Noark®

Catalog

Contactors and Relays
Manual Motor Starters

Ex9C, Ex9R, Ex9CD, Ex9RD, Ex9CK, Ex9CKT, Ex9S32, and Ex9SN Series



Ex9CKT30B40



Ex9C38 and Ex9R38A



Ex9S32

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NOARK Electric

Electrical Equipment Manufacturer for Distribution and Control



NOARK Electric is a global manufacturer of electrical distribution and control products that address a variety of customer needs, ranging from components to intelligent system solutions. Our global product lines include: circuit breakers, contactors, relays and intelligent control. Based in Shanghai, China, NOARK Electric was established in 2007 and covers the globe with regional headquarters in North America, Latin America, Europe and Middle East/ Africa.

Globally, NOARK Electric serves the industrial, commercial, utility and residential markets. In North America, NOARK Electric focuses primarily on industrial OEMs, users and associated channel partners. Our motto is "Excellent Product...Exceptional Value," which NOARK Electric delivers to our customer by maintaining local inventory, providing local sales, customer service and support and manufacturing quality, aggressively priced products backed by a five-year limited warranty.

Quality Product

- Backed by a five-year limited warranty*

5 YEAR LIMITED WARRANTY

Exceptional Value

- Reduce the cost of products
- Improve profitability
- Increase margins

Local Support and Local Inventory

- Superb customer service
- Knowledgeable technical support
- Dedicated sales force
- Well-stocked inventory
- North American headquarters

*Contact NOARK Electric for complete details.

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International Headquarter Locations



Global reach. Local resources.

The best of both worlds come together when customers count on NOARK as their electrical product manufacturer.

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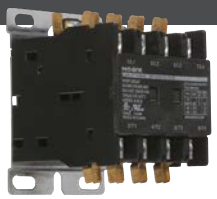
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IEC CONTACTORS



Ex9C

Features

Ex9C contactors are intended for various applications including heavy industrial ones. Splitting into four frame sizes brings optimization of electrical parameters and mechanical dimensions. All these frame sizes share accessory auxiliary contacts. Overload relays differ with the frame sizes in order to fit respective contactor of given rated current.

- Contactors according to IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-1and UL 60947-4-1
- Nine frame sizes with rated current up to 1000 A at 690 V AC-3
- Coil control voltage 24~600 Vac, 24~250 Vdc; 24~600 Vac/dc (115~300 A); 36~600 Vac/dc (400~500 A)
- Wide range electronic coil available for 09~500 A contactor
- Mounts onto DIN rail 35 mm or 75 mm or onto panel (frame sizes 09~38 mount on 35 mm; 40~100 mount on 35 mm or 75 mm; 115~1000 cannot be mount on DIN rail, only mount by screw)

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IEC Contactors
Ex9C National and International Standards

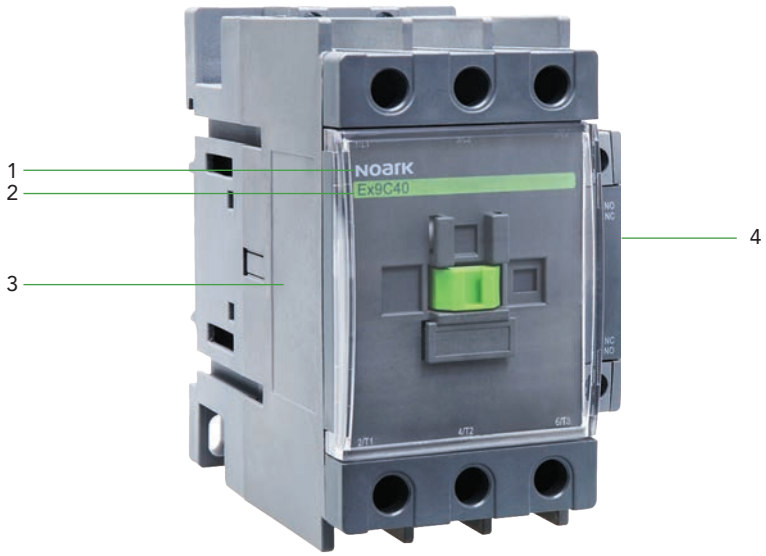
Certifications

- UL 508 Listed, File Number E353866, UL 60947-1 and 60947-4-1
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant

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IEC Contactors
Ex9C Product Selection Guide

Label



1. Brand
2. Product Selection
3. Label with UL logo, CE logo and data
4. Built-In Auxiliary Contact

Product Selection Guide

Ex9C	S	R	09	D	10	A	7	B	G
NOARK Ex9C Series	Contactor Type	Function	Rated Current (AC-3)	Coil Type	Auxiliary Contacts	Control Voltage	Frequency	Main Power Contacts	Application
	Blank: Ex9C Standard (9~1000 A)	Blank: Full Voltage Non-Reversing (FVNR)	06: 6 A 09: 9 A 12: 12 A 18: 18 A 25: 25 A 32: 32 A 38: 38 A 40: 40 A 50: 50 A 65: 65 A 80: 80 A 100: 100 A 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 300: 300 A 400: 400 A 500: 500 A 630: 630 A 800: 800 A 1000: 1000 A	Blank: AC	10: 1NO (9CS Only)	A: 12V B: 24V* C: 36V D: 42V E: 48V F: 110V G: 120V X: 208V M: 220V P: 230V U: 240V W: 250V N: 277V Q: 380V V: 400V Z: 415V R: 440V T: 480V S: 500V Y: 600V J: 24-60Vac/dc H: 48-130Vac/dc K: 100-250Vac/dc L: 250-500Vac/dc	7: 50/60 Hz	Blank: 3NO	G: No top mounting accessories for special industry (115-1000A)
	S: Ex9C Miniature (6~12 A)	R: Full Voltage Reversing (FVR)		D: DC* *:available on Miniature Contactor only	01: 1NC (9CS Only)			B: 2NO+ 2NC (9CS Only)	
				E: Vac/dc (115~600A Only)	11: 1NO+ 1NC (9~100A Only)			C: 4NO (9CS Only)	
				F: Wide Range Electronic Coil	22: 2NO+ 2NC (09~38/115~1000A)				

* Note: 24Vac is not available at 400A and 1000A
**630-1000A:48-415 Vac/dc available only

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IEC Contactors
Ex9CS 6 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A28-35



Certifications
IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		6 A • 3 Poles				6 A • 4 Poles			
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CS0610B7	1320001	Ex9CS0601B7	1320055	Ex9CS06B7C	1320109	Ex9CS06B7B	1320415
	36	Ex9CS0610C7	1320002	Ex9CS0601C7	1320056	Ex9CS06C7C	1320110	Ex9CS06C7B	1320416
	42	Ex9CS0610D7	1320003	Ex9CS0601D7	1320057	Ex9CS06D7C	1320111	Ex9CS06D7B	1320417
	48	Ex9CS0610E7	1320004	Ex9CS0601E7	1320058	Ex9CS06E7C	1320112	Ex9CS06E7B	1320418
	110	Ex9CS0610F7	1320005	Ex9CS0601F7	1320059	Ex9CS06F7C	1320113	Ex9CS06F7B	1320419
	120	Ex9CS0610G7	1320006	Ex9CS0601G7	1320060	Ex9CS06G7C	1320114	Ex9CS06G7B	1320420
	208	Ex9CS0610X7	1320018	Ex9CS0601X7	1320072	Ex9CS06X7C	1320126	Ex9CS06X7B	1320432
	220	Ex9CS0610M7	1320007	Ex9CS0601M7	1320061	Ex9CS06M7C	1320115	Ex9CS06M7B	1320421
	230	Ex9CS0610P7	1320008	Ex9CS0601P7	1320062	Ex9CS06P7C	1320116	Ex9CS06P7B	1320422
	240	Ex9CS0610U7	1320010	Ex9CS0601U7	1320064	Ex9CS06U7C	1320118	Ex9CS06U7B	1320424
	277	Ex9CS0610N7	1320009	Ex9CS0601N7	1320063	Ex9CS06N7C	1320117	Ex9CS06N7B	1320423
	380	Ex9CS0610Q7	1320011	Ex9CS0601Q7	1320065	Ex9CS06Q7C	1320119	Ex9CS06Q7B	1320425
	400	Ex9CS0610V7	1320012	Ex9CS0601V7	1320066	Ex9CS06V7C	1320120	Ex9CS06V7B	1320426
	415	Ex9CS0610Z7	1320013	Ex9CS0601Z7	1320067	Ex9CS06Z7C	1320121	Ex9CS06Z7B	1320427
	440	Ex9CS0610R7	1320014	Ex9CS0601R7	1320068	Ex9CS06R7C	1320122	Ex9CS06R7B	1320428
	480	Ex9CS0610T7	1320015	Ex9CS0601T7	1320069	Ex9CS06T7C	1320123	Ex9CS06T7B	1320429
	500	Ex9CS0610S7	1320016	Ex9CS0601S7	1320070	Ex9CS06S7C	1320124	Ex9CS06S7B	1320430
Vdc	12	Ex9CS06D10A	1320325	Ex9CS06D01A	1320340	Ex9CS06DAC	1320355	Ex9CS06DAB	1320523
	24	Ex9CS06D10B	1320326	Ex9CS06D01B	1320341	Ex9CS06DBC	1320356	Ex9CS06DBB	1320524
	48	Ex9CS06D10E	1320327	Ex9CS06D01E	1320342	Ex9CS06DEC	1320357	Ex9CS06DEB	1320525
	110	Ex9CS06D10F	1320328	Ex9CS06D01F	1320343	Ex9CS06DFC	1320358	Ex9CS06DFB	1320526
	220	Ex9CS06D10M	1320329	Ex9CS06D01M	1320344	Ex9CS06DMC	1320359	Ex9CS06DMB	1320527
	250	Ex9CS06D10W	1320553	Ex9CS06D01W	1320556	Ex9CS06DWC	1320559	Ex9CS06DWB	1320571

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IEC Contactors
Ex9CS 9 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A28-35



Certifications
IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

A

Coil Voltage		9 A • 3 Poles				9 A • 4 Poles			
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CS0910B7	1320019	Ex9CS0901B7	1320073	Ex9CS09B7C	1320127	Ex9CS09B7B	1320433
	36	Ex9CS0910C7	1320020	Ex9CS0901C7	1320074	Ex9CS09C7C	1320128	Ex9CS09C7B	1320434
	42	Ex9CS0910D7	1320021	Ex9CS0901D7	1320075	Ex9CS09D7C	1320129	Ex9CS09D7B	1320435
	48	Ex9CS0910E7	1320022	Ex9CS0901E7	1320076	Ex9CS09E7C	1320130	Ex9CS09E7B	1320436
	110	Ex9CS0910F7	1320023	Ex9CS0901F7	1320077	Ex9CS09F7C	1320131	Ex9CS09F7B	1320437
	120	Ex9CS0910G7	1320024	Ex9CS0901G7	1320078	Ex9CS09G7C	1320132	Ex9CS09G7B	1320438
	208	Ex9CS0910X7	1320036	Ex9CS0901X7	1320090	Ex9CS09X7C	1320144	Ex9CS09X7B	1320450
	220	Ex9CS0910M7	1320025	Ex9CS0901M7	1320079	Ex9CS09M7C	1320133	Ex9CS09M7B	1320439
	230	Ex9CS0910P7	1320026	Ex9CS0901P7	1320080	Ex9CS09P7C	1320134	Ex9CS09P7B	1320440
	240	Ex9CS0910U7	1320028	Ex9CS0901U7	1320082	Ex9CS09U7C	1320136	Ex9CS09U7B	1320442
	277	Ex9CS0910N7	1320027	Ex9CS0901N7	1320081	Ex9CS09N7C	1320135	Ex9CS09N7B	1320441
	380	Ex9CS0910Q7	1320029	Ex9CS0901Q7	1320083	Ex9CS09Q7C	1320137	Ex9CS09Q7B	1320443
	400	Ex9CS0910V7	1320030	Ex9CS0901V7	1320084	Ex9CS09V7C	1320138	Ex9CS09V7B	1320444
	415	Ex9CS0910Z7	1320031	Ex9CS0901Z7	1320085	Ex9CS09Z7C	1320139	Ex9CS09Z7B	1320445
	440	Ex9CS0910R7	1320032	Ex9CS0901R7	1320086	Ex9CS09R7C	1320140	Ex9CS09R7B	1320446
	480	Ex9CS0910T7	1320033	Ex9CS0901T7	1320087	Ex9CS09T7C	1320141	Ex9CS09T7B	1320447
	500	Ex9CS0910S7	1320034	Ex9CS0901S7	1320088	Ex9CS09S7C	1320142	Ex9CS09S7B	1320448
Vdc	12	Ex9CS09D10A	1320330	Ex9CS09D01A	1320345	Ex9CS09DAC	1320360	Ex9CS09DAB	1320528
	24	Ex9CS09D10B	1320331	Ex9CS09D01B	1320346	Ex9CS09DBC	1320361	Ex9CS09DBB	1320529
	48	Ex9CS09D10E	1320332	Ex9CS09D01E	1320347	Ex9CS09DEC	1320362	Ex9CS09DEB	1320530
	110	Ex9CS09D10F	1320333	Ex9CS09D01F	1320348	Ex9CS09DFC	1320363	Ex9CS09DFB	1320531
	220	Ex9CS09D10M	1320334	Ex9CS09D01M	1320349	Ex9CS09DMC	1320364	Ex9CS09DMB	1320532
	250	Ex9CS09D10W	1320554	Ex9CS09D01W	1320557	Ex9CS09DWC	1320560	Ex9CS09DWB	1320572

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IEC Contactors
Ex9CS 12 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Non-Reversing
- Ratings page A28-35



Certifications
IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		12 A • 3 Poles				12 A • 4 Poles			
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO		2NO+2NC	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CS1210B7	1320037	Ex9CS1201B7	1320091	Ex9CS12B7C	1320145	Ex9CS12B7B	1320451
	36	Ex9CS1210C7	1320038	Ex9CS1201C7	1320092	Ex9CS12C7C	1320146	Ex9CS12C7B	1320452
	42	Ex9CS1210D7	1320039	Ex9CS1201D7	1320093	Ex9CS12D7C	1320147	Ex9CS12D7B	1320453
	48	Ex9CS1210E7	1320040	Ex9CS1201E7	1320094	Ex9CS12E7C	1320148	Ex9CS12E7B	1320454
	110	Ex9CS1210F7	1320041	Ex9CS1201F7	1320095	Ex9CS12F7C	1320149	Ex9CS12F7B	1320455
	120	Ex9CS1210G7	1320042	Ex9CS1201G7	1320096	Ex9CS12G7C	1320150	Ex9CS12G7B	1320456
	208	Ex9CS1210X7	1320054	Ex9CS1201X7	1320108	Ex9CS12X7C	1320162	Ex9CS12X7B	1320468
	220	Ex9CS1210M7	1320043	Ex9CS1201M7	1320097	Ex9CS12M7C	1320151	Ex9CS12M7B	1320457
	230	Ex9CS1210P7	1320044	Ex9CS1201P7	1320098	Ex9CS12P7C	1320152	Ex9CS12P7B	1320458
	240	Ex9CS1210U7	1320046	Ex9CS1201U7	1320100	Ex9CS12U7C	1320154	Ex9CS12U7B	1320460
	277	Ex9CS1210N7	1320045	Ex9CS1201N7	1320099	Ex9CS12N7C	1320153	Ex9CS12N7B	1320459
	380	Ex9CS1210Q7	1320047	Ex9CS1201Q7	1320101	Ex9CS12Q7C	1320155	Ex9CS12Q7B	1320461
	400	Ex9CS1210V7	1320048	Ex9CS1201V7	1320102	Ex9CS12V7C	1320156	Ex9CS12V7B	1320462
	415	Ex9CS1210Z7	1320049	Ex9CS1201Z7	1320103	Ex9CS12Z7C	1320157	Ex9CS12Z7B	1320463
	440	Ex9CS1210R7	1320050	Ex9CS1201R7	1320104	Ex9CS12R7C	1320158	Ex9CS12R7B	1320464
	480	Ex9CS1210T7	1320051	Ex9CS1201T7	1320105	Ex9CS12T7C	1320159	Ex9CS12T7B	1320465
	500	Ex9CS1210S7	1320052	Ex9CS1201S7	1320106	Ex9CS12S7C	1320160	Ex9CS12S7B	1320466
Vdc	12	Ex9CS12D10A	1320335	Ex9CS12D01A	1320350	Ex9CS12DAC	1320365	Ex9CS12DAB	1320533
	24	Ex9CS12D10B	1320336	Ex9CS12D01B	1320351	Ex9CS12DBC	1320366	Ex9CS12DBB	1320534
	48	Ex9CS12D10E	1320337	Ex9CS12D01E	1320352	Ex9CS12DEC	1320367	Ex9CS12DEB	1320535
	110	Ex9CS12D10F	1320338	Ex9CS12D01F	1320353	Ex9CS12DFC	1320368	Ex9CS12DFB	1320536
	220	Ex9CS12D10M	1320339	Ex9CS12D01M	1320354	Ex9CS12DMC	1320369	Ex9CS12DMB	1320537
	250	Ex9CS12D10W	1320555	Ex9CS12D01W	1320558	Ex9CS12DWC	1320561	Ex9CS12DWB	1320573

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IEC Contactors

Ex9C 9~12 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		9 A • 3 Poles				12 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9C0911B7	1320576	Ex9C0922B7	1320774	Ex9C1211B7	1320594	Ex9C1222B7	1320792
	36	Ex9C0911C7	1320577	Ex9C0922C7	1320775	Ex9C1211C7	1320595	Ex9C1222C7	1320793
	42	Ex9C0911D7	1320578	Ex9C0922D7	1320776	Ex9C1211D7	1320596	Ex9C1222D7	1320794
	48	Ex9C0911E7	1320579	Ex9C0922E7	1320777	Ex9C1211E7	1320597	Ex9C1222E7	1320795
	110	Ex9C0911F7	1320580	Ex9C0922F7	1320778	Ex9C1211F7	1320598	Ex9C1222F7	1320796
	120	Ex9C0911G7	1320581	Ex9C0922G7	1320779	Ex9C1211G7	1320599	Ex9C1222G7	1320797
	208	Ex9C0911X7	1320593	Ex9C0922X7	1320791	Ex9C1211X7	1320611	Ex9C1222X7	1320809
	220	Ex9C0911M7	1320582	Ex9C0922M7	1320780	Ex9C1211M7	1320600	Ex9C1222M7	1320798
	230	Ex9C0911P7	1320583	Ex9C0922P7	1320781	Ex9C1211P7	1320601	Ex9C1222P7	1320799
	240	Ex9C0911U7	1320585	Ex9C0922U7	1320783	Ex9C1211U7	1320603	Ex9C1222U7	1320801
	277	Ex9C0911N7	1320584	Ex9C0922N7	1320782	Ex9C1211N7	1320602	Ex9C1222N7	1320800
	380	Ex9C0911Q7	1320586	Ex9C0922Q7	1320784	Ex9C1211Q7	1320604	Ex9C1222Q7	1320802
	400	Ex9C0911V7	1320587	Ex9C0922V7	1320785	Ex9C1211V7	1320605	Ex9C1222V7	1320803
	415	Ex9C0911Z7	1320588	Ex9C0922Z7	1320786	Ex9C1211Z7	1320606	Ex9C1222Z7	1320804
	440	Ex9C0911R7	1320589	Ex9C0922R7	1320787	Ex9C1211R7	1320607	Ex9C1222R7	1320805
	480	Ex9C0911T7	1320590	Ex9C0922T7	1320788	Ex9C1211T7	1320608	Ex9C1222T7	1320806
	500	Ex9C0911S7	1320591	Ex9C0922S7	1320789	Ex9C1211S7	1320609	Ex9C1222S7	1320807
	600	Ex9C0911Y7	1320592	Ex9C0922Y7	1320790	Ex9C1211Y7	1320610	Ex9C1222Y7	1320808
Wide Range Electronic Coil Vac/dc	24~60	Ex9C09F11J	1321846	Ex9C09F22J	1321864	Ex9C12F11J	1321847	Ex9C12F22J	1321865
	48~130	Ex9C09F11H	1321852	Ex9C09F22H	1321870	Ex9C12F11H	1321853	Ex9C12F22H	1321871
	100~250	Ex9C09F11K	1321858	Ex9C09F22K	1321876	Ex9C12F11K	1321859	Ex9C12F22K	1321877

Specifications ..... A28 to 35
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Matched Relay: Ex9R38A **B65**
Relay Specifications ..... B67 to 68
Relay Trip Curve B69
Relay Dimensions B71
Relay Wiring Diagram B75
Relay Accessories B76

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IEC Contactors

Ex9C 18~25 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

Coil Voltage		18 A • 3 Poles				25 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9C1811B7	1320612	Ex9C1822B7	1320810	Ex9C2511B7	1320630	Ex9C2522B7	1320828
	36	Ex9C1811C7	1320613	Ex9C1822C7	1320811	Ex9C2511C7	1320631	Ex9C2522C7	1320829
	42	Ex9C1811D7	1320614	Ex9C1822D7	1320812	Ex9C2511D7	1320632	Ex9C2522D7	1320830
	48	Ex9C1811E7	1320615	Ex9C1822E7	1320813	Ex9C2511E7	1320633	Ex9C2522E7	1320831
	110	Ex9C1811F7	1320616	Ex9C1822F7	1320814	Ex9C2511F7	1320634	Ex9C2522F7	1320832
	120	Ex9C1811G7	1320617	Ex9C1822G7	1320815	Ex9C2511G7	1320635	Ex9C2522G7	1320833
	208	Ex9C1811X7	1320629	Ex9C1822X7	1320827	Ex9C2511X7	1320647	Ex9C2522X7	1320845
	220	Ex9C1811M7	1320618	Ex9C1822M7	1320816	Ex9C2511M7	1320636	Ex9C2522M7	1320834
	230	Ex9C1811P7	1320619	Ex9C1822P7	1320817	Ex9C2511P7	1320637	Ex9C2522P7	1320835
	240	Ex9C1811U7	1320621	Ex9C1822U7	1320819	Ex9C2511U7	1320639	Ex9C2522U7	1320837
	277	Ex9C1811N7	1320620	Ex9C1822N7	1320818	Ex9C2511N7	1320638	Ex9C2522N7	1320836
	380	Ex9C1811Q7	1320622	Ex9C1822Q7	1320820	Ex9C2511Q7	1320640	Ex9C2522Q7	1320838
	400	Ex9C1811V7	1320623	Ex9C1822V7	1320821	Ex9C2511V7	1320641	Ex9C2522V7	1320839
	415	Ex9C1811Z7	1320624	Ex9C1822Z7	1320822	Ex9C2511Z7	1320642	Ex9C2522Z7	1320840
	440	Ex9C1811R7	1320625	Ex9C1822R7	1320823	Ex9C2511R7	1320643	Ex9C2522R7	1320841
	480	Ex9C1811T7	1320626	Ex9C1822T7	1320824	Ex9C2511T7	1320644	Ex9C2522T7	1320842
	500	Ex9C1811S7	1320627	Ex9C1822S7	1320825	Ex9C2511S7	1320645	Ex9C2522S7	1320843
	600	Ex9C1811Y7	1320628	Ex9C1822Y7	1320826	Ex9C2511Y7	1320646	Ex9C2522Y7	1320844
Wide Range Electronic Coil Vac/dc	24~60	Ex9C18F11J	1321848	Ex9C18F22J	1321866	Ex9C25F11J	1321849	Ex9C25F22J	1321867
	48~130	Ex9C18F11H	1321854	Ex9C18F22H	1321872	Ex9C25F11H	1321855	Ex9C25F22H	1321873
	100~250	Ex9C18F11K	1321860	Ex9C18F22K	1321878	Ex9C25F11K	1321861	Ex9C25F22K	1321879

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Matched Relay: Ex9R38A **B65**
Relay Specifications ..... B67 to 68
Relay Trip Curve B69
Relay Dimensions B71
Relay Wiring Diagram B75
Relay Accessories B76

2020 NOARK Electric

IEC Contactors

Ex9C 32~38 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

A

Coil Voltage		32 A • 3 Poles				38 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9C3211B7	1320648	Ex9C3222B7	1320846	Ex9C3811B7	1320666	Ex9C3822B7	1320864
	36	Ex9C3211C7	1320649	Ex9C3222C7	1320847	Ex9C3811C7	1320667	Ex9C3822C7	1320865
	42	Ex9C3211D7	1320650	Ex9C3222D7	1320848	Ex9C3811D7	1320668	Ex9C3822D7	1320866
	48	Ex9C3211E7	1320651	Ex9C3222E7	1320849	Ex9C3811E7	1320669	Ex9C3822E7	1320867
	110	Ex9C3211F7	1320652	Ex9C3222F7	1320850	Ex9C3811F7	1320670	Ex9C3822F7	1320868
	120	Ex9C3211G7	1320653	Ex9C3222G7	1320851	Ex9C3811G7	1320671	Ex9C3822G7	1320869
	208	Ex9C3211X7	1320665	Ex9C3222X7	1320863	Ex9C3811X7	1320683	Ex9C3822X7	1320881
	220	Ex9C3211M7	1320654	Ex9C3222M7	1320852	Ex9C3811M7	1320672	Ex9C3822M7	1320870
	230	Ex9C3211P7	1320655	Ex9C3222P7	1320853	Ex9C3811P7	1320673	Ex9C3822P7	1320871
	240	Ex9C3211U7	1320657	Ex9C3222U7	1320855	Ex9C3811U7	1320675	Ex9C3822U7	1320873
	277	Ex9C3211N7	1320656	Ex9C3222N7	1320854	Ex9C3811N7	1320674	Ex9C3822N7	1320872
	380	Ex9C3211Q7	1320658	Ex9C3222Q7	1320856	Ex9C3811Q7	1320676	Ex9C3822Q7	1320874
	400	Ex9C3211V7	1320659	Ex9C3222V7	1320857	Ex9C3811V7	1320677	Ex9C3822V7	1320875
	415	Ex9C3211Z7	1320660	Ex9C3222Z7	1320858	Ex9C3811Z7	1320678	Ex9C3822Z7	1320876
	440	Ex9C3211R7	1320661	Ex9C3222R7	1320859	Ex9C3811R7	1320679	Ex9C3822R7	1320877
	480	Ex9C3211T7	1320662	Ex9C3222T7	1320860	Ex9C3811T7	1320680	Ex9C3822T7	1320878
	500	Ex9C3211S7	1320663	Ex9C3222S7	1320861	Ex9C3811S7	1320681	Ex9C3822S7	1320879
	600	Ex9C3211Y7	1320664	Ex9C3222Y7	1320862	Ex9C3811Y7	1320682	Ex9C3822Y7	1320880
Wide Range Electronic Coil Vac/dc	24~60	Ex9C32F11J	1321850	Ex9C32F22J	1321868	Ex9C38F11J	1321851	Ex9C38F22J	1321869
	48~130	Ex9C32F11H	1321856	Ex9C32F22H	1321874	Ex9C38F11H	1321857	Ex9C38F22H	1321875
	100~250	Ex9C32F11K	1321862	Ex9C32F22K	1321880	Ex9C38F11K	1321863	Ex9C38F22K	1321881

Specifications ..... A28 to 35
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Wiring Diagram A41
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Matched Relay: Ex9R38A B65
Relay Specifications ..... B67 to 68
Relay Trip Curve B69
Relay Dimensions B71
Relay Wiring Diagram B75
Relay Accessories B76

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IEC Contactors

Ex9C 40~100 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

Coil Voltage		40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles	
		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9C4011B7	1320684	Ex9C5011B7	1320702	Ex9C6511B7	1320720	Ex9C8011B7	1320738	Ex9C10011B7	1320756
	36	Ex9C4011C7	1320685	Ex9C5011C7	1320703	Ex9C6511C7	1320721	Ex9C8011C7	1320739	Ex9C10011C7	1320757
	42	Ex9C4011D7	1320686	Ex9C5011D7	1320704	Ex9C6511D7	1320722	Ex9C8011D7	1320740	Ex9C10011D7	1320758
	48	Ex9C4011E7	1320687	Ex9C5011E7	1320705	Ex9C6511E7	1320723	Ex9C8011E7	1320741	Ex9C10011E7	1320759
	110	Ex9C4011F7	1320688	Ex9C5011F7	1320706	Ex9C6511F7	1320724	Ex9C8011F7	1320742	Ex9C10011F7	1320760
	120	Ex9C4011G7	1320689	Ex9C5011G7	1320707	Ex9C6511G7	1320725	Ex9C8011G7	1320743	Ex9C10011G7	1320761
	208	Ex9C4011X7	1320701	Ex9C5011X7	1320719	Ex9C6511X7	1320737	Ex9C8011X7	1320755	Ex9C10011X7	1320773
	220	Ex9C4011M7	1320690	Ex9C5011M7	1320708	Ex9C6511M7	1320726	Ex9C8011M7	1320744	Ex9C10011M7	1320762
	230	Ex9C4011P7	1320691	Ex9C5011P7	1320709	Ex9C6511P7	1320727	Ex9C8011P7	1320745	Ex9C10011P7	1320763
	240	Ex9C4011U7	1320693	Ex9C5011U7	1320711	Ex9C6511U7	1320729	Ex9C8011U7	1320747	Ex9C10011U7	1320765
	277	Ex9C4011N7	1320692	Ex9C5011N7	1320710	Ex9C6511N7	1320728	Ex9C8011N7	1320746	Ex9C10011N7	1320764
	380	Ex9C4011Q7	1320694	Ex9C5011Q7	1320712	Ex9C6511Q7	1320730	Ex9C8011Q7	1320748	Ex9C10011Q7	1320766
	400	Ex9C4011V7	1320695	Ex9C5011V7	1320713	Ex9C6511V7	1320731	Ex9C8011V7	1320749	Ex9C10011V7	1320767
	415	Ex9C4011Z7	1320696	Ex9C5011Z7	1320714	Ex9C6511Z7	1320732	Ex9C8011Z7	1320750	Ex9C10011Z7	1320768
	440	Ex9C4011R7	1320697	Ex9C5011R7	1320715	Ex9C6511R7	1320733	Ex9C8011R7	1320751	Ex9C10011R7	1320769
	480	Ex9C4011T7	1320698	Ex9C5011T7	1320716	Ex9C6511T7	1320734	Ex9C8011T7	1320752	Ex9C10011T7	1320770
	500	Ex9C4011S7	1320699	Ex9C5011S7	1320717	Ex9C6511S7	1320735	Ex9C8011S7	1320753	Ex9C10011S7	1320771
	600	Ex9C4011Y7	1320700	Ex9C5011Y7	1320718	Ex9C6511Y7	1320736	Ex9C8011Y7	1320754	Ex9C10011Y7	1320772
Wide Range Electronic Coil Vac/dc	24~60	Ex9C40F11J	1321936	Ex9C50F11J	1321939	Ex9C65F11J	1321942	Ex9C80F11J	1321945	Ex9C100F11J	1321948
	48~130	Ex9C40F11H	1321937	Ex9C50F11H	1321940	Ex9C65F11H	1321943	Ex9C80F11H	1321946	Ex9C100F11H	1321949
	100~250	Ex9C40F11K	1321938	Ex9C50F11K	1321941	Ex9C65F11K	1321944	Ex9C80F11K	1321947	Ex9C100F11K	1321950

Specifications ..... A28 to 35
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Matched Relay: Ex9R100A B65
Relay Specifications ..... B67 to 68
Relay Trip Curve B69
Relay Dimensions B72
Relay Wiring Diagram B75
Relay Accessories B76

2020 NOARK Electric

IEC Contactors

Ex9C 115~225 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

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Coil Voltage		115 A • 3 Poles		150 A • 3 Poles		185 A • 3 Poles		225 A • 3 Poles	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac/dc	24	Ex9C115E22B	1321316	Ex9C150E22B	1321331	Ex9C185E22B	1321346	Ex9C225E22B	1321361
	36	Ex9C115E22C	1321317	Ex9C150E22C	1321332	Ex9C185E22C	1321347	Ex9C225E22C	1321362
	42	Ex9C115E22D	1321318	Ex9C150E22D	1321333	Ex9C185E22D	1321348	Ex9C225E22D	1321363
	48	Ex9C115E22E	1321319	Ex9C150E22E	1321334	Ex9C185E22E	1321349	Ex9C225E22E	1321364
	110	Ex9C115E22F	1321320	Ex9C150E22F	1321335	Ex9C185E22F	1321350	Ex9C225E22F	1321365
	120	Ex9C115E22G	1321321	Ex9C150E22G	1321336	Ex9C185E22G	1321351	Ex9C225E22G	1321366
	208	Ex9C115E22X	1321324	Ex9C150E22X	1321339	Ex9C185E22X	1321354	Ex9C225E22X	1321369
	220	Ex9C115E22M	1321322	Ex9C150E22M	1321337	Ex9C185E22M	1321352	Ex9C225E22M	1321367
	230	Ex9C115E22P	1321323	Ex9C150E22P	1321338	Ex9C185E22P	1321353	Ex9C225E22P	1321368
	240	Ex9C115E22U	1321325	Ex9C150E22U	1321340	Ex9C185E22U	1321355	Ex9C225E22U	1321370
	277	Ex9C115E22N	1321328	Ex9C150E22N	1321643	Ex9C185E22N	1321358	Ex9C225E22N	1321644
	380	Ex9C115E22Q	1321326	Ex9C150E22Q	1321341	Ex9C185E22Q	1321356	Ex9C225E22Q	1321371
	400	Ex9C115E22V	1321327	Ex9C150E22V	1321342	Ex9C185E22V	1321357	Ex9C225E22V	1321372
	415	Ex9C115E22Z	1321651	Ex9C150E22Z	1321343	Ex9C185E22Z	1321653	Ex9C225E22Z	1321373
	480	Ex9C115E22T	1321329	Ex9C150E22T	1321344	Ex9C185E22T	1321359	Ex9C225E22T	1321374
	600	Ex9C115E22Y	1321330	Ex9C150E22Y	1321345	Ex9C185E22Y	1321360	Ex9C225E22Y	1321375
Wide Range Electronic Coil Vac/dc	48~130	Ex9C115F22H	1321434	Ex9C150F22H	1321437	Ex9C185F22H	1321440	Ex9C225F22H	1321443
	100~250	Ex9C115F22K	1321435	Ex9C150F22K	1321438	Ex9C185F22K	1321441	Ex9C225F22K	1321444
	250~500	Ex9C115F22L	1321436	Ex9C150F22L	1321439	Ex9C185F22L	1321442	Ex9C225F22L	1321445

Specifications ..... A28 to 35
Dimensions A36
Wiring Diagram A41
Mounting Position A43
Accessories ..... A44 to 60

Matched Relay:
Ex9R185A (115~185 A) B66
Ex9R500A (225 A) B66
Relay Specifications ..... B67 to 68
Relay Trip Curve B69

Relay Dimensions (Ex9R185A) B73
Relay Dimensions (Ex9R500A) B74
Relay Wiring Diagram B75
Relay Accessories B76

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IEC Contactors

Ex9C 265~500 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

Coil Voltage		265 A • 3 Poles		300 A • 3 Poles		400 A • 3 Poles		500 A • 3 Poles	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac/dc	24	Ex9C265E22B	1321376	Ex9C300E22B	1321391	-	-	-	-
	36	Ex9C265E22C	1321377	Ex9C300E22C	1321392	Ex9C400E22C	1321406	Ex9C500E22C	1321420
	42	Ex9C265E22D	1321378	Ex9C300E22D	1321393	Ex9C400E22D	1321407	Ex9C500E22D	1321421
	48	Ex9C265E22E	1321379	Ex9C300E22E	1321394	Ex9C400E22E	1321408	Ex9C500E22E	1321422
	110	Ex9C265E22F	1321380	Ex9C300E22F	1321395	Ex9C400E22F	1321409	Ex9C500E22F	1321423
	120	Ex9C265E22G	1321381	Ex9C300E22G	1321396	Ex9C400E22G	1321410	Ex9C500E22G	1321424
	208	Ex9C265E22X	1321384	Ex9C300E22X	1321399	Ex9C400E22X	1321413	Ex9C500E22X	1321427
	220	Ex9C265E22M	1321382	Ex9C300E22M	1321397	Ex9C400E22M	1321411	Ex9C500E22M	1321425
	230	Ex9C265E22P	1321383	Ex9C300E22P	1321398	Ex9C400E22P	1321412	Ex9C500E22P	1321426
	240	Ex9C265E22U	1321385	Ex9C300E22U	1321400	Ex9C400E22U	1321414	Ex9C500E22U	1321428
	277	Ex9C265E22N	1321388	Ex9C300E22N	1321645	Ex9C400E22N	1321417	Ex9C500E22N	1321646
	380	Ex9C265E22Q	1321386	Ex9C300E22Q	1321401	Ex9C400E22Q	1321415	Ex9C500E22Q	1321429
	400	Ex9C265E22V	1321387	Ex9C300E22V	1321402	Ex9C400E22V	1321416	Ex9C500E22V	1321430
	415	Ex9C265E22Z	1321654	Ex9C300E22Z	1321403	Ex9C400E22Z	1321655	Ex9C500E22Z	1321431
	480	Ex9C265E22T	1321389	Ex9C300E22T	1321404	Ex9C400E22T	1321418	Ex9C500E22T	1321432
	600	Ex9C265E22Y	1321390	Ex9C300E22Y	1321405	Ex9C400E22Y	1321419	Ex9C500E22Y	1321433
Wide Range Electronic Coil Vac/dc	48~130	Ex9C265F22H	1321446	Ex9C300F22H	1321449	Ex9C400F22H	1321452	Ex9C500F22H	1321455
	100~250	Ex9C265F22K	1321447	Ex9C300F22K	1321450	Ex9C400F22K	1321453	Ex9C500F22K	1321456
	250~500	Ex9C265F22L	1321448	Ex9C300F22L	1321451	Ex9C400F22L	1321454	Ex9C500F22L	1321457

Specifications ..... A28 to 35
Dimensions A36
Wiring Diagram A41
Mounting Position A43
Accessories ..... A44 to 60
Matched Relay: Ex9R500A B66
Relay Specifications ..... B67 to 68
Relay Trip Curve B69
Relay Dimensions B74
Relay Wiring Diagram B75
Relay Accessories B76

2020 NOARK Electric

IEC Contactors

Ex9C 630~1,000 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Non-Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

CE c UL us LISTED

A

Coil Voltage		630 A • 3 Poles		800 A • 3 Poles		1,000 A • 3 Poles	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number
Vac/dc	48	Ex9C630E22EG	1321807	Ex9C800E22EG	1321819	Ex9C1000E22EG	1321831
	110	Ex9C630E22FG	1321808	Ex9C800E22FG	1321820	Ex9C1000E22FG	1321832
	120	Ex9C630E22GG	1321809	Ex9C800E22GG	1321821	Ex9C1000E22GG	1321833
	208	Ex9C630E22XG	1321810	Ex9C800E22XG	1321822	Ex9C1000E22XG	1321834
	220	Ex9C630E22MG	1321811	Ex9C800E22MG	1321823	Ex9C1000E22MG	1321835
	230	Ex9C630E22PG	1321812	Ex9C800E22PG	1321824	Ex9C1000E22PG	1321836
	240	Ex9C630E22UG	1321813	Ex9C800E22UG	1321825	Ex9C1000E22UG	1321837
	250	Ex9C630E22WG	1321814	Ex9C800E22WG	1321826	Ex9C1000E22WG	1321838
	277	Ex9C630E22NG	1321815	Ex9C800E22NG	1321827	Ex9C1000E22NG	1321839
	380	Ex9C630E22QG	1321816	Ex9C800E22QG	1321828	Ex9C1000E22QG	1321840
	400	Ex9C630E22VG	1321817	Ex9C800E22VG	1321829	Ex9C1000E22VG	1321841
	415	Ex9C630E22ZG	1321818	Ex9C800E22ZG	1321830	Ex9C1000E22ZG	1321842
	480	EX9C630E22TG	1321843	EX9C800E22TG	1321844	EX9C1000E22TG	1321845

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Relay Dimensions B74
Relay Wiring Diagram B75
Relay Accessories B76

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IEC Contactors
Ex9CSR 6 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A28-35



Certifications
IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		6 A • 3 Poles				6 A • 4 Poles	
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO	
		Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CSR0610B7	1320163	Ex9CSR0601B7	1320217	Ex9CSR06B7C	1320271
	36	Ex9CSR0610C7	1320164	Ex9CSR0601C7	1320218	Ex9CSR06C7C	1320272
	42	Ex9CSR0610D7	1320165	Ex9CSR0601D7	1320219	Ex9CSR06D7C	1320273
	48	Ex9CSR0610E7	1320166	Ex9CSR0601E7	1320220	Ex9CSR06E7C	1320274
	110	Ex9CSR0610F7	1320167	Ex9CSR0601F7	1320221	Ex9CSR06F7C	1320275
	120	Ex9CSR0610G7	1320168	Ex9CSR0601G7	1320222	Ex9CSR06G7C	1320276
	208	Ex9CSR0610X7	1320180	Ex9CSR0601X7	1320234	Ex9CSR06X7C	1320288
	220	Ex9CSR0610M7	1320169	Ex9CSR0601M7	1320223	Ex9CSR06M7C	1320277
	230	Ex9CSR0610P7	1320170	Ex9CSR0601P7	1320224	Ex9CSR06P7C	1320278
	240	Ex9CSR0610U7	1320172	Ex9CSR0601U7	1320226	Ex9CSR06U7C	1320280
	277	Ex9CSR0610N7	1320171	Ex9CSR0601N7	1320225	Ex9CSR06N7C	1320279
	380	Ex9CSR0610Q7	1320173	Ex9CSR0601Q7	1320227	Ex9CSR06Q7C	1320281
	400	Ex9CSR0610V7	1320174	Ex9CSR0601V7	1320228	Ex9CSR06V7C	1320282
	415	Ex9CSR0610Z7	1320175	Ex9CSR0601Z7	1320229	Ex9CSR06Z7C	1320283
	440	Ex9CSR0610R7	1320176	Ex9CSR0601R7	1320230	Ex9CSR06R7C	1320284
	480	Ex9CSR0610T7	1320177	Ex9CSR0601T7	1320231	Ex9CSR06T7C	1320285
	500	Ex9CSR0610S7	1320178	Ex9CSR0601S7	1320232	Ex9CSR06S7C	1320286
Vdc	12	Ex9CSR06D10A	1320370	Ex9CSR06D01A	1320385	Ex9CSR06DAC	1320400
	24	Ex9CSR06D10B	1320371	Ex9CSR06D01B	1320386	Ex9CSR06DBC	1320401
	48	Ex9CSR06D10E	1320372	Ex9CSR06D01E	1320387	Ex9CSR06DEC	1320402
	110	Ex9CSR06D10F	1320373	Ex9CSR06D01F	1320388	Ex9CSR06DFC	1320403
	220	Ex9CSR06D10M	1320374	Ex9CSR06D01M	1320389	Ex9CSR06DMC	1320404
	250	Ex9CSR06D10W	1320562	Ex9CSR06D01W	1320565	Ex9CSR06DWC	1320568

Specifications .....A28 to 35
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2020 NOARK Electric

IEC Contactors
Ex9CSR 9 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A28-35



Certifications
IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

A

Coil Voltage		9 A • 3 Poles				9 A • 4 Poles	
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO	
		Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CSR0910B7	1320181	Ex9CSR0901B7	1320235	Ex9CSR09B7C	1320289
	36	Ex9CSR0910C7	1320182	Ex9CSR0901C7	1320236	Ex9CSR09C7C	1320290
	42	Ex9CSR0910D7	1320183	Ex9CSR0901D7	1320237	Ex9CSR09D7C	1320291
	48	Ex9CSR0910E7	1320184	Ex9CSR0901E7	1320238	Ex9CSR09E7C	1320292
	110	Ex9CSR0910F7	1320185	Ex9CSR0901F7	1320239	Ex9CSR09F7C	1320293
	120	Ex9CSR0910G7	1320186	Ex9CSR0901G7	1320240	Ex9CSR09G7C	1320294
	208	Ex9CSR0910X7	1320198	Ex9CSR0901X7	1320252	Ex9CSR09X7C	1320306
	220	Ex9CSR0910M7	1320187	Ex9CSR0901M7	1320241	Ex9CSR09M7C	1320295
	230	Ex9CSR0910P7	1320188	Ex9CSR0901P7	1320242	Ex9CSR09P7C	1320296
	240	Ex9CSR0910U7	1320190	Ex9CSR0901U7	1320244	Ex9CSR09U7C	1320298
	277	Ex9CSR0910N7	1320189	Ex9CSR0901N7	1320243	Ex9CSR09N7C	1320297
	380	Ex9CSR0910Q7	1320191	Ex9CSR0901Q7	1320245	Ex9CSR09Q7C	1320299
	400	Ex9CSR0910V7	1320192	Ex9CSR0901V7	1320246	Ex9CSR09V7C	1320300
	415	Ex9CSR0910Z7	1320193	Ex9CSR0901Z7	1320247	Ex9CSR09Z7C	1320301
	440	Ex9CSR0910R7	1320194	Ex9CSR0901R7	1320248	Ex9CSR09R7C	1320302
	480	Ex9CSR0910T7	1320195	Ex9CSR0901T7	1320249	Ex9CSR09T7C	1320303
	500	Ex9CSR0910S7	1320196	Ex9CSR0901S7	1320250	Ex9CSR09S7C	1320304
Vdc	12	Ex9CSR09D10A	1320375	Ex9CSR09D01A	1320390	Ex9CSR09DAC	1320405
	24	Ex9CSR09D10B	1320376	Ex9CSR09D01B	1320391	Ex9CSR09DBC	1320406
	48	Ex9CSR09D10E	1320377	Ex9CSR09D01E	1320392	Ex9CSR09DEC	1320407
	110	Ex9CSR09D10F	1320378	Ex9CSR09D01F	1320393	Ex9CSR09DFC	1320408
	220	Ex9CSR09D10M	1320379	Ex9CSR09D01M	1320394	Ex9CSR09DMC	1320409
	250	Ex9CSR09D10W	1320563	Ex9CSR09D01W	1320566	Ex9CSR09DWC	1320569

Specifications ..... A28 to 35
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IEC Contactors

Ex9CSR 12 A Miniature

- Built-in auxiliary contacts; additional auxiliary contacts are front mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		12 A • 3 Poles				12 A • 4 Poles	
		3NO • 1NO Auxiliary Contact		3NO • 1NC Auxiliary Contact		4NO	
		Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CSR1210B7	1320199	Ex9CSR1201B7	1320253	Ex9CSR12B7C	1320307
	36	Ex9CSR1210C7	1320200	Ex9CSR1201C7	1320254	Ex9CSR12C7C	1320308
	42	Ex9CSR1210D7	1320201	Ex9CSR1201D7	1320255	Ex9CSR12D7C	1320309
	48	Ex9CSR1210E7	1320202	Ex9CSR1201E7	1320256	Ex9CSR12E7C	1320310
	110	Ex9CSR1210F7	1320203	Ex9CSR1201F7	1320257	Ex9CSR12F7C	1320311
	120	Ex9CSR1210G7	1320204	Ex9CSR1201G7	1320258	Ex9CSR12G7C	1320312
	208	Ex9CSR1210X7	1320216	Ex9CSR1201X7	1320270	Ex9CSR12X7C	1320324
	220	Ex9CSR1210M7	1320205	Ex9CSR1201M7	1320259	Ex9CSR12M7C	1320313
	230	Ex9CSR1210P7	1320206	Ex9CSR1201P7	1320260	Ex9CSR12P7C	1320314
	240	Ex9CSR1210U7	1320208	Ex9CSR1201U7	1320262	Ex9CSR12U7C	1320316
	277	Ex9CSR1210N7	1320207	Ex9CSR1201N7	1320261	Ex9CSR12N7C	1320315
	380	Ex9CSR1210Q7	1320209	Ex9CSR1201Q7	1320263	Ex9CSR12Q7C	1320317
	400	Ex9CSR1210V7	1320210	Ex9CSR1201V7	1320264	Ex9CSR12V7C	1320318
	415	Ex9CSR1210Z7	1320211	Ex9CSR1201Z7	1320265	Ex9CSR12Z7C	1320319
	440	Ex9CSR1210R7	1320212	Ex9CSR1201R7	1320266	Ex9CSR12R7C	1320320
	480	Ex9CSR1210T7	1320213	Ex9CSR1201T7	1320267	Ex9CSR12T7C	1320321
	500	Ex9CSR1210S7	1320214	Ex9CSR1201S7	1320268	Ex9CSR12S7C	1320322
Vdc	12	Ex9CSR12D10A	1320380	Ex9CSR12D01A	1320395	Ex9CSR12DAC	1320410
	24	Ex9CSR12D10B	1320381	Ex9CSR12D01B	1320396	Ex9CSR12DBC	1320411
	48	Ex9CSR12D10E	1320382	Ex9CSR12D01E	1320397	Ex9CSR12DEC	1320412
	110	Ex9CSR12D10F	1320383	Ex9CSR12D01F	1320398	Ex9CSR12DFC	1320413
	220	Ex9CSR12D10M	1320384	Ex9CSR12D01M	1320399	Ex9CSR12DMC	1320414
	250	Ex9CSR12D10W	1320564	Ex9CSR12D01W	1320567	Ex9CSR12DWC	1320570

Specifications .....A28 to 35
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Mounting Position.....A43
Accessories.....A44 to 60

2020 NOARK Electric

IEC Contactors

Ex9CR 9~12 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

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Coil Voltage		9 A • 3 Poles				12 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CR0911B7	1320882	Ex9CR0922B7	1321062	Ex9CR1211B7	1320900	Ex9CR1222B7	1321080
	36	Ex9CR0911C7	1320883	Ex9CR0922C7	1321063	Ex9CR1211C7	1320901	Ex9CR1222C7	1321081
	42	Ex9CR0911D7	1320884	Ex9CR0922D7	1321064	Ex9CR1211D7	1320902	Ex9CR1222D7	1321082
	48	Ex9CR0911E7	1320885	Ex9CR0922E7	1321065	Ex9CR1211E7	1320903	Ex9CR1222E7	1321083
	110	Ex9CR0911F7	1320886	Ex9CR0922F7	1321066	Ex9CR1211F7	1320904	Ex9CR1222F7	1321084
	120	Ex9CR0911G7	1320887	Ex9CR0922G7	1321067	Ex9CR1211G7	1320905	Ex9CR1222G7	1321085
	208	Ex9CR0911X7	1320899	Ex9CR0922X7	1321079	Ex9CR1211X7	1320917	Ex9CR1222X7	1321097
	220	Ex9CR0911M7	1320888	Ex9CR0922M7	1321068	Ex9CR1211M7	1320906	Ex9CR1222M7	1321086
	230	Ex9CR0911P7	1320889	Ex9CR0922P7	1321069	Ex9CR1211P7	1320907	Ex9CR1222P7	1321087
	240	Ex9CR0911U7	1320891	Ex9CR0922U7	1321071	Ex9CR1211U7	1320909	Ex9CR1222U7	1321089
	277	Ex9CR0911N7	1320890	Ex9CR0922N7	1321070	Ex9CR1211N7	1320908	Ex9CR1222N7	1321088
	380	Ex9CR0911Q7	1320892	Ex9CR0922Q7	1321072	Ex9CR1211Q7	1320910	Ex9CR1222Q7	1321090
	400	Ex9CR0911V7	1320893	Ex9CR0922V7	1321073	Ex9CR1211V7	1320911	Ex9CR1222V7	1321091
	415	Ex9CR0911Z7	1320894	Ex9CR0922Z7	1321074	Ex9CR1211Z7	1320912	Ex9CR1222Z7	1321092
	440	Ex9CR0911R7	1320895	Ex9CR0922R7	1321075	Ex9CR1211R7	1320913	Ex9CR1222R7	1321093
	480	Ex9CR0911T7	1320896	Ex9CR0922T7	1321076	Ex9CR1211T7	1320914	Ex9CR1222T7	1321094
	500	Ex9CR0911S7	1320897	Ex9CR0922S7	1321077	Ex9CR1211S7	1320915	Ex9CR1222S7	1321095
	600	Ex9CR0911Y7	1320898	Ex9CR0922Y7	1321078	Ex9CR1211Y7	1320916	Ex9CR1222Y7	1321096

Specifications ..... A28 to 35
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Mounting Position A43
Accessories ..... A44 to 60

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IEC Contactors

Ex9CR 18~25 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

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Coil Voltage		18 A • 3 Poles				25 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CR1811B7	1321607	Ex9CR1822B7	1321625	Ex9CR2511B7	1320918	Ex9CR2522B7	1321098
	36	Ex9CR1811C7	1321608	Ex9CR1822C7	1321626	Ex9CR2511C7	1320919	Ex9CR2522C7	1321099
	42	Ex9CR1811D7	1321609	Ex9CR1822D7	1321627	Ex9CR2511D7	1320920	Ex9CR2522D7	1321100
	48	Ex9CR1811E7	1321610	Ex9CR1822E7	1321628	Ex9CR2511E7	1320921	Ex9CR2522E7	1321101
	110	Ex9CR1811F7	1321611	Ex9CR1822F7	1321629	Ex9CR2511F7	1320922	Ex9CR2522F7	1321102
	120	Ex9CR1811G7	1321612	Ex9CR1822G7	1321630	Ex9CR2511G7	1320923	Ex9CR2522G7	1321103
	208	Ex9CR1811X7	1321624	Ex9CR1822X7	1321642	Ex9CR2511X7	1320935	Ex9CR2522X7	1321115
	220	Ex9CR1811M7	1321613	Ex9CR1822M7	1321631	Ex9CR2511M7	1320924	Ex9CR2522M7	1321104
	230	Ex9CR1811P7	1321614	Ex9CR1822P7	1321632	Ex9CR2511P7	1320925	Ex9CR2522P7	1321105
	240	Ex9CR1811U7	1321616	Ex9CR1822U7	1321634	Ex9CR2511U7	1320927	Ex9CR2522U7	1321107
	277	Ex9CR1811N7	1321615	Ex9CR1822N7	1321633	Ex9CR2511N7	1320926	Ex9CR2522N7	1321106
	380	Ex9CR1811Q7	1321617	Ex9CR1822Q7	1321635	Ex9CR2511Q7	1320928	Ex9CR2522Q7	1321108
	400	Ex9CR1811V7	1321618	Ex9CR1822V7	1321636	Ex9CR2511V7	1320929	Ex9CR2522V7	1321109
	415	Ex9CR1811Z7	1321619	Ex9CR1822Z7	1321637	Ex9CR2511Z7	1320930	Ex9CR2522Z7	1321110
	440	Ex9CR1811R7	1321620	Ex9CR1822R7	1321638	Ex9CR2511R7	1320931	Ex9CR2522R7	1321111
	480	Ex9CR1811T7	1321621	Ex9CR1822T7	1321639	Ex9CR2511T7	1320932	Ex9CR2522T7	1321112
	500	Ex9CR1811S7	1321622	Ex9CR1822S7	1321640	Ex9CR2511S7	1320933	Ex9CR2522S7	1321113
	600	Ex9CR1811Y7	1321623	Ex9CR1822Y7	1321641	Ex9CR2511Y7	1320934	Ex9CR2522Y7	1321114

Specifications .....A27 to 32
Dimensions.....A35
Wiring Diagram.....A38
Mounting Position.....A39
Accessories.....A40 to 56

2020 NOARK Electric

IEC Contactors

Ex9CR 32~38 A Standard

- Built-in auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

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Coil Voltage		32 A • 3 Poles				38 A • 3 Poles			
		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CR3211B7	1320936	Ex9CR3222B7	1321116	Ex9CR3811B7	1320954	Ex9CR3822B7	1321134
	36	Ex9CR3211C7	1320937	Ex9CR3222C7	1321117	Ex9CR3811C7	1320955	Ex9CR3822C7	1321135
	42	Ex9CR3211D7	1320938	Ex9CR3222D7	1321118	Ex9CR3811D7	1320956	Ex9CR3822D7	1321136
	48	Ex9CR3211E7	1320939	Ex9CR3222E7	1321119	Ex9CR3811E7	1320957	Ex9CR3822E7	1321137
	110	Ex9CR3211F7	1320940	Ex9CR3222F7	1321120	Ex9CR3811F7	1320958	Ex9CR3822F7	1321138
	120	Ex9CR3211G7	1320941	Ex9CR3222G7	1321121	Ex9CR3811G7	1320959	Ex9CR3822G7	1321139
	208	Ex9CR3211X7	1320953	Ex9CR3222X7	1321133	Ex9CR3811X7	1320971	Ex9CR3822X7	1321151
	220	Ex9CR3211M7	1320942	Ex9CR3222M7	1321122	Ex9CR3811M7	1320960	Ex9CR3822M7	1321140
	230	Ex9CR3211P7	1320943	Ex9CR3222P7	1321123	Ex9CR3811P7	1320961	Ex9CR3822P7	1321141
	240	Ex9CR3211U7	1320945	Ex9CR3222U7	1321125	Ex9CR3811U7	1320963	Ex9CR3822U7	1321143
	277	Ex9CR3211N7	1320944	Ex9CR3222N7	1321124	Ex9CR3811N7	1320962	Ex9CR3822N7	1321142
	380	Ex9CR3211Q7	1320946	Ex9CR3222Q7	1321126	Ex9CR3811Q7	1320964	Ex9CR3822Q7	1321144
	400	Ex9CR3211V7	1320947	Ex9CR3222V7	1321127	Ex9CR3811V7	1320965	Ex9CR3822V7	1321145
	415	Ex9CR3211Z7	1320948	Ex9CR3222Z7	1321128	Ex9CR3811Z7	1320966	Ex9CR3822Z7	1321146
	440	Ex9CR3211R7	1320949	Ex9CR3222R7	1321129	Ex9CR3811R7	1320967	Ex9CR3822R7	1321147
	480	Ex9CR3211T7	1320950	Ex9CR3222T7	1321130	Ex9CR3811T7	1320968	Ex9CR3822T7	1321148
	500	Ex9CR3211S7	1320951	Ex9CR3222S7	1321131	Ex9CR3811S7	1320969	Ex9CR3822S7	1321149
	600	Ex9CR3211Y7	1320952	Ex9CR3222Y7	1321132	Ex9CR3811Y7	1320970	Ex9CR3822Y7	1321150

Specifications .....A27 to 32
Dimensions.....A35
Wiring Diagram.....A38
Mounting Position.....A39
Accessories.....A40 to 56

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IEC Contactors

Ex9CR 40~100 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

Coil Voltage		40 A • 3 Poles		50 A • 3 Poles		65 A • 3 Poles		80 A • 3 Poles		100 A • 3 Poles	
		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact		3NO • 1NO+1NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac • 50/60 Hz	24	Ex9CR4011B7	1320972	Ex9CR5011B7	1320990	Ex9CR6511B7	1321008	Ex9CR8011B7	1321026	Ex9CR10011B7	1321044
	36	Ex9CR4011C7	1320973	Ex9CR5011C7	1320991	Ex9CR6511C7	1321009	Ex9CR8011C7	1321027	Ex9CR10011C7	1321045
	42	Ex9CR4011D7	1320974	Ex9CR5011D7	1320992	Ex9CR6511D7	1321010	Ex9CR8011D7	1321028	Ex9CR10011D7	1321046
	48	Ex9CR4011E7	1320975	Ex9CR5011E7	1320993	Ex9CR6511E7	1321011	Ex9CR8011E7	1321029	Ex9CR10011E7	1321047
	110	Ex9CR4011F7	1320976	Ex9CR5011F7	1320994	Ex9CR6511F7	1321012	Ex9CR8011F7	1321030	Ex9CR10011F7	1321048
	120	Ex9CR4011G7	1320977	Ex9CR5011G7	1320995	Ex9CR6511G7	1321013	Ex9CR8011G7	1321031	Ex9CR10011G7	1321049
	208	Ex9CR4011X7	1320989	Ex9CR5011X7	1321007	Ex9CR6511X7	1321025	Ex9CR8011X7	1321043	Ex9CR10011X7	1321061
	220	Ex9CR4011M7	1320978	Ex9CR5011M7	1320996	Ex9CR6511M7	1321014	Ex9CR8011M7	1321032	Ex9CR10011M7	1321050
	230	Ex9CR4011P7	1320979	Ex9CR5011P7	1320997	Ex9CR6511P7	1321015	Ex9CR8011P7	1321033	Ex9CR10011P7	1321051
	240	Ex9CR4011U7	1320981	Ex9CR5011U7	1320999	Ex9CR6511U7	1321017	Ex9CR8011U7	1321035	Ex9CR10011U7	1321053
	277	Ex9CR4011N7	1320980	Ex9CR5011N7	1320998	Ex9CR6511N7	1321016	Ex9CR8011N7	1321034	Ex9CR10011N7	1321052
	380	Ex9CR4011Q7	1320982	Ex9CR5011Q7	1321000	Ex9CR6511Q7	1321018	Ex9CR8011Q7	1321036	Ex9CR10011Q7	1321054
	400	Ex9CR4011V7	1320983	Ex9CR5011V7	1321001	Ex9CR6511V7	1321019	Ex9CR8011V7	1321037	Ex9CR10011V7	1321055
	415	Ex9CR4011Z7	1320984	Ex9CR5011Z7	1321002	Ex9CR6511Z7	1321020	Ex9CR8011Z7	1321038	Ex9CR10011Z7	1321056
	440	Ex9CR4011R7	1320985	Ex9CR5011R7	1321003	Ex9CR6511R7	1321021	Ex9CR8011R7	1321039	Ex9CR10011R7	1321057
	480	Ex9CR4011T7	1320986	Ex9CR5011T7	1321004	Ex9CR6511T7	1321022	Ex9CR8011T7	1321040	Ex9CR10011T7	1321058
	500	Ex9CR4011S7	1320987	Ex9CR5011S7	1321005	Ex9CR6511S7	1321023	Ex9CR8011S7	1321041	Ex9CR10011S7	1321059
	600	Ex9CR4011Y7	1320988	Ex9CR5011Y7	1321006	Ex9CR6511Y7	1321024	Ex9CR8011Y7	1321042	Ex9CR10011Y7	1321060

Specifications .....A28 to 35
Dimensions.....A39 to 40
Wiring Diagram.....A42
Mounting Position.....A43
Accessories.....A44 to 60

2020 NOARK Electric

IEC Contactors

Ex9CR 115~225 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

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Coil Voltage		115 A • 3 Poles		150 A • 3 Poles		185 A • 3 Poles		225 A • 3 Poles	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac/dc	24	Ex9CR115E22B	1321458	Ex9CR150E22B	1321473	Ex9CR185E22B	1321488	Ex9CR225E22B	1321503
	36	Ex9CR115E22C	1321459	Ex9CR150E22C	1321474	Ex9CR185E22C	1321489	Ex9CR225E22C	1321504
	42	Ex9CR115E22D	1321460	Ex9CR150E22D	1321475	Ex9CR185E22D	1321490	Ex9CR225E22D	1321505
	48	Ex9CR115E22E	1321461	Ex9CR150E22E	1321476	Ex9CR185E22E	1321491	Ex9CR225E22E	1321506
	110	Ex9CR115E22F	1321462	Ex9CR150E22F	1321477	Ex9CR185E22F	1321492	Ex9CR225E22F	1321507
	120	Ex9CR115E22G	1321463	Ex9CR150E22G	1321478	Ex9CR185E22G	1321493	Ex9CR225E22G	1321508
	208	Ex9CR115E22X	1321466	Ex9CR150E22X	1321481	Ex9CR185E22X	1321496	Ex9CR225E22X	1321511
	220	Ex9CR115E22M	1321464	Ex9CR150E22M	1321479	Ex9CR185E22M	1321494	Ex9CR225E22M	1321509
	230	Ex9CR115E22P	1321465	Ex9CR150E22P	1321480	Ex9CR185E22P	1321495	Ex9CR225E22P	1321510
	240	Ex9CR115E22U	1321467	Ex9CR150E22U	1321482	Ex9CR185E22U	1321497	Ex9CR225E22U	1321512
	277	Ex9CR115E22N	1321470	Ex9CR150E22N	1321647	Ex9CR185E22N	1321500	Ex9CR225E22N	1321648
	380	Ex9CR115E22Q	1321468	Ex9CR150E22Q	1321483	Ex9CR185E22Q	1321498	Ex9CR225E22Q	1321513
	400	Ex9CR115E22V	1321469	Ex9CR150E22V	1321484	Ex9CR185E22V	1321499	Ex9CR225E22V	1321514
	415	Ex9CR115E22Z	1321652	Ex9CR150E22Z	1321485	Ex9CR185E22Z	1321656	ExCR225E22Z	1321515
	480	Ex9CR115E22T	1321471	Ex9CR150E22T	1321486	Ex9CR185E22T	1321501	Ex9CR225E22T	1321516
	600	Ex9CR115E22Y	1321472	Ex9CR150E22Y	1321487	Ex9CR185E22Y	1321502	Ex9CR225E22Y	1321517
Wide Range Electronic Coil Vac/dc	48~130	Ex9CR115F22H	1321576	Ex9CR150F22H	1321579	Ex9CR185F22H	1321582	Ex9CR225F22H	1321585
	100~250	Ex9CR115F22K	1321577	Ex9CR150F22K	1321580	Ex9CR185F22K	1321583	Ex9CR225F22K	1321586
	250~500	Ex9CR115F22L	1321578	Ex9CR150F22L	1321581	Ex9CR185F22L	1321584	Ex9CR225F22L	1321587

Specifications ..... A28 to 35
Dimensions A40
Wiring Diagram A42
Mounting Position A43
Accessories ..... A44 to 60

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IEC Contactors

Ex9CR 265~500 A Standard

- Built-in side auxiliary contacts; additional auxiliary contacts are front or side mounted
- Reversing
- Ratings page A28-35



Certifications

IEC/EN 60947-1, 60947-4-1
UL 60947-1, 60947-4-1

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Coil Voltage		265 A • 3 Poles		300 A • 3 Poles		400 A • 3 Poles		500 A • 3 Poles	
		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact		3NO • 2NO+2NC Auxiliary Contact	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Vac/dc	24	Ex9CR265E22B	1321518	Ex9CR300E22B	1321533	-	-	-	-
	36	Ex9CR265E22C	1321519	Ex9CR300E22C	1321534	Ex9CR400E22C	1321548	Ex9CR500E22C	1321562
	42	Ex9CR265E22D	1321520	Ex9CR300E22D	1321535	Ex9CR400E22D	1321549	Ex9CR500E22D	1321563
	48	Ex9CR265E22E	1321521	Ex9CR300E22E	1321536	Ex9CR400E22E	1321550	Ex9CR500E22E	1321564
	110	Ex9CR265E22F	1321522	Ex9CR300E22F	1321537	Ex9CR400E22F	1321551	Ex9CR500E22F	1321565
	120	Ex9CR265E22G	1321523	Ex9CR300E22G	1321538	Ex9CR400E22G	1321552	Ex9CR500E22G	1321566
	208	Ex9CR265E22X	1321526	Ex9CR300E22X	1321541	Ex9CR400E22X	1321555	Ex9CR500E22X	1321569
	220	Ex9CR265E22M	1321524	Ex9CR300E22M	1321539	Ex9CR400E22M	1321553	Ex9CR500E22M	1321567
	230	Ex9CR265E22P	1321525	Ex9CR300E22P	1321540	Ex9CR400E22P	1321554	Ex9CR500E22P	1321568
	240	Ex9CR265E22U	1321527	Ex9CR300E22U	1321542	Ex9CR400E22U	1321556	Ex9CR500E22U	1321570
	277	Ex9CR265E22N	1321530	Ex9CR300E22N	1321649	Ex9CR400E22N	1321559	Ex9CR500E22N	1321650
	380	Ex9CR265E22Q	1321528	Ex9CR300E22Q	1321543	Ex9CR400E22Q	1321557	Ex9CR500E22Q	1321571
	400	Ex9CR265E22V	1321529	Ex9CR300E22V	1321544	Ex9CR400E22V	1321558	Ex9CR500E22V	1321572
	415	Ex9CR265E22Z	1321657	Ex9CR300E22Z	1321545	Ex9CR400E22Z	1321658	Ex9CR500E22Z	1321573
	480	Ex9CR265E22T	1321531	Ex9CR300E22T	1321546	Ex9CR400E22T	1321560	Ex9CR500E22T	1321574
	600	Ex9CR265E22Y	1321532	Ex9CR300E22Y	1321547	Ex9CR400E22Y	1321561	Ex9CR500E22Y	1321575
Wide Range Electronic Coil Vac/dc	48~130	Ex9CR265F22H	1321588	Ex9CR300F22H	1321591	Ex9CR400F22H	1321594	Ex9CR500F22H	1321597
	100~250	Ex9CR265F22K	1321589	Ex9CR300F22K	1321592	Ex9CR400F22K	1321595	Ex9CR500F22K	1321598
	250~500	Ex9CR265F22L	1321590	Ex9CR300F22L	1321593	Ex9CR400F22L	1321596	Ex9CR500F22L	1321599

Specifications .....A28 to 35
Dimensions.....A40
Wiring Diagram.....A42
Mounting Position.....A43
Accessories.....A44 to 60

2020 NOARK Electric

IEC Contactors

Ex9CS/C Specifications

			Ex9CS/CSR			Ex9C/CR							
			6	9	12	9	12	18	25	32	38	40	50
General Information													
Pole			3, 4			3							
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1										
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30										
Rated Frequency (Hz)			50/60										
Conventional Free Air Thermal Current Ith (A)	0≤104 °F (0≤40 °C)		20			25		32	40	50		60	80
	0≤140 °F (0≤60 °C)												
	0≤158 °F (0≤70 °C)		16			17		22	28	35		42	56
Rated Insulating Voltage Ui (V)			690									1,000	
Rated Impulse Withstand Voltage Uimp (kV)			6									8	
Electrical Life ($x10^4$ cycles)	AC-3	380/400 V	120										
	AC-4		5	4		5	4		5	4		3.5	3
Mechanical Life ($x10^4$ cycles)			1,000										
Operating Cycles Per Hour (cycles/h)	AC-3		1,200						1,000				
	AC-4		300						150			120	
Environmental Temperature	Transportation or Storage		-76 to 176 °F (-60 to +80 °C)										
	Working At		-4 to 140 °F (-20 to +60 °C)										
	Maximum		-40 to 158 °F (-40 to +70 °C)										
Altitude ft (m)			6,562 (2,000)										
Pollution Degree			Class III										
Rated Operational Current Ie (A)													
At -82 to 131 °F (-25 to 40 °C)	AC-1	690 V	20			25		32	40	50		60	80
	AC-3	380/400 V	6	9	12	9	12	18	25	32	38	40	50
	AC-3	660/690 V	3.8	4.9		6.7	9	10.6	17.3	21.9		34	39
	AC-4	380/400 V	6	9	12	9	12	18	25	32		40	50
	AC-4	660/690 V	3.8	4.9		6.7		8.9	14	17.3		34	39
Rated Power of 3-Phase Motor													
For IEC (kW)	AC-3	230 Vac	-										
	AC-4												
	AC-3	380/400 Vac	2.2	4	5.5	4	5.5	7.5	11	15	18.5		22
	AC-4												
	AC-3	660/690 Vac	3	4		5.5	7.5	9	15	18.5		30	33
	AC-4					5.5		7.5	11	15			
	AC-3	1,000 Vac	-										
	AC-4												
UL Rating													
Ith (A)			20			25		32	40	50		60	80
Single-Phase (HP)		110-120 Vac	0.5		0.75	0.5	1	1.5	2	3			5
		220-240 Vac	1	1.5	2	1.5	2	3		5		7.5	10
Three-Phase (HP)		200-208 Vac	1.5	3				5	7.5	10		10	15
		220-240 Vac	2									15	20
		440-480 Vac	3	5	7.5	5	7.5	10	15	20		30	40
		550-600 Vac	5	7.5	10	7.5	10	15	20	25			
Coil Voltage (V)			24~500Vac, 12~250 Vdc			24 600 Vac, 24-250Vac/dc							

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IEC Contactors

Ex9C Specifications

			Ex9C/CR										
			65	80	100	115	150	185	225	265	300	400	500
General Information													
Pole			3										
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1										
Environmental Testing According to			IEC 60068-2-1, IEC 600682-2, IEC 60068-2-11, IEC 60068-2-30										
Rated Frequency (Hz)			50/60										
Conventional Free Air Thermal Current Ith (A)	0≤104 °F (0≤40 °C)		80	125		160	185	215	275	330	400	500	610
	0≤140 °F (0≤60 °C)						170	200	260	300	360	430	550
	0≤158 °F (0≤70 °C)		56	80		140	160	180	200	260	290	400	480
Rated Insulating Voltage Ui (V)			1,000										
Rated Impulse Withstand Voltage Uimp (kV)			8										
Electrical Life ($x10^4$ cycles)	AC-3	380/400 V	120			100							
	AC-4		3		2.5	20							
Mechanical Life ($x10^4$ cycles)			1,000			800						500	
Operating Cycles Per Hour (cycles/h)	AC-3		1,000	900			750		500				420
	AC-4		120			130							
Environmental Temperature	Transportation or Storage		-76 to 176 °F (-60 to +80 °C)										
	Working At		-4 to 140 °F (-20 to +60 °C)										
	Maximum		-40 to 158 °F (-40 to +70 °C)										
Altitude ft (m)			6,562 (2,000)										
Pollution Degree			Class III										
Rated Operational Current Ie (A)													
At -82 to 131 °F (-25 to 40 °C)	AC-1	690 V	80	125		160	185	215	275	330	400	500	650
	AC-3	380/400 V	65	80	100	115	150	185	225	265	300	400	500
	AC-3	660/690 V	42	49				170			280		450
	AC-4	380/400 V	65	80	100	54	68	81	96	117	125	150	175
	AC-4	660/690 V	42	49		48	57	65	85	105	115	135	150
Rated Power of 3-Phase Motor													
For IEC (kW)	AC-3	230 Vac	-			37	45	55		75	90	132	160
	AC-4					18.5	22	30		37	40	45	55
	AC-3	380/400 Vac	30	37	45	55	75	90	110	132	160	220	250
	AC-4					30	37	45	55	63	75	90	100
	AC-3	660/690 Vac	37	45		110	132	160	200	250		355	400
	AC-4					50	55	63	80	100	110	132	150
	AC-3	1,000 Vac	-			75	90	90		132		250	315
	AC-4					50	55	63		80		110	
UL Rating													
Ith (A)			80	125		160	185	215	275	330	400	500	610
Single-Phase (HP)		110-120 Vac	5	7.5	10	15	-		-				
		220-240 Vac	15	20		25	30	40					
Three-Phase (HP)		200-208 Vac	20	30	30	40	50	60		75	100	125	150
		220-240 Vac	25		40	50	60	75		100	125	150	200
		440-480 Vac	50	60		100	125	150		200	250	300	400
		550-600 Vac				125	150	200		250	300	400	500
Coil Voltage (V)			24~600 Vac			24~600 Vac/dc						36~600 Vac/dc	

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IEC Contactors

Ex9C Specifications

			Ex9C		
			630	800	1000
General Information					
Pole			3		
Production Standard			IEC 60947-1, IEC 60947-4-1, UL 60947-1, UL 60947-4-1		
Environmental Testing According to			IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-11, IEC 60068-2-30		
Rated Frequency (Hz)			50/60		
Conventional Free Air Thermal Current Ith (A)	0≤104 °F (0≤40 °C)		800	1000	1000
	0≤140 °F (0≤60 °C)		720	850	850
	0≤158 °F (0≤70 °C)		630	750	750
Rated Insulating Voltage Ui (V)			1,000		
Rated Impulse Withstand Voltage Uimp (kV)			8		
Electrical Life ($x10^4$ cycles)	AC-3	380/400 V	80	50	
	AC-4		20		
Mechanical Life ($x10^4$ cycles)			300		
Operating Cycles Per Hour (cycles/h)	AC-3		300		120
	AC-4		100		
Environmental Temperature	Transportation or Storage		-76 to 176 °F (-60 to +80 °C)		
	Working At		-4 to 140 °F (-20 to +60 °C)		
	Maximum		-40 to 158 °F (-40 to +70 °C)		
Altitude ft (m)			6,562 (2,000)		
Pollution Degree			Class III		
Rated Operational Current Ie (A)					
At -82 to 131 °F (-25 to 40 °C)	AC-1	690 V	800	1000	1260
	AC-3	380/400 V	630	800	1000
	AC-3	660/690 V	560	650	700
	AC-4	380/400 V	225	242	260
	AC-4	660/690 V	200	215	230
Rated Power of 3-Phase Motor					
For IEC (kW)	AC-3	230 Vac	200	250	315
	AC-4		75		80
	AC-3	380/400 Vac	335	450	560
	AC-4		110	132	150
	AC-3	660/690 Vac	560	630	710
	AC-4		185	200	220
	AC-3	1,000 Vac	400	450	500
	AC-4		150	200	
UL Rating					
Ith (A)			800	900	1000
Single-Phase (HP)		110-120 Vac	-		
		220-240 Vac			
Three-Phase (HP)		200-208 Vac	250	300	350
		220-240 Vac	500	600	750
		440-480 Vac	600	700	800
		550-600 Vac			
Coil Voltage (V)			48 - 480 Vac/dc		

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IEC Contactors

Ex9CS/C Specifications

			Ex9CS/CSR			Ex9C/CR						
			6	9	12	9	12	18	25	32	38	40	50
Coil Electrical Parameters													
Tolerance of Control Voltage 50/60 Hz	Operation (Uc)	Standard	0.85~1.10										
		F-Type	-			0.85Ucmin~1.10Ucmax							
	Drop-Off (Uc)	Standard	0.20~0.75 AC 0.10~0.75 DC										
		F-Type	-			0.20Ucmax~0.75Ucmin (AC), 0.10Ucmax~0.75Ucmin (DC)							
Coil Power Consumption													
In Rush (VA)		AC	70			90			100			240	
		F-Type	-			100						200	
Power Factor			-										
Sealed (VA)		AC	9			9.5			11.4			36.6	
		F-Type	-			2.5						6	
Power Factor			-										
Pick-Up (W)		DC	4			7						17	
		F-Type	-			70						150	
Hold (W)		DC	4			7						17	
		F-Type	-			2						4.5	
Operating Time (ms)	Operation	Standard	10-20			12-24			14-27			20-30	
		F-Type	-			100-170						50~100	
	Drop-Off	Standard	4-16			6-20			7-22			8-20	
		F-Type				40~80			40~80			20~120	
IEC AC Contactor Working at DC Power Data													
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)										
Working Type: DC-1, Resistive Load Time Data: L/R≤1ms Environmental Temperature: ≤140 °F (≤60 °C)	24	1	15			20		25	32	40		50	65
		2											
		3											
	48/75	1											
		2											
		3											
	125	1	4						7				
		2	15			20		25	32	40		50	65
		3											
	225	1	1									1.5	
		2	4						7				
		3	15			20		25	32	40		50	65
IEC AC Contactor Working at DC Power Data													
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)										
Working Type: DC-2 to DC-5, Inductive Load Time Data: L/R≤15ms Environmental Temperature: ≤140 °F (≤60 °C)	24	1	15			20		25	32	40		50	65
		2											
		3											
	48/75	1	5			8							
		2	15			20		25					
		3											
	125	1	1.5			2			3			4	
		2	11			15			32	40		50	65
		3	15			20		25					
	225	1	0.5						1			1.5	
		2	1.5			2			3			4	
		3	5			8			32	40		50	65

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IEC Contactors

Ex9C Specifications

			Ex9C/CR										Ex9C		
			65	80	100	115	150	185	225	265	300	400	500	630	800	1000
Coil Electrical Parameters																
Tolerance of Control Voltage 50/60 Hz		Operation (Uc)	0.85~1.10													
		Drop-Off (Uc)	0.20~0.70			0.20~0.65										
Coil Power Consumption																
In Rush (VA)		AC	240	280		400			590			600		850		
		F-Type	200											-		
Power Factor			-			0.90-0.95										
Sealed (VA)		AC	36			10								10		
		F-Type	6											-		
Power Factor			-			0.90-0.95										
Pick-Up (W)		DC	17			400			590			600		850		
		F-Type	150											-		
Hold (W)		Standard	17			10								10		
		F-Type	4.5											-		
Operating Time (ms)	Operation	Standard	20-30	20-35		31-64			45-100			58-95		100~180		
		F-Type	50~100											-		
	Drop-Off	Standard	8-20	6-20		44-68			47-67			85-120		100~120		
		F-Type	20~120											-		
IEC AC Contactor Working at DC Power Data																
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)													
Working Type: DC-1, Resistive Load Time Data: L/R≤1ms Environmental Temperature: ≤140 °F (≤60 °C)	24	1	65	100		160			200		300	400				
		2														
		3														
	48/75	1														
		2														
		3														
	125	1	7	12		18			33							
		2	65	100		160			200		300	400				
		3														
	225	1	1.5			3.4			3.8							
		2	7	12		20			30			40				
		3	65	100		160			200		300	400				
IEC AC Contactor Working at DC Power Data																
	Rated Working Voltage (V)	Poles of Series Connection	Rated Working Current (A)													
Working Type: DC-2 to DC-5, Inductive Load Time Data: L/R≤15ms Environmental Temperature: ≤140 °F (≤60 °C)	24	1	65	100		160			200		300	400				
		2														
		3														
	48/75	1														
		2														
		3														
	125	1	4	5		7.5			11							
		2	65	100		160			200		300	400				
		3														
	225	1	1.5	2		2.5										
		2	4	5		7.5			11							
		3	65	100		160			200		300	400				

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IEC Contactors

Ex9CS/C Specifications

		Ex9CS/CSR			Ex9C/CR						
		6	9	12	9	12	18	25	32	38	40	50
Built-In Auxiliary Contacts												
Auxiliary Contacts		1NO/1NC (3P), None (4P)			1NO+1NC, 2NO+2NC						1NO+1NC	
Rated Operation Voltage Ue (V)		690										
Rated Insulating Voltage Ui (V)												
Rated Impulse Withstand Voltage Uimp (kV)		6										
Rated Frequency (Hz)		50/60										
Conventional Free Air Thermal Current Ith (A)		10										
Rated Operational Current Ie (A)												
AC-15	24 V	-										
	120 V	6										
	230 V	-										
	240 V	3										
	380 V	1.9										
	400 V	-										
	600 V	1.2										
	690 V	-										
DC-13	125 V	0.55										
	220 V	0.31										
	250 V	-			0.27							
Mounting	Screw (mm)	ø4									ø5	
	DIN rail (mm)	35/7.5									35/7.5 or 75/7.5	
Dimension LxWxH in (mm)		1.93x2.32x2.28 (49x59x58)			3.50x1.77x3.70 (89x45x94)			3.94x1.77x4.25 (100x45x108)			4.80x2.99x4.84 (122x76x123)	
Weight lb (kg)		0.40 (0.18)			0.77 (0.35)			0.88 (0.40)			2.71 (1.23)	
Degree of Protection		IP 20										
Main Power Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	18-12* (1-2.5)†			18-10* (1.5-6)†			14-8* (1.5-10)†			14-4* (2.5-25)†	
	Dual Cable											
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable											
	Dual Cable											
Screw Size ø (mm)		M3			M3.5			M4			M8	
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)			22 (2.50)			53 (6)	
Bus Bar Terminal Connection												
Bus Bar Size		-										
Screw Size ø (mm)												
Torque of Terminals in-lb (N.m)												
Auxiliary Contact Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	18-12* (1-2.5)†										
	Dual Cable											
Stiff Cable With Cold-Press Terminal AWG (mm^2)	Single Cable											
	Dual Cable											
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable											
	Dual Cable											
Screw Size ø (mm)		M3			M3.5							
Torque of Terminals in-lb (N.m)		7 (0.80)			15 (1.70)							

* American Wire Guage
† IEC Wire Guage

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IEC Contactors

Ex9C Specifications

		Ex9C/CR										
		65	80	100	115	150	185	225	265	300	400	500
Built-In Auxiliary Contacts												
Auxiliary Contacts		1NO+1NC			2NO+2NC							
Rated Operation Voltage Ue (V)		690										
Rated Insulating Voltage Ui (V)												
Rated Impulse Withstand Voltage Uimp (kV)		6										
Rated Frequency (Hz)		50/60										
Conventional Free Air Thermal Current Ith (A)		10										
Rated Operational Current Ie (A)												
AC-15	24 V	-			6							
	120 V	6			-							
	230 V	-			3.13							
	240 V	3										
	380 V	1.9			-							
	400 V	-			1.8							
	600 V	1.2			-							
	690 V	-			1.04							
DC-13	125 V	0.55										
	220 V	0.31										
	250 V	0.27										
Mounting	Screw (mm)	ø5			ø8			ø9				
	DIN rail (mm)	35/7.5 or 75/7.5			-							
Dimension LxWxH in (mm)		4.80x2.99 x4.84 (122x76x123)	5.12x3.43x5.12 (130x87x130)		6.81x4.72x6.85 (173x120x174)			8.39x5.71x8.19 (213x145x208)			8.50x6.30x9.02 (216x160x229)	
Weight lb (kg)		2.71 (1.23)	3.31 (1.50)		6.61 (3)			13.23 (6)			20.94 (9.5)	
Degree of Protection		IP 20										
Main Power Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	14-4* (2.5-25)†	12-1/0 (2.5-50)		(1x) 4 - (2x) 250 MCM ((1x) 25 - (2x) 120)			(1x) 1/0 - (2x) 500 MCM ((1x) 50 - (2x) 240)				
	Dual Cable		12-1 (2.5-42.5)									
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable		12-1/0 (2.5-50)									
	Dual Cable		12-1 (2.5-42.5)									
Screw Size ø (mm)		M8						M10				
Torque of Terminals in-lb (N.m)		53 (6)	79 (9)		159 (18)			310 (35)				
Bus Bar Terminal Connection												
Bus Bar Size		-			2x0.75x0.25 (2x20x5)			2x1x0.25 (2x30x5)			2x1.25x0.25 (2x40x5)	
Screw Size ø (mm)					M8			M10				
Torque of Terminals in-lb (N.m)					159 (18)			310 (35)				
Auxiliary Contact Terminal Connection												
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	18-12* (1-2.5)†										
	Dual Cable											
Stiff Cable With Cold-Press Terminal AWG (mm^2)	Single Cable											
	Dual Cable											
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable											
	Dual Cable											
Screw Size ø (mm)		M3.5										
Torque of Terminals in-lb (N.m)		15 (1.70)										

* American Wire Guage
† IEC Wire Guage

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IEC Contactors

Ex9C Specifications

		Ex9C		
		630	800	1000
Built-In Auxiliary Contacts				
Auxiliary Contacts		2NO+2NC		
Rated Operation Voltage Ue (V)		690		
Rated Insulating Voltage Ui (V)				
Rated Impulse Withstand Voltage Uimp (kV)		6		
Rated Frequency (Hz)		50/60		
Conventional Free Air Thermal Current Ith (A)		10		
Rated Operational Current Ie (A)				
AC-15	24 V	6		
	120 V	-		
	230 V	3.13		
	240 V	3		
	380 V	-		
	400 V	1.8		
	600 V	-		
	690 V	1.04		
DC-13	125 V	0.55		
	220 V	0.31		
	250 V	0.27		
Mounting	Screw (mm)	11.5		
	DIN rail (mm)	-		
Dimension LxWxH in (mm)		11.73*9.06*10.47 (298*230*266)	12.68*9.06*10.47 (322*230*266)	
Weight lb (kg)		44.53(20.2)	48.5(22)	49.16(22.3)
Degree of Protection		IP 20 (Control Circuit Terminal) IP 00 Main Circuit Terminal		
Main Power Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	LTC25NB 250~600 LTC25NC 4/0~500	LTC26NC 3/0~750 LTC26ND 3/0~500	
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M12	4*M10	
Torque of Terminals in-lb (N.m)		310(45)	310(35)	
Auxiliary Contact Terminal Connection				
Flexible Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable	18-12* (1-2.5) †		
	Dual Cable			
Stiff Cable With Cold-Press Terminal AWG (mm^2)	Single Cable			
	Dual Cable			
Stiff Cable Without Cold-Press Terminal AWG (mm^2)	Single Cable			
	Dual Cable			
Screw Size ø (mm)		M3.5		
Torque of Terminals in-lb (N.m)		15 (1.70)		

* American Wire Guage
† IEC Wire Guage

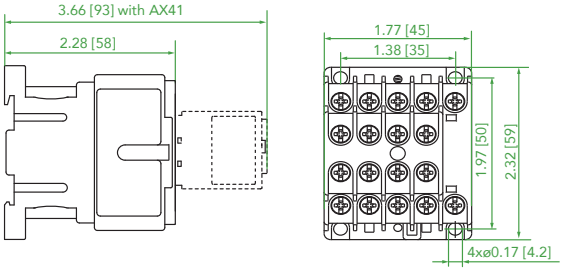
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Ex9CS/C Dimensions

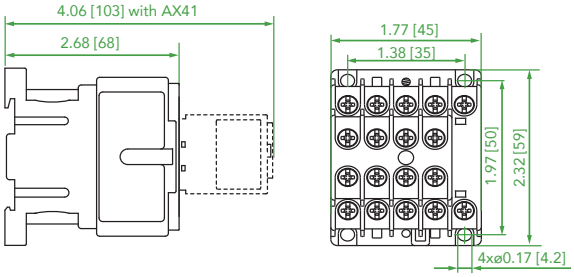
Ex9CS06~12 AC

Unit: in [mm]



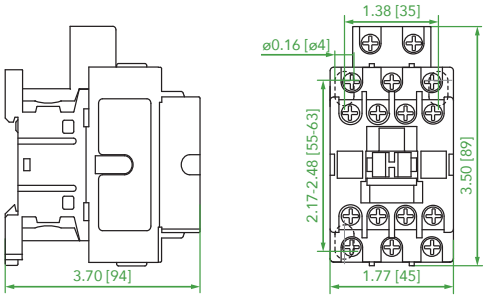
Ex9CS06~12 DC

Unit: in [mm]



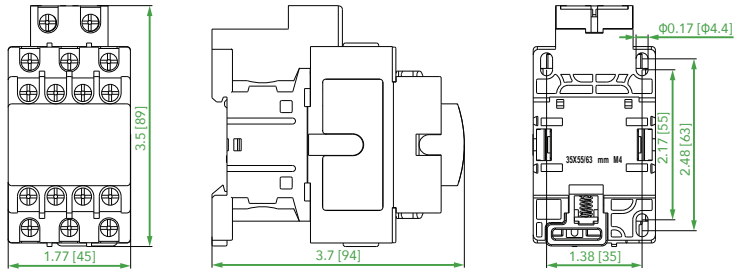
Ex9C09~18

Unit: in [mm]



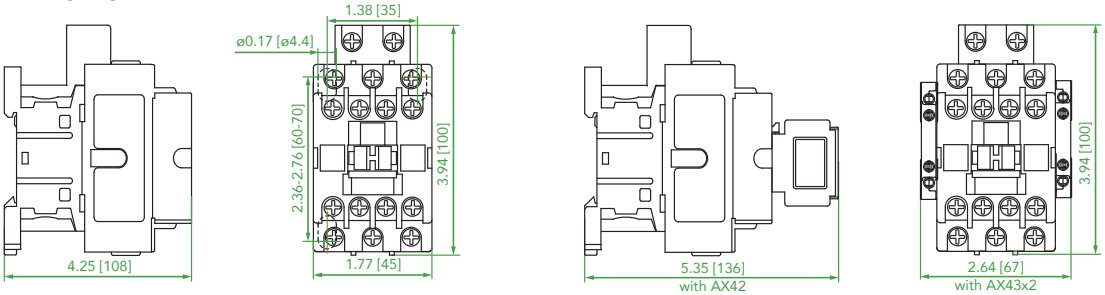
Ex9C09F~18F

Unit: in [mm]



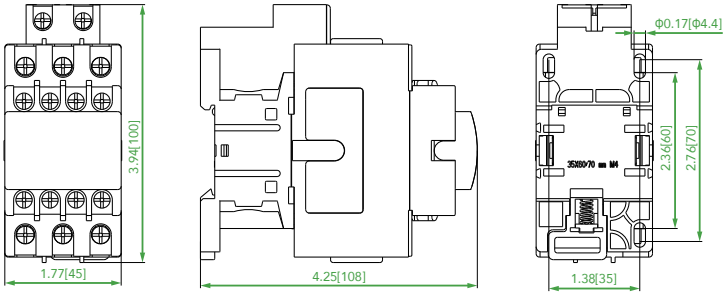
Ex9C25~38

Unit: in [mm]



Ex9C25F~38F

Unit: in [mm]

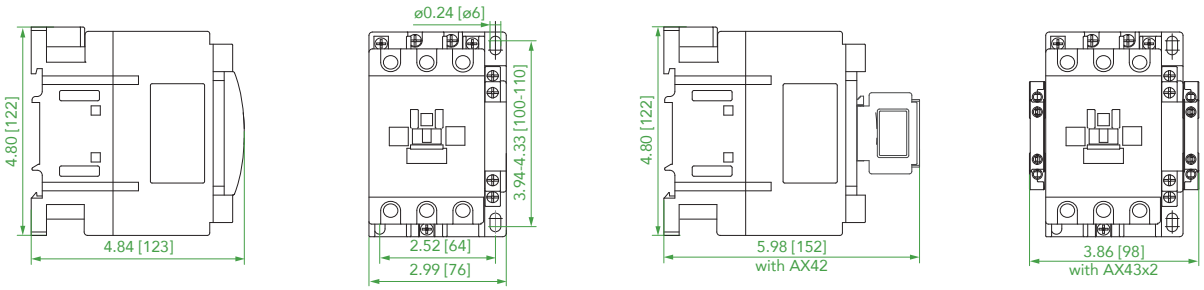


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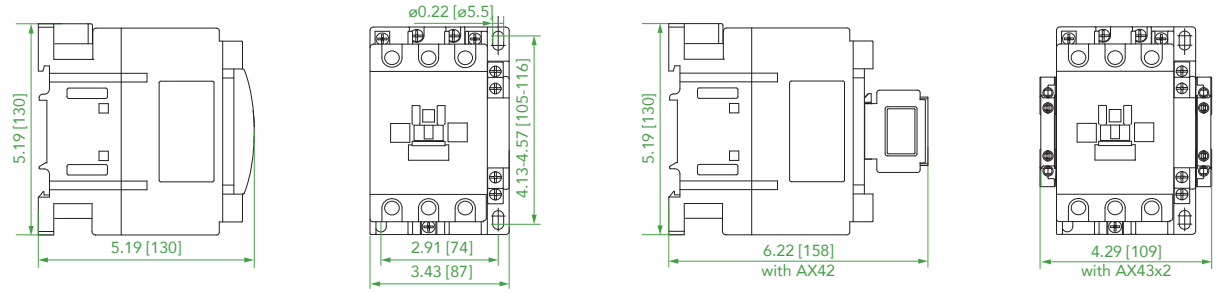
IEC Contactors

Ex9C Dimensions

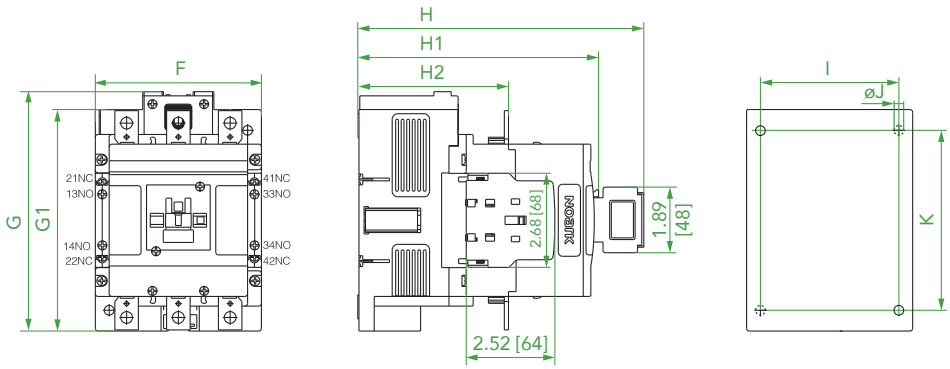
Ex9C40~65
Unit: in [mm]



Ex9C80~100
Unit: in [mm]



Ex9C115~500
Unit: in [mm]



Contactor	F	G	G1	H	H1	H2	I	J*	K
Ex9C115~185	4.75 [120]	6.81 [173]	6.30 [160]	8.07 [205]	6.85 [174]	4.25 [108]	3.94 [100]	ø0.28 [ø7]	5.12 [130]
Ex9C225~300	5.71 [145]	8.35 [212]	7.87 [200]	9.41 [239]	8.15 [207]	5.28 [134]	4.72 [120]	ø0.35 [ø9]	7.09 [180]
Ex9C400~500	6.30 [160]	8.58 [218]	7.87 [200]	10.28 [261]	9.02 [229]	5.94 [151]	5.12 [130]	ø0.35 [ø9]	7.09 [180]

*Note: Ex9C115~185 has only two mounting holes as broken circles and the other types have four mounting holes.

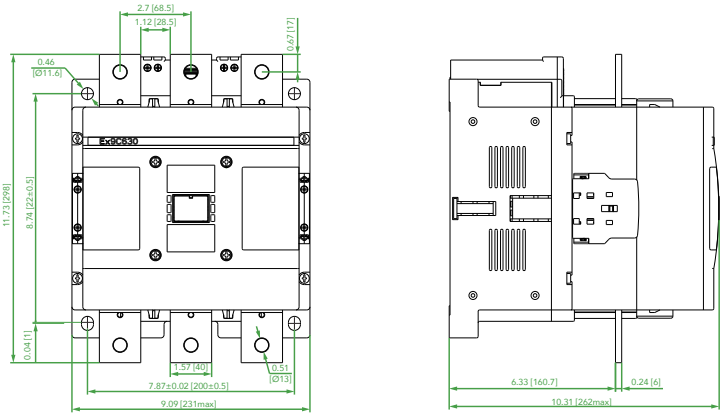
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IEC Contactors

Ex9C Dimensions

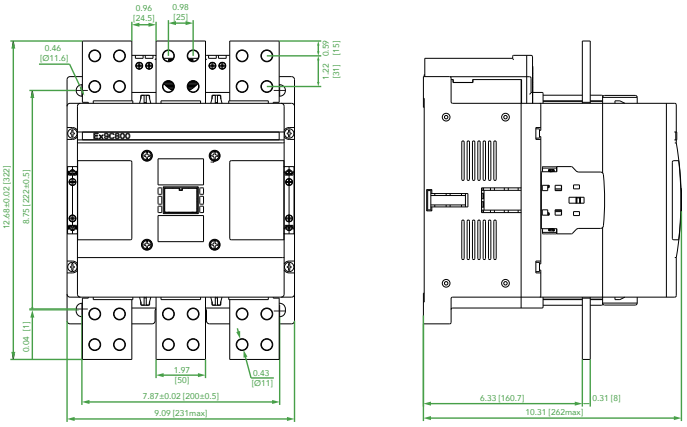
Ex9C630

Unit: in [mm]



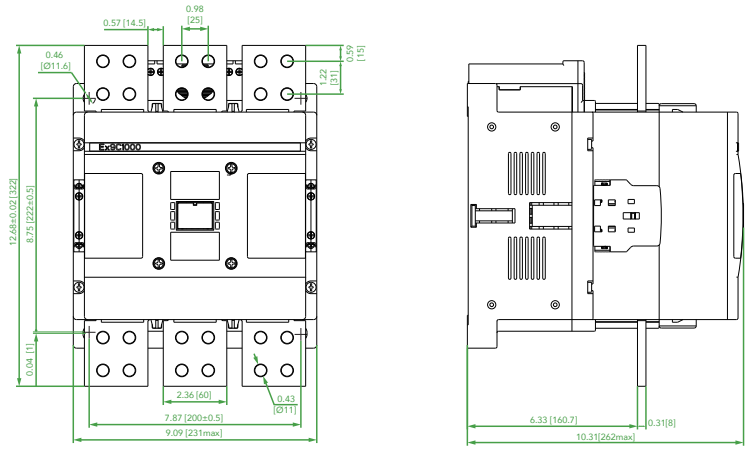
Ex9C800

Unit: in [mm]



Ex9C1000

Unit: in [mm]



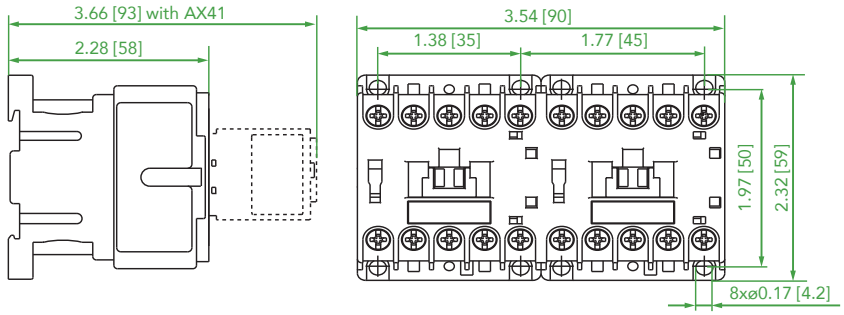
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Ex9CSR/CR Dimensions

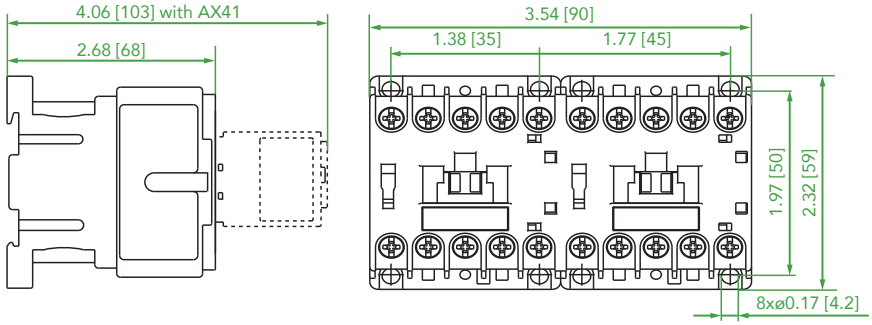
Ex9CSR06~12 AC

Unit: in [mm]



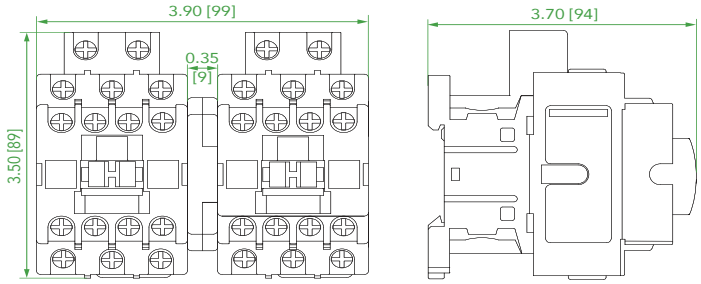
Ex9CSR06~12 DC

Unit: in [mm]



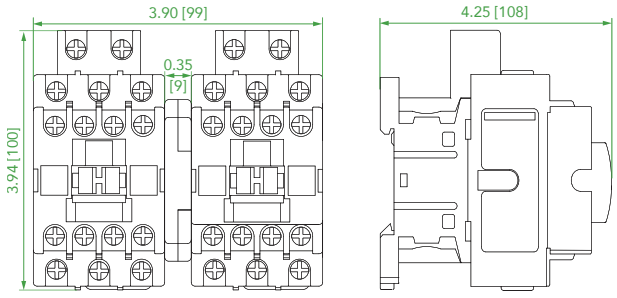
Ex9CR09~18

Unit: in [mm]



Ex9CR25~38

Unit: in [mm]



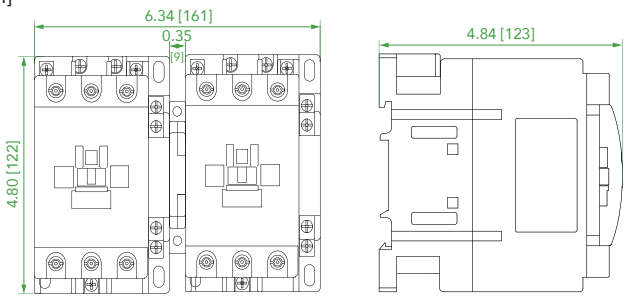
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IEC Contactors

Ex9CR Dimensions

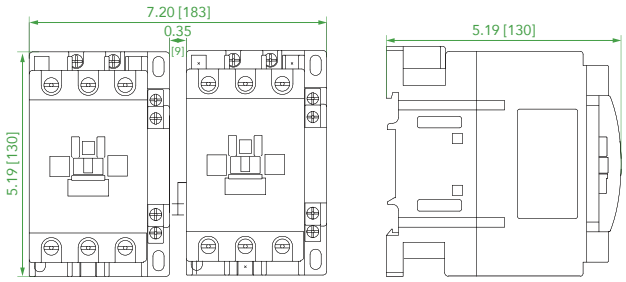
Ex9CR40~65

Unit: in [mm]



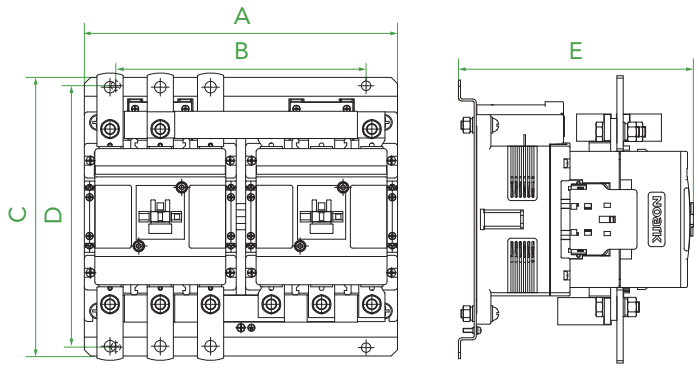
Ex9CR80~100

Unit: in [mm]



Ex9CR115~500

Unit: in [mm]



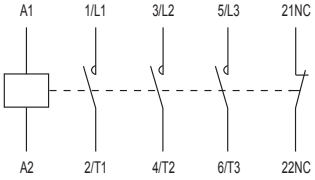
Contactor	A	B	C	D	E
Ex9C115~185	9.80 [249]	7.44 [189]	9.06 [230]	8.43 [214]	7.64 [194]
Ex9C225~300	11.77 [299]	9.41 [239]	10.47 [266]	9.84 [250]	8.86 [225]
Ex9C400~500	12.95 [329]	10.59 [269]	10.55 [268]	9.96 [253]	9.69 [246]

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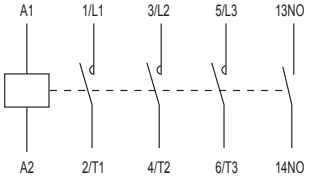
IEC Contactors

Ex9CS/C Wiring Diagrams

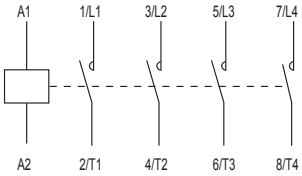
Ex9CS06~12



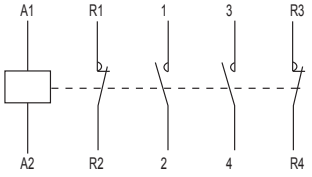
Ex9CS... 3P 1NC



Ex9CS... 3P 1NO

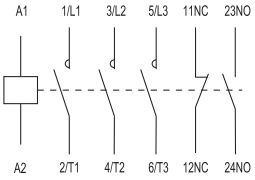


Ex9CS... 4P No Auxiliary

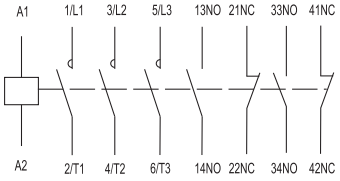


Ex9CS... 4P 2NO+2NC

Ex9C09~38

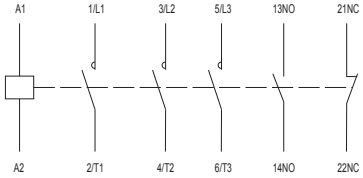


Ex9C... 3P 1NO+1NC



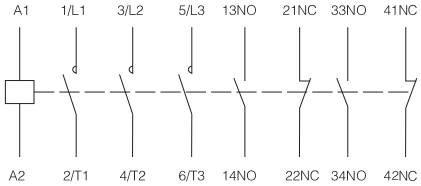
Ex9C... 3P 2NO+2NC

Ex9C40~100



Ex9C... 3P 1NO+1NC

Ex9C115~1000



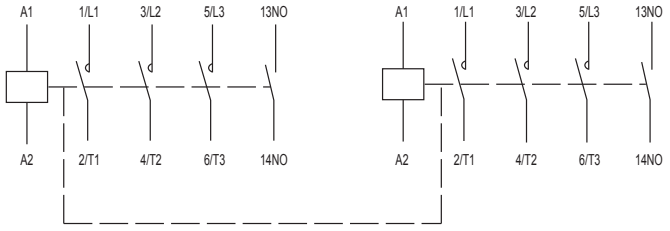
Ex9C... 3P 2NO+2NC

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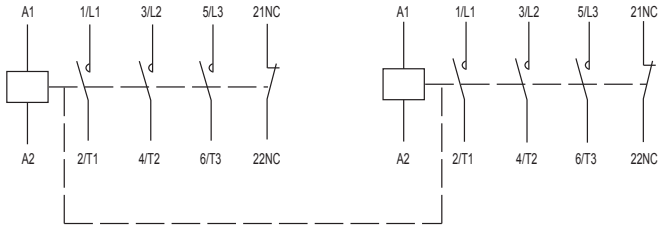
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Ex9CSR/CR Wiring Diagrams

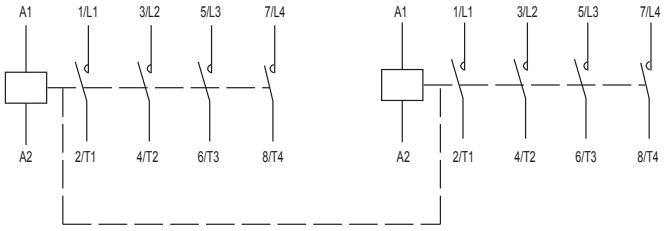
Ex9CSR06~12



Ex9CSR... 3P 1NO

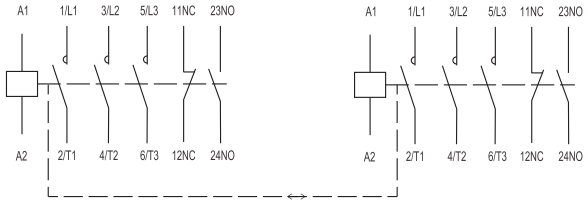


Ex9CSR... 3P 1NC

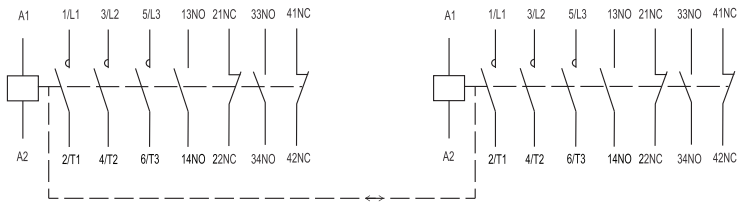


Ex9CSR... 4P No Auxiliary

Ex9CR09~38

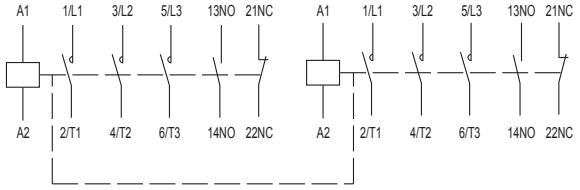


Ex9CR... 3P 1NO+1NC



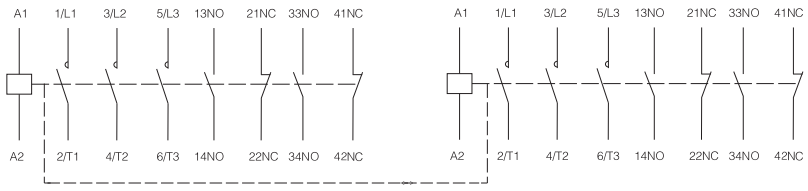
Ex9CR... 3P 2NO+2NC

Ex9CR40~100



Ex9CR... 3P 1NO+1NC

Ex9CR115~500



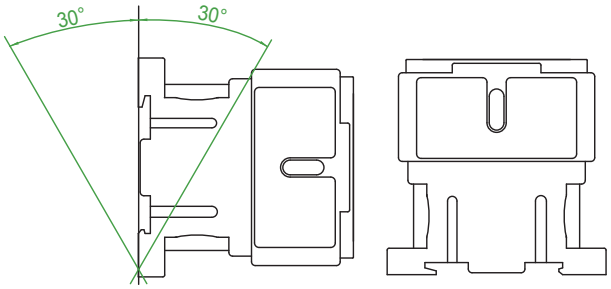
Ex9C... 3P 2NO+2NC

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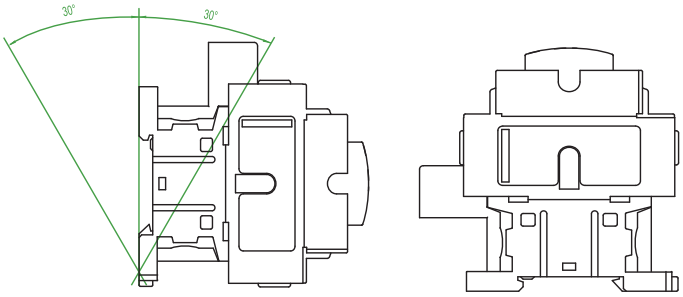
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Ex9CS/C Mounting Positions

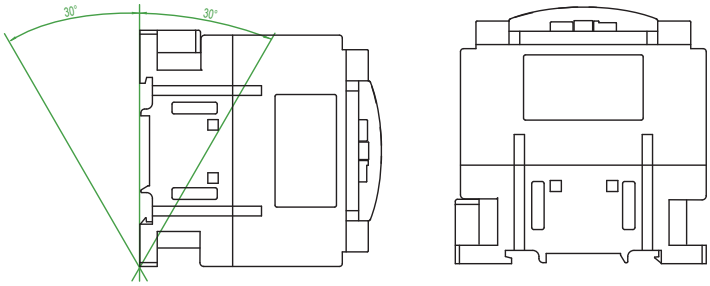
Ex9CS/CSR06~12



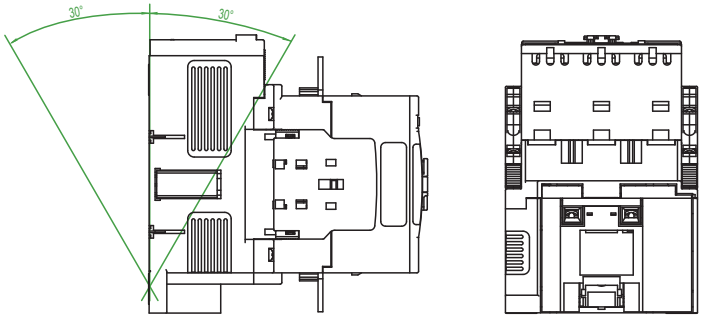
Ex9C/CR09~38



Ex9C/CR40~100



Ex9C/CR115~1000

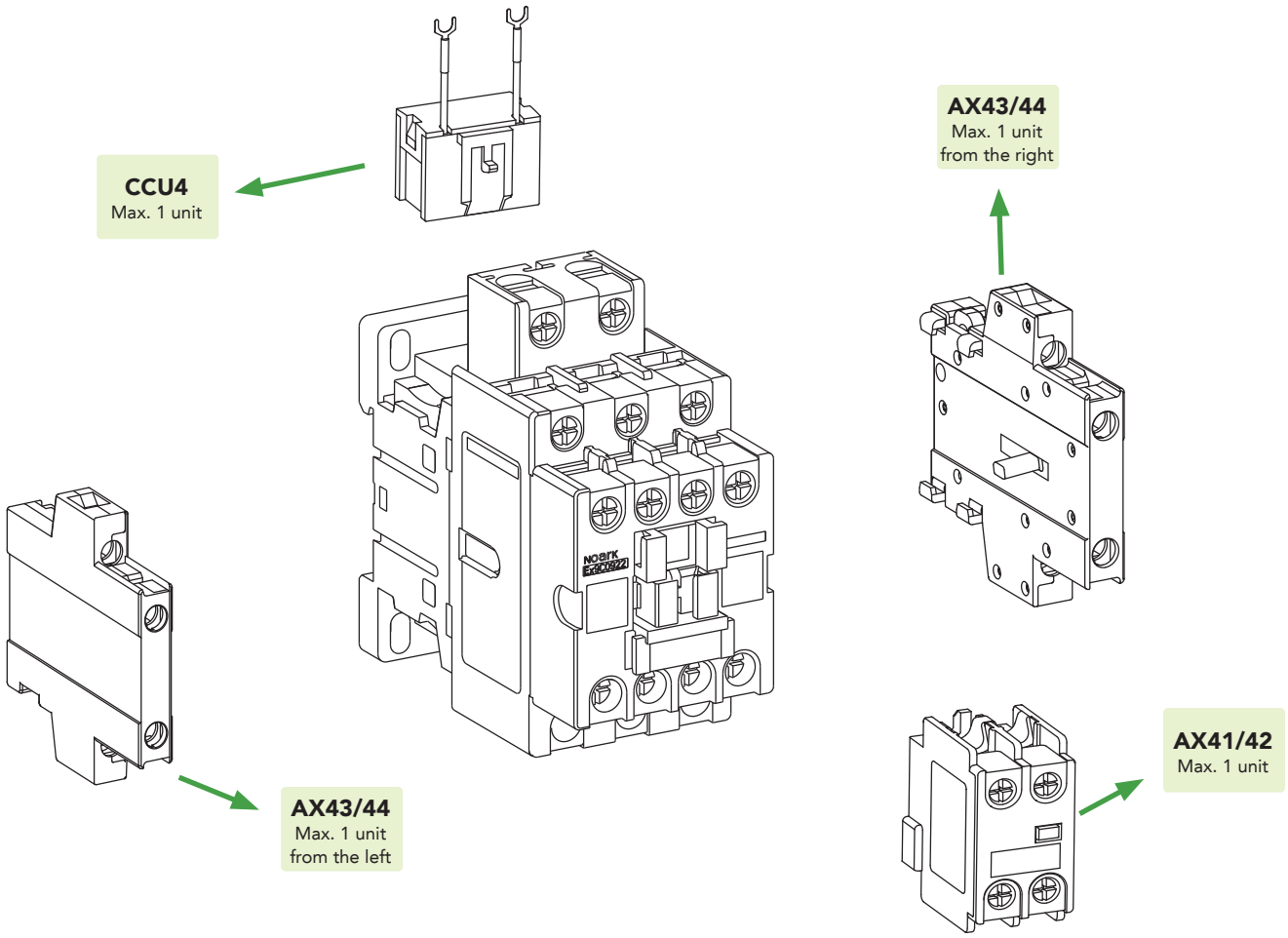


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Ex9CS/C Accessories Overview

The Ex9CS/C line shares accessories and every contactor can be equipped with one front-mounted unit, two units of side-mounted contact (one from the left, the other from the right) and surge suppressor block.



Front-Mounted Auxiliary Contacts (AX41/42)

- For subsequent mounting
- One unit used with a contactor

Side-Mounted Auxiliary Contacts (AX43/44)

- For subsequent mounting
- One unit used with a contactor on the left side, another unit on the right side

Surge Suppressor Blocks (CCU4)

- Reduces voltage peaks in control circuit
- Versions with varistor and RC circuit technology
- Includes cable lugs for connecting to contactor terminals

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IEC Contactors

Ex9CS/C Accessories: Auxiliary Contact



Front Mount

- For contactors Ex9CS, Ex9CSR, Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor



Side Mount

- For contactors Ex9C and Ex9CR
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

Specifications A52
Dimensions..... A54
Wiring Diagram A59

AX4	1	04	UL
Description	Contactor Type and Rated Current	Auxiliary Contact	Device Category
Auxiliary Contact	1: Ex9CS Mini Front Mount 06~12 A	02: 2NC	UL: UL Listed
	2: Ex9C Standard Front Mount 09~500 A	04: 4NC	
	3: Ex9C Standard Side Mount 09~100 A	11: 1NO+1NC	
	4: Ex9C Standard Side Mount 115~500 A	13: 1NO+3NC	
		20: 2NO	
		22: 2NO+2NC	
		31: 3NO+1NC	
		40: 4NO	

Accessory Description		Matched Contactor	Product	Part Number
Auxiliary Contact Mechanically Linked Contacts (in accordance with IEC 60947-5-1 Annex L) and Mirror Contacts (in accordance with IEC 60947-4-1 Annex F)	Front Mount	Ex9CS06~12 Ex9CSR06~12 (Front Mount)	AX4104UL	1330001
			AX4113UL	1330002
			AX4122UL	1330003
			AX4131UL	1330004
			AX4140UL	1330005
		Ex9C09~500 Ex9CR09~500 (Front Mount)	AX4202UL	1330006
			AX4204UL	1330009
			AX4211UL	1330007
			AX4213UL	1330010
			AX4220UL	1330008
			AX4222UL	1330011
			AX4231UL	1330012
			AX4240UL	1330013
	Side Mount	Ex9C09~100 Ex9CR09~100 (Side Mount)	AX4311UL	1330014
		Ex9C115~500 Ex9CR115~500 (Side Mount)	AX4402UL	1330016
			AX4411UL	1330015
			AX4420UL	1330209

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IEC Contactors

Ex9CS/C Accessories: Coil



- Field interchangeable

Part Numbers ..... A47 to 48
Specifications ..... A31 to 32

COU41	A	12	A	UL
Description	**Coil Type**	**Contactor Type and Rated Current**	**Control Voltage**	**Device Category**
Coil	A: AC, 50/60 Hz	12: Ex9CS Mini 06~12 A	B: 24 V C: 36 V D: 42 V E: 48 V H: 48~130 Vac/dc K: 100~250 Vac/dc F: 110 V G: 120 V X: 208 V M: 220 V P: 230 V U: 240 V W: 250 V L: 250~500 Vac/dc N: 277 V Q: 380 V V: 400 V Z: 415 V R: 440 V T: 480 V S: 500 V Y: 600 V	UL: UL Listed
	E: AC/DC	18: Ex9C Standard 09~18 A		
	F: Wide Range Electronic AC/DC	38: Ex9C Standard 25~38 A		
		65: Ex9C Standard 40~65 A		
		100: Ex9C Standard 80~100 A		
		185: Ex9C Standard 115~185 A		
		300: Ex9C Standard 225~300 A		
		500: Ex9C Standard 400~500 A		

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IEC Contactors

Ex9CS/C Accessories: Coil

Accessory Description	Coil Voltage	AC Coil					
		Product	Part Number	Product	Part Number	Product	Part Number
		06~12 A		25~38 A		80~100 A	
Coil (See page A42 for description)	24	COU41A12BUL	1330036	COU41A38BUL	1330084	COU41A100BUL	1330132
	36	COU41A12CUL	1330037	COU41A38CUL	1330085	COU41A100CUL	1330133
	42	COU41A12DUL	1330038	COU41A38DUL	1330086	COU41A100DUL	1330134
	48	COU41A12EUL	1330039	COU41A38EUL	1330087	COU41A100EUL	1330135
	110	COU41A12FUL	1330040	COU41A38FUL	1330088	COU41A100FUL	1330136
	120	COU41A12GUL	1330041	COU41A38GUL	1330089	COU41A100GUL	1330137
	208	COU41D12XUL	1330053	COU41A38XUL	1330101	COU41A100XUL	1330149
	220	COU41A12MUL	1330042	COU41A38MUL	1330090	COU41A100MUL	1330138
	230	COU41A12PUL	1330043	COU41A38PUL	1330091	COU41A100PUL	1330139
	240	COU41A12UUL	1330045	COU41A38UUL	1330093	COU41A100UUL	1330141
	277	COU41A12NUL	1330044	COU41A38NUL	1330092	COU41A100NUL	1330140
	380	COU41A12QUL	1330046	COU41A38QUL	1330094	COU41A100QUL	1330142
	400	COU41A12VUL	1330047	COU41A38VUL	1330095	COU41A100VUL	1330143
	415	COU41A12ZUL	1330048	COU41A38ZUL	1330096	COU41A100ZUL	1330144
	440	COU41A12RUL	1330049	COU41A38RUL	1330097	COU41A100RUL	1330145
	480	COU41A12TUL	1330050	COU41A38TUL	1330098	COU41A100TUL	1330146
	500	COU41A12SUL	1330051	COU41A38SUL	1330099	COU41A100SUL	1330147
	600	COU41A12YUL	1330052	COU41A38YUL	1330100	COU41A100YUL	1330148
		09~18 A		40~65 A			
	24	COU41A18BUL	1330060	COU41A65BUL	1330108		
	36	COU41A18CUL	1330061	COU41A65CUL	1330109		
	42	COU41A18DUL	1330062	COU41A65DUL	1330110		
	48	COU41A18EUL	1330063	COU41A65EUL	1330111		
	110	COU41A18FUL	1330064	COU41A65FUL	1330112		
	120	COU41A18GUL	1330065	COU41A65GUL	1330113		
	208	COU41A18XUL	1330077	COU41A65XUL	1330125		
	220	COU41A18MUL	1330066	COU41A65MUL	1330114		
	230	COU41A18PUL	1330067	COU41A65PUL	1330115		
	240	COU41A18UUL	1330069	COU41A65UUL	1330117		
	277	COU41A18NUL	1330068	COU41A65NUL	1330116		
	380	COU41A18QUL	1330070	COU41A65QUL	1330118		
	400	COU41A18VUL	1330071	COU41A65VUL	1330119		
	415	COU41A18ZUL	1330072	COU41A65ZUL	1330120		
	440	COU41A18RUL	1330073	COU41A65RUL	1330121		
	480	COU41A18TUL	1330074	COU41A65TUL	1330122		
	500	COU41A18SUL	1330075	COU41A65SUL	1330123		
	600	COU41A18YUL	1330076	COU41A65YUL	1330124		

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Ex9CS/C Accessories: Coil

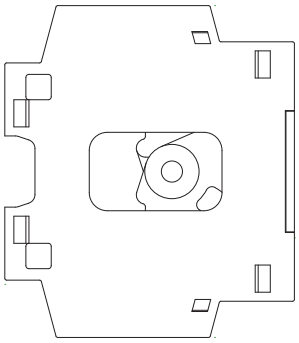
Accessory Description	Coil Voltage	AC/DC Coil					
		Product	Part Number	Product	Part Number	Product	Part Number
		115~185 A		225~300 A		400~500 A	
Coil (See page A42 for description)	24	COU41E185BUL	1330155	COU41E300BUL	1330173	-	-
	36	COU41E185CUL	1330156	COU41E300CUL	1330174	COU41E500CUL	1330192
	42	COU41E185DUL	1330157	COU41E300DUL	1330175	COU41E500DUL	1330193
	48	COU41E185EUL	1330158	COU41E300EUL	1330176	COU41E500EUL	1330194
	110	COU41E185FUL	1330159	COU41E300FUL	1330177	COU41E500FUL	1330195
	120	COU41E185GUL	1330160	COU41E300GUL	1330178	COU41E500GUL	1330196
	208	COU41E185XUL	1330163	COU41E300XUL	1330181	COU41E500XUL	1330199
	220	COU41E185MUL	1330161	COU41E300MUL	1330179	COU41E500MUL	1330197
	230	COU41E185PUL	1330162	COU41E300PUL	1330180	COU41E500PUL	1330198
	240	COU41E185UUL	1330164	COU41E300UUL	1330182	COU41E500UUL	1330200
	277	COU41E185NUL	1330167	COU41E300NUL	1330185	COU41E500NUL	1330203
	380	COU41E185QUL	1330165	COU41E300QUL	1330183	COU41E500QUL	1330201
	400	COU41E185VUL	1330166	COU41E300VUL	1330184	COU41E500VUL	1330202
	480	COU41E185TUL	1330168	COU41E300TUL	1330186	COU41E500TUL	1330204
	600	COU41E185YUL	1330169	COU41E300YUL	1330187	COU41E500YUL	1330205
		Wide Range Electronic AC/DC Coil					
		115~185 A		225~300 A		400~500 A	
	48~130	COU41F185HUL	1330170	COU41F300HUL	1330188	COU41F500HUL	1330206
	100~250	COU41F185KUL	1330171	COU41F300KUL	1330189	COU41F500KUL	1330207
	250~500	COU41F185LUL	1330172	COU41F300LUL	1330190	COU41F500LUL	1330208

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Ex9CS/C Accessories: Mechanical Interlock and Power

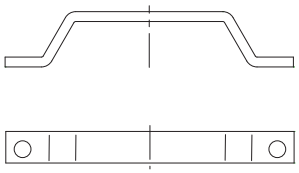


Dimensions..... A55 to 56

*NOTE: MIT41 cannot be installed by end user.

MIT4	1	UL
Description	Contactor Type and Rated Current	Device Category
Mechanical Interlock	1: Ex9CS Mini 06~12 A*	UL: UL Listed
	2: Ex9C Standard 09~38 A	
	3: Ex9C Standard 40~100 A	
	4: Ex9C Standard 115~185 A	
	5: Ex9C Standard 225~300 A	
	6: Ex9C Standard 400~500 A	

Accessory Description	Product	Part Number
Mechanical Interlock	MIT41UL	1330026
	MIT42UL	1330027
	MIT43UL	1330028
	MIT44UL	1330029
	MIT45UL	1330030
	MIT46UL	1330031



Dimensions..... A57

PCL	185	UL
Description	Contactor Type and Rated Current	Device Category
Power Connection	185: Ex9C Standard 115~185 A	UL: UL Listed
	300: Ex9C Standard 225~300 A	
	500: Ex9C Standard 400~500 A	

Accessory Description	Product	Part Number
Power Connection	PCL185UL	1330032
	PCL300UL	1330033
	PCL500UL	1330034

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Ex9CS/C Accessories: Surge Suppressor Block



CCU41



CCU42


CCU43

- Reduces voltage peaks in control circuit
- Versions with varistor (CCU41) and RC circuit technology (CCU42 and CCU43)
- Includes cable lugs for connecting to contactor terminals

Specifications A53
Dimensions..... A58
Wiring Diagram.... A60

CCU4	1	A	UL
Description	Contactor Type and Rated Current	Voltage Protection Scope	Device Category
Surge Suppressor Block	1: Ex9CS Mini 06~12 A	A: 24~48 Vac	UL: UL Listed
	2: Ex9C Standard 09~38 A	B: 110~240 Vac	
	3: Ex9C Standard 40~100 A	C: 380~415 Vac	

Accessory Description	Matched Contactor	Product	Part Number
Surge Suppressor Block	Ex9CS06~12	CCU41AUL	1330017
		CCU41BUL	1330018
		CCU41CUL	1330019
	Ex9C09~38	CCU42AUL	1330020
		CCU42BUL	1330021
		CCU42CUL	1330022
	Ex9C40~100	CCU43AUL	1330023
		CCU43BUL	1330024
		CCU43CUL	1330025

A

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Ex9CS/C Accessories: Time Delay Relay, Lugs, Wiring Kit



AXC	T	0	UL
Description	Relay Type	Timing Range	Device Category
Time Delay Relay	D: Off Delay	0: 0.1~3 s	UL: UL Listed
	T: On Delay	2: 0.1~30 s	
		4: 10~180 s	

Dimensions..... A58
Wiring Diagram.... A60

Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9C09~500	AXCD0UL	1311730
		AXCD2UL	1311729
		AXCD4UL	1311731
		AXCT0UL	1311726
		AXCT2UL	1311727
		AXCT4UL	1311728





LTC	25	N	B
Description	Type	Device Category	Number of Holes
Terminal Lugs	25: for Ex9C630	N: UL Approval	B: 2 holes * 630A only
	26: for Ex9C800/1000		C: 3 Holes * 630-1000A
			D: 4 Holes * 800-1000A

Dimensions..... A58

Accessory Description	Type	Number of Holes	Product	Part Number
Terminal Lugs	630A	2 Holes	LTC25NB	1101184
		3 Holes	LTC25NC	1101185
	800/1000A	3 Holes	LTC26NC	1101166
		4 holes	LTC26ND	1101167



Accessory Description	Suitable For	Product Number	Part Number
Star Delta Wiring Kit (SDWK)	Ex9CS or Ex9CSR	SDWK41	1330216
	Ex9C 115-185	SDWK45	1330217

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Ex9CS/C Accessory Specifications

		Auxiliary Contact																
		CS/CSR Front Mount AX41					C/CR Front Mount AX42								C/CR Side Mount AX43	C/CR Side Mount AX44		
		04	13	22	31	40	02	04	11	13	20	22	31	40	11	02	11	20
UL Standard File Number		E353866																
IEC Standard File Number		IEC/EN 60947-5-1																
Certifications		UL Listed, CSA, CCC, RoHS																
Electrical Parameters																		
Contacts		4NC	1NO+ 3NC	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+ 1NC	2NC	1NO+ 1NC	2NO
Rated Frequency (Hz)		50/60																
Rated Working Voltage Ue	AC-15 (V)	380/400/415														24/230/400/690		
	DC-13 (V)	220/250														125/250		
Rated Working Current Ie	AC-15 (A)	1.9A														6.00 (24 V) 3.13 (230 V) 1.80 (400 V) 1.04 (690 V)		
	DC-13 (A)	0.31														0.55 (125 V) 0.27 (250 V)		
Rated Capacity	AC-15 (VA)	720																
	DC-13 (W)	69																
Rated Thermal Current Ith (A)		10																
Rated Impulse Withstand Voltage Uimp (kV)		6 (1.2/50 ms)																
Rated Insulation Voltage Ui (V)		690																
Mechanical Parameters																		
Device Width in (mm)		1.30 (33)					1.89 (48)								0.43 (11)	0.39 (10)		
Device Height in (mm)		1.54 (39)					1.46 (37)								2.72 (69)	2.52 (64)		
Device Depth in (mm)		1.46 (37)					1.02 (26)			1.77 (45)					2.76 (70)	2.68 (68)		
Degree of Protection		IP 20																
Terminals		Lift																
Terminal Capacity AWG (mm^2)		18-12 (1-4)																
Torque of Terminals in-lb (N.m)		7 (0.80)					15 (1.70)											

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Ex9CS/C Accessory Specifications

	Surge Suppressor Block		
	CCU41	CCU42	CCU43
Electrical Parameters			
Internal Technology	Varistor	Resistance	
Control Coil Voltage Uc (Protection Range)	24~48 Vac/dc 110~240 Vac/dc 380~415 Vac/dc		
Maximum Peak Voltage Up (Uc)	2kV	3kV	
Mechanical Parameters			
Matched Contactor Type	Ex9CS06~12	Ex9C09~38	Ex9C40~100
Mounting	Mounts to Contactor Control Coil Terminals		
Weight lb (kg)	0.04 (0.02)		

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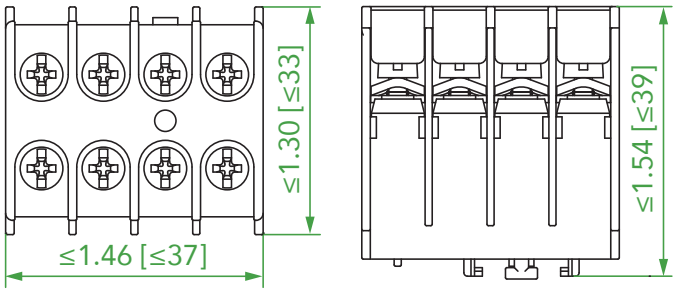
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Ex9CS/C Accessory Dimensions

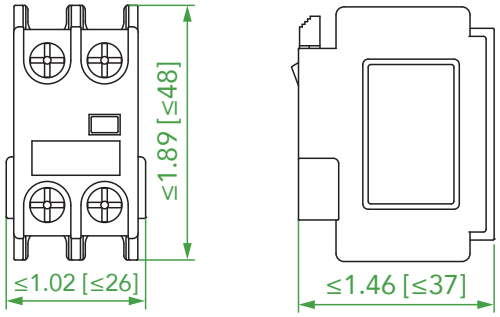
AX41/42

Front Mount Auxiliary Contact

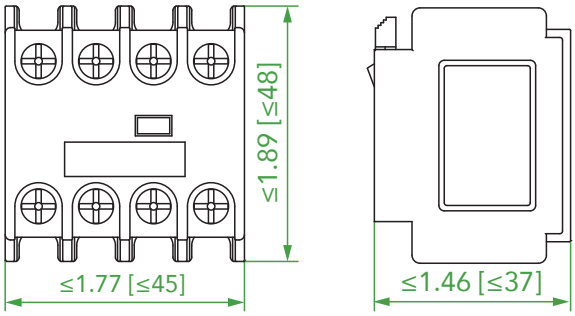
Unit: in [mm]



AX41



AX42 2P

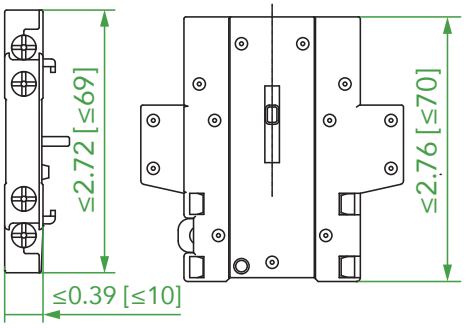


AX42 4P

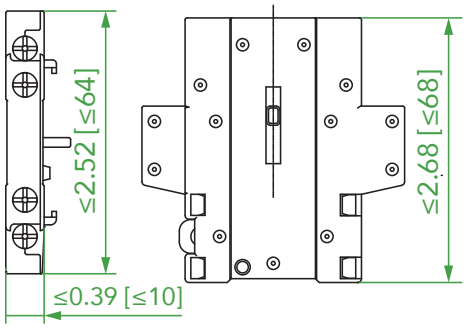
AX43/44

Side Mount Auxiliary Contact

Unit: in [mm]



AX43

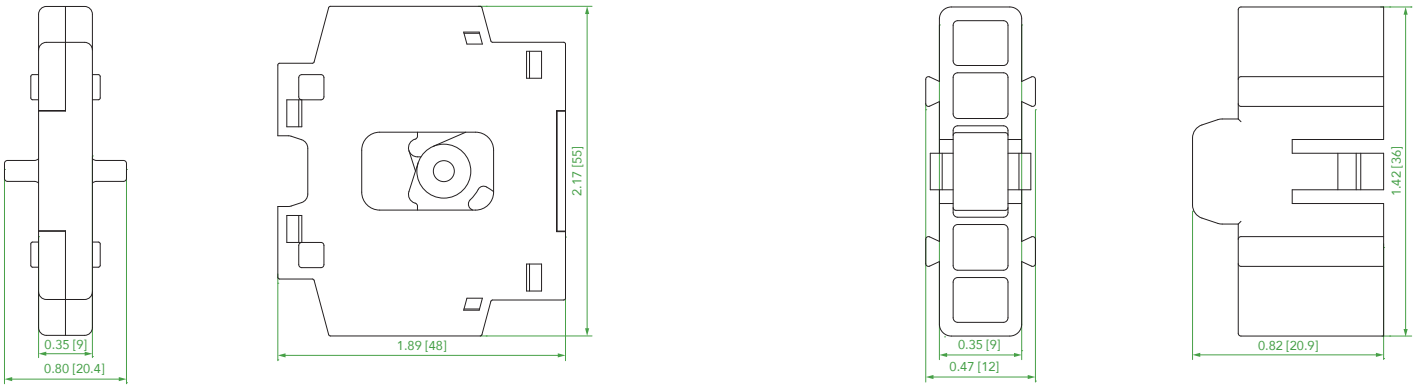


AX44

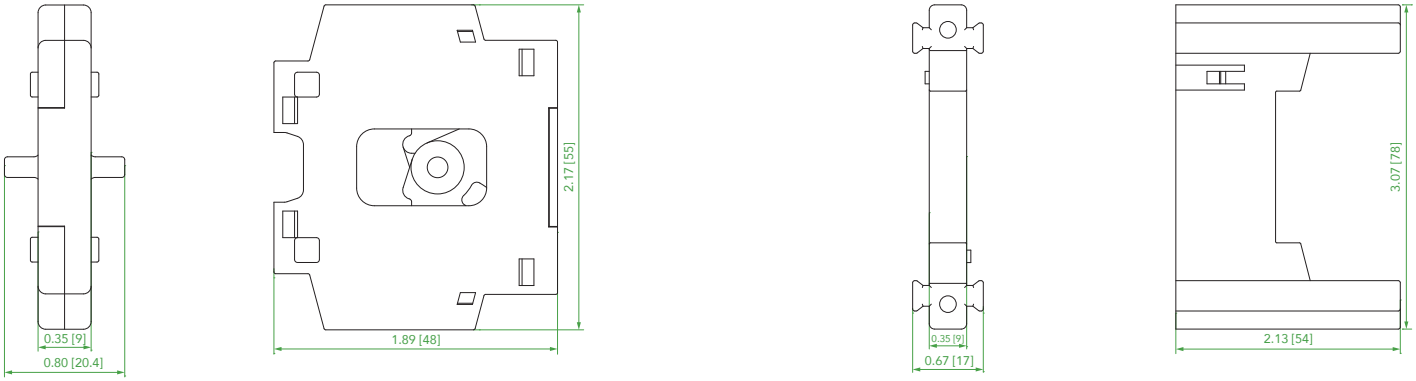
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IEC Contactors
Ex9CS/C Accessory Dimensions

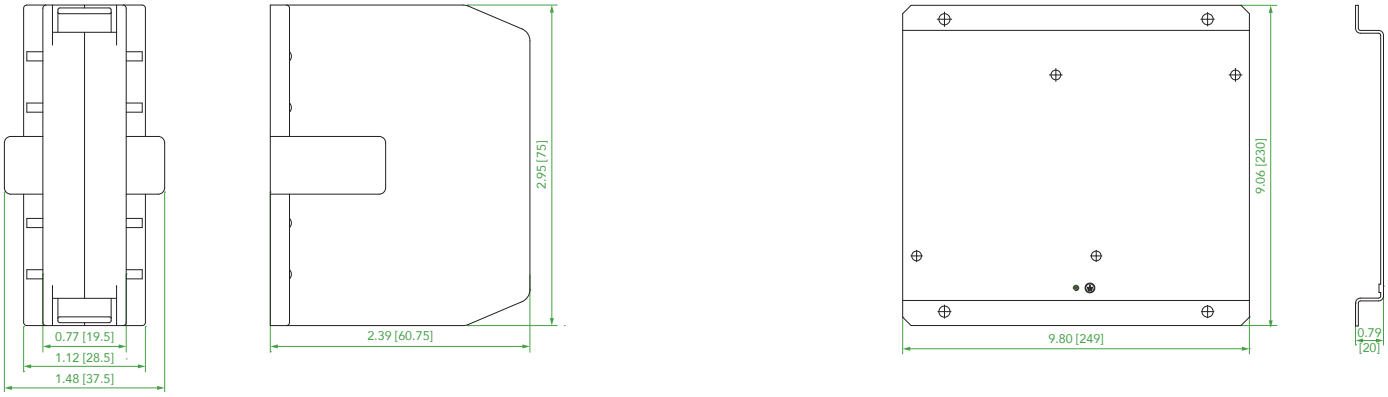
MIT42
Mechanical Interlock Kit
Unit: in [mm]



MIT43
Mechanical Interlock Kit
Unit: in [mm]



MIT44
Mechanical Interlock Kit
Unit: in [mm]



2020 NOARK Electric

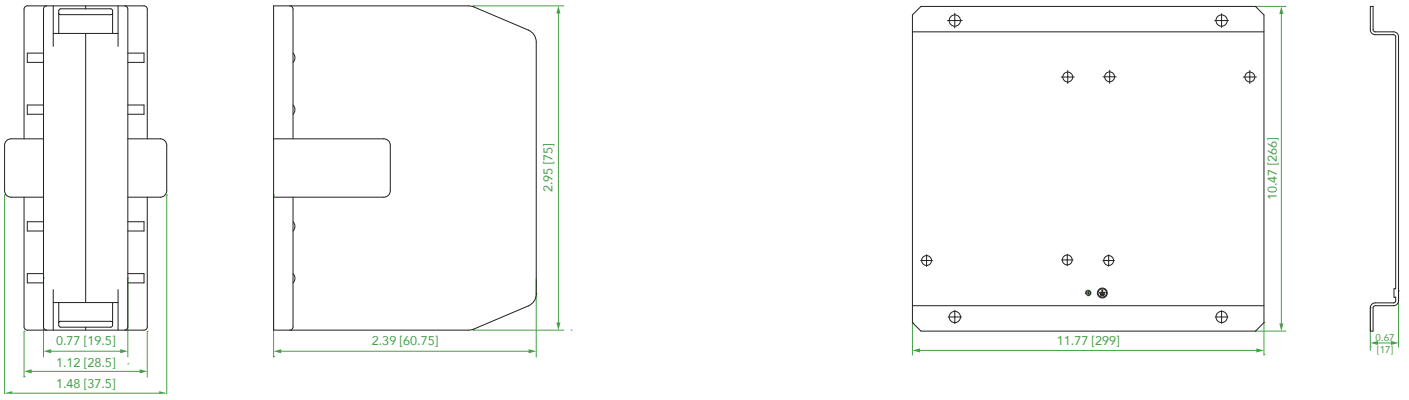
IEC Contactors

Ex9CS/C Accessory Dimensions

MIT45

Mechanical Interlock Kit

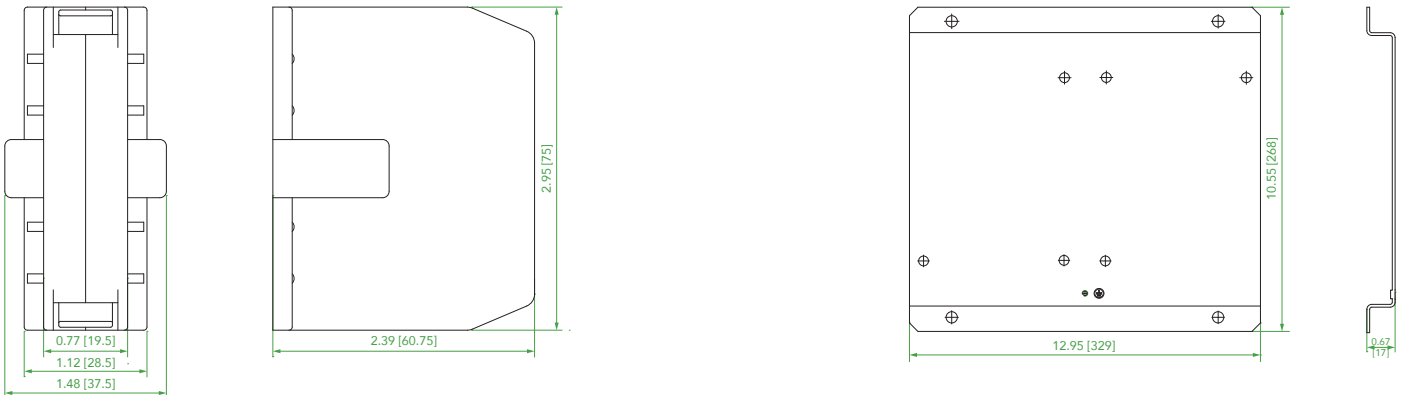
Unit: in [mm]



MIT46

Mechanical Interlock Kit

Unit: in [mm]



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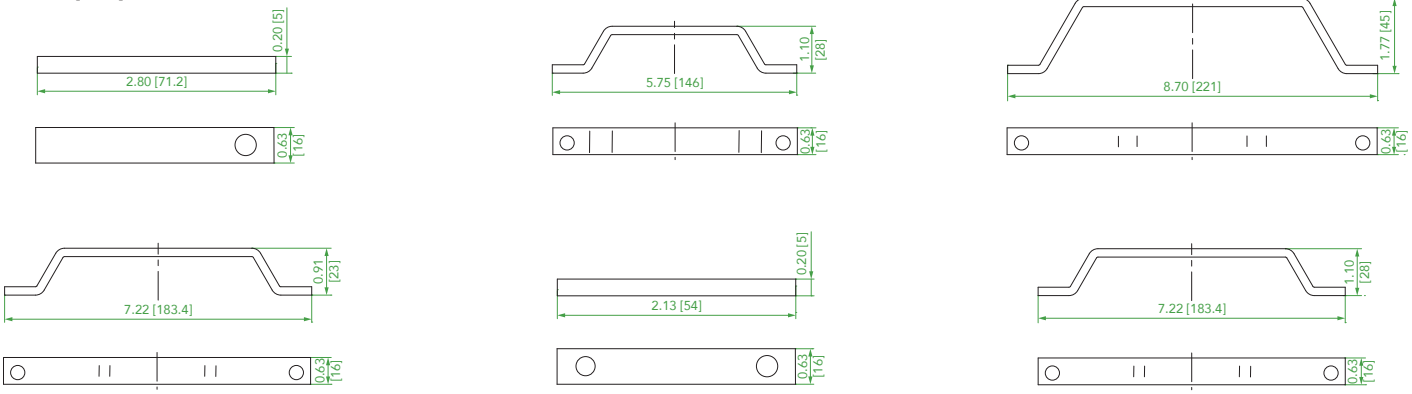
IEC Contactors

Ex9CS/C Accessory Dimensions

PCL185

Power Connection Kit

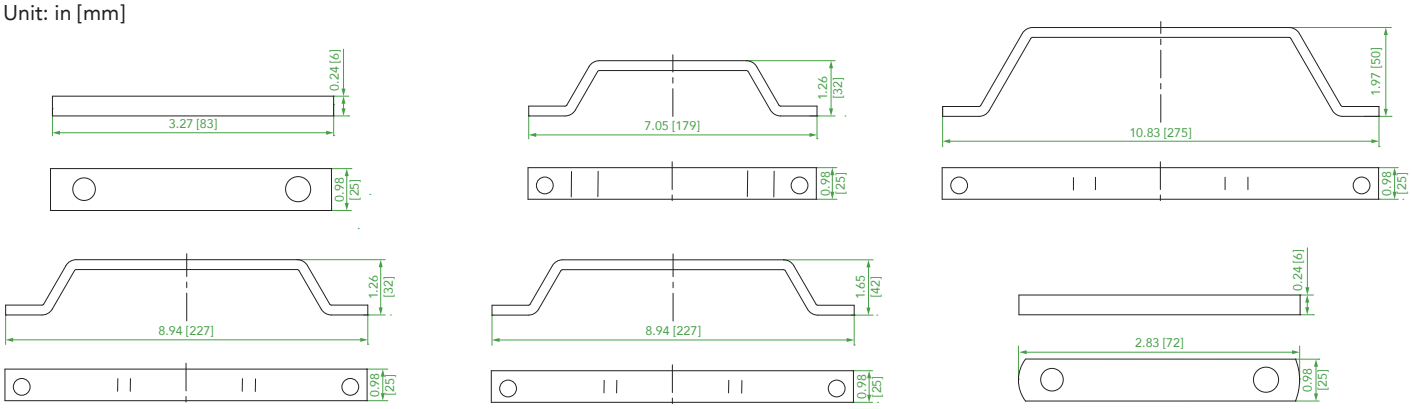
Unit: in [mm]



PCL300

Power Connection Kit

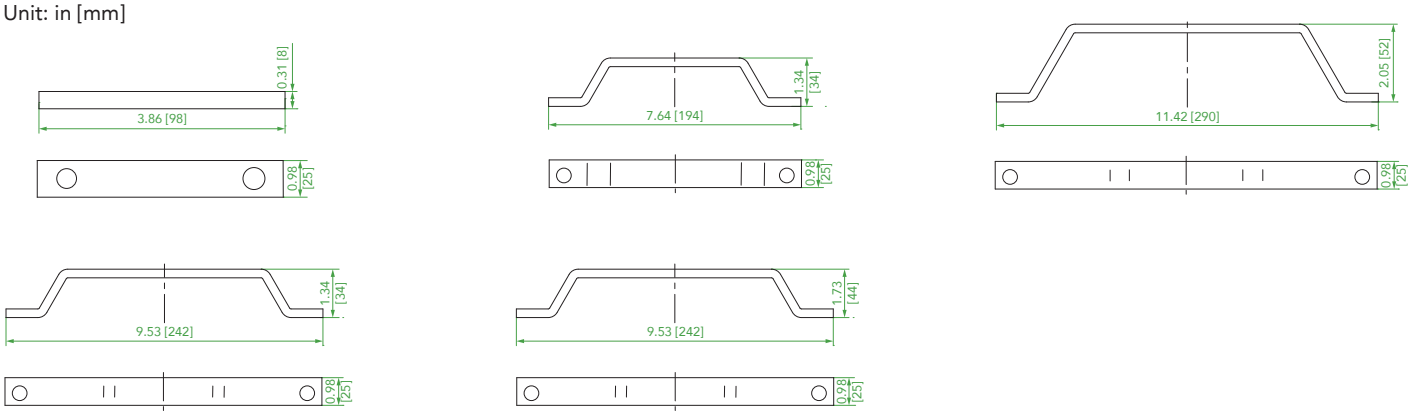
Unit: in [mm]



PCL500

Power Connection Kit

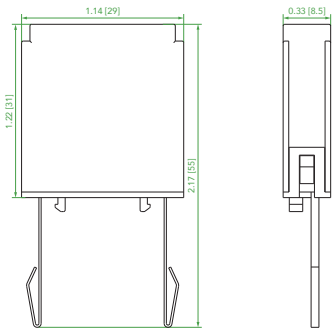
Unit: in [mm]



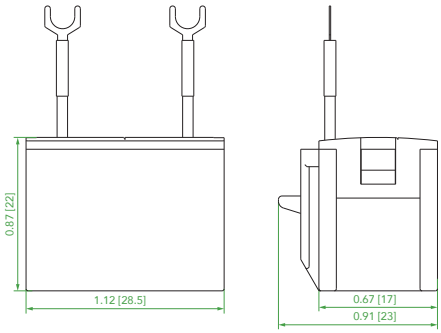
2020 NOARK Electric

IEC Contactors
Ex9CS/C Accessory Dimensions

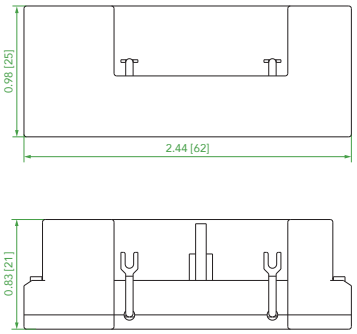
CCU4
Surge Suppressor Block
Unit: in [mm]



CCU41

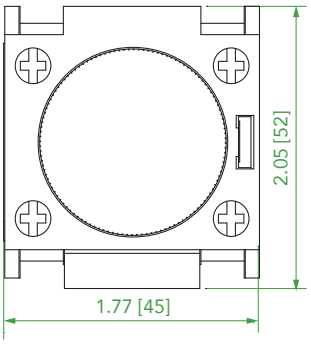


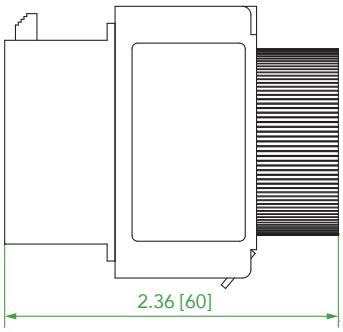
CCU42



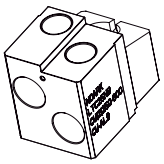
CCU43

AXC
Time Delay Relay
Unit: in [mm]

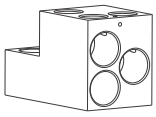




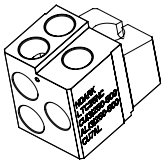
LTC
Terminal Lugs
Unit: in [mm]



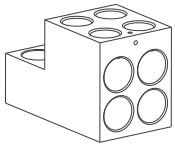
2-Holes
75/90°C
Al/Cu Wire Only
(2)250kcmil-600kcmil
398 lb-in/pulg/po
(2)120-300mm2
45N·m



3-Holes
75°C/90°C
Al/Cu Wire
(3)3/0AWG-750kcmil
310 lb-in/pulg/po
(3)95-300mm2
35N·m



3-Holes
75/90°C
Al/Cu Wire Only
(3)250kcmil-500kcmil
398 lb-in/pulg/po
(3)120-240mm2
45N·m



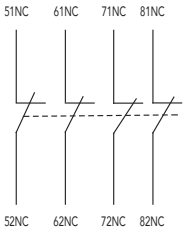
4-Holes
75°C/90°C
Al/Cu Wire
(4)3/0AWG-500kcmil
310 lb-in/pulg/po
(4)95-240mm2
35N·m

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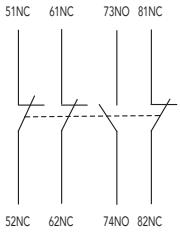
IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

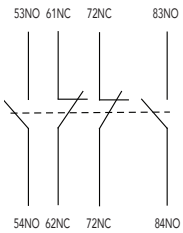
AX41/42
Front Mount Auxiliary Contact



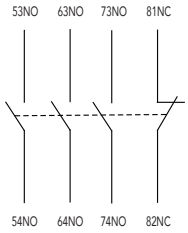
AX41
4NC



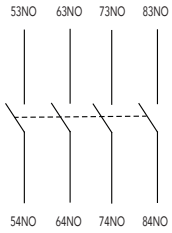
AX41
1NO+3NC



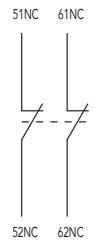
AX41
2NO+2NC



AX41
3NO+1NC



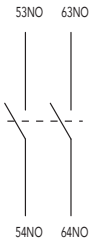
AX41
4NO



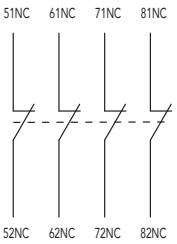
AX42
2NC



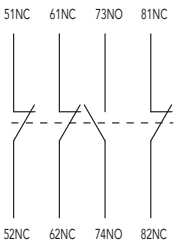
AX42
1NO+1NC



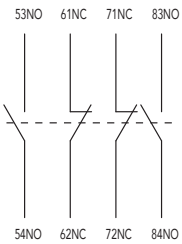
AX42
2NO



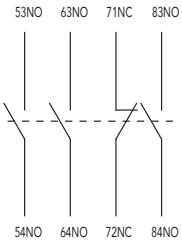
AX42
4NC



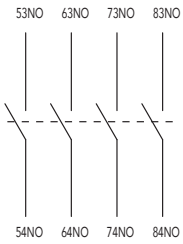
AX42
1NO+3NC



AX42
2NO+2NC

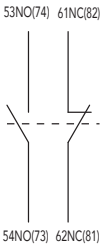


AX42
3NO+1NC



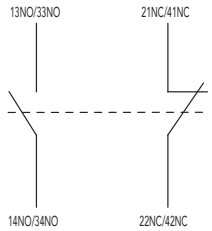
AX42
4NO

AX43
Side Mount Auxiliary Contact

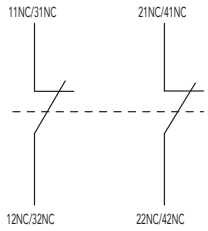


AX43
1NO+1NC

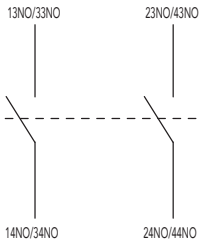
AX44
Side Mount Auxiliary Contact



AX44
1NO+1NC



AX44
2NC



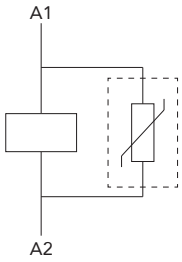
AX44
2NO

2020 NOARK Electric

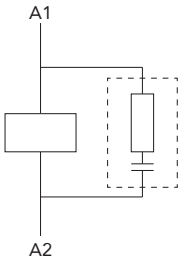
IEC Contactors

Ex9CS/C Accessory Wiring Diagrams

CCU4
Surge Suppressor Block

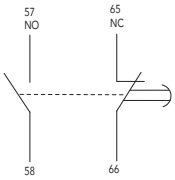


CCU41

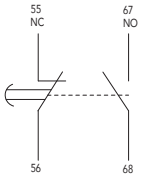


CCU42
CCU43

AXC
Time Delay Relay



AXCD



AXCT

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THERMAL OVERLOAD RELAYS



Ex9R

Features

- Compatible with Ex9C, Ex9CR, Ex9CS and Ex9CSR
- Rated current up to 500 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 and Class 10 A
- Phase loss sensitivity
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option

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Thermal Overload Relays

Ex9R National and International Standards

Certifications

- UL Listed, File Number E353865, UL 60947-1 and 60947-4-1
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Approved
- CCC Certified
- RoHS Compliant

2020 NOARK Electric

Thermal Overload Relays
Ex9R Product Selection Guide

Label



1. Brand
2. Label with UL Logo, CE Logo and Data
3. Adjustable Current Range
4. Push to Test
5. Product Series/Frame Amperage
6. Manual Stop
7. Manual/Auto Reset
8. Auxiliary Contacts

Product Selection Guide

Ex9R	12	B	0.16A
NOARK Ex9R Series	Frame Size	Trip Class*	Setting Amperage
	12: 12 A	B: Class 10	
	38: 38 A		
	100: 100 A		
	185: 185 A		
	500: 500 A		

0.16A:	0.1~0.16 A	32A:	23~32 A
0.25A:	0.16~0.25 A	38A:	30~38 A
0.4A:	0.25~0.4 A	40A:	30~40 A
0.63A:	0.4~0.63 A	50A:	37~50 A
1A:	0.63~1 A	65A:	48~65 A
1.6A:	1~1.6 A	70A:	55~70 A
2.5A:	1.6~2.5 A	80A:	63~80 A
4A:	2.5~4 A	100A:	80~104 A
6A:	4~6 A	115A:	75~115 A
8A:	5.5~8 A	150A:	110~150 A
10A:	7~10 A	185A:	140~210 A
12A:	9~12 A	225A:	160~225 A
13A:	9~13 A	300A:	210~300 A
18A:	12~18 A	400A:	280~400 A
24A:	16~24 A	500A:	380~500 A

Note: Consult NOARK for information on Tripping Class 10 A.

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Thermal Overload Relays

Ex9R 12~100 A

Certifications

IEC/EN 60947-4-1

CE c UL us LISTED



12 A



38 A



100 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9CS06~12		Use with Contactors: Ex9C09~38		Use with Contactors: Ex9C40~100	
	Product	Part Number	Product	Part Number	Product	Part Number
0.1~0.16	Ex9R12B0.16A	1420001	-	-	-	-
0.16~0.25	Ex9R12B0.25A	1420002	-	-	-	-
0.25~0.4	Ex9R12B0.4A	1420003	-	-	-	-
0.4~0.63	Ex9R12B0.63A	1420004	-	-	-	-
0.63~1	Ex9R12B1A	1420005	Ex9R38B1A	1420013	-	-
1~1.6	Ex9R12B1.6A	1420006	Ex9R38B1.6A	1420014	-	-
1.6~2.5	Ex9R12B2.5A	1420007	Ex9R38B2.5A	1420015	-	-
2.5~4	Ex9R12B4A	1420008	Ex9R38B4A	1420016	-	-
4~6	Ex9R12B6A	1420009	Ex9R38B6A	1420017	-	-
5.5~8	Ex9R12B8A	1420010	Ex9R38B8A	1420018	-	-
7~10	Ex9R12B10A	1420011	Ex9R38B10A	1420019	-	-
9~12	Ex9R12B12A	1420012	-	-	-	-
9~13	-	-	Ex9R38B13A	1420020	-	-
12~18	-	-	Ex9R38B18A	1420021	-	-
16~24	-	-	Ex9R38B24A	1420022	-	-
23~32	-	-	Ex9R38B32A	1420023	Ex9R100B32A	1420025
30~38	-	-	Ex9R38B38A	1420024	-	-
30~40	-	-	-	-	Ex9R100B40A	1420026
37~50	-	-	-	-	Ex9R100B50A	1420027
48~65	-	-	-	-	Ex9R100B65A	1420028
55~70	-	-	-	-	Ex9R100B70A	1420029
63~80	-	-	-	-	Ex9R100B80A	1420030
80~104	-	-	-	-	Ex9R100B104A	1420046

Specifications .....B67 to 68
Trip Curve.....B69
Dimensions.....B70 to 72
Wiring Diagram.....B75
Accessories.....B76

2020 NOARK Electric

Thermal Overload Relays

Ex9R 185~500 A

Certifications

IEC/EN 60947-4-1

CE cULus LISTED



185 A



500 A

Current Range Amp (Min-Max)	Use with Contactors: Ex9C115~185		Use with Contactors: Ex9C225~500	
	Product	Part Number	Product	Part Number
75~115	Ex9R185B115A	1420032	-	-
110~150	Ex9R185B150A	1420033	-	-
140~210	Ex9R185B210A	1420047	-	-
160~225	-	-	Ex9R500B225A	1420035
210~300	-	-	Ex9R500B300A	1420036
280~400	-	-	Ex9R500B400A	1420037
380~500	-	-	Ex9R500B500A	1420038

Specifications ..... B67 to 68
Trip Curve B69
Dimensions ..... B73 to 74
Wiring Diagram B75
Accessories B76

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Thermal Overload Relays

Ex9R Specifications

			Ex9R
Tripping Class			Class 10/10 A
Operating Frequency (Hz)			50/60
Phase Failure Protection Function			Yes
Automatic and Manual Reset			
Temperature Compensation			
Tripping Indicator			
Test and Stop Pushbutton			
Environ-mental Conditions	Altitude ft (m)		6,562 (2,000)
	Pollution Degree		Class III
Rated Tripping Current (In)			1.2
Sensitivity to Phase Failure (In)			30%
Rated Working Voltage (V)			600
Rated Impulse Withstand Voltage Uimp			6 kV
Auxiliary Contacts	Number of Contacts		1NO+1NC
	Rated Operating Voltage Ue (V)	AC-15	220/380
		DC-13	220
	Rated Operating Current Ie (A)	AC-15	1.64 / 0.95
		DC-13	0.13
	Circuit Continuous Current		5 A 600 Vac, 1 A 300 Vdc
	Contact Rating		B600, R300
	Terminal Wire Range AWG (mm^2)		#18-12 (1-2.5)
	Terminal Torque in-lb (N.m)		15 (1.70)
	Terminal Wire Strip Length in (mm)		0.43 (11)

2020 NOARK Electric

Thermal Overload Relays

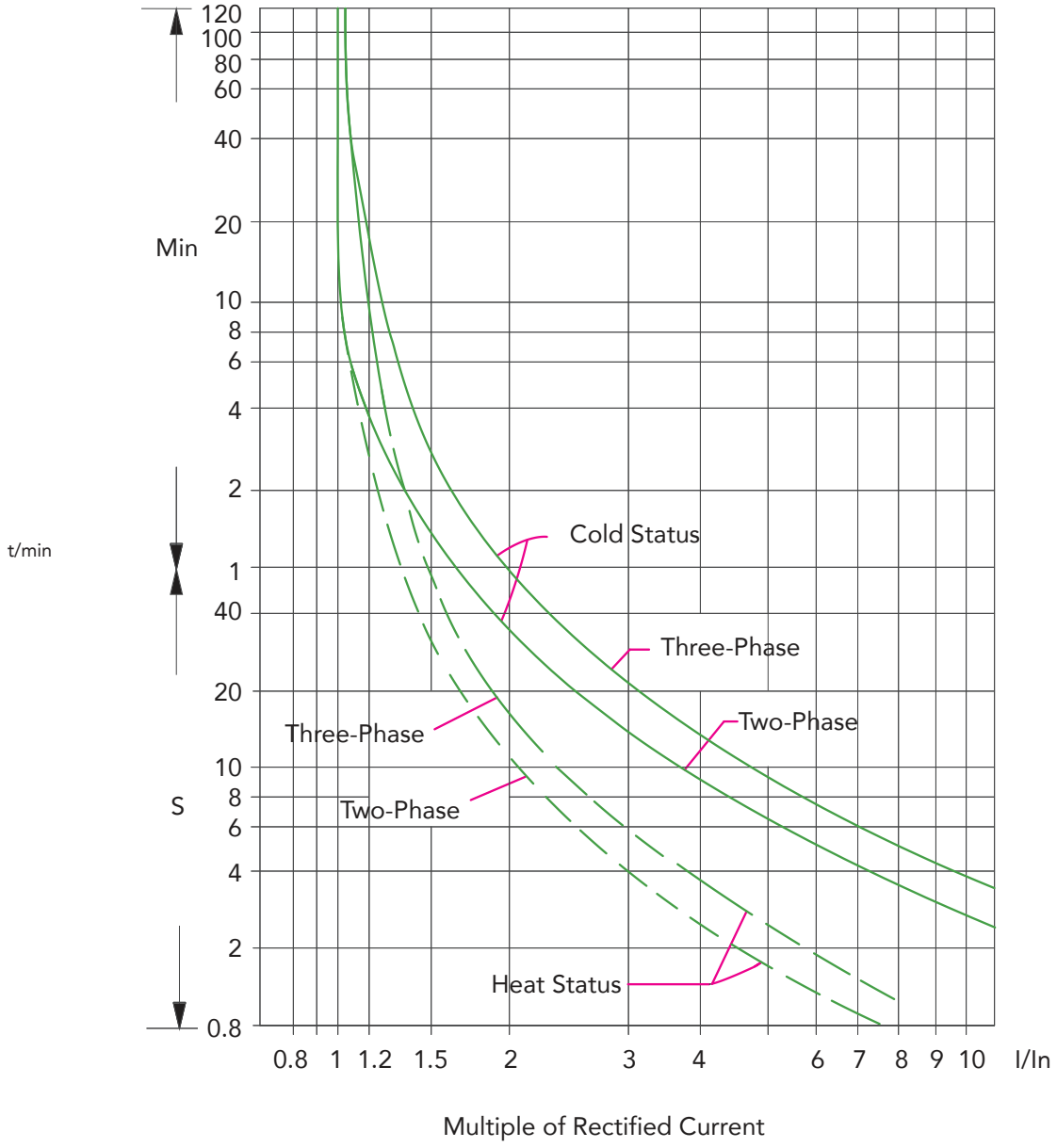
Ex9R Specifications

Ex9R	12 A											
Current Rated (A)	0.16~1.6						2.5~12					
Current Setting Range (A)	0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~12
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1						5					
Power Terminal	#18-10 AWG											
Power Terminal Torque in-lb (N.m)	15 (1.7)											
Power Terminal Wire Strip Length in (mm)	0.43 (11)											
Matched Contactor Type	Ex9CS06~12											
Matched Adapter	AD51											
	38 A											
Current Rated (A)	1~1.6		2.5~38									
Current Setting Range (A)	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	16~24	23~32	30~38
Short Circuit Rating, 3 Phase at 600 Vac (kA)	1		5									
Power Terminal	#18-10 AWG / #8 AWG Str											
Power Terminal Torque in-lb (N.m)	22 (2.5)											
Power Terminal Wire Strip Length in (mm)	0.51 (13)											
Matched Contactor Type	Ex9C09~38											
Matched Adapter	AD56											
	100 A											
Current Rated (A)	32~50					65~104						
Current Setting Range (A)	23~32		30~40		37~50	48~65		55~70		63~80		80~104
Short Circuit Rating, 3 Phase at 600 Vac (kA)	5					10						
Power Terminal	#12-10 AWG / #8-1 AWG Str											
Power Terminal Torque in-lb (N.m)	80 (9)											
Power Terminal Wire Strip Length in (mm)	0.71 (18)											
Matched Contactor Type	Ex9C40~100											
Matched Adapter	AD53											
	185 A											
Current Rated (A)	115~210											
Current Setting Range (A)	75~115					110~150				140~210		
Short Circuit Rating, 3 Phase at 600 Vac (kA)	10											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	159 (18)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C115~185											
Matched Adapter	AD54											
	500 A											
Current Rated (A)	225~500											
Current Setting Range (A)	160~225				210~300			280~400			380~500	
Short Circuit Rating, 3 Phase at 600 Vac (kA)	30											
Power Terminal	Bus Bar Only											
Power Terminal Torque in-lb (N.m)	310 (35)											
Power Terminal Wire Strip Length in (mm)	-											
Matched Contactor Type	Ex9C225~500											
Matched Adapter	AD55											

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Thermal Overload Relays

Ex9R Trip Curves



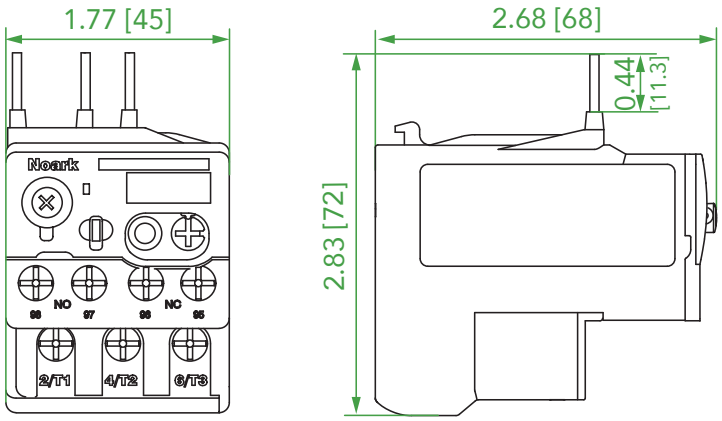
2020 NOARK Electric

Thermal Overload Relays

Ex9R12 Dimensions

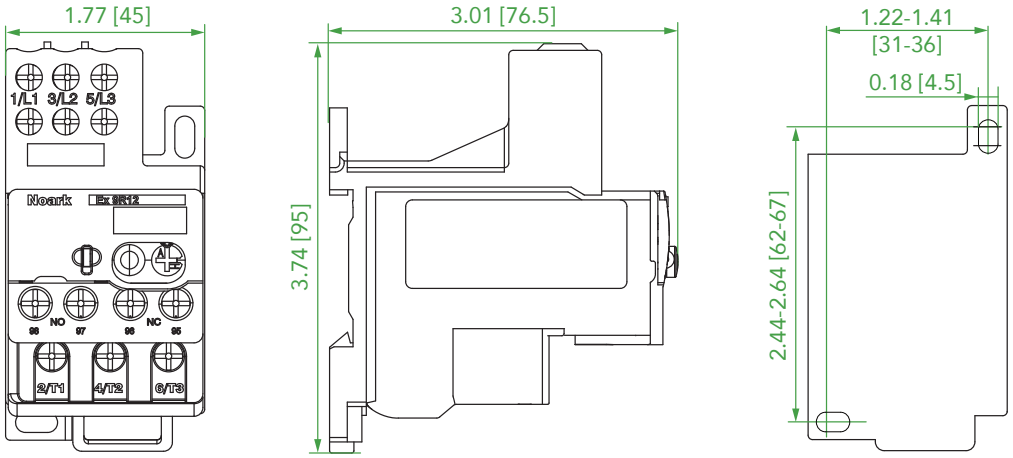
Ex9R12

Unit: in [mm]



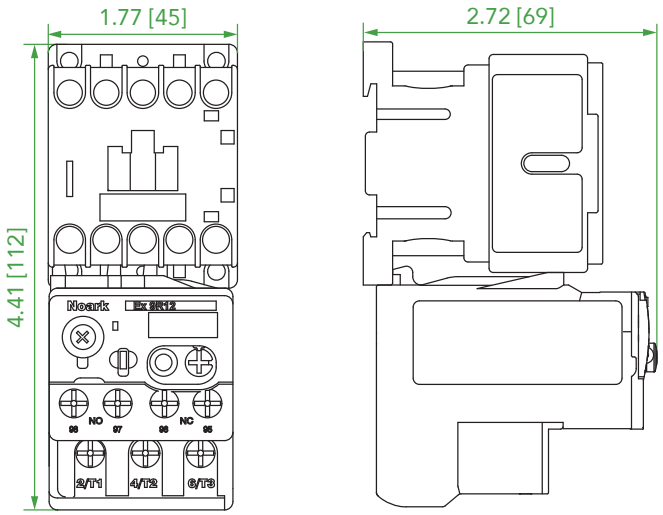
Ex9R12+AD51

Unit: in [mm]



Ex9R12+Ex9CS06~12

Unit: in [mm]

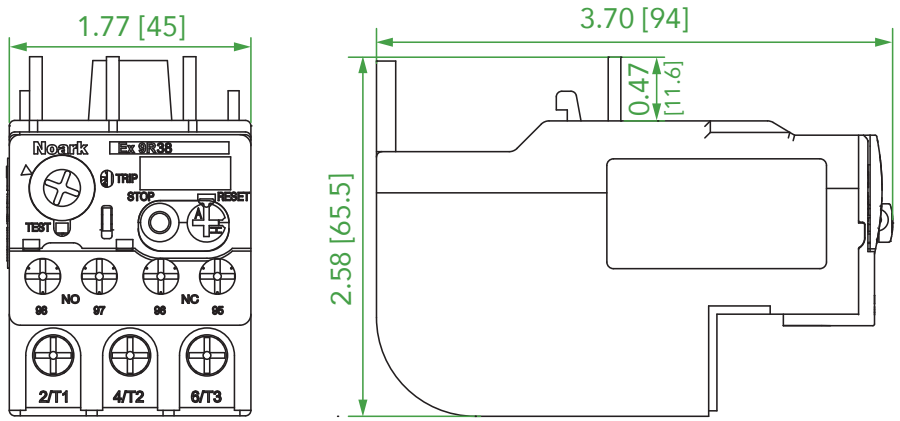


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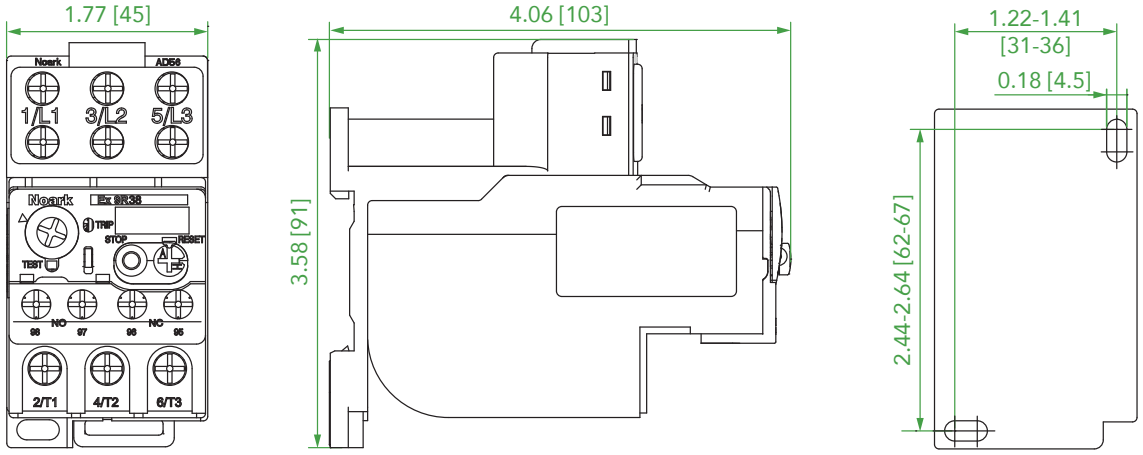
Thermal Overload Relays

Ex9R38 Dimensions

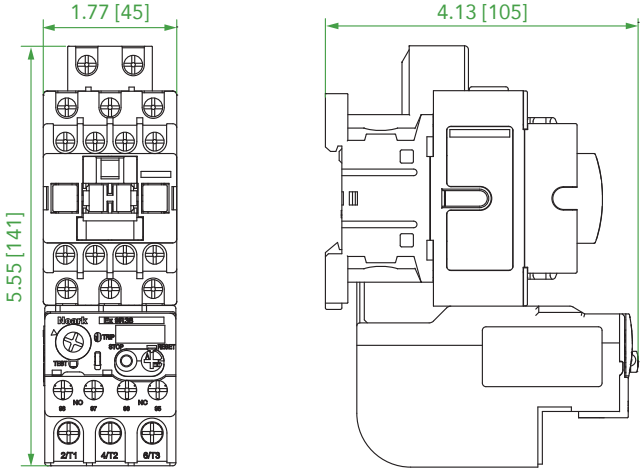
Ex9R38
Unit: in [mm]



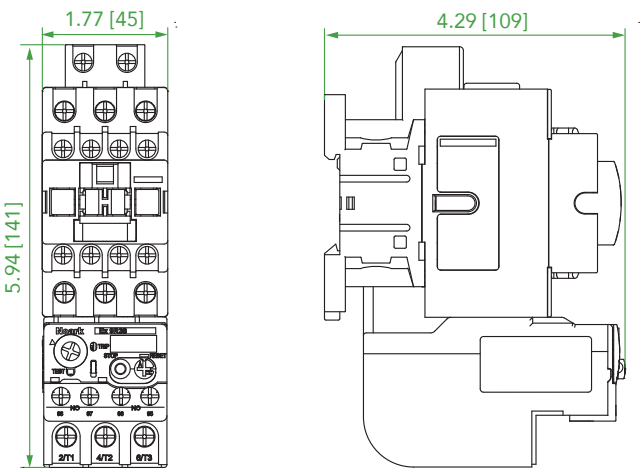
Ex9R38+AD56
Unit: in [mm]



Ex9R38+Ex9C09~18
Unit: in [mm]



Ex9R38+Ex9C25~38
Unit: in [mm]

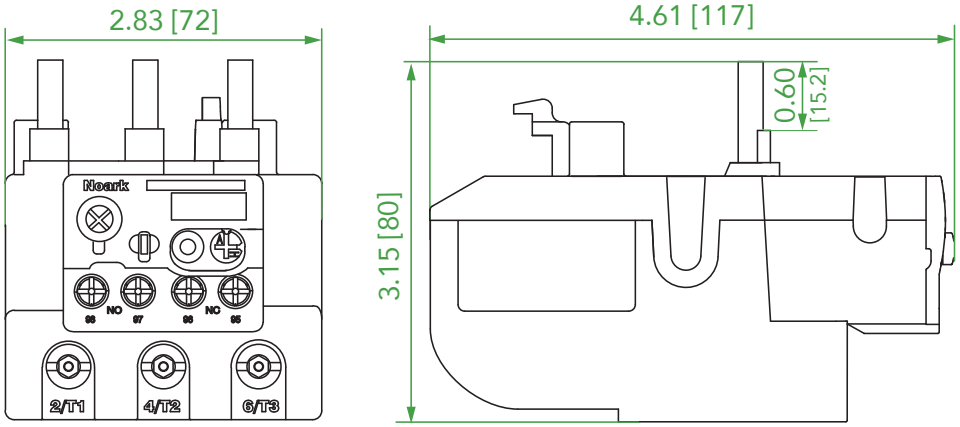


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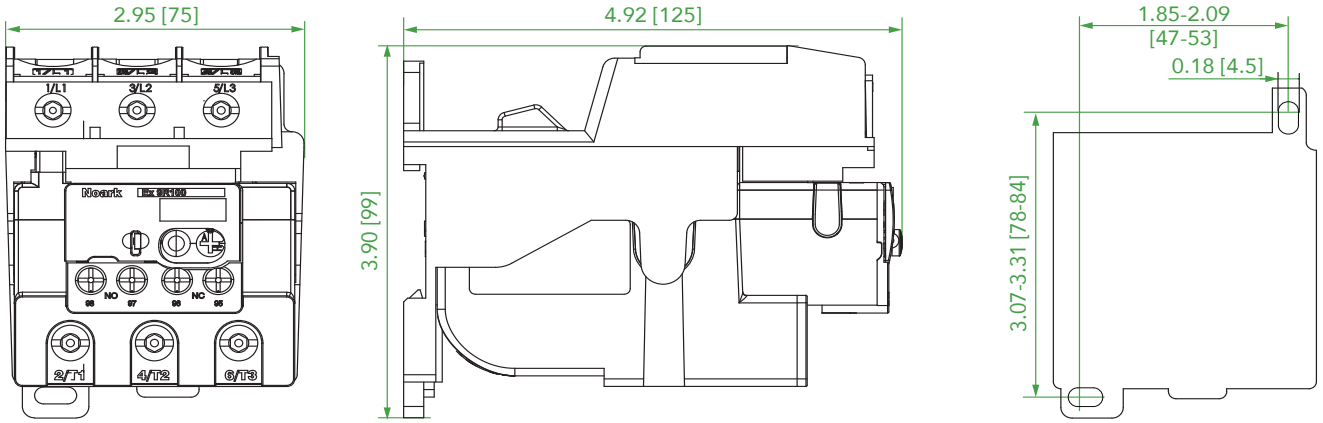
Thermal Overload Relays

Ex9R100 Dimensions

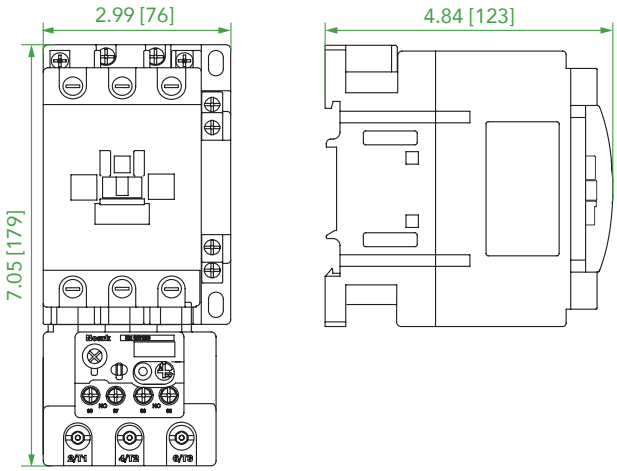
Ex9R100
Unit: in [mm]



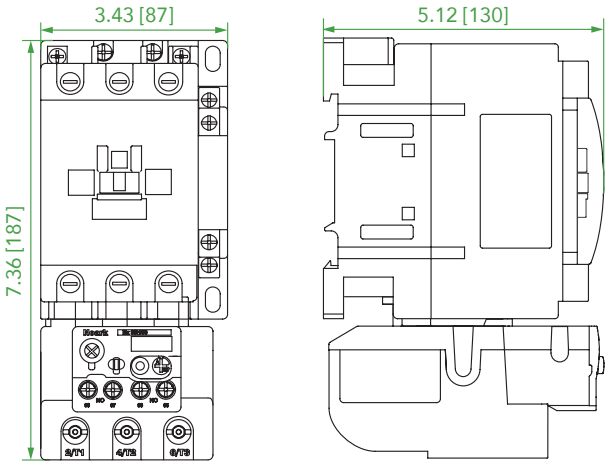
Ex9R100+AD53
Unit: in [mm]



Ex9R100+Ex9C40~65
Unit: in [mm]



Ex9R100+Ex9C80~100
Unit: in [mm]



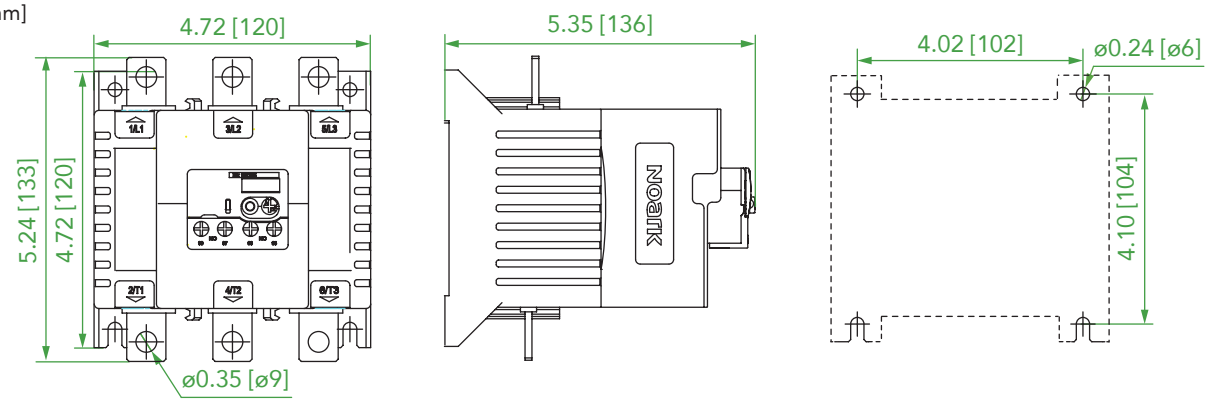
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Thermal Overload Relays

Ex9R185 Dimensions

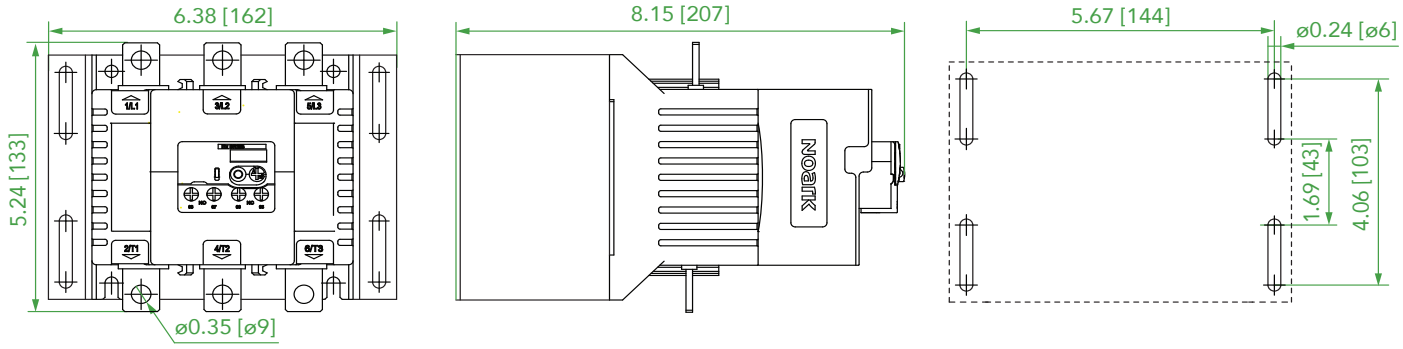
Ex9R185

Unit: in [mm]



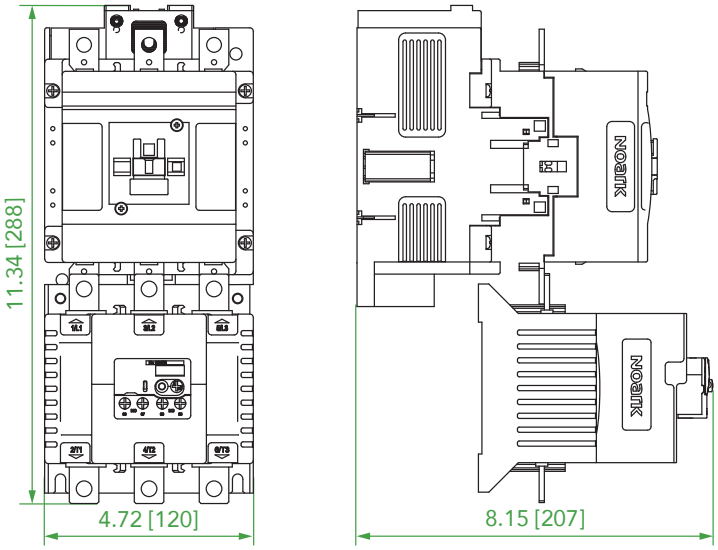
Ex9R185+AD54

Unit: in [mm]



Ex9R185+Ex9C115~185

Unit: in [mm]



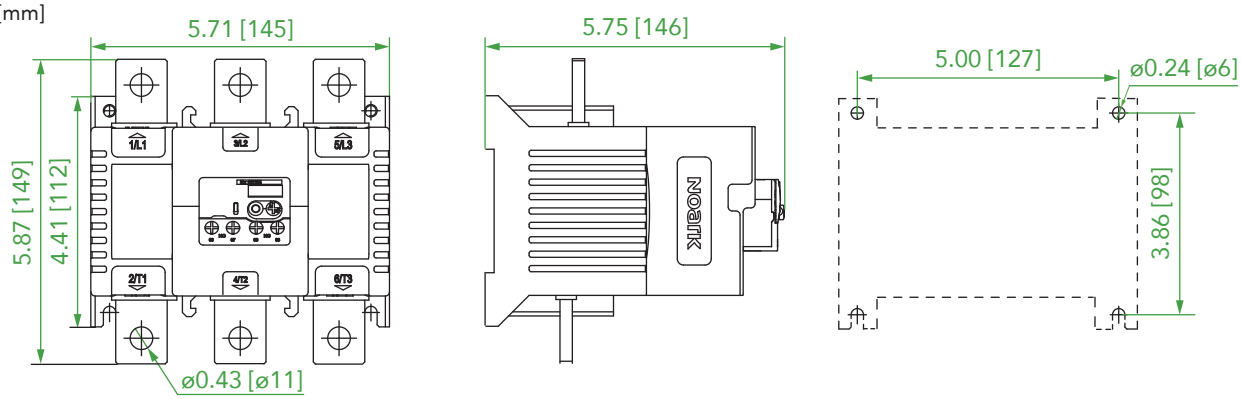
2020 NOARK Electric

Thermal Overload Relays

Ex9R500 Dimensions

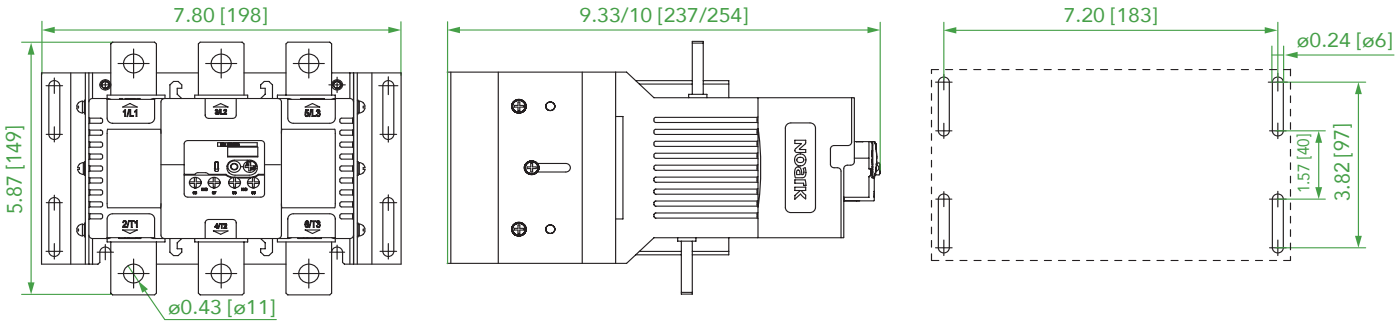
Ex9R500

Unit: in [mm]



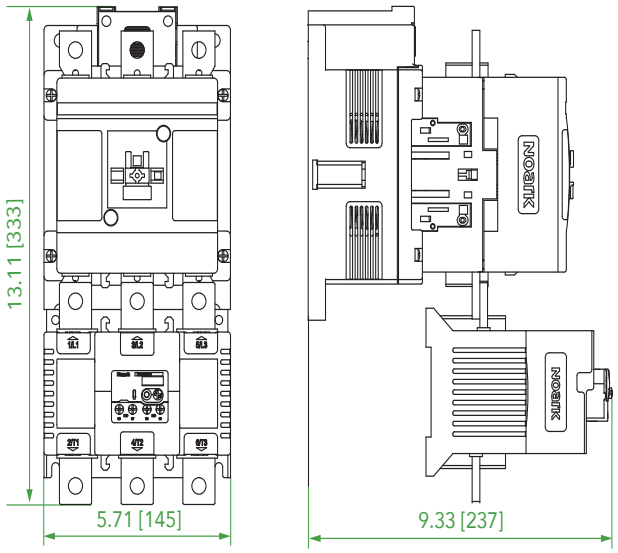
Ex9R500+AD55

Unit: in [mm]



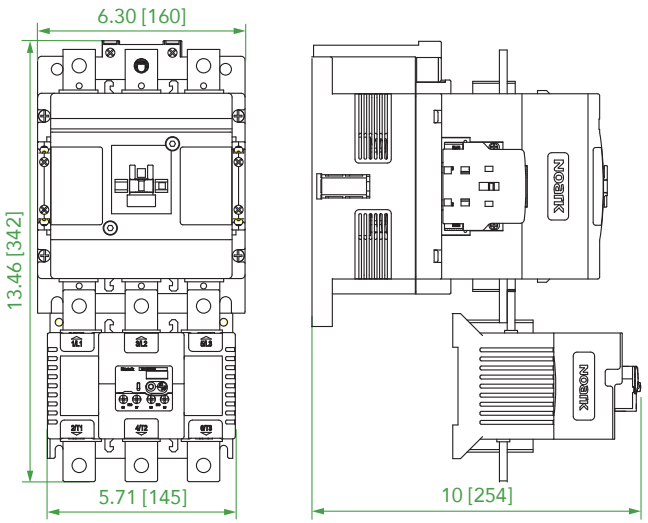
Ex9R500+Ex9C225~300

Unit: in [mm]



Ex9R500+Ex9C400~500

Unit: in [mm]



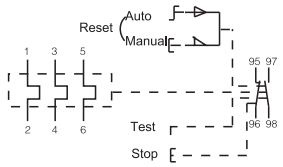
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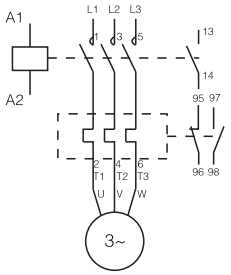
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Thermal Overload Relays

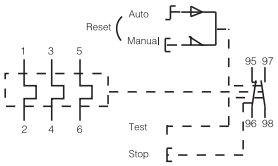
Ex9R Wiring Diagrams

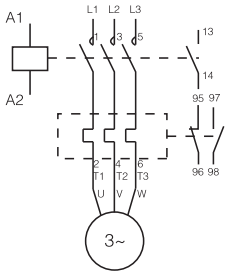
Ex9R12



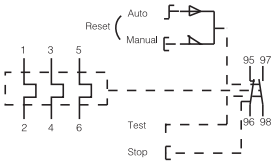


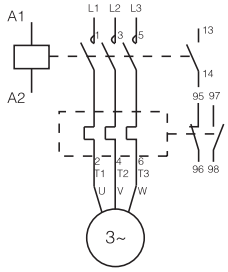
Ex9R38



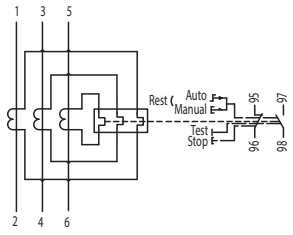


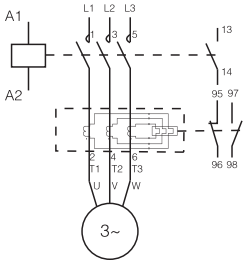
Ex9R100



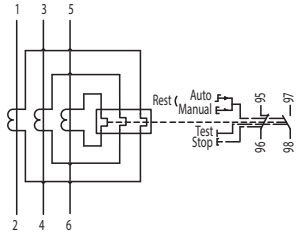


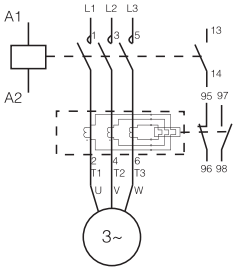
Ex9R185





Ex9R500

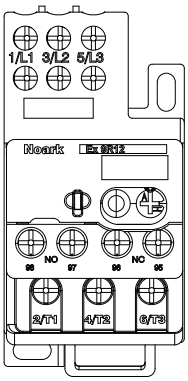




2020 NOARK Electric

Thermal Overload Relays

Ex9R Accessories: Mounting Base



AD51 shown with Ex9R12
for reference only

Dimensions..... B71 to B72

AD	51
Description	Relay Type
Mounting Base	51: Ex9R12
	56: Ex9R38
	53: Ex9R100
	54: Ex9R185
	55: Ex9R500

Accessory Description	Product	Part Number
Mounting Base	AD51	1420039
	AD56	1420040
	AD53	1420041
	AD54	1420042
	AD55	1420043

Mounting Base	AD51	AD56	AD53	AD54	AD55
Current Rating (A)	12	38	104	185	500
Voltage (Vac)	600				
Terminal Wire Range	#18-12 AWG	#18-10 AWG / #8 AWG Str	#12-10 AWG / #8-1 AWG, Str	-	
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)	80 (9)		
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)	0.71 (18)		
Matched Contactor Type	Ex9CS6~12	Ex9C09~38	Ex9C40~100	Ex9C115~185	Ex9C225~500

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IEC CONTACTORS



Ex9CD/CM

Features

- AC-3 contactor ratings from 630 A and AC-1 contactor ratings to 800 A
- Coil voltages from 24~600 Vac, 50/60 Hz
- Full Voltage Non-Reversing (FVNR) and Full Voltage Reversing (FVR)
- 5 kA @ 600 Vac
- Built-on NO or NC auxiliary contacts to 32 A
- IP 20 finger and back-of hand safe
- 3 and 4 pole versions including 2NO+2NC and 4NO configurations
- 95 A mounts on standard 35mm DIN rail (40~95 can also mount on 75 mm DIN rail)
- Compatible with Ex9RD thermal overload relays
- Plug-on accessories for reduced installation time
- Coil replacement on standard contactor from 9~630 A

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IEC Contactors
Ex9CD/CM National and International Standards

Certifications

- UL Listed, File Number E353866
- Certified for Canada according to CSA standards
- IEC/EN 60947
- CE Compliant

2020 NOARK Electric

IEC Contactors
Ex9CD/CM Product Selection Guide

Label



1. CE Mark
2. Brand
3. Product Selection
4. UL Listed Mark
5. Coil Indicator
6. AC Coil Voltage
7. Frequency

Product Selection Guide

Ex9C	D	S	09	A	30	G	7	A
NOARK Ex9C Series	Contactor Type	Function	Rated Current AC-3	Terminal	Pole	AC/DC Coil Voltage	Frequency	Auxiliary Contacts (Built In)
	D: Ex9CD Standard (9~630 A)	S: Full Voltage Non-Reversing (FVNR)	06: 6 A 09: 9 A[1] 12: 12 A[1] 18: 18 A[1] 25: 25 A[1] 32: 32 A[1] 38: 38 A[2] 40: 40 A[1] 50: 50 A[1] 65: 65 A[1] 80: 80 A[1] 95: 95 A 100: 100 A[2] 115: 115 A 150: 150 A 185: 185 A 225: 225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A	A: Screw Terminals	30: 3NO[1]	B: 24 V[1] E: 48 V[1] F: 110 V[1] G: 120 V M: 220 V[1] P: 230 V U: 240 V N: 277 V Q: 380 V R: 440 V T: 480 V Y: 600 V	7: 50/60 Hz (Not available on DC coil)	A: 1NO B: 1NC Mini Type (6~12 A)
	M: Ex9CM Miniature (9~12 A)	R: Full Voltage Reversing (FVR)			40: 4NO			A: 1NO B: 1NC Standard Type (9~32 A)
					22: 2NO+ 2NC			C[1]: 1NO+ 1NC Standard Type AC Coil: (40~95 A) DC Coil: (9~100A)
								Blank None Standard Type (115~630 A)

Notes:
1. DC Coil Contactor available
2. DC Coil Contactor only

115-265A: 110-440Vac Coil available
330-630A: 110-380Vac Coil available
DC Coil available in 2018

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IEC Contactors

Ex9CMS 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz
- Ratings page C109



Certifications

IEC/EN 60947-4-1

6 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMS06A30B7A	1311137	Ex9CMS06A30B7B	1311113
48	Ex9CMS06A30E7A	1313334	Ex9CMS06A30E7B	1313310
110	Ex9CMS06A30F7A	1311129	Ex9CMS06A30F7B	1311105
120	Ex9CMS06A30G7A	1311131	Ex9CMS06A30G7B	1311107
220	Ex9CMS06A30M7A	1313328	Ex9CMS06A30M7B	1313304
230	Ex9CMS06A30P7A	1311133	Ex9CMS06A30P7B	1311109
240	Ex9CMS06A30U7A	1311135	Ex9CMS06A30U7B	1311111
277	Ex9CMS06A30N7A	1313336	Ex9CMS06A30N7B	1313312
380	Ex9CMS06A30Q7A	1313330	Ex9CMS06A30Q7B	1313306
440	Ex9CMS06A30R7A	1313332	Ex9CMS06A30R7B	1313308
480	Ex9CMS06A30T7A	1311139	Ex9CMS06A30T7B	1311115
600	Ex9CMS06A30Y7A	1313326	Ex9CMS06A30Y7B	1313302

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMS06A40B7	1311065	Ex9CMS06A22B7	1311089
48	Ex9CMS06A40E7	1313262	Ex9CMS06A22E7	1313286
110	Ex9CMS06A40F7	1311057	Ex9CMS06A22F7	1311081
120	Ex9CMS06A40G7	1311059	Ex9CMS06A22G7	1311083
220	Ex9CMS06A40M7	1313256	Ex9CMS06A22M7	1313280
230	Ex9CMS06A40P7	1311061	Ex9CMS06A22P7	1311085
240	Ex9CMS06A40U7	1311063	Ex9CMS06A22U7	1311087
277	Ex9CMS06A40N7	1313264	Ex9CMS06A22N7	1313288
380	Ex9CMS06A40Q7	1313258	Ex9CMS06A22Q7	1313282
440	Ex9CMS06A40R7	1313260	Ex9CMS06A22R7	1313284
480	Ex9CMS06A40T7	1311067	Ex9CMS06A22T7	1311091
600	Ex9CMS06A40Y7	1313254	Ex9CMS06A22Y7	1313278

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMS09A30B7A	1311233	Ex9CMS09A30B7B	1311209
48	Ex9CMS09A30E7A	1313430	Ex9CMS09A30E7B	1313406
110	Ex9CMS09A30F7A	1311225	Ex9CMS09A30F7B	1311201
120	Ex9CMS09A30G7A	1311227	Ex9CMS09A30G7B	1311203
220	Ex9CMS09A30M7A	1313424	Ex9CMS09A30M7B	1313400
230	Ex9CMS09A30P7A	1311229	Ex9CMS09A30P7B	1311205
240	Ex9CMS09A30U7A	1311231	Ex9CMS09A30U7B	1311207
277	Ex9CMS09A30N7A	1313432	Ex9CMS09A30N7B	1313408
380	Ex9CMS09A30Q7A	1313426	Ex9CMS09A30Q7B	1313402
440	Ex9CMS09A30R7A	1313428	Ex9CMS09A30R7B	1313404
480	Ex9CMS09A30T7A	1311235	Ex9CMS09A30T7B	1311211
600	Ex9CMS09A30Y7A	1313422	Ex9CMS09A30Y7B	1313398

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMS09A40B7	1311161	Ex9CMS09A22B7	1311185
48	Ex9CMS09A40E7	1313358	Ex9CMS09A22E7	1313382
110	Ex9CMS09A40F7	1311153	Ex9CMS09A22F7	1311177
120	Ex9CMS09A40G7	1311155	Ex9CMS09A22G7	1311179
220	Ex9CMS09A40M7	1313352	Ex9CMS09A22M7	1313376
230	Ex9CMS09A40P7	1311157	Ex9CMS09A22P7	1311181
240	Ex9CMS09A40U7	1311159	Ex9CMS09A22U7	1311183
277	Ex9CMS09A40N7	1313360	Ex9CMS09A22N7	1313384
380	Ex9CMS09A40Q7	1313354	Ex9CMS09A22Q7	1313378
440	Ex9CMS09A40R7	1313356	Ex9CMS09A22R7	1313380
480	Ex9CMS09A40T7	1311163	Ex9CMS09A22T7	1311187
600	Ex9CMS09A40Y7	1313350	Ex9CMS09A22Y7	1313374

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Relay Specifications D133
Relay Trip Curve D135
Relay Dimensions D136
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CMS 12 A Miniature

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us CE

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMS12A30B7A	1311329	Ex9CMS12A30B7B	1311305
48	Ex9CMS12A30E7A	1313526	Ex9CMS12A30E7B	1313502
110	Ex9CMS12A30F7A	1311321	Ex9CMS12A30F7B	1311297
120	Ex9CMS12A30G7A	1311323	Ex9CMS12A30G7B	1311299
220	Ex9CMS12A30M7A	1313520	Ex9CMS12A30M7B	1313496
230	Ex9CMS12A30P7A	1311325	Ex9CMS12A30P7B	1311301
240	Ex9CMS12A30U7A	1311327	Ex9CMS12A30U7B	1311303
277	Ex9CMS12A30N7A	1313528	Ex9CMS12A30N7B	1313504
380	Ex9CMS12A30Q7A	1313522	Ex9CMS12A30Q7B	1313498
440	Ex9CMS12A30R7A	1313524	Ex9CMS12A30R7B	1313500
480	Ex9CMS12A30T7A	1311331	Ex9CMS12A30T7B	1311307
600	Ex9CMS12A30Y7A	1313518	Ex9CMS12A30Y7B	1313494

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMS12A40B7	1311257	Ex9CMS12A22B7	1311281
48	Ex9CMS12A40E7	1313454	Ex9CMS12A22E7	1313478
110	Ex9CMS12A40F7	1311249	Ex9CMS12A22F7	1311273
120	Ex9CMS12A40G7	1311251	Ex9CMS12A22G7	1311275
220	Ex9CMS12A40M7	1313448	Ex9CMS12A22M7	1313472
230	Ex9CMS12A40P7	1311253	Ex9CMS12A22P7	1311277
240	Ex9CMS12A40U7	1311255	Ex9CMS12A22U7	1311279
277	Ex9CMS12A40N7	1313456	Ex9CMS12A22N7	1313480
380	Ex9CMS12A40Q7	1313450	Ex9CMS12A22Q7	1313474
440	Ex9CMS12A40R7	1313452	Ex9CMS12A22R7	1313476
480	Ex9CMS12A40T7	1311259	Ex9CMS12A22T7	1311283
600	Ex9CMS12A40Y7	1313446	Ex9CMS12A22Y7	1313470

Ratings		6 A	9 A	12 A
UL/CSA (A)	General Purpose	20		
Single-Phase (hp)	110/120 V	0.3	0.5	0.75
	230/240 V	0.75	1.5	2
Three-Phase (hp)	200/208 V	1.5	3	
	230/240 V			
	460/480 V	3	5	7.5
	575/600 V			10
IEC (A)	AC-3 Ie	6	9	12
	AC-1 Ie	20		
AC-3 (kw)	220/230/240 V	1.5	2.2	3
	380/400 V	2.2	4	5.5
	415 V			
	660/690 V	3		4

C

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Relay Specifications D133
Relay Trip Curve D135
Relay Dimensions D136
Relay Accessories D138

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IEC Contactors

Ex9CDS 9~12 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C109



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDS09A30B7A	1310069	Ex9CDS09A30B7B	1310009
48	Ex9CDS09A30E7A	1312266	Ex9CDS09A30E7B	1312206
110	Ex9CDS09A30F7A	1310061	Ex9CDS09A30F7B	1310001
120	Ex9CDS09A30G7A	1310063	Ex9CDS09A30G7B	1310003
220	Ex9CDS09A30M7A	1312260	Ex9CDS09A30M7B	1312200
230	Ex9CDS09A30P7A	1310065	Ex9CDS09A30P7B	1310005
240	Ex9CDS09A30U7A	1310067	Ex9CDS09A30U7B	1310007
277	Ex9CDS09A30N7A	1312268	Ex9CDS09A30N7B	1312208
380	Ex9CDS09A30Q7A	1312262	Ex9CDS09A30Q7B	1312202
440	Ex9CDS09A30R7A	1312264	Ex9CDS09A30R7B	1312204
480	Ex9CDS09A30T7A	1310071	Ex9CDS09A30T7B	1310011
600	Ex9CDS09A30Y7A	1312258	Ex9CDS09A30Y7B	1312198

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS09A40B7	1310033	Ex9CDS09A22B7	1310057
48	Ex9CDS09A40E7	1312230	Ex9CDS09A22E7	1312254
110	Ex9CDS09A40F7	1310025	Ex9CDS09A22F7	1310049
120	Ex9CDS09A40G7	1310027	Ex9CDS09A22G7	1310051
220	Ex9CDS09A40M7	1312224	Ex9CDS09A22M7	1312248
230	Ex9CDS09A40P7	1310029	Ex9CDS09A22P7	1310053
240	Ex9CDS09A40U7	1310031	Ex9CDS09A22U7	1310055
277	Ex9CDS09A40N7	1312232	Ex9CDS09A22N7	1312256
380	Ex9CDS09A40Q7	1312226	Ex9CDS09A22Q7	1312250
440	Ex9CDS09A40R7	1312228	Ex9CDS09A22R7	1312252
480	Ex9CDS09A40T7	1310035	Ex9CDS09A22T7	1310059
600	Ex9CDS09A40Y7	1312222	Ex9CDS09A22Y7	1312246

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDS12A30B7A	1310153	Ex9CDS12A30B7B	1310093
48	Ex9CDS12A30E7A	1312350	Ex9CDS12A30E7B	1312290
110	Ex9CDS12A30F7A	1310145	Ex9CDS12A30F7B	1310085
120	Ex9CDS12A30G7A	1310147	Ex9CDS12A30G7B	1310087
220	Ex9CDS12A30M7A	1312344	Ex9CDS12A30M7B	1312284
230	Ex9CDS12A30P7A	1310149	Ex9CDS12A30P7B	1310089
240	Ex9CDS12A30U7A	1310151	Ex9CDS12A30U7B	1310091
277	Ex9CDS12A30N7A	1312352	Ex9CDS12A30N7B	1312292
380	Ex9CDS12A30Q7A	1312346	Ex9CDS12A30Q7B	1312286
440	Ex9CDS12A30R7A	1312348	Ex9CDS12A30R7B	1312288
480	Ex9CDS12A30T7A	1310155	Ex9CDS12A30T7B	1310095
600	Ex9CDS12A30Y7A	1312342	Ex9CDS12A30Y7B	1312282

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS12A40B7	1310117	Ex9CDS12A22B7	1310141
48	Ex9CDS12A40E7	1312314	Ex9CDS12A22E7	1312338
110	Ex9CDS12A40F7	1310109	Ex9CDS12A22F7	1310133
120	Ex9CDS12A40G7	1310111	Ex9CDS12A22G7	1310135
220	Ex9CDS12A40M7	1312308	Ex9CDS12A22M7	1312332
230	Ex9CDS12A40P7	1310113	Ex9CDS12A22P7	1310137
240	Ex9CDS12A40U7	1310115	Ex9CDS12A22U7	1310139
277	Ex9CDS12A40N7	1312316	Ex9CDS12A22N7	1312340
380	Ex9CDS12A40Q7	1312310	Ex9CDS12A22Q7	1312334
440	Ex9CDS12A40R7	1312312	Ex9CDS12A22R7	1312336
480	Ex9CDS12A40T7	1310119	Ex9CDS12A22T7	1310143
600	Ex9CDS12A40Y7	1312306	Ex9CDS12A22Y7	1312330

Specifications C109
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Relay Specifications D133
Relay Trip Curve D135
Relay Dimensions D136
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDS18A30B7A	1310201	Ex9CDS18A30B7B	1310177
48	Ex9CDS18A30E7A	1312398	Ex9CDS18A30E7B	1312374
110	Ex9CDS18A30F7A	1310193	Ex9CDS18A30F7B	1310169
120	Ex9CDS18A30G7A	1310195	Ex9CDS18A30G7B	1310171
220	Ex9CDS18A30M7A	1312392	Ex9CDS18A30M7B	1312368
230	Ex9CDS18A30P7A	1310197	Ex9CDS18A30P7B	1310173
240	Ex9CDS18A30U7A	1310199	Ex9CDS18A30U7B	1310175
277	Ex9CDS18A30N7A	1312400	Ex9CDS18A30N7B	1312376
380	Ex9CDS18A30Q7A	1312394	Ex9CDS18A30Q7B	1312370
440	Ex9CDS18A30R7A	1312396	Ex9CDS18A30R7B	1312372
480	Ex9CDS18A30T7A	1310203	Ex9CDS18A30T7B	1310179
600	Ex9CDS18A30Y7A	1312390	Ex9CDS18A30Y7B	1312366

Ratings		9 A	12 A	18 A
UL/CSA (A)	General Purpose	20		32
Single-Phase (hp)	120 V	0.5	0.75	1
	208 V	1	2	3
	240 V			
Three-Phase (hp)	200 V	3	5	7.5
	240 V			
	460 V	5	7.5	10
	600 V			
IEC (A)	AC-3 Ie	9	12	18
	AC-1 Ie	20		32
AC-3 (kw)	220/230 V	2.2	3	4
	380/400 V	4	5.5	7.5
	660/690 V	5.5	7.5	10

C

Specifications C109
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Accessories ..... C119 to 126
Matched Relay: Ex9RD25 ..... D131
Relay Specifications D133
Relay Trip Curve D135
Relay Dimensions D136
Relay Accessories D138

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IEC Contactors

Ex9CDS 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C109



Certifications

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c UL us LISTED CE

25 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDS25A30B7A	1310285	Ex9CDS25A30B7B	1310225
48	Ex9CDS25A30E7A	1312482	Ex9CDS25A30E7B	1312422
110	Ex9CDS25A30F7A	1310277	Ex9CDS25A30F7B	1310217
120	Ex9CDS25A30G7A	1310279	Ex9CDS25A30G7B	1310219
220	Ex9CDS25A30M7A	1312476	Ex9CDS25A30M7B	1312416
230	Ex9CDS25A30P7A	1310281	Ex9CDS25A30P7B	1310221
240	Ex9CDS25A30U7A	1310283	Ex9CDS25A30U7B	1310223
277	Ex9CDS25A30N7A	1312484	Ex9CDS25A30N7B	1312424
380	Ex9CDS25A30Q7A	1312478	Ex9CDS25A30Q7B	1312418
440	Ex9CDS25A30R7A	1312480	Ex9CDS25A30R7B	1312420
480	Ex9CDS25A30T7A	1310287	Ex9CDS25A30T7B	1310227
600	Ex9CDS25A30Y7A	1312474	Ex9CDS25A30Y7B	1312414

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS25A40B7	1310249	Ex9CDS25A22B7	1310273
48	Ex9CDS25A40E7	1312446	Ex9CDS25A22E7	1312470
110	Ex9CDS25A40F7	1310241	Ex9CDS25A22F7	1310265
120	Ex9CDS25A40G7	1310243	Ex9CDS25A22G7	1310267
220	Ex9CDS25A40M7	1312440	Ex9CDS25A22M7	1312464
230	Ex9CDS25A40P7	1310245	Ex9CDS25A22P7	1310269
240	Ex9CDS25A40U7	1310247	Ex9CDS25A22U7	1310271
277	Ex9CDS25A40N7	1312448	Ex9CDS25A22N7	1312472
380	Ex9CDS25A40Q7	1312442	Ex9CDS25A22Q7	1312466
440	Ex9CDS25A40R7	1312444	Ex9CDS25A22R7	1312468
480	Ex9CDS25A40T7	1310251	Ex9CDS25A22T7	1310275
600	Ex9CDS25A40Y7	1312438	Ex9CDS25A22Y7	1312462

32 A

3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
Product	Part Number	Product	Part Number
Ex9CDS32A30B7A	1310333	Ex9CDS32A30B7B	1310309
Ex9CDS32A30E7A	1312530	Ex9CDS32A30E7B	1312506
Ex9CDS32A30F7A	1310325	Ex9CDS32A30F7B	1310301
Ex9CDS32A30G7A	1310327	Ex9CDS32A30G7B	1310303
Ex9CDS32A30M7A	1312524	Ex9CDS32A30M7B	1312500
Ex9CDS32A30P7A	1310329	Ex9CDS32A30P7B	1310305
Ex9CDS32A30U7A	1310331	Ex9CDS32A30U7B	1310307
Ex9CDS32A30N7A	1312532	Ex9CDS32A30N7B	1312508
Ex9CDS32A30Q7A	1312526	Ex9CDS32A30Q7B	1312502
Ex9CDS32A30R7A	1312528	Ex9CDS32A30R7B	1312504
Ex9CDS32A30T7A	1310335	Ex9CDS32A30T7B	1310311
Ex9CDS32A30Y7A	1312522	Ex9CDS32A30Y7B	1312498

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Matched Relay:
Ex9RD25 (25~32 A) D131
Ex9RD36 (32 A) D131
Relay Specifications D133
Relay Trip Curve D135
Relay Dimensions D136
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDS40A30B7C	1310393
48	Ex9CDS40A30E7C	1312590
110	Ex9CDS40A30F7C	1310385
120	Ex9CDS40A30G7C	1310387
220	Ex9CDS40A30M7C	1312584
230	Ex9CDS40A30P7C	1310389
240	Ex9CDS40A30U7C	1310391
277	Ex9CDS40A30N7C	1312592
380	Ex9CDS40A30Q7C	1312586
440	Ex9CDS40A30R7C	1312588
480	Ex9CDS40A30T7C	1310395
600	Ex9CDS40A30Y7C	1312582

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS40A40B7	1310357	Ex9CDS40A22B7	1310381
48	Ex9CDS40A40E7	1312554	Ex9CDS40A22E7	1312578
110	Ex9CDS40A40F7	1310349	Ex9CDS40A22F7	1310373
120	Ex9CDS40A40G7	1310351	Ex9CDS40A22G7	1310375
220	Ex9CDS40A40M7	1312548	Ex9CDS40A22M7	1312572
230	Ex9CDS40A40P7	1310353	Ex9CDS40A22P7	1310377
240	Ex9CDS40A40U7	1310355	Ex9CDS40A22U7	1310379
277	Ex9CDS40A40N7	1312556	Ex9CDS40A22N7	1312580
380	Ex9CDS40A40Q7	1312550	Ex9CDS40A22Q7	1312574
440	Ex9CDS40A40R7	1312552	Ex9CDS40A22R7	1312576
480	Ex9CDS40A40T7	1310359	Ex9CDS40A22T7	1310383
600	Ex9CDS40A40Y7	1312546	Ex9CDS40A22Y7	1312570

Ratings		25 A	32 A	40 A
UL/CSA (A)	General Purpose	40	50	60
Single-Phase (hp)	120 V	2	3	
	208 V	5		7.5
	240 V			
Three-Phase (hp)	200 V	7.5	10	15
	240 V	10	15	20
	460 V	15	20	25
	600 V			
IEC (A)	AC-3 Ie	25	32	40
	AC-1 Ie	40	50	60
AC-3 (kw)	220/230 V	5.5	7.5	11
	380/400 V	11	15	18.5
	660/690 V	15	18.5	30

Specifications C109
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Accessories ..... C119 to 126
Matched Relay: Ex9RD93 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

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IEC Contactors

Ex9CDS 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz
- Ratings page C109



Certifications

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50 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDS50A30B7C	1310453
48	Ex9CDS50A30E7C	1312650
110	Ex9CDS50A30F7C	1310445
120	Ex9CDS50A30G7C	1310447
220	Ex9CDS50A30M7C	1312644
230	Ex9CDS50A30P7C	1310449
240	Ex9CDS50A30U7C	1310451
277	Ex9CDS50A30N7C	1312652
380	Ex9CDS50A30Q7C	1312646
440	Ex9CDS50A30R7C	1312648
480	Ex9CDS50A30T7C	1310455
600	Ex9CDS50A30Y7C	1312642

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS50A40B7	1310417	Ex9CDS50A22B7	1310441
48	Ex9CDS50A40E7	1312614	Ex9CDS50A22E7	1312638
110	Ex9CDS50A40F7	1310409	Ex9CDS50A22F7	1310433
120	Ex9CDS50A40G7	1310411	Ex9CDS50A22G7	1310435
220	Ex9CDS50A40M7	1312608	Ex9CDS50A22M7	1312632
230	Ex9CDS50A40P7	1310413	Ex9CDS50A22P7	1310437
240	Ex9CDS50A40U7	1310415	Ex9CDS50A22U7	1310439
277	Ex9CDS50A40N7	1312616	Ex9CDS50A22N7	1312640
380	Ex9CDS50A40Q7	1312610	Ex9CDS50A22Q7	1312634
440	Ex9CDS50A40R7	1312612	Ex9CDS50A22R7	1312636
480	Ex9CDS50A40T7	1310419	Ex9CDS50A22T7	1310443
600	Ex9CDS50A40Y7	1312606	Ex9CDS50A22Y7	1312630

65 A

3 Poles 3NO+1NO/1NC • Auxiliary Contact	
Product	Part Number
Ex9CDS65A30B7C	1310513
Ex9CDS65A30E7C	1312710
Ex9CDS65A30F7C	1310505
Ex9CDS65A30G7C	1310507
Ex9CDS65A30M7C	1312704
Ex9CDS65A30P7C	1310509
Ex9CDS65A30U7C	1310511
Ex9CDS65A30N7C	1312712
Ex9CDS65A30Q7C	1312706
Ex9CDS65A30R7C	1312708
Ex9CDS65A30T7C	1310515
Ex9CDS65A30Y7C	1312702

4 Poles (4NO)		4 Poles (2NO+2NC)	
Product	Part Number	Product	Part Number
Ex9CDS65A40B7	1310477	Ex9CDS65A22B7	1310501
Ex9CDS65A40E7	1312674	Ex9CDS65A22E7	1312698
Ex9CDS65A40F7	1310469	Ex9CDS65A22F7	1310493
Ex9CDS65A40G7	1310471	Ex9CDS65A22G7	1310495
Ex9CDS65A40M7	1312668	Ex9CDS65A22M7	1312692
Ex9CDS65A40P7	1310473	Ex9CDS65A22P7	1310497
Ex9CDS65A40U7	1310475	Ex9CDS65A22U7	1310499
Ex9CDS65A40N7	1312676	Ex9CDS65A22N7	1312700
Ex9CDS65A40Q7	1312670	Ex9CDS65A22Q7	1312694
Ex9CDS65A40R7	1312672	Ex9CDS65A22R7	1312696
Ex9CDS65A40T7	1310479	Ex9CDS65A22T7	1310503
Ex9CDS65A40Y7	1312666	Ex9CDS65A22Y7	1312690

Specifications C109
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Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDS80A30B7C	1310573
48	Ex9CDS80A30E7C	1312770
110	Ex9CDS80A30F7C	1310565
120	Ex9CDS80A30G7C	1310567
220	Ex9CDS80A30M7C	1312764
230	Ex9CDS80A30P7C	1310569
240	Ex9CDS80A30U7C	1310571
277	Ex9CDS80A30N7C	1312772
380	Ex9CDS80A30Q7C	1312766
440	Ex9CDS80A30R7C	1312768
480	Ex9CDS80A30T7C	1310575
600	Ex9CDS80A30Y7C	1312762

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS80A40B7	1310537	Ex9CDS80A22B7	1310561
48	Ex9CDS80A40E7	1312734	Ex9CDS80A22E7	1312758
110	Ex9CDS80A40F7	1310529	Ex9CDS80A22F7	1310553
120	Ex9CDS80A40G7	1310531	Ex9CDS80A22G7	1310555
220	Ex9CDS80A40M7	1312728	Ex9CDS80A22M7	1312752
230	Ex9CDS80A40P7	1310533	Ex9CDS80A22P7	1310557
240	Ex9CDS80A40U7	1310535	Ex9CDS80A22U7	1310559
277	Ex9CDS80A40N7	1312736	Ex9CDS80A22N7	1312760
380	Ex9CDS80A40Q7	1312730	Ex9CDS80A22Q7	1312754
440	Ex9CDS80A40R7	1312732	Ex9CDS80A22R7	1312756
480	Ex9CDS80A40T7	1310539	Ex9CDS80A22T7	1310563
600	Ex9CDS80A40Y7	1312726	Ex9CDS80A22Y7	1312750

Ratings		50 A	65 A	80 A
UL/CSA (A)	General Purpose	80		95
Single-Phase (hp)	120 V	5		7.5
	208 V	10	-	
	240 V		15	20
Three-Phase (hp)	200 V	15	20	25
	240 V	20	25	30
	460 V	30	40	
	600 V			
IEC (A)	AC-3 Ie	50	65	80
	AC-1 Ie	80		95
AC-3 (kw)	220/230 V	15	18.5	22
	380/400 V	22	30	37
	660/690 V	37		45

C

Specifications C109
Dimensions C115
Wiring Diagram C116
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Matched Relay: Ex9RD93 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

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IEC Contactors

Ex9CDS 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDS95A30B7C	1310633
48	Ex9CDS95A30E7C	1312830
110	Ex9CDS95A30F7C	1310625
120	Ex9CDS95A30G7C	1310627
220	Ex9CDS95A30M7C	1312824
230	Ex9CDS95A30P7C	1310629
240	Ex9CDS95A30U7C	1310631
277	Ex9CDS95A30N7C	1312832
380	Ex9CDS95A30Q7C	1312826
440	Ex9CDS95A30R7C	1312828
480	Ex9CDS95A30T7C	1310635
600	Ex9CDS95A30Y7C	1312822

Ratings		95 A
UL/CSA (A)	General Purpose	95
Single-Phase (hp)	120 V	7.5
	208 V	-
	240 V	20
Three-Phase (hp)	200 V	30
	240 V	
	460 V	50
	600 V	
IEC (A)	AC-3 Ie	95
	AC-1 Ie	
AC-3 (kw)	220/230 V	25
	380/400 V	45
	660/690 V	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CDS95A40B7	1310597	Ex9CDS95A22B7	1310621
48	Ex9CDS95A40E7	1312794	Ex9CDS95A22E7	1312818
110	Ex9CDS95A40F7	1310589	Ex9CDS95A22F7	1310613
120	Ex9CDS95A40G7	1310591	Ex9CDS95A22G7	1310615
220	Ex9CDS95A40M7	1312788	Ex9CDS95A22M7	1312812
230	Ex9CDS95A40P7	1310593	Ex9CDS95A22P7	1310617
240	Ex9CDS95A40U7	1310595	Ex9CDS95A22U7	1310619
277	Ex9CDS95A40N7	1312796	Ex9CDS95A22N7	1312820
380	Ex9CDS95A40Q7	1312790	Ex9CDS95A22Q7	1312814
440	Ex9CDS95A40R7	1312792	Ex9CDS95A22R7	1312816
480	Ex9CDS95A40T7	1310599	Ex9CDS95A22T7	1310623
600	Ex9CDS95A40Y7	1312786	Ex9CDS95A22Y7	1312810

Specifications C109
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Matched Relay: Ex9RD93 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 115~150 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

C

115 A / 150 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS115A30F7	1310649	Ex9CDS150A30F7	1310697
120	Ex9CDS115A30G7	1310651	Ex9CDS150A30G7	1310699
220	Ex9CDS115A30M7	1312848	Ex9CDS150A30M7	1312896
230	Ex9CDS115A30P7	1310653	Ex9CDS150A30P7	1310701
240	Ex9CDS115A30U7	1310655	Ex9CDS150A30U7	1310703
277	Ex9CDS115A30N7	1312856	Ex9CDS150A30N7	1312904
380	Ex9CDS115A30Q7	1312850	Ex9CDS150A30Q7	1312898
440	Ex9CDS115A30R7	1312852	Ex9CDS150A30R7	1312900

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS115A40F7	1310661	Ex9CDS150A40F7	1310709
120	Ex9CDS115A40G7	1310663	Ex9CDS150A40G7	1310711
220	Ex9CDS115A40M7	1312860	Ex9CDS150A40M7	1312908
230	Ex9CDS115A40P7	1310665	Ex9CDS150A40P7	1310713
240	Ex9CDS115A40U7	1310667	Ex9CDS150A40U7	1310715
277	Ex9CDS115A40N7	1312868	Ex9CDS150A40N7	1312916
380	Ex9CDS115A40Q7	1312862	Ex9CDS150A40Q7	1312910
440	Ex9CDS115A40R7	1312864	Ex9CDS150A40R7	1312912

Ratings		115 A	150 A
UL/CSA (A)	General Purpose	200	
Three-Phase (hp)	240 V	40	50
	415 V	60	75
	480 V	75	100
	600 V		
IEC (A)	AC-3 Ie	115	150
	AC-1 Ie	200	
AC-3 (kw)	220/230 V	33	45
	380/400 V	55	75
	660/690 V	80	100

Specifications C110
Dimensions ..... C116 to 117
Wiring Diagram C116
Mounting Position C118
Accessories ..... C119 to 126
Matched Relay: Ex9RD200 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

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IEC Contactors

Ex9CDS 185~225 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

185 A / 225 A

Coil Voltage (Vac)	185 A: 3 Poles (3NO)		225 A: 3 Poles (3NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS185A30F7	1310745	Ex9CDS225A30F7	1310793
120	Ex9CDS185A30G7	1310747	Ex9CDS225A30G7	1310795
220	Ex9CDS185A30M7	1312944	Ex9CDS225A30M7	1312992
230	Ex9CDS185A30P7	1310749	Ex9CDS225A30P7	1310797
240	Ex9CDS185A30U7	1310751	Ex9CDS225A30U7	1310799
277	Ex9CDS185A30N7	1312952	Ex9CDS225A30N7	1313000
380	Ex9CDS185A30Q7	1312946	Ex9CDS225A30Q7	1312994
440	Ex9CDS185A30R7	1312948	Ex9CDS225A30R7	1312996

Coil Voltage (Vac)	185 A: 4 Poles (4NO)		225 A: 4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS185A40F7	1310757	Ex9CDS225A40F7	1310805
120	Ex9CDS185A40G7	1310759	Ex9CDS225A40G7	1310807
220	Ex9CDS185A40M7	1312956	Ex9CDS225A40M7	1313004
230	Ex9CDS185A40P7	1310761	Ex9CDS225A40P7	1310809
240	Ex9CDS185A40U7	1310763	Ex9CDS225A40U7	1310811
277	Ex9CDS185A40N7	1312964	Ex9CDS225A40N7	1313012
380	Ex9CDS185A40Q7	1312958	Ex9CDS225A40Q7	1313006
440	Ex9CDS185A40R7	1312960	Ex9CDS225A40R7	1313008

Ratings		185 A	225 A
UL/CSA (A)	General Purpose	275	
Three-Phase (hp)	240 V	60	75
	415 V	100	125
	480 V		
	600 V		
IEC (A)	AC-3 Ie	185	225
	AC-1 Ie	275	
AC-3 (kw)	220/230 V	55	63
	380/400 V	90	110
	660/690 V	100	129

Specifications C110
Dimensions ..... C110 to 111
Wiring Diagram C116
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Accessories ..... C1273 to 134
Matched Relay:
Ex9RD200 ..... D132
Ex9RD630 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 265~330 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

265 A / 330 A

Coil Voltage (Vac)	3 Poles (3NO)		3 Poles (3NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS265A30F7	1310841	Ex9CDS330A30F7	1310889
120	Ex9CDS265A30G7	1310843	Ex9CDS330A30G7	1310891
220	Ex9CDS265A30M7	1313040	Ex9CDS330A30M7	1313088
230	Ex9CDS265A30P7	1310845	Ex9CDS330A30P7	1310893
240	Ex9CDS265A30U7	1310847	Ex9CDS330A30U7	1310895
277	Ex9CDS265A30N7	1313048	Ex9CDS330A30N7	1313096
380	Ex9CDS265A30Q7	1313042	Ex9CDS330A30Q7	1313090
440	Ex9CDS265A30R7	1313044	-	

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
110	Ex9CDS265A40F7	1310853	Ex9CDS330A40F7	1310901
120	Ex9CDS265A40G7	1310855	Ex9CDS330A40G7	1310903
220	Ex9CDS265A40M7	1313052	Ex9CDS330A40M7	1313100
230	Ex9CDS265A40P7	1310857	Ex9CDS330A40P7	1310905
240	Ex9CDS265A40U7	1310859	Ex9CDS330A40U7	1310907
277	Ex9CDS265A40N7	1313060	Ex9CDS330A40N7	1313108
380	Ex9CDS265A40Q7	1313054	Ex9CDS330A40Q7	1313102
440	Ex9CDS265A40R7	1313056	-	

Ratings		265 A	330 A
UL/CSA (A)	General Purpose	315	380
Three-Phase (hp)	240 V	100	125
	415 V	150	150
	480 V		200
	600 V		
IEC (A)	AC-3 Ie	265	330
	AC-1 Ie	315	380
AC-3 (kw)	220/230 V	80	100
	380/400 V	132	160
	660/690 V	160	220

C

Specifications C110
Dimensions ..... C111 to 112
Wiring Diagram C116
Mounting Position C118
Accessories ..... C119 to 126
Matched Relay: Ex9RD630 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

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IEC Contactors

Ex9CDS 400~500 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

400 A

Coil Voltage (Vac)	3 Poles (3NO)	
	Product	Part Number
110	Ex9CDS400A30F7	1310937
120	Ex9CDS400A30G7	1310939
220	Ex9CDS400A30M7	1313136
230	Ex9CDS400A30P7	1310941
240	Ex9CDS400A30U7	1310943
277	Ex9CDS400A30N7	1313144
380	Ex9CDS400A30Q7	1313138

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
110	Ex9CDS400A40F7	1310949
120	Ex9CDS400A40G7	1310951
220	Ex9CDS400A40M7	1313148
230	Ex9CDS400A40P7	1310953
240	Ex9CDS400A40U7	1310955
277	Ex9CDS400A40N7	1313156
380	Ex9CDS400A40Q7	1313150

500 A

3 Poles (3NO)	
Product	Part Number
Ex9CDS500A30F7	1310985
Ex9CDS500A30G7	1310987
Ex9CDS500A30M7	1313184
Ex9CDS500A30P7	1310989
Ex9CDS500A30U7	1310991
Ex9CDS500A30N7	1313192
Ex9CDS500A30Q7	1313186

Ratings		400 A	500 A
UL/CSA (A)	General Purpose	450	630
Three-Phase (hp)	240 V	150	200
	415 V	200	250
	480 V	250	350
	600 V	300	
IEC (A)	AC-3 Ie	400	500
	AC-1 Ie	450	630
AC-3 (kw)	220/230 V	110	150
	380/400 V	200	250
	660/690 V	280	335

Specifications C110
Dimensions C113
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Matched Relay: Ex9RD630 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

2020 NOARK Electric

IEC Contactors

Ex9CDS 630 A Standard

- Auxiliary contacts are front mounted
- FVNR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

630 A

Coil Voltage (Vac)	3 Poles (3NO)	
	Product	Part Number
110	Ex9CDS630A30F7	1311009
120	Ex9CDS630A30G7	1311011
220	Ex9CDS630A30M7	1313208
230	Ex9CDS630A30P7	1311013
240	Ex9CDS630A30U7	1311015
277	Ex9CDS630A30N7	1313216
380	Ex9CDS630A30Q7	1313210

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
110	Ex9CDS630A40F7	1311021
120	Ex9CDS630A40G7	1311023
220	Ex9CDS630A40M7	1313220
230	Ex9CDS630A40P7	1311025
240	Ex9CDS630A40U7	1311027
277	Ex9CDS630A40N7	1313228
380	Ex9CDS630A40Q7	1313222

Ratings		630 A
UL/CSA (A)	General Purpose	800
Three-Phase (hp)	240 V	250
	415 V	350
	480 V	400
	600 V	500
IEC (A)	AC-3 Ie	630
	AC-1 Ie	800
AC-3 (kw)	220/230 V	200
	380/400 V	335
	660/690 V	450

C

Specifications C110
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Matched Relay: Ex9RD630 ..... D132
Relay Specifications D134
Relay Trip Curve D135
Relay Dimensions D137
Relay Accessories D138

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IEC Contactors

Ex9CMR 6~9 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz
- Ratings page C104



Certifications

IEC/EN 60947-4-1

6 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMR06A30B7A	1311149	Ex9CMR06A30B7B	1311125
48	Ex9CMR06A30E7A	1313346	Ex9CMR06A30E7B	1313322
110	Ex9CMR06A30F7A	1311141	Ex9CMR06A30F7B	1311117
120	Ex9CMR06A30G7A	1311143	Ex9CMR06A30G7B	1311119
220	Ex9CMR06A30M7A	1313340	Ex9CMR06A30M7B	1313316
230	Ex9CMR06A30P7A	1311145	Ex9CMR06A30P7B	1311121
240	Ex9CMR06A30U7A	1311147	Ex9CMR06A30U7B	1311123
277	Ex9CMR06A30N7A	1313348	Ex9CMR06A30N7B	1313324
380	Ex9CMR06A30Q7A	1313342	Ex9CMR06A30Q7B	1313318
440	Ex9CMR06A30R7A	1313344	Ex9CMR06A30R7B	1313320
480	Ex9CMR06A30T7A	1311151	Ex9CMR06A30T7B	1311127
600	Ex9CMR06A30Y7A	1313338	Ex9CMR06A30Y7B	1313314

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMR06A40B7	1311077	Ex9CMR06A22B7	1311101
48	Ex9CMR06A40E7	1313274	Ex9CMR06A22E7	1313298
110	Ex9CMR06A40F7	1311069	Ex9CMR06A22F7	1311093
120	Ex9CMR06A40G7	1311071	Ex9CMR06A22G7	1311095
220	Ex9CMR06A40M7	1313268	Ex9CMR06A22M7	1313292
230	Ex9CMR06A40P7	1311073	Ex9CMR06A22P7	1311097
240	Ex9CMR06A40U7	1311075	Ex9CMR06A22U7	1311099
277	Ex9CMR06A40N7	1313276	Ex9CMR06A22N7	1313300
380	Ex9CMR06A40Q7	1313270	Ex9CMR06A22Q7	1313294
440	Ex9CMR06A40R7	1313272	Ex9CMR06A22R7	1313296
480	Ex9CMR06A40T7	1311079	Ex9CMR06A22T7	1311103
600	Ex9CMR06A40Y7	1313266	Ex9CMR06A22Y7	1313290

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMR09A30B7A	1311245	Ex9CMR09A30B7B	1311221
48	Ex9CMR09A30E7A	1313442	Ex9CMR09A30E7B	1313418
110	Ex9CMR09A30F7A	1311237	Ex9CMR09A30F7B	1311213
120	Ex9CMR09A30G7A	1311239	Ex9CMR09A30G7B	1311215
220	Ex9CMR09A30M7A	1313436	Ex9CMR09A30M7B	1313412
230	Ex9CMR09A30P7A	1311241	Ex9CMR09A30P7B	1311217
240	Ex9CMR09A30U7A	1311243	Ex9CMR09A30U7B	1311219
277	Ex9CMR09A30N7A	1313444	Ex9CMR09A30N7B	1313420
380	Ex9CMR09A30Q7A	1313438	Ex9CMR09A30Q7B	1313414
440	Ex9CMR09A30R7A	1313440	Ex9CMR09A30R7B	1313416
480	Ex9CMR09A30T7A	1311247	Ex9CMR09A30T7B	1311223
600	Ex9CMR09A30Y7A	1313434	Ex9CMR09A30Y7B	1313410

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMR09A40B7	1311173	Ex9CMR09A22B7	1311197
48	Ex9CMR09A40E7	1313370	Ex9CMR09A22E7	1313394
110	Ex9CMR09A40F7	1311165	Ex9CMR09A22F7	1311189
120	Ex9CMR09A40G7	1311167	Ex9CMR09A22G7	1311191
220	Ex9CMR09A40M7	1313364	Ex9CMR09A22M7	1313388
230	Ex9CMR09A40P7	1311169	Ex9CMR09A22P7	1311193
240	Ex9CMR09A40U7	1311171	Ex9CMR09A22U7	1311195
277	Ex9CMR09A40N7	1313372	Ex9CMR09A22N7	1313396
380	Ex9CMR09A40Q7	1313366	Ex9CMR09A22Q7	1313390
440	Ex9CMR09A40R7	1313368	Ex9CMR09A22R7	1313392
480	Ex9CMR09A40T7	1311175	Ex9CMR09A22T7	1311199
600	Ex9CMR09A40Y7	1313362	Ex9CMR09A22Y7	1313386

Specifications C104
Dimensions.....C110
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

2020 NOARK Electric

IEC Contactors

Ex9CMR 12 A Miniature

- Auxiliary contacts are front mounted
- FVR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us CE

12 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CMR12A30B7A	1311341	Ex9CMR12A30B7B	1311317
48	Ex9CMR12A30E7A	1313538	Ex9CMR12A30E7B	1313514
110	Ex9CMR12A30F7A	1311333	Ex9CMR12A30F7B	1311309
120	Ex9CMR12A30G7A	1311335	Ex9CMR12A30G7B	1311311
220	Ex9CMR12A30M7A	1313532	Ex9CMR12A30M7B	1313508
230	Ex9CMR12A30P7A	1311337	Ex9CMR12A30P7B	1311313
240	Ex9CMR12A30U7A	1311339	Ex9CMR12A30U7B	1311315
277	Ex9CMR12A30N7A	1313540	Ex9CMR12A30N7B	1313516
380	Ex9CMR12A30Q7A	1313534	Ex9CMR12A30Q7B	1313510
440	Ex9CMR12A30R7A	1313536	Ex9CMR12A30R7B	1313512
480	Ex9CMR12A30T7A	1311343	Ex9CMR12A30T7B	1311319
600	Ex9CMR12A30Y7A	1313530	Ex9CMR12A30Y7B	1313506

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (2NO+2NC)	
	Product	Part Number	Product	Part Number
24	Ex9CMR12A40B7	1311269	Ex9CMR12A22B7	1311293
48	Ex9CMR12A40E7	1313466	Ex9CMR12A22E7	1313490
110	Ex9CMR12A40F7	1311261	Ex9CMR12A22F7	1311285
120	Ex9CMR12A40G7	1311263	Ex9CMR12A22G7	1311287
220	Ex9CMR12A40M7	1313460	Ex9CMR12A22M7	1313484
230	Ex9CMR12A40P7	1311265	Ex9CMR12A22P7	1311289
240	Ex9CMR12A40U7	1311267	Ex9CMR12A22U7	1311291
277	Ex9CMR12A40N7	1313468	Ex9CMR12A22N7	1313492
380	Ex9CMR12A40Q7	1313462	Ex9CMR12A22Q7	1313486
440	Ex9CMR12A40R7	1313464	Ex9CMR12A22R7	1313488
480	Ex9CMR12A40T7	1311271	Ex9CMR12A22T7	1311295
600	Ex9CMR12A40Y7	1313458	Ex9CMR12A22Y7	1313482

Ratings		6 A	9 A	12 A
UL/CSA (A)	General Purpose	20		
Single-Phase (hp)	110/120 V	0.3	0.5	0.75
	230/240 V	0.75	1.5	2
Three-Phase (hp)	200/208 V	1.5	3	
	230/240 V			
	460/480 V	3	5	7.5
	575/600 V			10
IEC (A)	AC-3 Ie	6	9	12
	AC-1 Ie	20		
AC-3 (kw)	220/230/240 V	1.5	2.2	3
	380/400 V	2.2	4	5.5
	415 V			
	660/690 V	3		4

C

Specifications C104
Dimensions.....C110
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

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IEC Contactors

Ex9CDR 9~12 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C109



Certifications

IEC/EN 60947-4-1

9 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR09A30B7A	1310081	Ex9CDR09A30B7B	1310021
48	Ex9CDR09A30E7A	1312278	Ex9CDR09A30E7B	1312218
110	Ex9CDR09A30F7A	1310073	Ex9CDR09A30F7B	1310013
120	Ex9CDR09A30G7A	1310075	Ex9CDR09A30G7B	1310015
220	Ex9CDR09A30M7A	1312272	Ex9CDR09A30M7B	1312212
230	Ex9CDR09A30P7A	1310077	Ex9CDR09A30P7B	1310017
240	Ex9CDR09A30U7A	1310079	Ex9CDR09A30U7B	1310019
277	Ex9CDR09A30N7A	1312280	Ex9CDR09A30N7B	1312220
380	Ex9CDR09A30Q7A	1312274	Ex9CDR09A30Q7B	1312214
440	Ex9CDR09A30R7A	1312276	Ex9CDR09A30R7B	1312216
480	Ex9CDR09A30T7A	1310083	Ex9CDR09A30T7B	1310023
600	Ex9CDR09A30Y7A	1312270	Ex9CDR09A30Y7B	1312210

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR09A40B7	1310045
48	Ex9CDR09A40E7	1312242
110	Ex9CDR09A40F7	1310037
120	Ex9CDR09A40G7	1310039
220	Ex9CDR09A40M7	1312236
230	Ex9CDR09A40P7	1310041
240	Ex9CDR09A40U7	1310043
277	Ex9CDR09A40N7	1312244
380	Ex9CDR09A40Q7	1312238
440	Ex9CDR09A40R7	1312240
480	Ex9CDR09A40T7	1310047
600	Ex9CDR09A40Y7	1312234

12 A

3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
Product	Part Number	Product	Part Number
Ex9CDR12A30B7A	1310165	Ex9CDR12A30B7B	1310105
Ex9CDR12A30E7A	1312362	Ex9CDR12A30E7B	1312302
Ex9CDR12A30F7A	1310157	Ex9CDR12A30F7B	1310097
Ex9CDR12A30G7A	1310159	Ex9CDR12A30G7B	1310099
Ex9CDR12A30M7A	1312356	Ex9CDR12A30M7B	1312296
Ex9CDR12A30P7A	1310161	Ex9CDR12A30P7B	1310101
Ex9CDR12A30U7A	1310163	Ex9CDR12A30U7B	1310103
Ex9CDR12A30N7A	1312364	Ex9CDR12A30N7B	1312304
Ex9CDR12A30Q7A	1312358	Ex9CDR12A30Q7B	1312298
Ex9CDR12A30R7A	1312360	Ex9CDR12A30R7B	1312300
Ex9CDR12A30T7A	1310167	Ex9CDR12A30T7B	1310107
Ex9CDR12A30Y7A	1312354	Ex9CDR12A30Y7B	1312294

4 Poles (4NO)	
Product	Part Number
Ex9CDR12A40B7	1310129
Ex9CDR12A40E7	1312326
Ex9CDR12A40F7	1310121
Ex9CDR12A40G7	1310123
Ex9CDR12A40M7	1312320
Ex9CDR12A40P7	1310125
Ex9CDR12A40U7	1310127
Ex9CDR12A40N7	1312328
Ex9CDR12A40Q7	1312322
Ex9CDR12A40R7	1312324
Ex9CDR12A40T7	1310131
Ex9CDR12A40Y7	1312318

Specifications C104
Dimensions.....C107
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

2020 NOARK Electric

IEC Contactors

Ex9CDR 18 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

18 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR18A30B7A	1310213	Ex9CDR18A30B7B	1310189
48	Ex9CDR18A30E7A	1312410	Ex9CDR18A30E7B	1312386
110	Ex9CDR18A30F7A	1310205	Ex9CDR18A30F7B	1310181
120	Ex9CDR18A30G7A	1310207	Ex9CDR18A30G7B	1310183
220	Ex9CDR18A30M7A	1312404	Ex9CDR18A30M7B	1312380
230	Ex9CDR18A30P7A	1310209	Ex9CDR18A30P7B	1310185
240	Ex9CDR18A30U7A	1310211	Ex9CDR18A30U7B	1310187
277	Ex9CDR18A30N7A	1312412	Ex9CDR18A30N7B	1312388
380	Ex9CDR18A30Q7A	1312406	Ex9CDR18A30Q7B	1312382
440	Ex9CDR18A30R7A	1312408	Ex9CDR18A30R7B	1312384
480	Ex9CDR18A30T7A	1310215	Ex9CDR18A30T7B	1310191
600	Ex9CDR18A30Y7A	1312402	Ex9CDR18A30Y7B	1312378

Ratings		9 A	12 A	18 A
UL/CSA (A)	General Purpose	20		32
Single-Phase (hp)	120 V	0.5	0.75	1
	208 V	1	2	3
	240 V			
Three-Phase (hp)	200 V	3	5	7.5
	240 V			
	460 V	5	7.5	10
	600 V			
IEC (A)	AC-3 Ie	9	12	18
	AC-1 Ie	20		32
AC-3 (kw)	220/230 V	2.2	3	4
	380/400 V	4	5.5	7.5
	660/690 V	5.5	7.5	10

C

Specifications C104
Dimensions.....C107
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

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IEC Contactors

Ex9CDR 25~32 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C109



Certifications

IEC/EN 60947-4-1



25 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR25A30B7A	1310297	Ex9CDR25A30B7B	1310237
48	Ex9CDR25A30E7A	1312494	Ex9CDR25A30E7B	1312434
110	Ex9CDR25A30F7A	1310289	Ex9CDR25A30F7B	1310229
120	Ex9CDR25A30G7A	1310291	Ex9CDR25A30G7B	1310231
220	Ex9CDR25A30M7A	1312488	Ex9CDR25A30M7B	1312428
230	Ex9CDR25A30P7A	1310293	Ex9CDR25A30P7B	1310233
240	Ex9CDR25A30U7A	1310295	Ex9CDR25A30U7B	1310235
277	Ex9CDR25A30N7A	1312496	Ex9CDR25A30N7B	1312436
380	Ex9CDR25A30Q7A	1312490	Ex9CDR25A30Q7B	1312430
440	Ex9CDR25A30R7A	1312492	Ex9CDR25A30R7B	1312432
480	Ex9CDR25A30T7A	1310299	Ex9CDR25A30T7B	1310239
600	Ex9CDR25A30Y7A	1312486	Ex9CDR25A30Y7B	1312426

32 A

Coil Voltage (Vac)	3 Poles 3NO+1NO • Auxiliary Contact		3 Poles 3NO+1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR32A30B7A	1310345	Ex9CDR32A30B7B	1310321
48	Ex9CDR32A30E7A	1312542	Ex9CDR32A30E7B	1312518
110	Ex9CDR32A30F7A	1310337	Ex9CDR32A30F7B	1310313
120	Ex9CDR32A30G7A	1310339	Ex9CDR32A30G7B	1310315
220	Ex9CDR32A30M7A	1312536	Ex9CDR32A30M7B	1312512
230	Ex9CDR32A30P7A	1310341	Ex9CDR32A30P7B	1310317
240	Ex9CDR32A30U7A	1310343	Ex9CDR32A30U7B	1310319
277	Ex9CDR32A30N7A	1312544	Ex9CDR32A30N7B	1312520
380	Ex9CDR32A30Q7A	1312538	Ex9CDR32A30Q7B	1312514
440	Ex9CDR32A30R7A	1312540	Ex9CDR32A30R7B	1312516
480	Ex9CDR32A30T7A	1310347	Ex9CDR32A30T7B	1310323
600	Ex9CDR32A30Y7A	1312534	Ex9CDR32A30Y7B	1312510

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR25A40B7	1310261
48	Ex9CDR25A40E7	1312458
110	Ex9CDR25A40F7	1310253
120	Ex9CDR25A40G7	1310255
220	Ex9CDR25A40M7	1312452
230	Ex9CDR25A40P7	1310257
240	Ex9CDR25A40U7	1310259
277	Ex9CDR25A40N7	1312460
380	Ex9CDR25A40Q7	1312454
440	Ex9CDR25A40R7	1312456
480	Ex9CDR25A40T7	1310263
600	Ex9CDR25A40Y7	1312450

Specifications C109
Dimensions.....C115
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

2020 NOARK Electric

IEC Contactors

Ex9CDR 40 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

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C

40 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDR40A30B7C	1310405
48	Ex9CDR40A30E7C	1312602
110	Ex9CDR40A30F7C	1310397
120	Ex9CDR40A30G7C	1310399
220	Ex9CDR40A30M7C	1312596
230	Ex9CDR40A30P7C	1310401
240	Ex9CDR40A30U7C	1310403
277	Ex9CDR40A30N7C	1312604
380	Ex9CDR40A30Q7C	1312598
440	Ex9CDR40A30R7C	1312600
480	Ex9CDR40A30T7C	1310407
600	Ex9CDR40A30Y7C	1312594

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR40A40B7	1310369
48	Ex9CDR40A40E7	1312566
110	Ex9CDR40A40F7	1310361
120	Ex9CDR40A40G7	1310363
220	Ex9CDR40A40M7	1312560
230	Ex9CDR40A40P7	1310365
240	Ex9CDR40A40U7	1310367
277	Ex9CDR40A40N7	1312568
380	Ex9CDR40A40Q7	1312562
440	Ex9CDR40A40R7	1312564
480	Ex9CDR40A40T7	1310371
600	Ex9CDR40A40Y7	1312558

Ratings		25 A	32 A	40 A
UL/CSA (A)	General Purpose	40	50	60
Single-Phase (hp)	120 V	2	3	
	208 V	5		7.5
	240 V			
Three-Phase (hp)	200 V	7.5	10	15
	240 V	10	15	20
	460 V	15	20	25
	600 V			
IEC (A)	AC-3 Ie	25	32	40
	AC-1 Ie	40	50	60
AC-3 (kw)	220/230 V	5.5	7.5	11
	380/400 V	11	15	18.5
	660/690 V	15	18.5	30

Specifications C109
Dimensions.....C115
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

Note: 40~95 A are not pre-wired in the factory.

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IEC Contactors

Ex9CDR 50~65 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz
- Ratings page C109



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

Coil Voltage (Vac)	50 A		65 A	
	3 Poles 3NO+1NO/1NC • Auxiliary Contact		3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A30B7C	1310465	Ex9CDR65A30B7C	1310525
48	Ex9CDR50A30E7C	1312662	Ex9CDR65A30E7C	1312722
110	Ex9CDR50A30F7C	1310457	Ex9CDR65A30F7C	1310517
120	Ex9CDR50A30G7C	1310459	Ex9CDR65A30G7C	1310519
220	Ex9CDR50A30M7C	1312656	Ex9CDR65A30M7C	1312716
230	Ex9CDR50A30P7C	1310461	Ex9CDR65A30P7C	1310521
240	Ex9CDR50A30U7C	1310463	Ex9CDR65A30U7C	1310523
277	Ex9CDR50A30N7C	1312664	Ex9CDR65A30N7C	1312724
380	Ex9CDR50A30Q7C	1312658	Ex9CDR65A30Q7C	1312718
440	Ex9CDR50A30R7C	1312660	Ex9CDR65A30R7C	1312720
480	Ex9CDR50A30T7C	1310467	Ex9CDR65A30T7C	1310527
600	Ex9CDR50A30Y7C	1312654	Ex9CDR65A30Y7C	1312714

Coil Voltage (Vac)	4 Poles (4NO)		4 Poles (4NO)	
	Product	Part Number	Product	Part Number
24	Ex9CDR50A40B7	1310429	Ex9CDR65A40B7	1310489
48	Ex9CDR50A40E7	1312626	Ex9CDR65A40E7	1312686
110	Ex9CDR50A40F7	1310421	Ex9CDR65A40F7	1310481
120	Ex9CDR50A40G7	1310423	Ex9CDR65A40G7	1310483
220	Ex9CDR50A40M7	1312620	Ex9CDR65A40M7	1312680
230	Ex9CDR50A40P7	1310425	Ex9CDR65A40P7	1310485
240	Ex9CDR50A40U7	1310427	Ex9CDR65A40U7	1310487
277	Ex9CDR50A40N7	1312628	Ex9CDR65A40N7	1312688
380	Ex9CDR50A40Q7	1312622	Ex9CDR65A40Q7	1312682
440	Ex9CDR50A40R7	1312624	Ex9CDR65A40R7	1312684
480	Ex9CDR50A40T7	1310431	Ex9CDR65A40T7	1310491
600	Ex9CDR50A40Y7	1312618	Ex9CDR65A40Y7	1312678

Specifications C109
Dimensions.....C115
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

Note: 40~95 A are not pre-wired in the factory.

2020 NOARK Electric

IEC Contactors

Ex9CDR 80 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

80 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDR80A30B7C	1310585
48	Ex9CDR80A30E7C	1312782
110	Ex9CDR80A30F7C	1310577
120	Ex9CDR80A30G7C	1310579
220	Ex9CDR80A30M7C	1312776
230	Ex9CDR80A30P7C	1310581
240	Ex9CDR80A30U7C	1310583
277	Ex9CDR80A30N7C	1312784
380	Ex9CDR80A30Q7C	1312778
440	Ex9CDR80A30R7C	1312780
480	Ex9CDR80A30T7C	1310587
600	Ex9CDR80A30Y7C	1312774

Coil Voltage (Vac)	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR80A40B7	1310549
48	Ex9CDR80A40E7	1312746
110	Ex9CDR80A40F7	1310541
120	Ex9CDR80A40G7	1310543
220	Ex9CDR80A40M7	1312740
230	Ex9CDR80A40P7	1310545
240	Ex9CDR80A40U7	1310547
277	Ex9CDR80A40N7	1312748
380	Ex9CDR80A40Q7	1312742
440	Ex9CDR80A40R7	1312744
480	Ex9CDR80A40T7	1310551
600	Ex9CDR80A40Y7	1312738

Ratings		50 A	65 A	80 A
UL/CSA (A)	General Purpose	80		95
Single-Phase (hp)	120 V	5		7.5
	208 V	10	-	
	240 V		15	20
Three-Phase (hp)	200 V	15	20	25
	240 V	20	25	30
	460 V	30	40	
	600 V			
IEC (A)	AC-3 Ie	50	65	80
	AC-1 Ie	80		95
AC-3 (kw)	220/230 V	15	18.5	22
	380/400 V	22	30	37
	660/690 V	37		45

C

Specifications C109
Dimensions.....C115
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

Note: 40~95 A are not pre-wired in the factory.

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IEC Contactors

Ex9CDR 95 A Standard

- Auxiliary contacts are side mounted; front mounted also available
- FVR, 50/60 Hz



Certifications

IEC/EN 60947-4-1

c UL us LISTED CE

95 A

Coil Voltage (Vac)	3 Poles 3NO+1NO/1NC • Auxiliary Contact	
	Product	Part Number
24	Ex9CDR95A30B7C	1310645
48	Ex9CDR95A30E7C	1312842
110	Ex9CDR95A30F7C	1310637
120	Ex9CDR95A30G7C	1310639
220	Ex9CDR95A30M7C	1312836
230	Ex9CDR95A30P7C	1310641
240	Ex9CDR95A30U7C	1310643
277	Ex9CDR95A30N7C	1312844
380	Ex9CDR95A30Q7C	1312838
440	Ex9CDR95A30R7C	1312840
480	Ex9CDR95A30T7C	1310647
600	Ex9CDR95A30Y7C	1312834

Coil Voltage Vac	4 Poles (4NO)	
	Product	Part Number
24	Ex9CDR95A40B7	1310609
48	Ex9CDR95A40E7	1312806
110	Ex9CDR95A40F7	1310601
120	Ex9CDR95A40G7	1310603
220	Ex9CDR95A40M7	1312800
230	Ex9CDR95A40P7	1310605
240	Ex9CDR95A40U7	1310607
277	Ex9CDR95A40N7	1312808
380	Ex9CDR95A40Q7	1312802
440	Ex9CDR95A40R7	1312804
480	Ex9CDR95A40T7	1310611
600	Ex9CDR95A40Y7	1312798

Ratings		95 A
UL/CSA (A)	General Purpose	95
Single-Phase (hp)	120 V	7.5
	240 V	20
Three-Phase (hp)	200 V	30
	240 V	
	460 V	50
	600 V	
IEC (A)	AC-3 Ie	95
	AC-1 Ie	
AC-3 (kw)	220/230 V	25
	380/400 V	45
	660/690 V	

Specifications C109
Dimensions.....C115
Wiring Diagram.....C117
Mounting Position.....C118
Accessories.....C119 to 126

Note: 40~95 A are not pre-wired in the factory.

2020 NOARK Electric

IEC Contactors

Ex9CMS/CMR Specifications

Ex9CMS/CMR		06	09	12
Operating Frequency (415 V)	AC-3	1,200 operations/h		
	AC-4	300 operations/h		
Electrical Life (x10^3 Operations)	AC-3	1,000		
	AC-4	200		
Ambient Temperature		23 to 104°F (-5 to 40°C)		
Mechanical Life (x10^6 Operations)		10		
Matched Overload Relay Type		Ex9RD11.5		
Terminal Connection				
Flexible Cable (with Cold-Press Terminal) AWG (mm^2)	Single Cable	16~14 (1~2.50)		
	Dual Cable	16 (1~1.50)		
Stiff Cable AWG ($mm^{2)}$	Single Cable	16~14 (1~2.50)		
	Dual Cable			
Screw Size		M3		
Tightening Torque in-lb (N.m)		7 (0.80)		

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Ex9CDS/CDR Specifications

Ex9CDS/CDR			09	12	18	25	32	40	50	65	80	95
Frame			Frame 1			Frame 2		Frame 3			Frame 4	
Poles			3 & 4		3	3 & 4	3	3 & 4				
Rated Insulation Voltage (Vac)			690									
Operating Frequency (Operations/h)	Electrical	AC-3	1,200				600					
		AC-4	300									
	Mechanical		3,600									
Electrical Life ($x10^3$ Operations)		AC-3	1,000				800		600			
		AC-4	200					150			100	
Ambient Temperature			23 to 104°F (-5 to 40°C)									
Mechanical Life ($x10^6$ Operations)			10				8				6	
Matched Overload Relay Type			Ex9RD25				Ex9RD36	Ex9RD93				
Rated Conventional Heating Current (A) AC-1			20		32	40	50	60	80		95	
AC-3	Ie (A)	220/230 V	9	12	18	25	32	40	50	65	80	95
		380/400 V										
		660/690 V	6.6	8.9	12	18	21	34	39	42	49	
	Pe (kW)	220/230 V	2.2	3	4	5.5	7.5	11	15	18.5	22	25
		380/400 V	4	5.5	7.5	11	15	18.5	22	30	37	45
		660/690 V	5.5	7.5	10	15	18.5	30	37		45	
Power of Controlled Three-Phase Cage Motor AC-3 (hp)		200 V	3	5	7.5	7.5	10	15		20	25	30
		240 V				10	15	20		25	30	
		460 V	5	7.5	10	15	20	25	30	40		50
		600 V										
Terminal Connection	**Number of Pieces**											
Flexible Cable with Cold-Pressed Socket AWG (mm^2)	1		16~14 (1~2.5)		16~12 (1.5~4)		14~10 (2.5~6)	10~4 (6~25)			8~2 (10~35)	
	2							12~8 (4~10)			10~6 (6~16)	
Flexible Cable without Cold-Pressed Socket AWG (mm^2)	1		16~12 (1~4)		16~10 (1.5~6)	1.5~10 (16~8)	14~8 (2.5~10)	10~4 (6~25)			8~2 (10~35)	
	2		1~2.5 (16~14)		16~12 (1.5~4)	1.5~6 (16~10)	14-10 (2.5~6)	4~10 (12~8)			10~6 (6~16)	
Inflexible Cable AWG (mm^2)	1		16~12 (1~4)		16~10 (1.5~6)		14~8 (2.5~10)	6~25 (10~4)			8~2 (10~35)	
	2							12~8 (4~10)			10~6 (6~16)	
Screw Size			M3.5			M4		M8			M10	
Tightening Torque in-lb (N.m)			7 (0.80)			10 (1.20)		45 (3.50)			89 (10)	

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Ex9CDS/CDR Specifications

Ex9CDS/CDR			115	150	185	225	265	330	400	500	630
Frame			Frame 5		Frame 6		Frame 7	Frame 8	Frame 9	Frame 10	Frame 11
Poles			3 & 4							3	3 & 4
Rated Insulation Voltage (Vac)			1,000								
Operating Frequency (Operations/h)	Electrical	AC-3	1,200		600						
		AC-4	300								
	Mechanical		1,200								
Electrical Life ($x10^3$ Operations)		AC-3	1,200		1,000		800				
Ambient Temperature			23 to 104°F (-5 to 40°C)								
Mechanical Life ($x10^6$ Operations)			10		6						
Matched Overload Relay Type			Ex9RD200			EX9RD630					
Rated Conventional Heating Current (A) AC-1			200		275		315	380	450	630	800
AC-3	Ie (A)	220/230 V	115	150	185	225	265	330	400	500	630
		380/400 V									
		660/690 V	86	108	118	137	170	235	303	353	462
	Pe (kW)	220/230 V	33	45	55	63	80	100	110	150	200
		380/400 V	55	75	90	110	132	160	200	250	335
		660/690 V	80	100	110	129	160	220	280	335	450
Power of Controlled Three-Phase Cage Motor AC-3 (hp)		240 V	40	50	60	75	100	125	150	200	250
		415 V	60	75	100	125	150	150	200	250	350
		480 V	75	100				200	250	350	400
		600 V							300		500
Terminal Connection	**Number of Pieces**										
Cable Cross Section AWG (mm^2)	1		00~000 (70~95)		0000~300 MCM (95~150)		250~350 MCM (120~185)	350~500 MCM (185~240)	-		
	1 (2)		-						500 MCM [300 MCM] (240 [150])	-	
	2		-							300~350 MCM (150~185)	350~500 MCM (185~240)
Cu Bus Bar Cross Section in (mm^2)	1 (2)		-						1x0.25 (30x5)	-	
	2		-							1.25x0.25 (40x5)	1.5x0.25 (50x5)
Screw Size			M6	M8		M10					M12
Tightening Torque in-lb (N.m)			27 (3)	54 (6)		89 (10)					124 (14)

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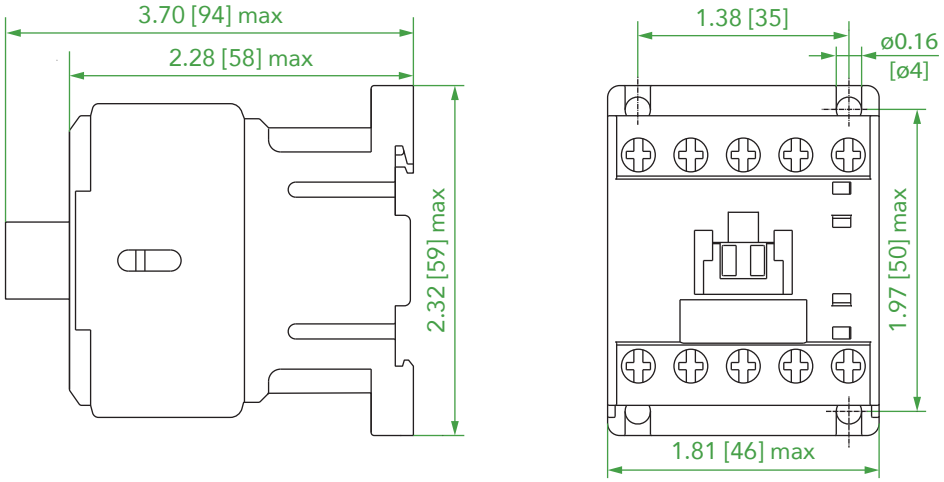
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IEC Contactors

Ex9CMS/CMR Dimensions

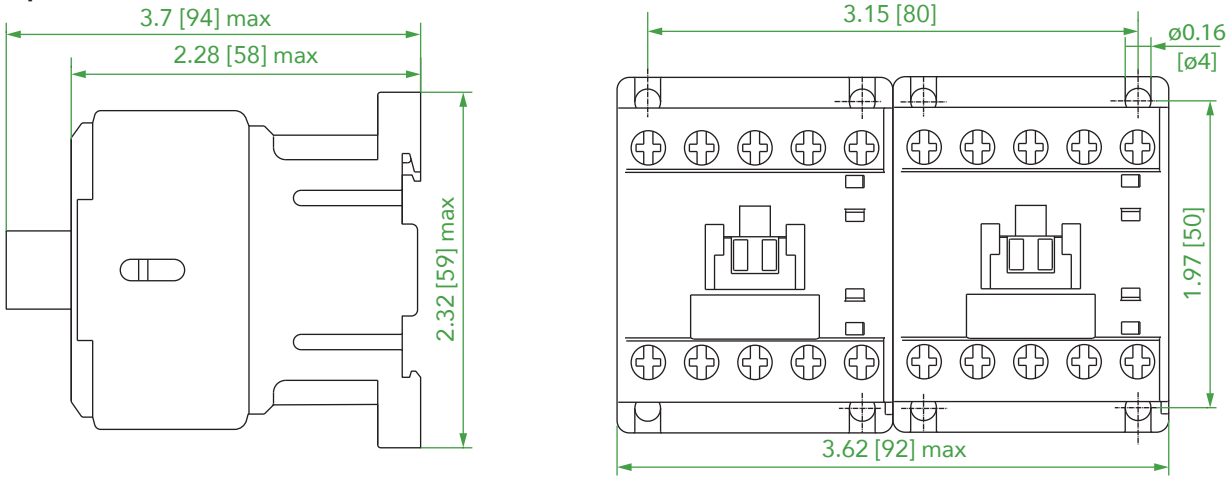
Ex9CMS06~12

Unit: in [mm]



Ex9CMR06~12

Unit: in [mm]



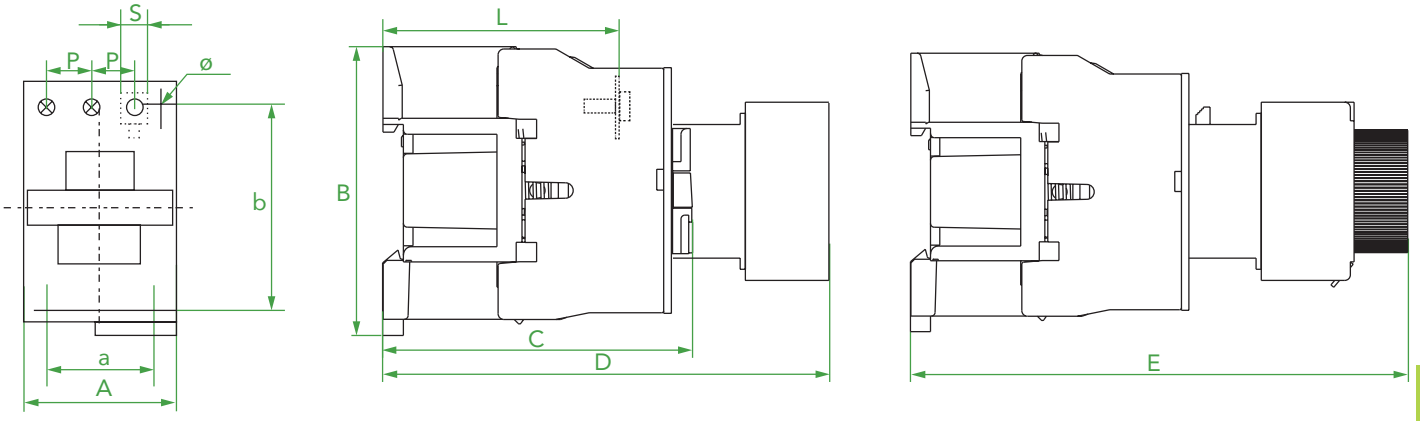
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IEC Contactors

Ex9CDS Dimensions

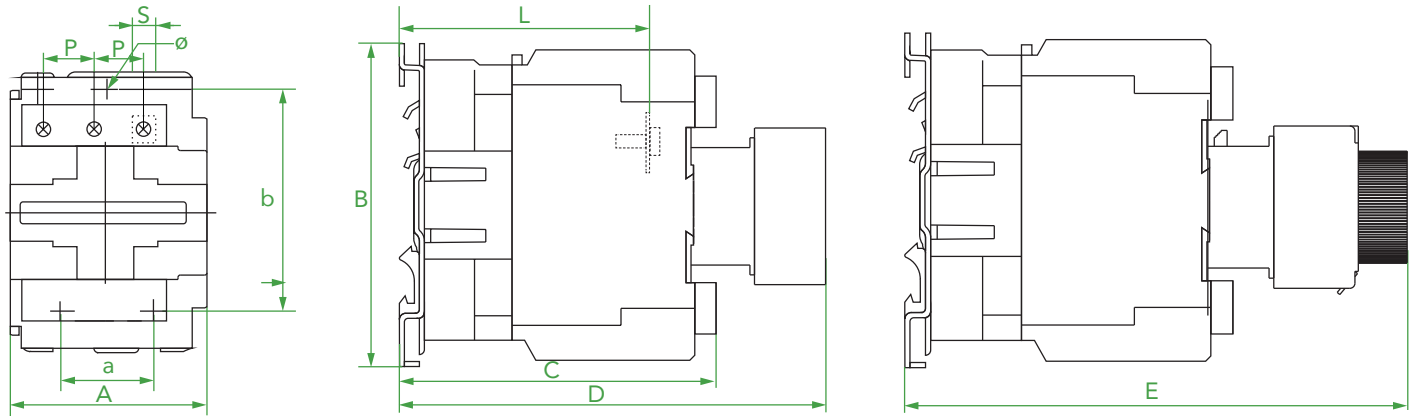
Ex9CDS09~32

Unit: in [mm]



Ex9CDS40~95

Unit: in [mm]



Ex9CDS	A max	B max	C max	D max	E max	a	b	ø	L	P	S
09	1.85 [47]	2.99 [76]	3.38 [86]	4.74 [120.5]	5.53 [140.5]	1.34/1.38 [34/35]	1.97/2.36 [50/60]	0.18 [4.5]	2.36 [60]	0.41 [10.5]	0.34 [8.6]
12											0.41 [10.4]
18									2.40 [61]	0.44 [11.3]	
25	2.25 [57]	3.38 [86]	3.74 [95]	5.25 [133.5]	6.04 [153.5]	1.57 [40]	1.89 [48]		2.76 [70]	0.52 [13.2]	0.46 [11.7]
32			3.94 [100]	5.45 [138.5]	6.24 [158.5]				2.82 [71.6]	0.57 [14.5]	0.51 [13]
40~65 11	3.03 [77]	5.08 [129]	4.56 [116]	6.08 [154.5]	6.87 [174.5]		4.13 [105]	0.26 [6.5]	3.07 [78]	0.79 [20]	0.34 [8.6]
40~65 40	3.30 [84]										
40~65 22											
80~95 11	3.42 [87]		5.00 [128]	6.51 [165.5]	7.3 [185.5]				3.27 [83]	0.93 [23.5]	0.47 [12]
80~95 40	3.78 [96]		4.80 [122]	6.31 [160.5]	7.10 [180.5]						
80~95 22			5.31 [135]								

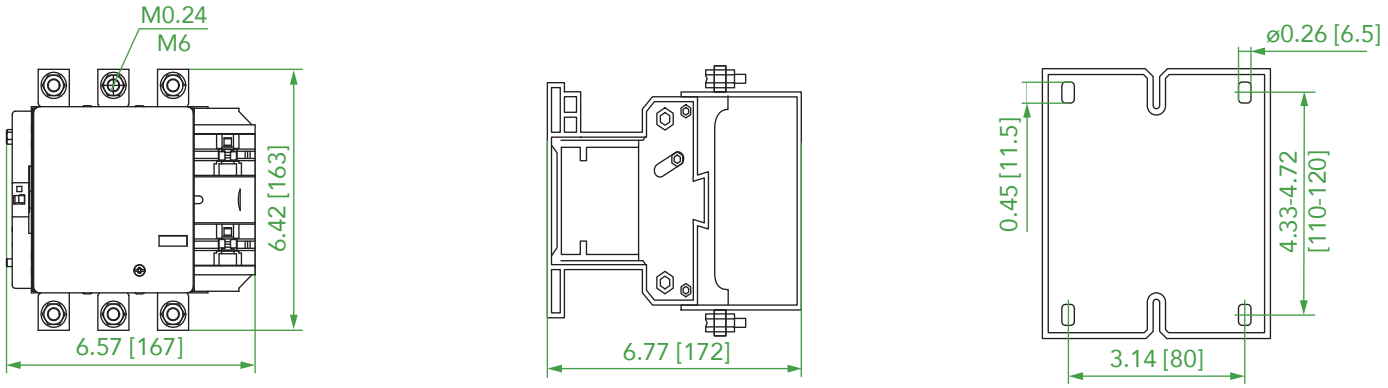
Note:
1) L is the distance between terminals and plate in main circuit.
2) P is the distance between two phase in main circuit.
3) S is the width of contacting plate: in main circuit.
4) Ex9CDS40~95: 11 = 3NO+1NO & 1NC, 40 = 4NO, 22 = 2NO & 2NC

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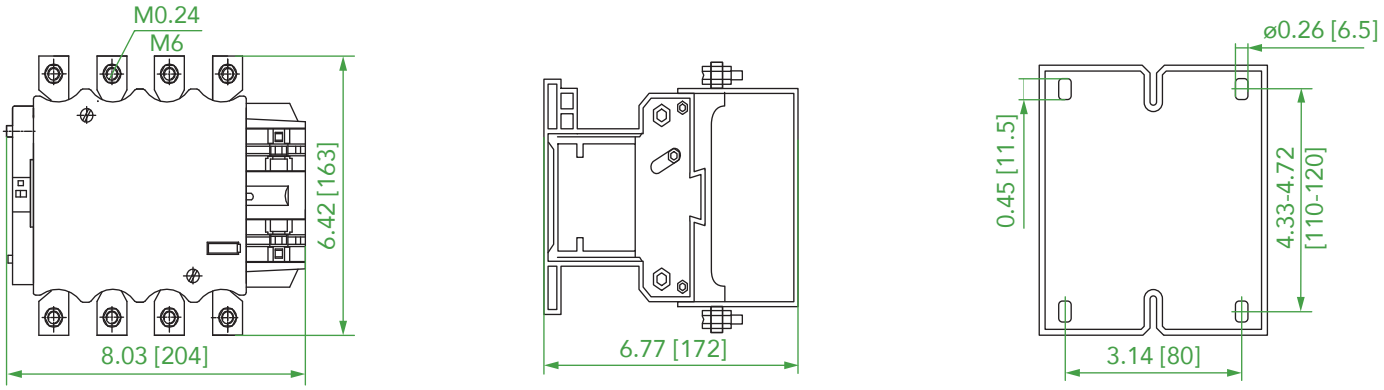
IEC Contactors

Ex9CDS Dimensions

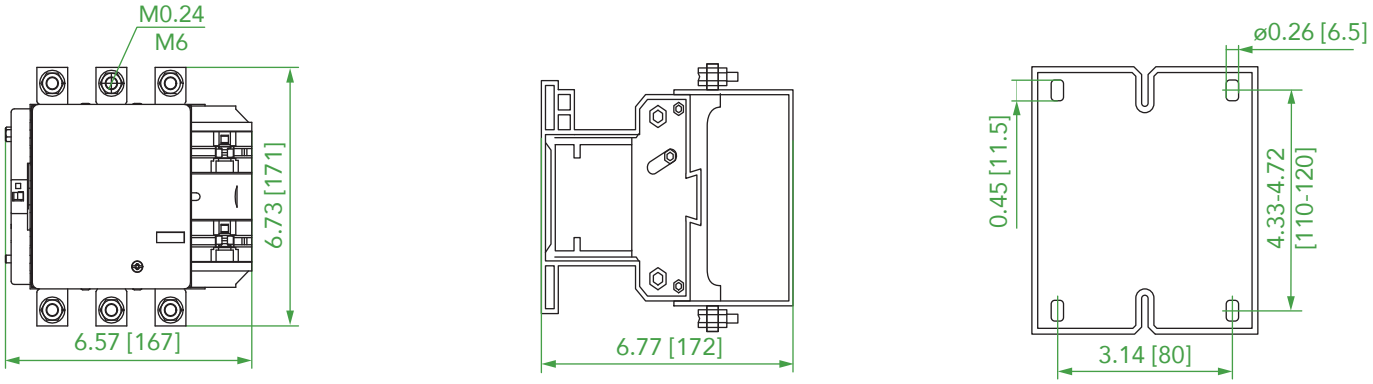
Ex9CDS115
3 Poles
Unit: in [mm]



Ex9CDS115
4 Poles
Unit: in [mm]



Ex9CDS150
3 Poles
Unit: in [mm]



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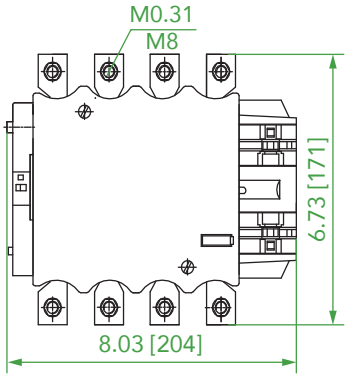
IEC Contactors

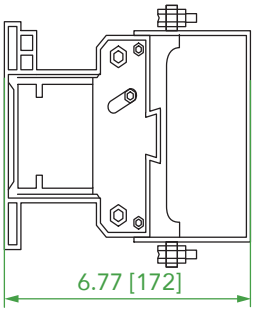
Ex9CDS Dimensions

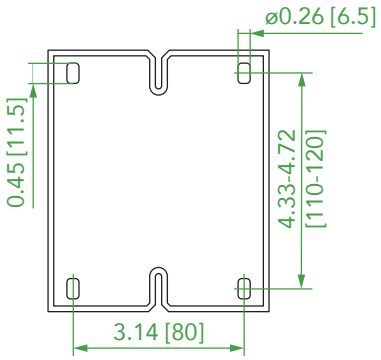
Ex9CDS150

4 Poles

Unit: in [mm]





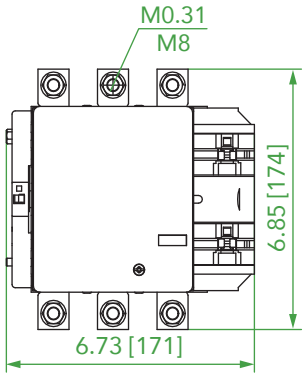


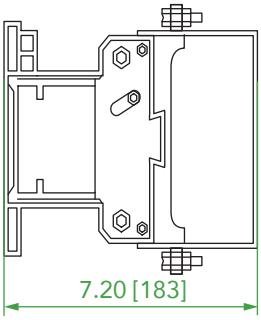
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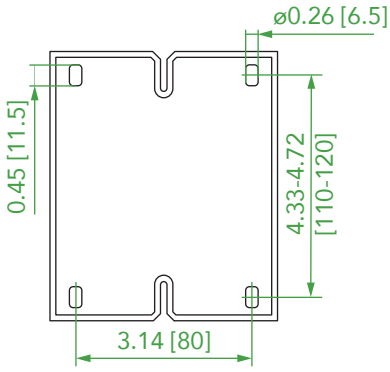
Ex9CDS185

3 Poles

Unit: in [mm]



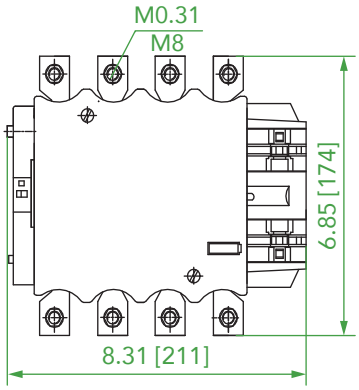


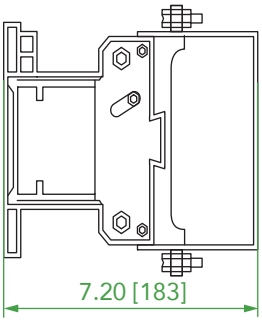


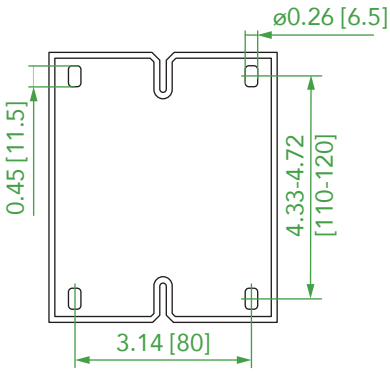
Ex9CDS185

4 Poles

Unit: in [mm]





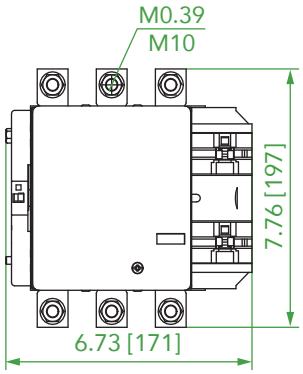


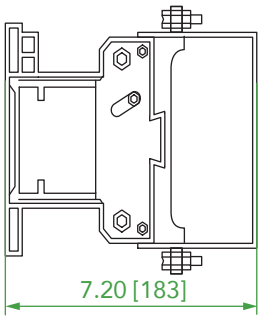
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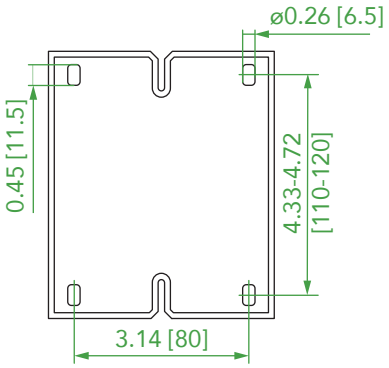
IEC Contactors

Ex9CDS Dimensions

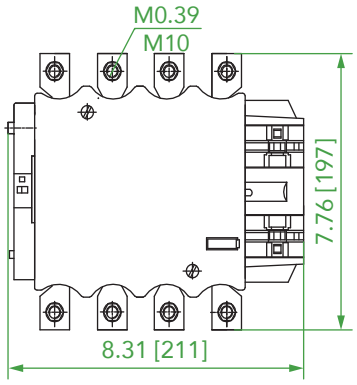
Ex9CDS225
3 Poles
Unit: in [mm]

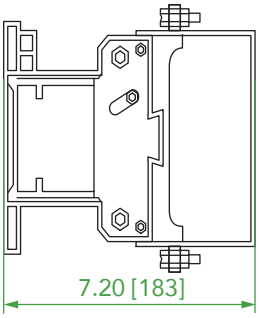


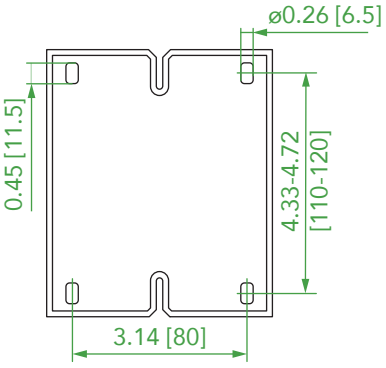




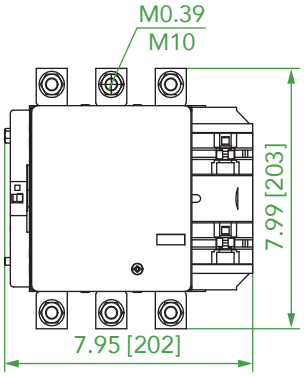
Ex9CDS225
4 Poles
Unit: in [mm]

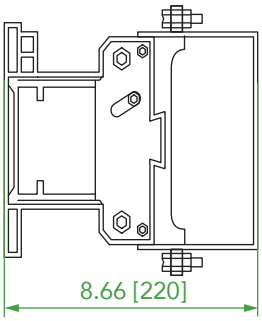


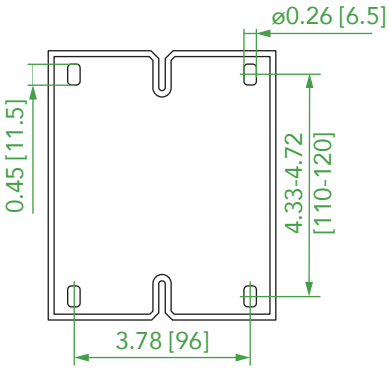




Ex9CDS265
3 Poles
Unit: in [mm]





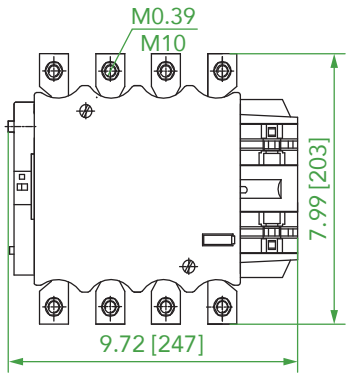


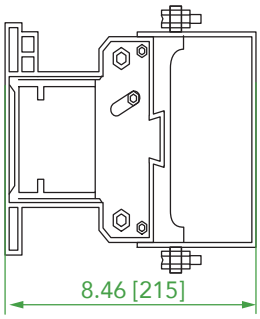
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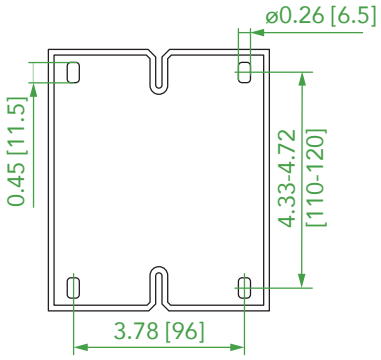
IEC Contactors

Ex9CDS Dimensions

Ex9CDS265
4 Poles
Unit: in [mm]

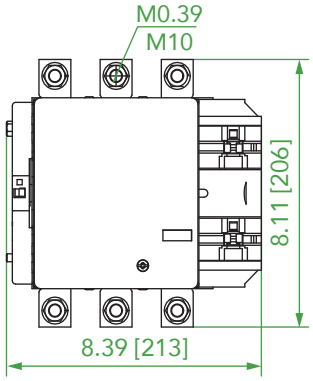


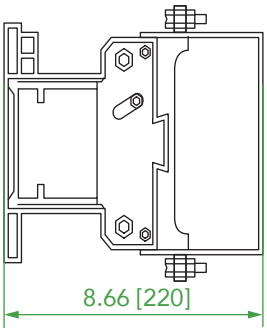


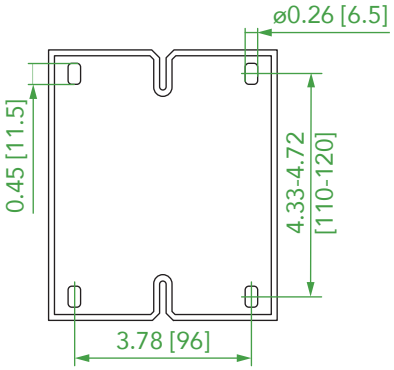


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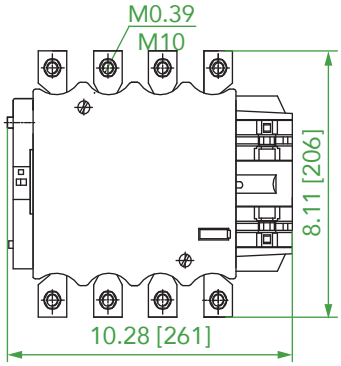
Ex9CDS330
3 Poles
Unit: in [mm]

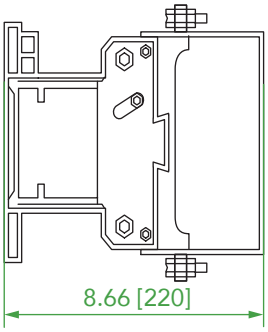


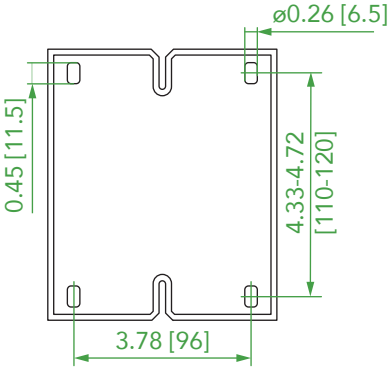




Ex9CDS330
4 Poles
Unit: in [mm]





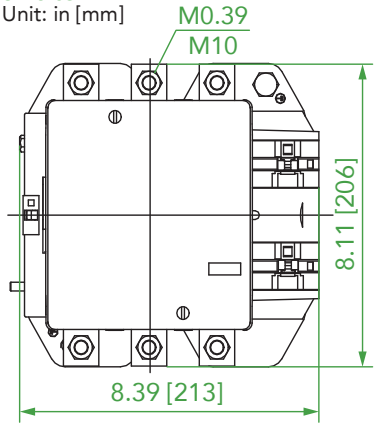


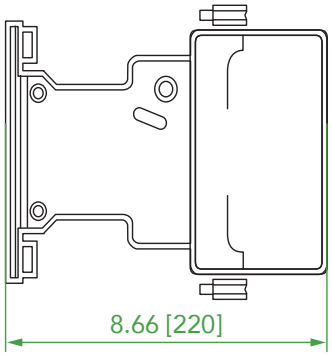
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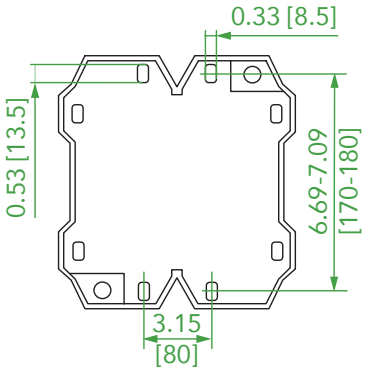
IEC Contactors

Ex9CDS Dimensions

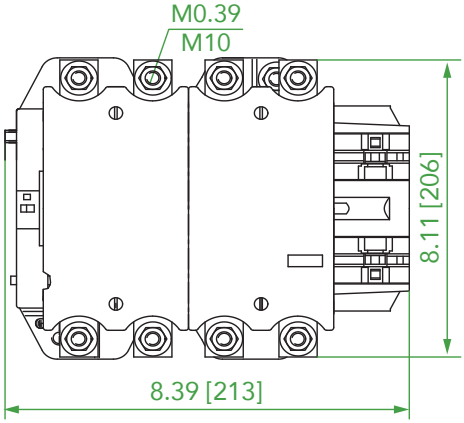
Ex9CDS400
3 Poles
Unit: in [mm]

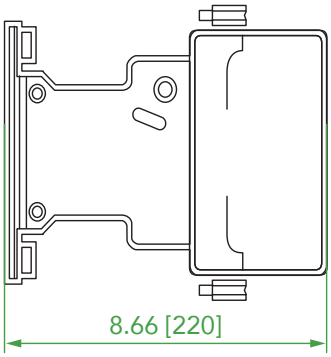


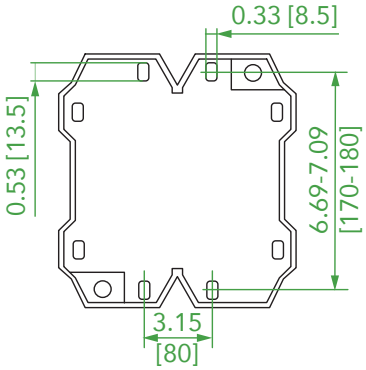




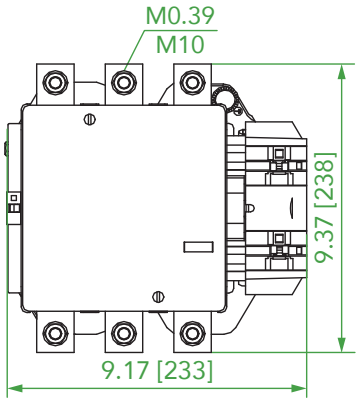
Ex9CDS400
4 Poles
Unit: in [mm]

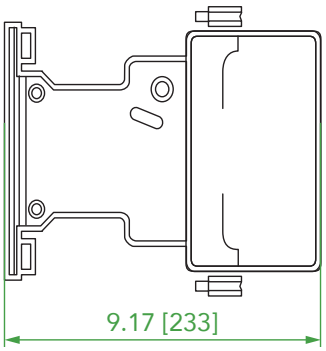


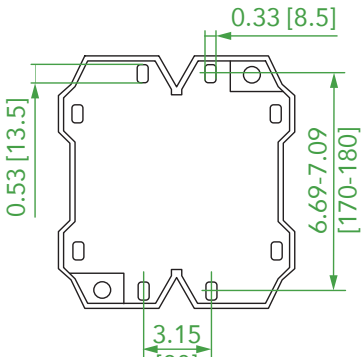




Ex9CDS500
3 Poles
Unit: in [mm]





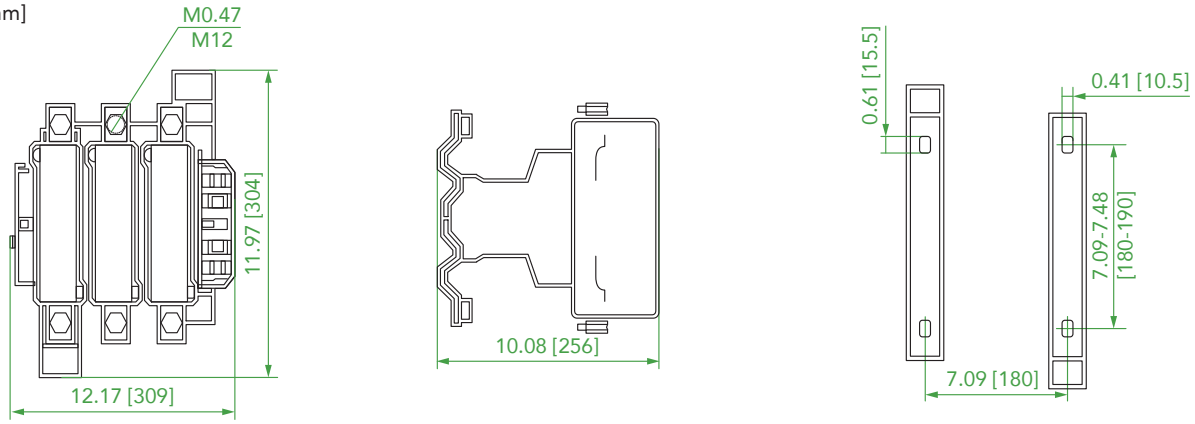


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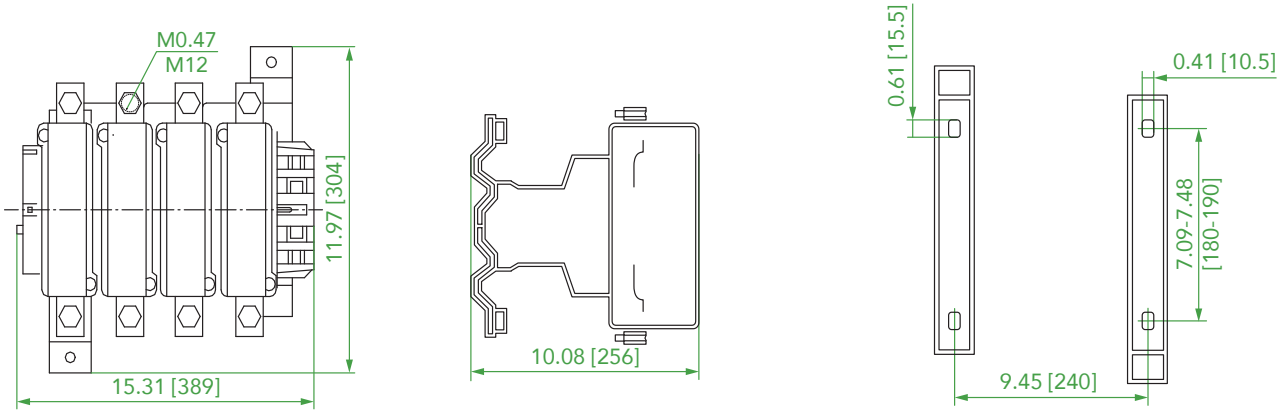
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Ex9CDS Dimensions

Ex9CDS630
3 Poles
Unit: in [mm]



Ex9CDS630
4 Poles
Unit: in [mm]



C

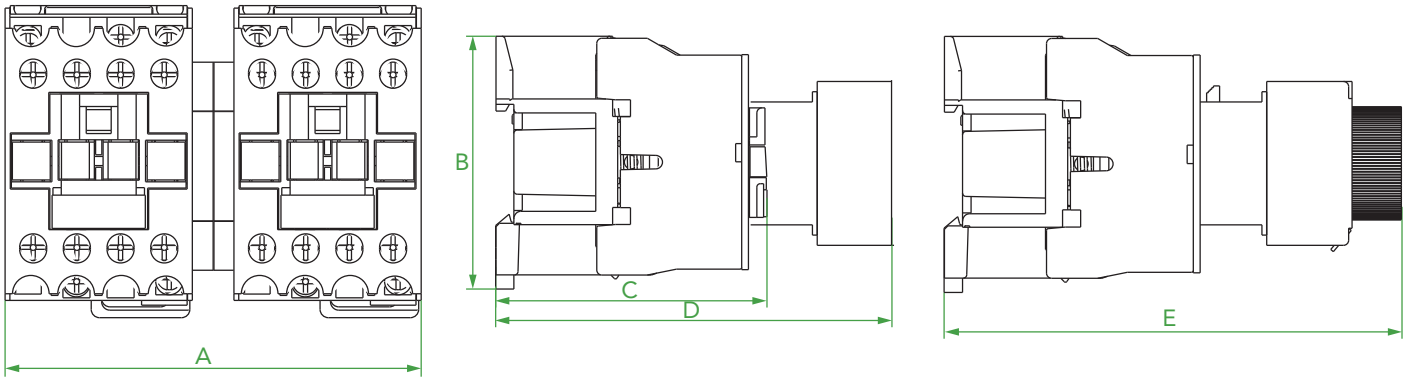
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IEC Contactors

Ex9CDR Dimensions

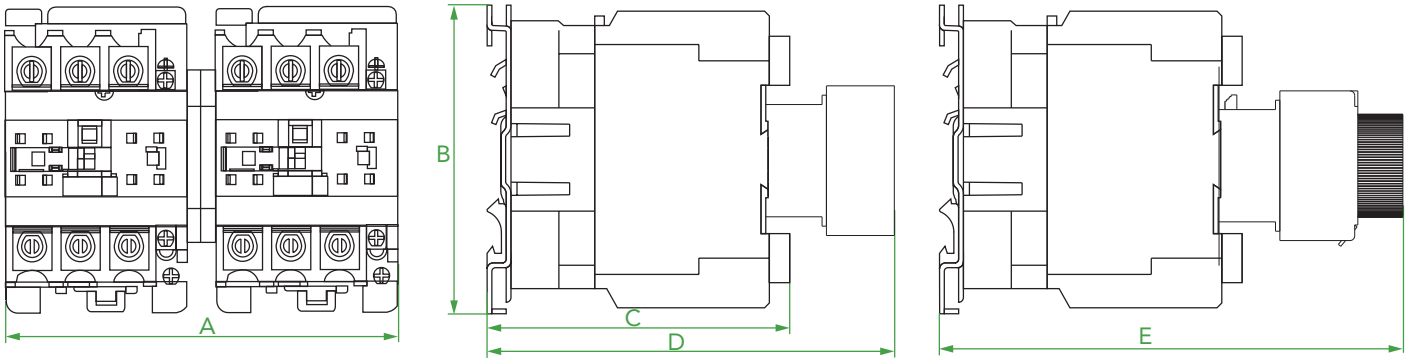
Ex9CDR09~32

Unit: in [mm]



Ex9CDR40~95

Unit: in [mm]



Ex9CDR	A	B	C	D	E
09	4.13 [105]	3.07 [78]	3.23 [82]	4.74 [120.5]	5.53 [140.5]
12					
18					
25	4.92 [125]	3.54 [90]	3.74 [95]	5.25 [133.5]	6.04 [153.5]
32			3.93 [100]	5.45 [138.5]	6.24 [158.5]
40~65 11	6.50 [165]	5.08 [129]	4.56 [116]	6.08 [154.5]	6.87 [174.5]
40~65 40	7.08 [180]				
80~95 11	7.36 [187]		5 [127]	6.51 [165.5]	7.30 [185.5]
80~95 40	8.07 [205]			6.31 [160.5]	7.10 [180.5]

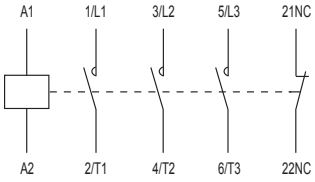
Note: 1) Ex9CDS40~80: 11 = 3NO+1NO/1NC, 40 = 4NO

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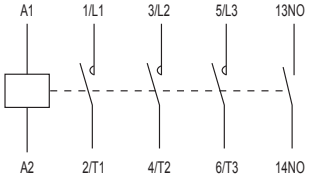
IEC Contactors

Ex9CMS/CDS Wiring Diagrams

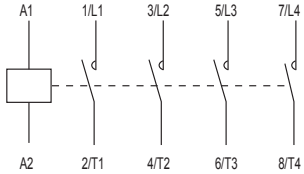
Ex9CMS06~12



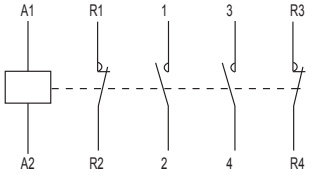
Ex9CMS... 3P 3NO+1NC



Ex9CMS... 3P 3NO+1NO

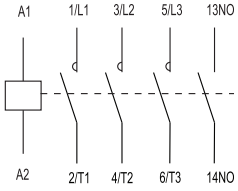


Ex9CMS... 4P 4NO

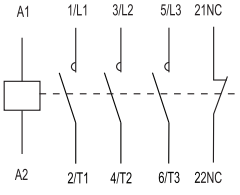


Ex9CMS... 4P 2NO+2NC

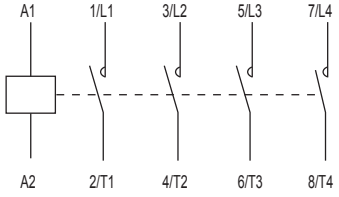
Ex9CDS09~32



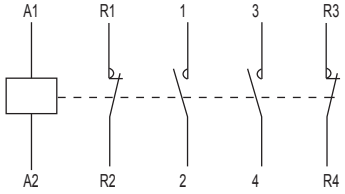
Ex9CDS... 3P 3NO+1NO



Ex9CDS... 3P 3NO+1NC

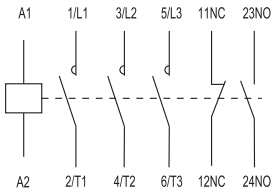


Ex9CDS... 4P 4NO

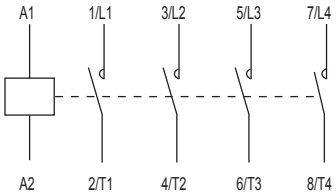


Ex9CDS... 4P 2NO+2NC

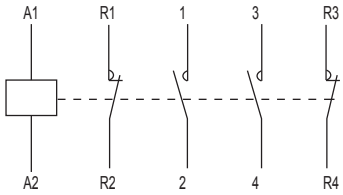
Ex9CDS40~95



Ex9CDS... 3P 3NO+1NO/1NC

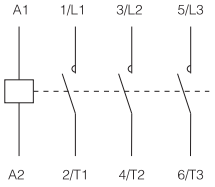


Ex9CDS... 4P 4NO

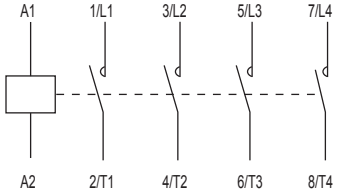


Ex9CDS... 4P 2NO+2NC

Ex9CDS115~630



Ex9CDS... 3P 3NO



Ex9CDS... 4P 4NO

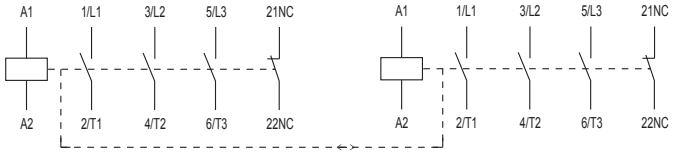
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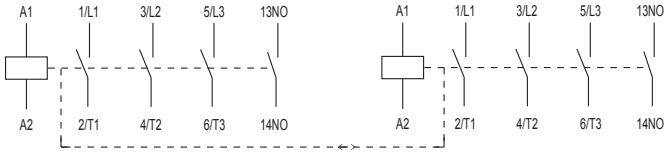
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Ex9CMR/CDR Wiring Diagrams

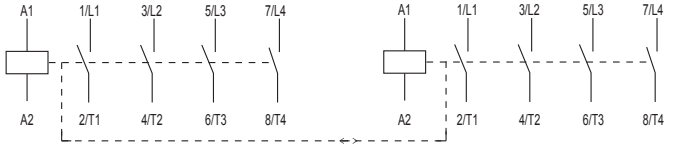
Ex9CMR06~12



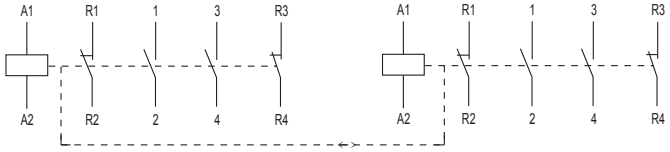
Ex9CMR... 3P 3NO+1NC



Ex9CMR... 3P 3NO+1NO

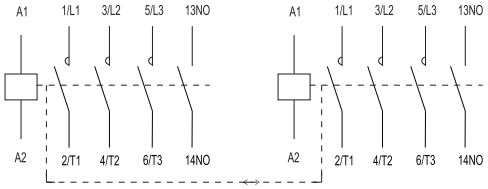


Ex9CMR... 4P 4NO

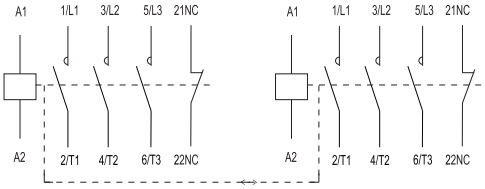


Ex9CMR... 4P 2NO+2NC

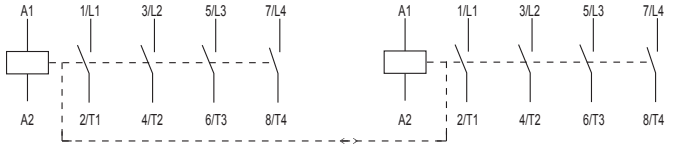
Ex9CDR09~32



Ex9CDR... 3P 3NO+1NO

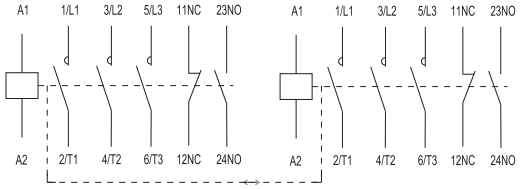


Ex9CDR... 3P 3NO+1NC

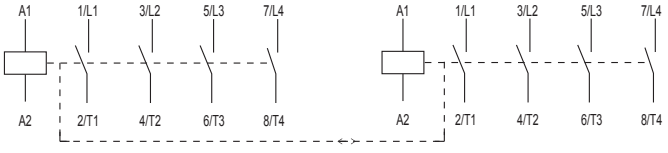


Ex9CDR... 4P 4NO

Ex9CDR40~95



Ex9CDR... 3P 3NO+1NO/1NC



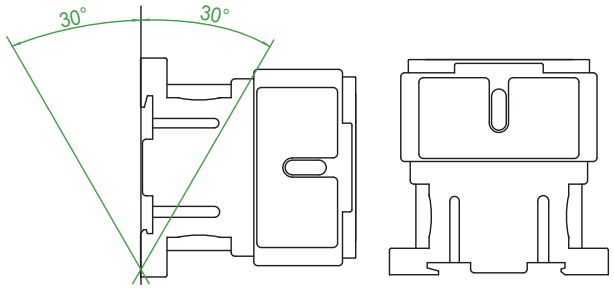
Ex9CDR... 4P 4NO

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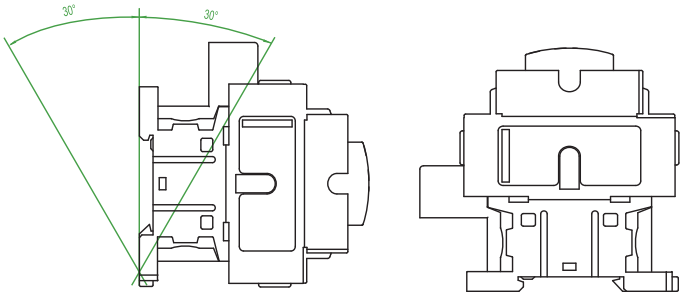
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Ex9CM/CD Mounting Positions

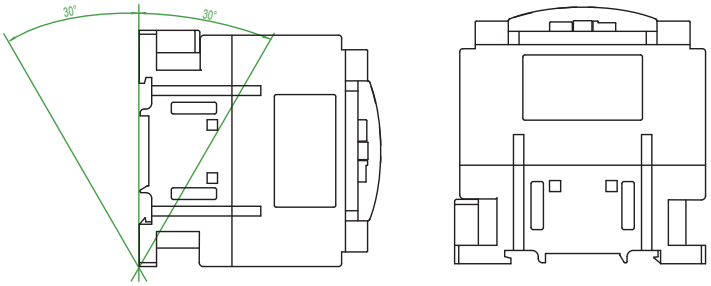
Ex9CMS/CMR06~12



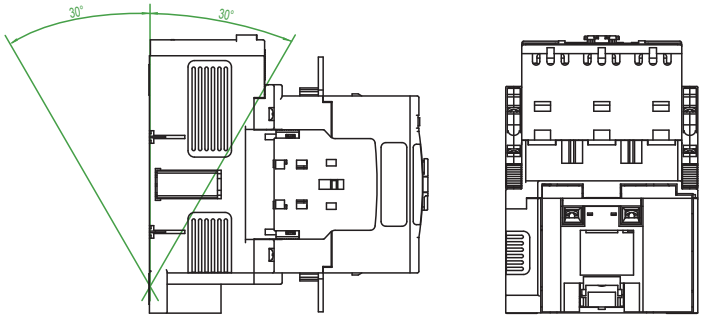
Ex9CDS/CDR09~32



Ex9CDS/CDR40~95



Ex9CDS115~630



C

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IEC Contactors

Ex9CD/CM Accessories: Auxiliary Contact



AX	A	11
Description	**Contactor Type and Rated Current**	**Auxiliary Contact**
Auxiliary Contact	A: Ex9CD Standard Front Mount 09~630 A	02: 2NC
	B: Ex9CM Mini Front Mount 0~12 A	04: 4NC
	FA: Ex9CDS Standard Side Mount 09~95 A (Not UL Approved)	11: 1NO+1NC
		13: 1NO+3NC
		20: 2NO
		22: 2NO+2NC
		31: 3NO+1NC
		40: 4NO

Front Mount

- For contactors Ex9CD, Ex9CDR, Ex9CM and Ex9CMR
- For subsequent mounting
- One unit used with a contactor
- Do not limit a possibility to install overload relays Ex9RD38 and Ex9RD100



Side Mount

- For contactors Ex9CDS
- **NOT UL Approved**
- For subsequent mounting
- One unit used with a contactor on the left and one unit on the right

Accessory Description		Matched Contactor	Product	Part Number
Auxiliary Contact Mechanically Linked Contacts (in accordance with IEC 60947-5-1 Annex L) and Mirror Contacts (in accordance with IEC 60947-4-1 Annex F)	Front Mount	Ex9CDS09~630 Ex9CDR09~630	AXA02	1311709
			AXA04	1311715
			AXA11	1311711
			AXA13	1311713
			AXA20	1311710
			AXA22	1311712
			AXA31	1311714
			AXA40	1311716
		Ex9CMS06~12 Ex9CMR06~12	AXB02	1311717
			AXB04	1311723
			AXB11	1311719
			AXB13	1311721
			AXB20	1311718
			AXB22	1311720
			AXB31	1311722
			AXB40	1311724
	Side Mount	Ex9CDS09~95	AXFA11	1313990

Specifications C123
Dimensions..... C124
Wiring Diagram.... C126

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IEC Contactors

Ex9CD/CM Accessories: Coil



Part Numbers..... C121

AXD	A	09	M	7
Description	Contactor Type	Rated Current AC-3	Control Voltage	Frequency
Coil	A: Ex9CD Standard	09: 9~18 A 25: 25~32 A 40: 40~95 A 115: 115~150 A 185: 185~225 A 265: 265 A 330: 330 A 400: 400 A 500: 500 A 630: 630 A	B: 24 V E: 48 V F: 110 V G: 120 V M: 220 V P: 230 V U: 240 V N: 277 V Q: 380 V R: 440 V T: 480 V Y: 600 V	7: 50/60 Hz

Note:
115-265A: 110-440Vac Coil available
330-630A: 110-380Vac Coil available

C

		Ex9CMS/CMR - Mini	Ex9CDS/CDR - Standard											
		06~12*	09~12	18	25	32	40~60	80~95	115~150	185~225	265	330	400	500	630
Coil Power	In-Rush (VA)	25~40	70		110		200		660	966	840	1,500			1,700
	Sealed (VA)	2~7	8	8	11		20		85.5	91.2	150	34.2			
	Power (W)	1~4	1.8~2.7	3~4			6~10		-	-	-	-	-	-	-
Operation Range	Operation Voltage (Us)	85~110%													
	Drop-Out Voltage (Us)	20~75%													
Coil Voltage (50/60 Hz)		24~600													

Note: Product and Part Numbers on pages C116.
Ex9CMS/CMR coil is not field changeable.

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IEC Contactors

Ex9CD/CM Accessories: Coil

Accessory Description	Coil Voltage (Vac)	09~18 A		25~32 A		40~95 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
	24	AXDA09B7	1311750	AXDA25B7	1311786	AXDA40B7	1311810		
	48	AXDA09E7	1311978	AXDA25E7	1312014	AXDA40E7	1312038		
	110	AXDA09F7	1311742	AXDA25F7	1311778	AXDA40F7	1311802		
	120	AXDA09G7	1311744	AXDA25G7	1311780	AXDA40G7	1311804		
	220	AXDA09M7	1311972	AXDA25M7	1312008	AXDA40M7	1312032		
	230	AXDA09P7	1311746	AXDA25P7	1311782	AXDA40P7	1311806		
	240	AXDA09U7	1311748	AXDA25U7	1311784	AXDA40U7	1311808		
	277	AXDA09N7	1311980	AXDA25N7	1312016	AXDA40N7	1312040		
	380	AXDA09Q7	1311974	AXDA25Q7	1312010	AXDA40Q7	1312034		
	440	AXDA09R7	1311976	AXDA25R7	1312012	AXDA40R7	1312036		
	480	AXDA09T7	1311752	AXDA25T7	1311788	AXDA40T7	1311812		
	600	AXDA09Y7	1311970	AXDA25Y7	1312006	AXDA40Y7	1312030		
		115~150 A		185~225 A		265 A		330 A	
		Product	Part Number	Product	Part Number	Product	Part Number	Product	Part Number
Coil (See page C116 for description)	110	AXDA115F7	1311862	AXDA185F7	1311886	AXDA265F7	1311910	AXDA330F7	1311922
	120	AXDA115G7	1311864	AXDA185G7	1311888	AXDA265G7	1311912	AXDA330G7	1311924
	220	AXDA115M7	1312092	AXDA185M7	1312116	AXDA265M7	1312140	AXDA330M7	1312152
	230	AXDA115P7	1311866	AXDA185P7	1311890	AXDA265P7	1311914	AXDA330P7	1311926
	240	AXDA115U7	1311868	AXDA185U7	1311892	AXDA265U7	1311916	AXDA330U7	1311928
	277	AXDA115N7	1312100	AXDA185N7	1312124	AXDA265N7	1312148	AXDA330N7	1312160
	380	AXDA115Q7	1312094	AXDA185Q7	1312118	AXDA265Q7	1312142	AXDA330Q7	1312154
		400 A		500 A		630 A			
		Product	Part Number	Product	Part Number	Product	Part Number		
	110	AXDA400F7	1311934	AXDA500F7	1311946	AXDA630F7	1311958		
	120	AXDA400G7	1311936	AXDA500G7	1311948	AXDA630G7	1311960		
	220	AXDA400M7	1312164	AXDA500M7	1312176	AXDA630M7	1312188		
	230	AXDA400P7	1311938	AXDA500P7	1311950	AXDA630P7	1311962		
	240	AXDA400U7	1311940	AXDA500U7	1311952	AXDA630U7	1311964		
	277	AXDA400N7	1312172	AXDA500N7	1312184	AXDA630N7	1312196		
	380	AXDA400Q7	1312166	AXDA500Q7	1312178	AXDA630Q7	1312190		

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Ex9CD/CM Accessories: Mechanical Interlock and Time Delay Relay



AXE	A	09	A
Description	Contactor Type	Rated Current AC-3	Installation
Mechanical Interlock	A: Ex9CD Standard	09: 9~32 A 40: 40~65 A (3P Only) 80: 40~65A 4P 80~95A 3P 8004: 80~95A (4P Only) 115: 115~150 A 185: 185~225 A 265: 265~500 A 630: 630 A	A: Horizontal Mount

C

Accessory Description	Product	Part Number
Mechanical Interlock	AXEA09A	1311732
	AXEA40A	1311737
	AXEA80A	1311740
	AXEA8004A	1600135
	AXEA115A	1313230
	AXEA185A	1313232
	AXEA265A	1313234
	AXEA630A	1313238



AXC	T	0
Description	Relay Type	Timing Range
Time Delay Relay	D: Off Delay	0: 0.1~3 s
	T: On Delay	2: 0.1~30 s
		4: 10~180 s

Dimensions..... C123
Wiring Diagram.... C126

Accessory Description	Matched Contactor	Product	Part Number
Time Delay Relay (Pneumatic Timer)	Ex9CDS09~630	AXCT0	1311726
		AXCT2	1311727
		AXCT4	1311728
		AXCD0	1311730
		AXCD2	1311729
		AXCD4	1311731

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IEC Contactors

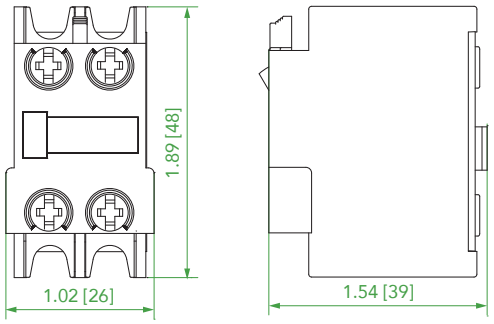
Ex9CD/CM Accessory Specifications

		Auxiliary Contact															
		CMS/CMR Front Mount AXB							CDS/CDR Front Mount AXA								Side Mount AXFA
		02	04	13	20	22	31	40	02	04	11	13	20	22	31	40	11
UL Standard File Number		E353866															
IEC Standard File Number		IEC/EN 60947-5-1															
Certifications		UL Listed, CSA, CCC, RoHS															
Electrical Parameters																	
Contacts		2NC	4NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	2NC	4NC	1NO+ 1NC	1NO+ 3NC	2NO	2NO+ 2NC	3NO+ 1NC	4NO	1NO+1NC
Rated Frequency (Hz)		50/60															
Rated Working Voltage Ue	AC-15 (V)	380/400/415															24/230/ 400/690
	DC-13 (V)	220/250															125/250
Rated Working Current Ie	AC-15 (A)	0.19															6.00 (24 V) 3.13 (230 V) 1.80 (400 V) 1.04 (690 V)
	DC-13 (A)	0.31															0.55 (125 V) 0.27 (250 V)
Rated Capacity	AC-15 (VA)	720															
	DC-13 (W)	69															
Rated Thermal Current Ith (A)		10															
Rated Impulse Withstand Voltage Uimp (kV)		6 (1.2/50 μs)															
Rated Insulation Voltage Ui (V)		690															
Mechanical Parameters																	
Device Width in (mm)		1.30 (33)							1.89 (48)								0.39 (10)
Device Height in (mm)		1.54 (39)							1.46 (37)								2.52 (64)
Device Depth in (mm)		1.46 (37)							1.02 (26)			1.77 (45)					2.68 (68)
Degree of Protection		IP 20															
Terminal Capacity AWG (mm^2)		17-9 (1-6)															
Torque of Terminals in-lb (N.m)		8.85 (1)															

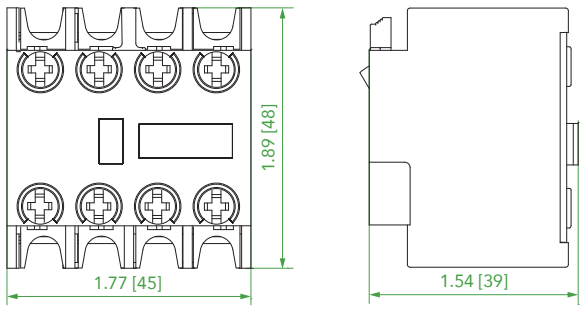
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IEC Contactors
Ex9CD/CM Accessory Dimensions

AXA
Front Mount Auxiliary Contact for Standard Contactor
Unit: in [mm]



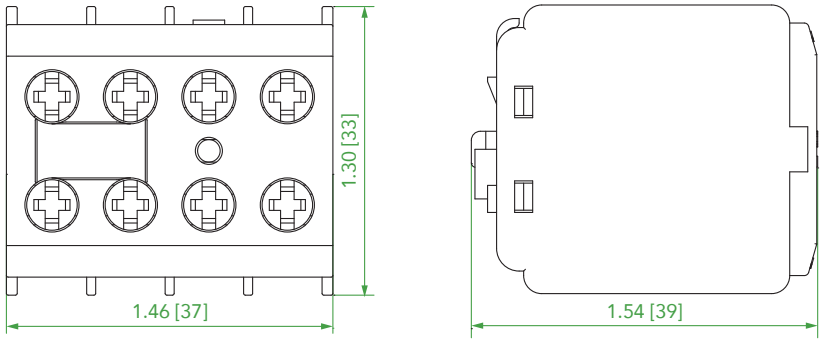
AXA 2 Pole



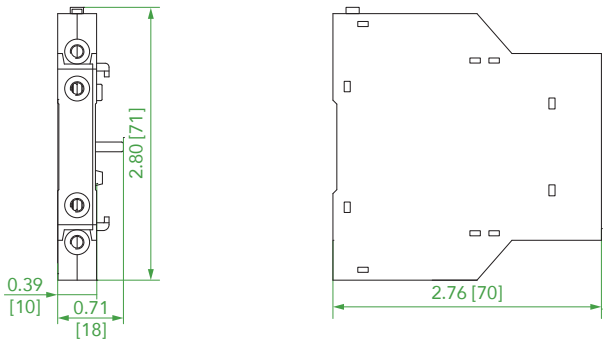
AXA 4 Pole

C

AXB
Front Mount Auxiliary Contact for Mini Contactor
Unit: in [mm]



AXFA
Side Mount Auxiliary Contact for Standard Contactor
Unit: in [mm]

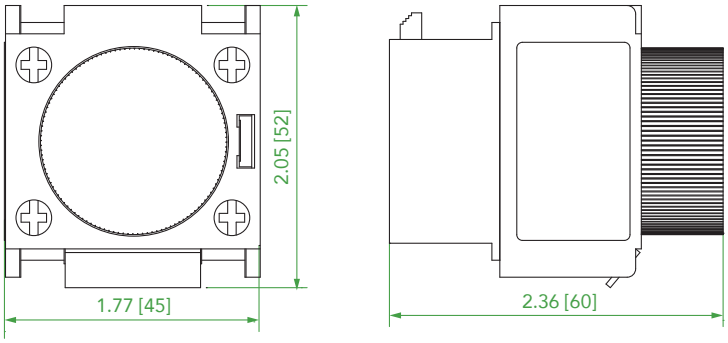


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IEC Contactors

Ex9CD/CM Accessory Dimensions

AXC
Time Delay Relay
Unit: in [mm]

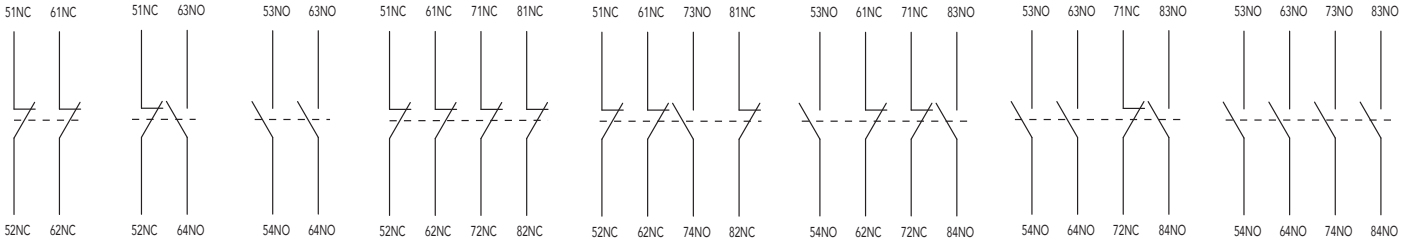


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IEC Contactors

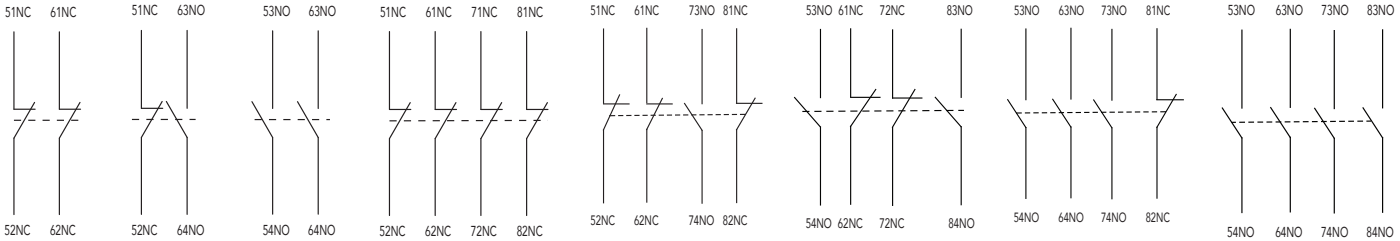
Ex9CD/CM Accessory Wiring Diagrams

AXA
Front Mount Auxiliary Contact



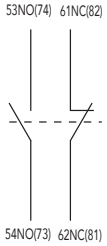
AXA 2NC | AXA 1NO+1NC | AXA 2NO | AXA 4NC | AXA 1NO+3NC | AXA 2NO+2NC | AXA 3NO+1NC | AXA 4NO

AXB
Front Mount Auxiliary Contact



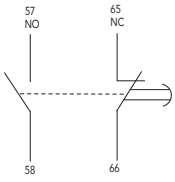
AXB 2NC | AXB 1NO+1NC | AXB 2NO | AXB 4NC | AXB 1NO+3NC | AXB 2NO+2NC | AXB 3NO+1NC | AXB 4NO

AXFA
Side Mount Auxiliary Contact

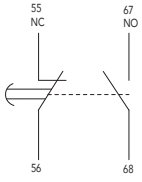


AXFA
1NO+1NC

AXC
Time Delay Relay



AXCD



AXCT

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THERMAL OVERLOAD RELAYS



Ex9RD

Features

- Rated current up to 630 A @ 600 Vac, 50/60 Hz
- Overload protection trip Class 10 A
- Phase loss sensitivity
- Temperature compensation from -13 to 131 °F (-25 to +55 °C)
- Adjustable current setting for overload protection
- Automatic or manual reset selectable
- Trip-free mechanism
- Status indication
- STOP and TEST function
- Direct mount to contactors or 35 mm DIN rail mounting base option

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Thermal Overload Relays

Ex9RD National and International Standards

Certifications

- UL Listed, File Number E353865
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- CE Compliant

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Thermal Overload Relays
Ex9RD Product Selection Guide

Label



1. Brand
2. CE Mark
3. Adjustable Current Range
4. Push to Test
5. UL Listed Mark
6. Product Series/Frame Amperage
7. Manual Stop
8. Manual/Auto Reset
9. Auxiliary Contacts

D

Product Selection Guide

Ex9RD	25	A	13
NOARK Ex9RD Series	Frame Size	Trip Class*	Setting Amperage
	11.5: 11.5 A 25: 25 A 36: 36 A 93: 93 A 200: 200 A 630: 630 A	A: Class 10 A	0.16: 0.1~0.16 A 0.25: 0.16~25 A 0.4: 0.25~0.4 A 0.63: 0.4~0.63 A 1: 0.63~1 A 1.6: 1~1.6 A 2: 1.25~2 A 2.5: 1.6~2.5 A 4: 2.5~4 A 6: 4~6 A 8: 5.5~8 A 10: 7~10 A 13: 9~13 A 18: 12~18 A 25: 17~25 A 32: 23~32 A 36: 28~36 A 40: 30~40 A 50: 37~50 A 65: 48~65 A 70: 55~70 A 80: 63~80 A 93: 80~93 A 125: 80~125 A 160: 100~160 A 200: 125~200 A 250: 160~250 A 315: 200~315 A 400: 250~400 A 500: 315~500 A 630: 400~630 A

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Thermal Overload Relays

Ex9RD 11.5~36 A

Certifications

IEC/EN 60947-4-1







Current Range Amp (Min-Max)	11.5 A				25 A				36 A			
	Use with Contactors: Ex9CM06~12				Use with Contactors: Ex9CD09~32				Use with Contactors: Ex9CD32			
	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number
	aM	gG			aM	gG			aM	gG		
0.1-0.16	0.25	2	Ex9RD11.5A0.16	1410001	0.25	2	Ex9RD25A0.16	1410014	-	-	-	-
0.16-0.25	0.5	2	Ex9RD11.5A0.25	1410002	0.5	2	Ex9RD25A0.25	1410015	-	-	-	-
0.25-0.4	1	2	Ex9RD11.5A0.4	1410003	1	2	Ex9RD25A0.4	1410016	-	-	-	-
0.4-0.63	1	2	Ex9RD11.5A0.63	1410004	1	2	Ex9RD25A0.63	1410017	-	-	-	-
0.63-1	2	4	Ex9RD11.5A1	1410005	2	4	Ex9RD25A1	1410018	-	-	-	-
1-1.6	2	4	Ex9RD11.5A1.6	1410008	2	4	Ex9RD25A1.6	1410019	-	-	-	-
1.25-2	4	6	Ex9RD11.5A2	1410006	4	6	Ex9RD25A2	1410020	-	-	-	-
1.6-2.5	4	6	Ex9RD11.5A2.5	1410007	4	6	Ex9RD25A2.5	1410021	-	-	-	-
2.5-4	6	10	Ex9RD11.5A4	1410009	6	10	Ex9RD25A4	1410022	-	-	-	-
4-6	8	16	Ex9RD11.5A6	1410010	8	16	Ex9RD25A6	1410023	-	-	-	-
5.5-8	12	20	Ex9RD11.5A8	1410011	12	20	Ex9RD25A8	1410024	-	-	-	-
7-10	12	20	Ex9RD11.5A10	1410012	12	20	Ex9RD25A10	1410025	-	-	-	-
9-13	16	25	Ex9RD11.5A13	1410013	16	25	Ex9RD25A13	1410026	-	-	-	-
12-18	-	-	-	-	20	35	Ex9RD25A18	1410027	-	-	-	-
17-25	-	-	-	-	25	50	Ex9RD25A25	1410028	-	-	-	-
23-32	-	-	-	-	-	-	-	-	40	63	Ex9RD36A32	1410030
28-36	-	-	-	-	-	-	-	-	40	80	Ex9RD36A36	1410031

Specifications D133
Trip Curve.....D135
Dimensions.....D136
Accessories.....D138

2020 NOARK Electric

Thermal Overload Relays

Ex9RD 93~630 A

Certifications

IEC/EN 60947-4-1







Current Range Amp (Min-Max)	93 A				200 A				630 A			
	Use with Contactors: Ex9CD40~95				Use with Contactors: Ex9CD115~225				Use with Contactors: Ex9CD185~630			
	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number	Matched Fuse		Product	Part Number
	aM	gG			aM	gG			aM	gG		
23-32	40	63	Ex9RD93A32	1410032	-	-	-	-	-	-	-	-
30-40	40	100	Ex9RD93A40	1410033	-	-	-	-	-	-	-	-
37-50	63	100	Ex9RD93A50	1410034	-	-	-	-	-	-	-	-
48-65	63	100	Ex9RD93A65	1410035	-	-	-	-	-	-	-	-
55-70	80	125	Ex9RD93A70	1410036	-	-	-	-	-	-	-	-
63-80	80	125	Ex9RD93A80	1410037	-	-	-	-	-	-	-	-
80-93	100	160	Ex9RD93A93	1410038	-	-	-	-	-	-	-	-
80-125	-	-	-	-	125	200	Ex9RD200A125	1410039	-	-	-	-
100-160	-	-	-	-	160	250	Ex9RD200A160	1410040	-	-	-	-
125-200	-	-	-	-	200	315	Ex9RD200A200	1410041	-	-	-	-
160-250	-	-	-	-	-	-	-	-	250	400	Ex9RD630A250	1410042
200-315	-	-	-	-	-	-	-	-	315	500	Ex9RD630A315	1410043
250-400	-	-	-	-	-	-	-	-	400	630	Ex9RD630A400	1410044
315-500	-	-	-	-	-	-	-	-	500	800	Ex9RD630A500	1410045
400-630	-	-	-	-	-	-	-	-	630	800	Ex9RD630A630	1410046

D

Specifications D134
Trip Curve.....D135
Dimensions.....D137
Accessories.....D138

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Thermal Overload Relays

Ex9RD Specifications

Ex9RD			11.5 A												
Current Class (A)			13												
Phase Failure Protection Function			Yes												
Automatic and Manual Reset															
Temperature Compensation															
Tripping Indicator															
Test and Stop Pushbutton															
Mounting Mode	Plug-In														
	Independent														
Auxiliary Contacts	Number of Contacts		1NO+1NC												
	Rated Current (A)	AC-15 220 V	2.73												
		AC-15 380 V	1.58												
		DC-13 220 V	0.2												
Current Setting Range (A)			0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13
Matched Fuse	aM (A)		0.25	0.5	1		2		4		6	8	12		16
	gG (A)		2				4		6		10	16	20		25

Ex9RD			25 A												
Current Class (A)			25												
Phase Failure Protection Function			Yes												
Automatic and Manual Reset															
Temperature Compensation															
Tripping Indicator															
Test and Stop Pushbutton															
Mounting Mode	Plug-In														
	Independent														
Auxiliary Contacts	Number of Contacts		1NO+1NC												
	Rated Current (A)	AC-15 220 V	2.73												
		AC-15 380 V	1.58												
		DC-13 220 V	0.2												
Current Setting Range (A)			0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.25~2	1.6~2.5	2.5~4	4~6	5.5~8	7~10	9~13	12~18	17~25
Matched Fuse	aM (A)		0.25	0.5	1		2		4		6	8	12		16	20	25
	gG (A)		2				4		6		10	16	20		25	35	50

Ex9RD			36 A	
Current Class (A)			36	
Phase Failure Protection Function			Yes	
Automatic and Manual Reset				
Temperature Compensation				
Tripping Indicator				
Test and Stop Pushbutton				
Mounting Mode	Plug-In			
	Independent			
Auxiliary Contacts	Number of Contacts		1NO+1NC	
	Rated Current (A)	AC-15 220 V	2.73	
		AC-15 380 V	1.58	
		DC-13 220 V	0.2	
Current Setting Range (A)			23~32	28~36
Matched Fuse	aM (A)		40	40
	gG (A)		63	80

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Thermal Overload Relays

Ex9RD Specifications

Ex9RD			93 A						
Current Class (A)			93						
Phase Failure Protection Function			Yes						
Automatic and Manual Reset									
Temperature Compensation									
Tripping Indicator									
Test and Stop Pushbutton									
Mounting Mode	Plug-In								
	Independent								
Auxiliary Contacts	Number of Contacts		1NO+1NC						
	Rated Current (A)	AC-15 220 V	2.73						
		AC-15 380 V	1.58						
		DC-13 220 V	0.2						
Current Setting Range (A)			23~32	30~40	37~50	48~65	55~70	63~80	80~93
Matched Fuse	aM (A)		40		63		80		100
	gG (A)		63	100			125		160

Ex9RD			200A		
Current Class (A)			200		
Phase Failure Protection Function			Yes		
Automatic and Manual Reset					
Temperature Compensation					
Tripping Indicator					
Test and Stop Pushbutton					
Mounting Mode	Plug-In		No		
	Independent		Yes		
Auxiliary Contacts	Number of Contacts		1NO+1NC		
	Rated Current (A)	AC-15 220 V	2.73		
		AC-15 380 V	1.58		
		DC-13 220 V	0.2		
Current Setting Range (A)			80~125	100~160	125~200
Matched Fuse	aM (A)		125	160	200
	gG (A)		200	250	315

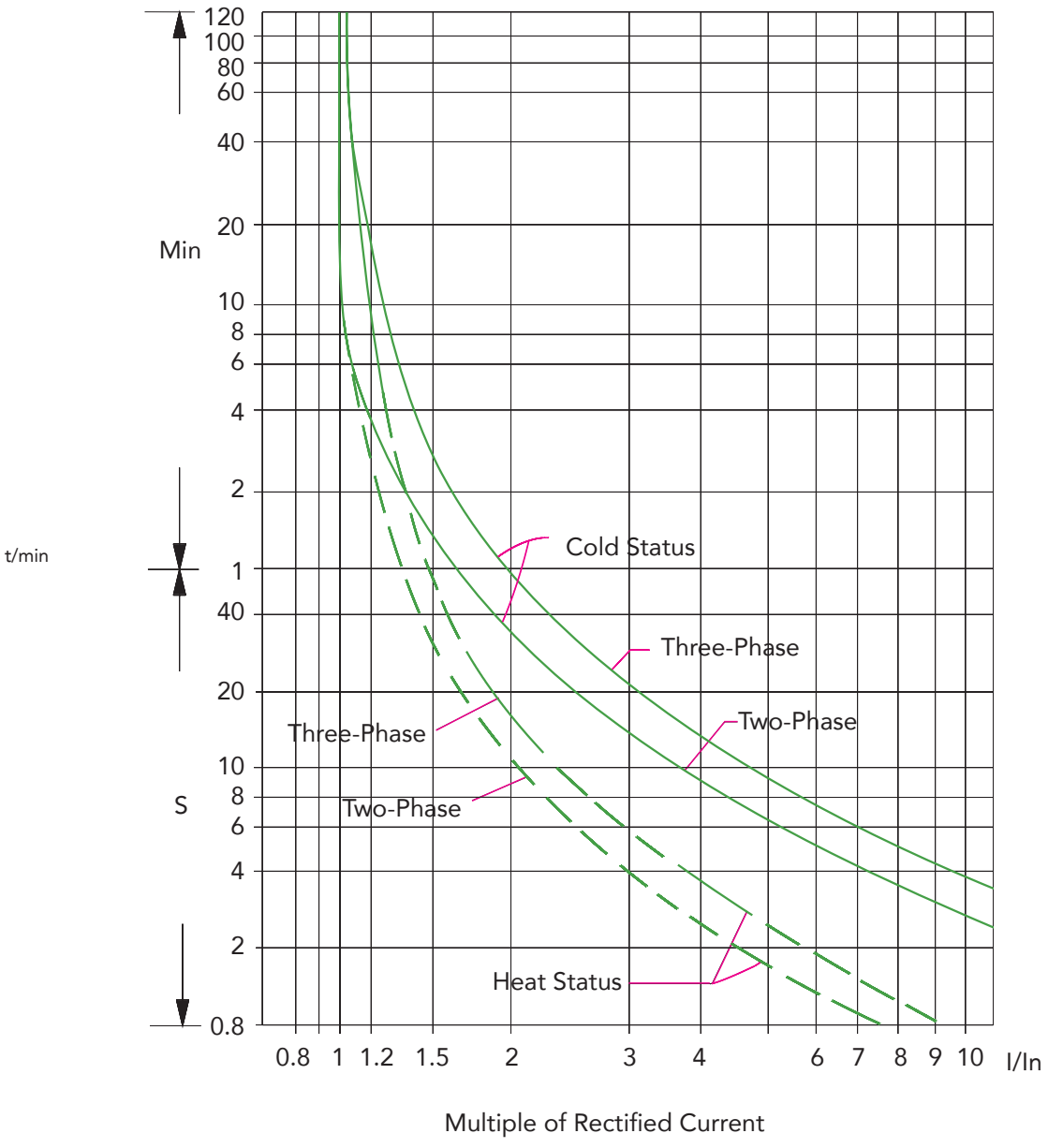
Ex9RD			630 A				
Current Class (A)			630				
Phase Failure Protection Function			Yes				
Automatic and Manual Reset							
Temperature Compensation							
Tripping Indicator							
Test and Stop Pushbutton							
Mounting Mode	Plug-In		No				
	Independent		Yes				
Auxiliary Contacts	Number of Contacts		1NO+1NC				
	Rated Current (A)	AC-15 220 V	2.73				
		AC-15 380 V	1.58				
		DC-13 220 V	0.2				
Current Setting Range (A)			160~250	200~315	250~400	315~500	400~630
Matched Fuse	aM (A)		250	315	400	500	630
	gG (A)		400	500	630	800	

D

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Thermal Overload Relays

Ex9RD Trip Curves



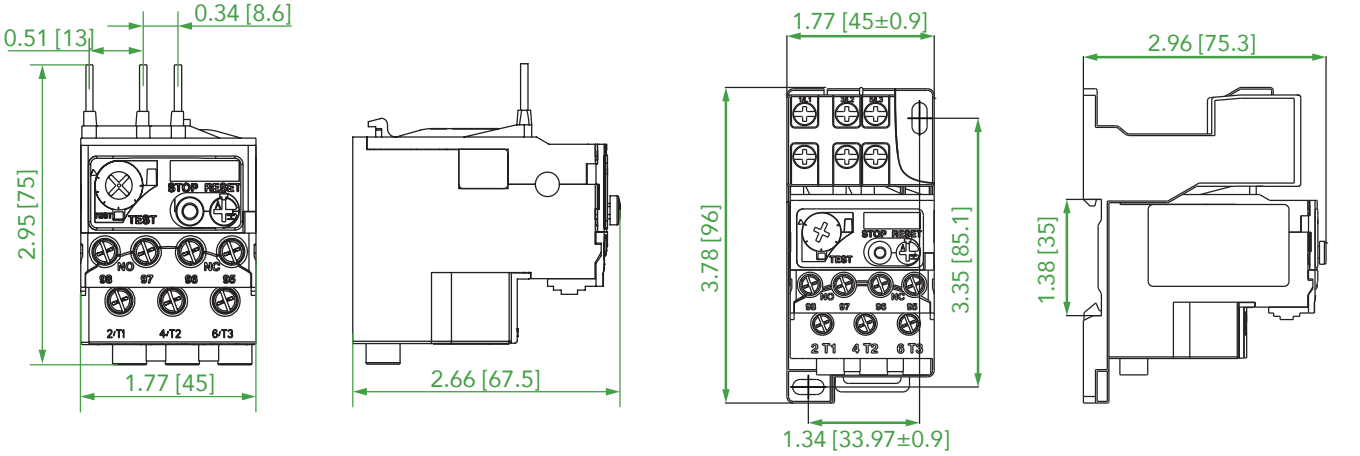
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Thermal Overload Relays

Ex9RD Dimensions

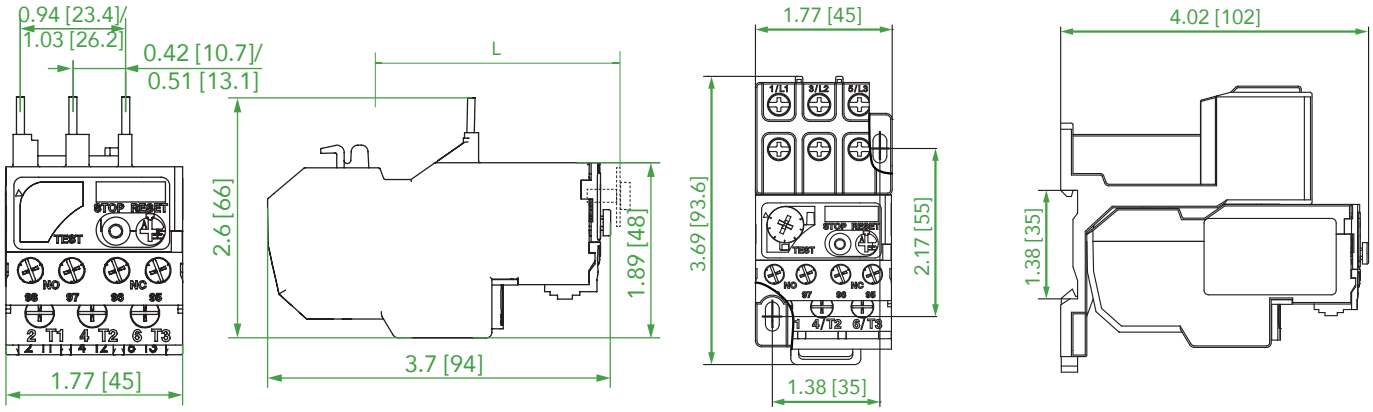
Ex9RD11.5

Unit: in [mm]



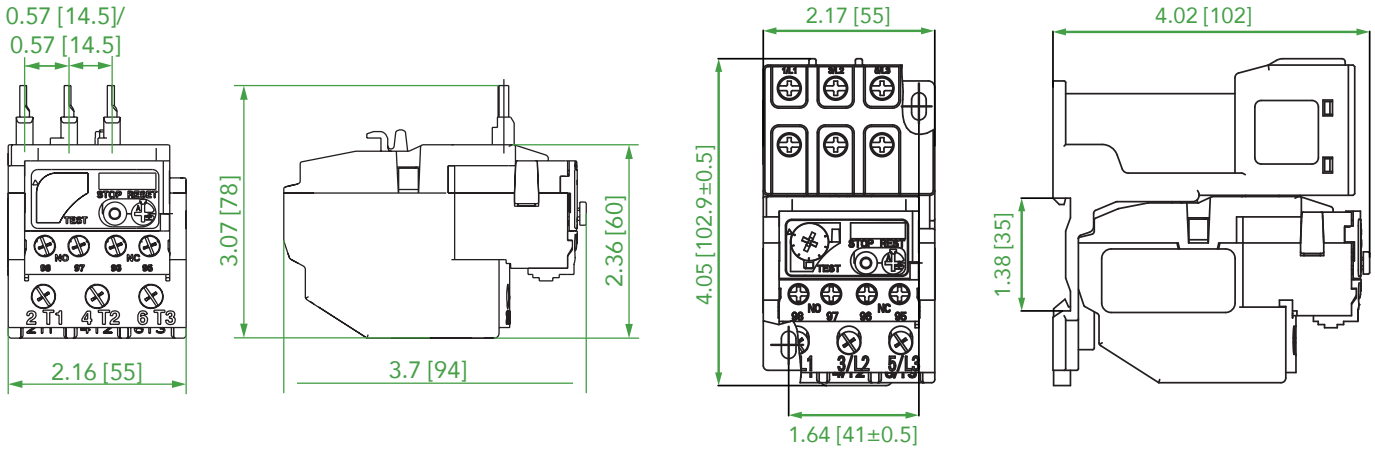
Ex9RD25

Unit: in [mm]



Ex9RD36

Unit: in [mm]



D

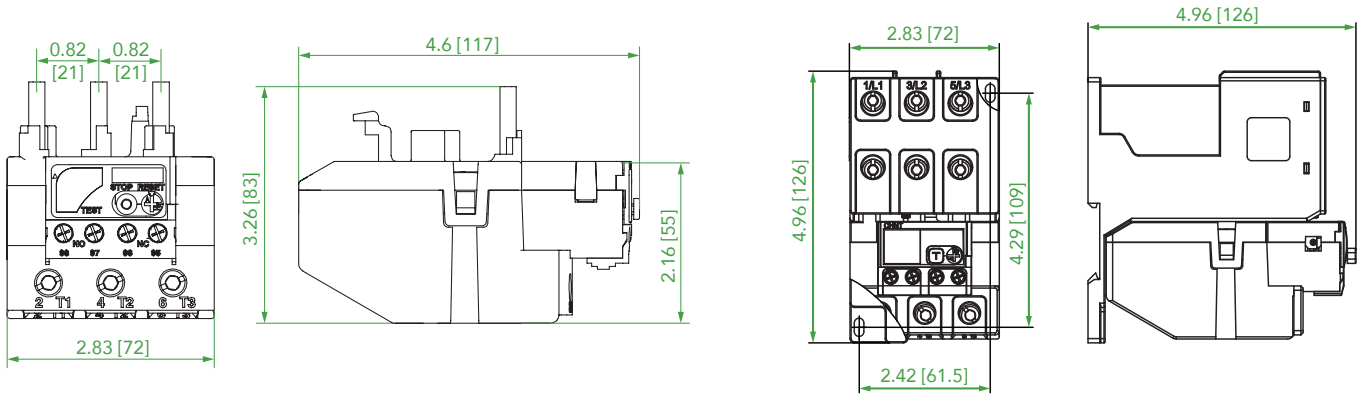
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Thermal Overload Relays

Ex9RD Dimensions

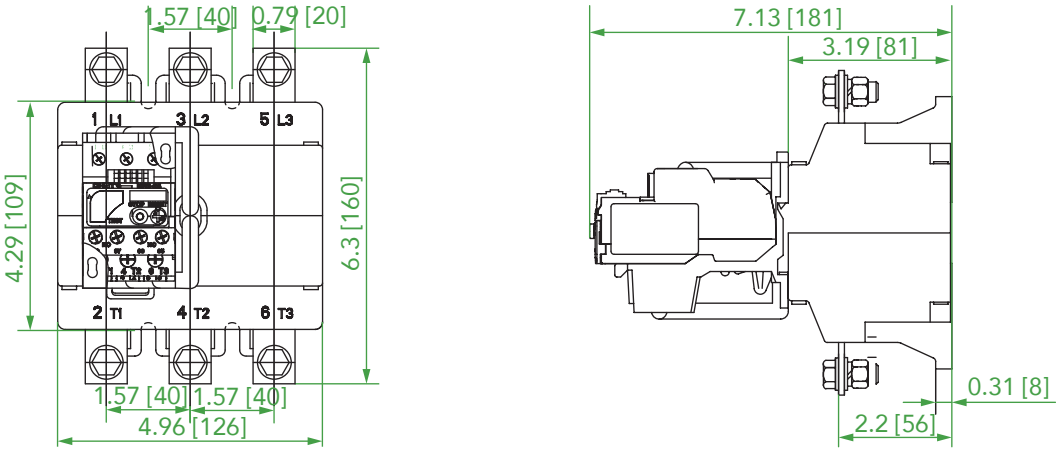
Ex9RD93

Unit: in [mm]



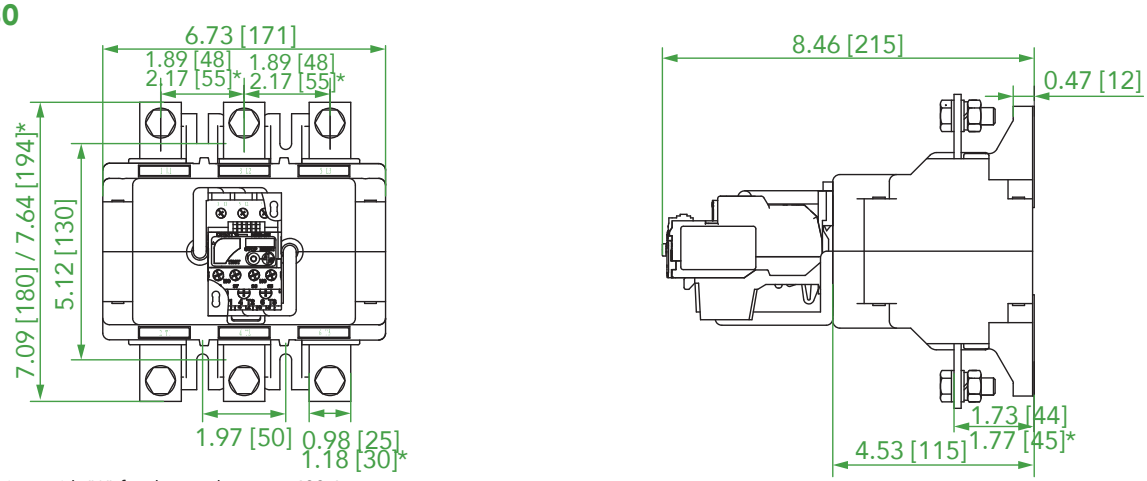
Ex9RD200

Unit: in [mm]



Ex9RD630

Unit: in [mm]

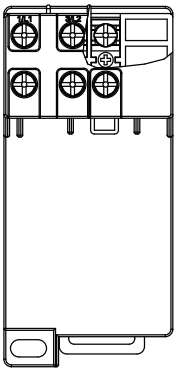


Note: Dimensions with "*" for the product over 400 A.

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Thermal Overload Relays

Ex9RD Accessories: Mounting Base



RDAD	25
Description	Relay Type
Mounting Base	11.5: Ex9RD11.5
	25: Ex9RD25
	36: Ex9RD36
	93: Ex9RD93

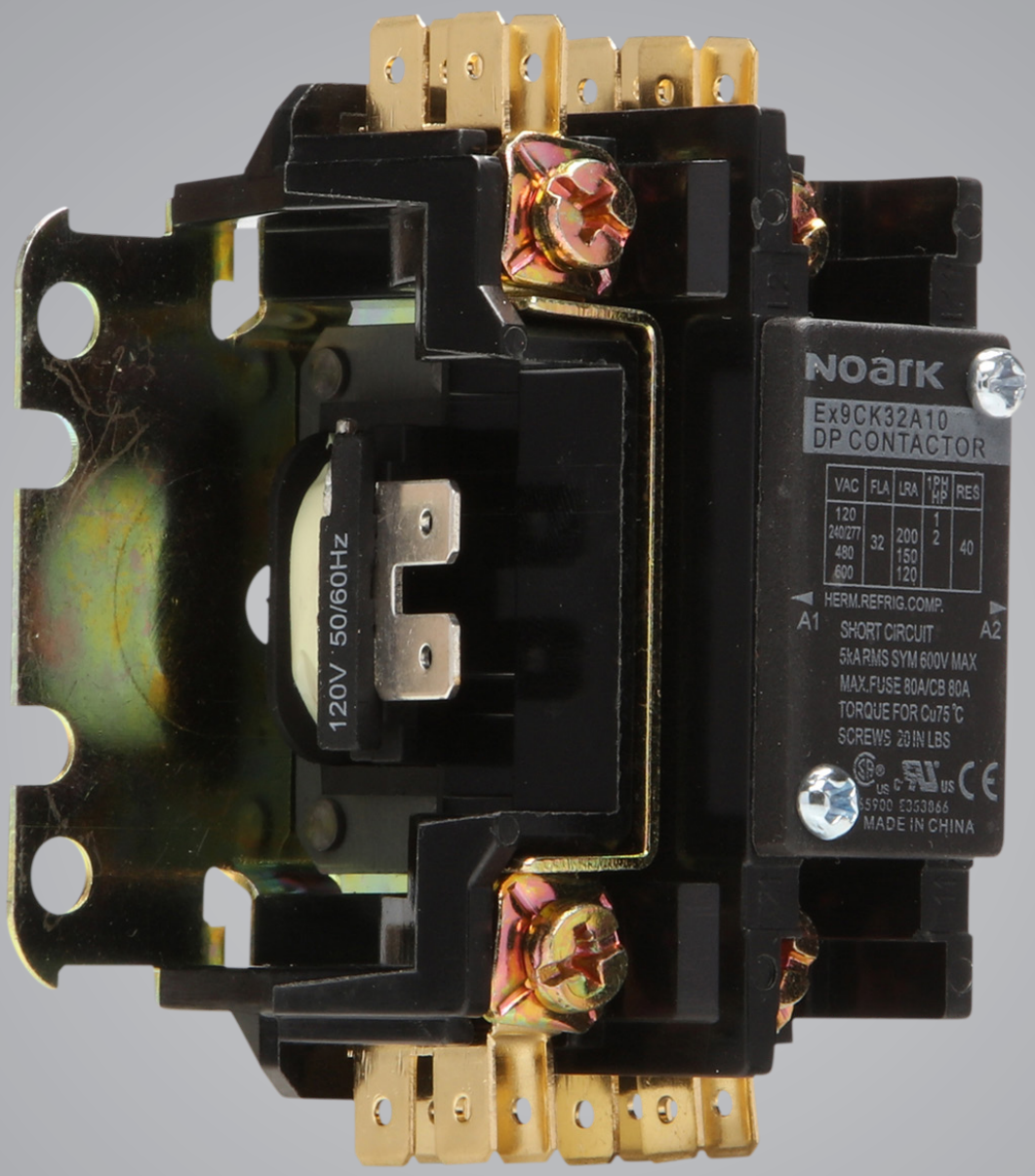
Accessory Description	Product	Part Number
Mounting Base	RDAD11.5	1410052
	RDAD25	1410049
	RDAD36	1410050
	RDAD93	1410051

D

Mounting Base	RDAD11.5	RDAD25	RDAD36	RDAD93
Current Rating (A)	11.5	25	36	93
Voltage (Vac)	600			
Terminal Wire Range	#18-12 AWG	#18-10 AWG #8 AWG Str		#12-10 AWG #8-1 AWG, Str
Terminal Torque in-lb (N.m)	7 (0.80)	22 (2.50)		80 (9)
Wire Strip Length in (mm)	0.39 (10)	0.51 (13)		0.71 (18)
Matched Contactor Type	Ex9CMS6~12	Ex9CDS09~32	Ex9CDS32	Ex9CDS40~95

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DEFINITE PURPOSE CONTACTORS



Ex9CK

Features

- Rated current from 20~90 A
- Coil voltages from 24~600 Vac, 50/60 Hz
- Coil is Class B 266 °F (130 °C)
- Available with enclosed coils for protection against particle contamination
- 1, 2, and 3 pole configurations
- Industry standard mounting plate provides easily accessible mounting holes
- More connection terminal options, including screw or lug connections each with quick connect spades
- Double E magnet assembly provides optimal performance with reduced power consumption
- 1NO+1NC auxiliary contact block with 600 Vac available as an option
- Base assembly is made from high arc-resistant polyester

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Definite Purpose Contactors

Ex9CK National and International Standards

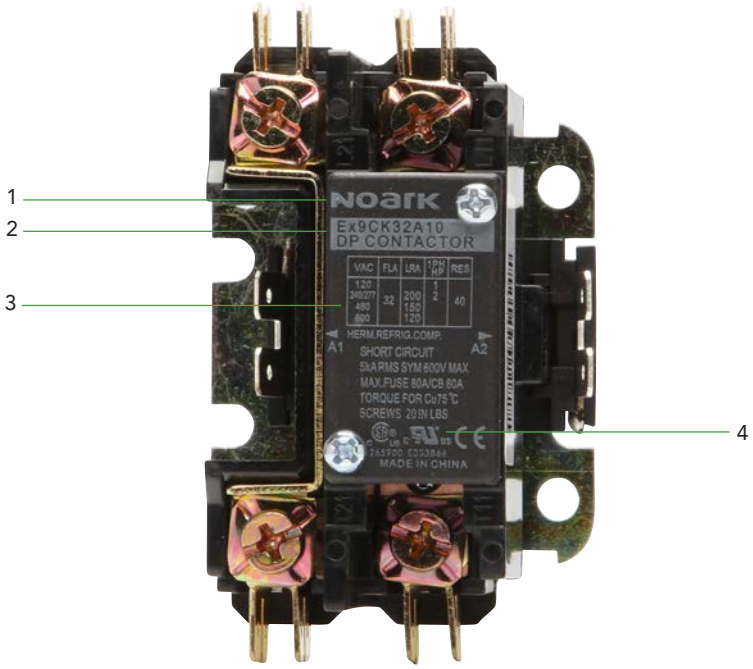
Certifications

- UL Recognized Component, File Number E353866
- Certified for Canada according to CSA standards
- IEC/EN 60947-4-1
- Complies with VDE standards

2020 NOARK Electric

Definite Purpose Contactors
Ex9CK Product Selection Guide

Label



1. Brand
2. Product Selection
3. AC Coil Voltage
4. UL Recognized Component

E

Product Selection Guide

Ex9CK	40	A	10	G	7	Q
NOARK Ex9CK Series	Full Load Amperage (FLA)	Terminal	Pole	Coil Voltage	Frequency	Quick Connection Terminal for 2P
	20: 20 A 25: 25 A 30: 30 A 32: 32 A 40: 40 A 50: 50 A 60: 60 A 75: 75 A 90: 90 A	A: Screw B: Lug	10: 1NO+1Shunt 20: 2NO 30: 3NO	B: 24V N: 277 V C: 36 V Q[1]: 380 V D: 42 V V: 400 V E: 48 V N: 415 V F: 110 V R: 440 V G: 120 V T: 480 V M: 220 V S: 500 V P: 230 V Y: 600 V	7: 50/60 Hz	Blank: Open Coil (1 & 2 Pole) Enclosed Coil (3 Pole)

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Definite Purpose Contactors

Ex9CK 20 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications

IEC/EN 60947-4-1

20 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK20B10B7	1311360	Ex9CK20B20B7	1313921	Ex9CK20B30B7	1313935
48	Ex9CK20B10E7	1313557	Ex9CK20B20E7	1313963	Ex9CK20B30E7	1313977
110	Ex9CK20B10F7	1311362	Ex9CK20B20F7	1313923	Ex9CK20B30F7	1313937
120	Ex9CK20B10G7	1311364	Ex9CK20B20G7	1313925	Ex9CK20B30G7	1313939
220	Ex9CK20B10M7	1313561	Ex9CK20B20M7	1313967	Ex9CK20B30M7	1313981
230	Ex9CK20B10P7	1311368	Ex9CK20B20P7	1313929	Ex9CK20B30P7	1313943
240	Ex9CK20B10U7	1311372	Ex9CK20B20U7	1313933	Ex9CK20B30U7	1313947
277	Ex9CK20B10N7	1311366	Ex9CK20B20N7	1313927	Ex9CK20B30N7	1313941
380	Ex9CK20B10Q7	1313565	Ex9CK20B20Q7	1313971	Ex9CK20B30Q7	1313985
440	Ex9CK20B10R7	1313569	Ex9CK20B20R7	1313975	Ex9CK20B30R7	1313989
480	Ex9CK20B10T7	1311370	Ex9CK20B20T7	1313931	Ex9CK20B30T7	1313945
600	Ex9CK20B10Y7	1313559	Ex9CK20B20Y7	1313965	Ex9CK20B30Y7	1313979

20 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CK20A10B7	1311346	Ex9CK20A20B7	1313907
48	Ex9CK20A10E7	1313543	Ex9CK20A20E7	1313949
110	Ex9CK20A10F7	1311348	Ex9CK20A20F7	1313909
120	Ex9CK20A10G7	1311350	Ex9CK20A20G7	1313911
220	Ex9CK20A10M7	1313547	Ex9CK20A20M7	1313953
230	Ex9CK20A10P7	1311354	Ex9CK20A20P7	1313915
240	Ex9CK20A10U7	1311358	Ex9CK20A20U7	1313919
277	Ex9CK20A10N7	1311352	Ex9CK20A20N7	1313913
380	Ex9CK20A10Q7	1313551	Ex9CK20A20Q7	1313957
440	Ex9CK20A10R7	1313555	Ex9CK20A20R7	1313961
480	Ex9CK20A10T7	1311356	Ex9CK20A20T7	1313917
600	Ex9CK20A10Y7	1313545	Ex9CK20A20Y7	1313951

20 A Ratings	1 P & 2 P			3 P		
Full Load Amperes (A)	20			25		
Resistive Current (A)	35					
Line Voltage (Vac)	240/ 277	480	600	240/ 277	480	600
Locked Rotor (A)	150	125	100	150	125	100

Specifications ..... E149 to 151
Dimensions ..... E152 to 153
Wiring Diagram E154
Mounting Positions E162
Accessories ..... E155 to 156

2020 NOARK Electric

Definite Purpose Contactors

Ex9CK 25 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications
IEC/EN 60947-4-1

25 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK25B10B7	1311402	Ex9CK25B20B7	1311416	Ex9CK25B30B7	1311430
48	Ex9CK25B10E7	1313599	Ex9CK25B20E7	1313613	Ex9CK25B30E7	1313627
110	Ex9CK25B10F7	1311404	Ex9CK25B20F7	1311418	Ex9CK25B30F7	1311432
120	Ex9CK25B10G7	1311406	Ex9CK25B20G7	1311420	Ex9CK25B30G7	1311434
220	Ex9CK25B10M7	1313603	Ex9CK25B20M7	1313617	Ex9CK25B30M7	1313631
230	Ex9CK25B10P7	1311410	Ex9CK25B20P7	1311424	Ex9CK25B30P7	1311438
240	Ex9CK25B10U7	1311414	Ex9CK25B20U7	1311428	Ex9CK25B30U7	1311442
277	Ex9CK25B10N7	1311408	Ex9CK25B20N7	1311422	Ex9CK25B30N7	1311436
380	Ex9CK25B10Q7	1313607	Ex9CK25B20Q7	1313621	Ex9CK25B30Q7	1313635
440	Ex9CK25B10R7	1313611	Ex9CK25B20R7	1313625	Ex9CK25B30R7	1313639
480	Ex9CK25B10T7	1311412	Ex9CK25B20T7	1311426	Ex9CK25B30T7	1311440
600	Ex9CK25B10Y7	1313601	Ex9CK25B20Y7	1313615	Ex9CK25B30Y7	1313629

E

25 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CK25A10B7	1311374	Ex9CK25A20B7	1311388
48	Ex9CK25A10E7	1313571	Ex9CK25A20E7	1313585
110	Ex9CK25A10F7	1311376	Ex9CK25A20F7	1311390
120	Ex9CK25A10G7	1311378	Ex9CK25A20G7	1311392
220	Ex9CK25A10M7	1313575	Ex9CK25A20M7	1313589
230	Ex9CK25A10P7	1311382	Ex9CK25A20P7	1311396
240	Ex9CK25A10U7	1311386	Ex9CK25A20U7	1311400
277	Ex9CK25A10N7	1311380	Ex9CK25A20N7	1311394
380	Ex9CK25A10Q7	1313579	Ex9CK25A20Q7	1313593
440	Ex9CK25A10R7	1313583	Ex9CK25A20R7	1313597
480	Ex9CK25A10T7	1311384	Ex9CK25A20T7	1311398
600	Ex9CK25A10Y7	1313573	Ex9CK25A20Y7	1313587

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25 A Ratings	1 P, 2 P, & 3 P		
Full Load Amperes (A)	25		
Resistive Current (A)	35		
Line Voltage (Vac)	240/277	480	600
Locked Rotor (A)	150	125	100

Specifications .....E149 to 151
Dimensions.....E152 to 153
Wiring Diagram.....E154
Mounting Positions E162
Accessories.....E155 to 156

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Definite Purpose Contactors

Ex9CK 30 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications

IEC/EN 60947-4-1

30 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK30B10B7	1311472	Ex9CK30B20B7	1311486	Ex9CK30B30B7	1311500
48	Ex9CK30B10E7	1313669	Ex9CK30B20E7	1313683	Ex9CK30B30E7	1313697
110	Ex9CK30B10F7	1311474	Ex9CK30B20F7	1311488	Ex9CK30B30F7	1311502
120	Ex9CK30B10G7	1311476	Ex9CK30B20G7	1311490	Ex9CK30B30G7	1311504
220	Ex9CK30B10M7	1313673	Ex9CK30B20M7	1313687	Ex9CK30B30M7	1313701
230	Ex9CK30B10P7	1311480	Ex9CK30B20P7	1311494	Ex9CK30B30P7	1311508
240	Ex9CK30B10U7	1311484	Ex9CK30B20U7	1311498	Ex9CK30B30U7	1311512
277	Ex9CK30B10N7	1311478	Ex9CK30B20N7	1311492	Ex9CK30B30N7	1311506
380	Ex9CK30B10Q7	1313677	Ex9CK30B20Q7	1313691	Ex9CK30B30Q7	1313705
440	Ex9CK30B10R7	1313681	Ex9CK30B20R7	1313695	Ex9CK30B30R7	1313709
480	Ex9CK30B10T7	1311482	Ex9CK30B20T7	1311496	Ex9CK30B30T7	1311510
600	Ex9CK30B10Y7	1313671	Ex9CK30B20Y7	1313685	Ex9CK30B30Y7	1313699

30 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CK30A10B7	1311444	Ex9CK30A20B7	1311458
48	Ex9CK30A10E7	1313641	Ex9CK30A20E7	1313655
110	Ex9CK30A10F7	1311446	Ex9CK30A20F7	1311460
120	Ex9CK30A10G7	1311448	Ex9CK30A20G7	1311462
220	Ex9CK30A10M7	1313645	Ex9CK30A20M7	1313659
230	Ex9CK30A10P7	1311452	Ex9CK30A20P7	1311466
240	Ex9CK30A10U7	1311456	Ex9CK30A20U7	1311470
277	Ex9CK30A10N7	1311450	Ex9CK30A20N7	1311464
380	Ex9CK30A10Q7	1313649	Ex9CK30A20Q7	1313663
440	Ex9CK30A10R7	1313653	Ex9CK30A20R7	1313667
480	Ex9CK30A10T7	1311454	Ex9CK30A20T7	1311468
600	Ex9CK30A10Y7	1313643	Ex9CK30A20Y7	1313657

30 A Ratings	1 P, 2 P, & 3 P		
Full Load Amperes (A)	32		
Resistive Current (A)	40		
Line Voltage (Vac)	240/277	480	600
Locked Rotor (A)	200	150	120

Specifications .....E149 to 151
Dimensions.....E152 to 153
Wiring Diagram.....E154
Mounting Positions E162
Accessories.....E155 to 156

2020 NOARK Electric

Definite Purpose Contactors

Ex9CK 32 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications

IEC/EN 60947-4-1

32 A Lug

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK32B10B7	1311542	Ex9CK32B20B7	1311556	Ex9CK32B30B7	1311570
48	Ex9CK32B10E7	1313739	Ex9CK32B20E7	1313753	Ex9CK32B30E7	1313767
110	Ex9CK32B10F7	1311544	Ex9CK32B20F7	1311558	Ex9CK32B30F7	1311572
120	Ex9CK32B10G7	1311546	Ex9CK32B20G7	1311560	Ex9CK32B30G7	1311574
220	Ex9CK32B10M7	1313743	Ex9CK32B20M7	1313757	Ex9CK32B30M7	1313771
230	Ex9CK32B10P7	1311550	Ex9CK32B20P7	1311564	Ex9CK32B30P7	1311578
240	Ex9CK32B10U7	1311554	Ex9CK32B20U7	1311568	Ex9CK32B30U7	1311582
277	Ex9CK32B10N7	1311548	Ex9CK32B20N7	1311562	Ex9CK32B30N7	1311576
380	Ex9CK32B10Q7	1313747	Ex9CK32B20Q7	1313761	Ex9CK32B30Q7	1313775
440	Ex9CK32B10R7	1313751	Ex9CK32B20R7	1313765	Ex9CK32B30R7	1313779
480	Ex9CK32B10T7	1311552	Ex9CK32B20T7	1311566	Ex9CK32B30T7	1311580
600	Ex9CK32B10Y7	1313741	Ex9CK32B20Y7	1313755	Ex9CK32B30Y7	1313769

32 A Screw

Coil Voltage (Vac)	1 Pole 1NO+1 Shunt		2 Poles 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CK32A10B7	1311514	Ex9CK32A20B7	1311528
48	Ex9CK32A10E7	1313711	Ex9CK32A20E7	1313725
110	Ex9CK32A10F7	1311516	Ex9CK32A20F7	1311530
120	Ex9CK32A10G7	1311518	Ex9CK32A20G7	1311532
220	Ex9CK32A10M7	1313715	Ex9CK32A20M7	1313729
230	Ex9CK32A10P7	1311522	Ex9CK32A20P7	1311536
240	Ex9CK32A10U7	1311526	Ex9CK32A20U7	1311540
277	Ex9CK32A10N7	1311520	Ex9CK32A20N7	1311534
380	Ex9CK32A10Q7	1313719	Ex9CK32A20Q7	1313733
440	Ex9CK32A10R7	1313723	Ex9CK32A20R7	1313737
480	Ex9CK32A10T7	1311524	Ex9CK32A20T7	1311538
600	Ex9CK32A10Y7	1313713	Ex9CK32A20Y7	1313727

32 A Ratings	1 P, 2 P, & 3 P		
Full Load Amperes (A)	32		
Resistive Current (A)	40		
Line Voltage (Vac)	240/277	480	600
Locked Rotor (A)	200	150	120

Specifications .....E149 to 151
Dimensions.....E152 to 153
Wiring Diagram.....E154
Mounting Positions E162
Accessories.....E155 to 156

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Definite Purpose Contactors

Ex9CK 40 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications

IEC/EN 60947-4-1

40 A Lug

Coil Voltage Vac	1 Pole 1NO+1 Shunt		2 Poles 2NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CK40B10B7	1311612	Ex9CK40B20B7	1311626	Ex9CK40B30B7	1311640
48	Ex9CK40B10E7	1313809	Ex9CK40B20E7	1313823	Ex9CK40B30E7	1313837
110	Ex9CK40B10F7	1311614	Ex9CK40B20F7	1311628	Ex9CK40B30F7	1311642
120	Ex9CK40B10G7	1311616	Ex9CK40B20G7	1311630	Ex9CK40B30G7	1311644
220	Ex9CK40B10M7	1313813	Ex9CK40B20M7	1313827	Ex9CK40B30M7	1313841
230	Ex9CK40B10P7	1311620	Ex9CK40B20P7	1311634	Ex9CK40B30P7	1311648
240	Ex9CK40B10U7	1311624	Ex9CK40B20U7	1311638	Ex9CK40B30U7	1311652
277	Ex9CK40B10N7	1311618	Ex9CK40B20N7	1311632	Ex9CK40B30N7	1311646
380	Ex9CK40B10Q7	1313817	Ex9CK40B20Q7	1313831	Ex9CK40B30Q7	1313845
440	Ex9CK40B10R7	1313821	Ex9CK40B20R7	1313835	Ex9CK40B30R7	1313849
480	Ex9CK40B10T7	1311622	Ex9CK40B20T7	1311636	Ex9CK40B30T7	1311650
600	Ex9CK40B10Y7	1313811	Ex9CK40B20Y7	1313825	Ex9CK40B30Y7	1313839

40 A Screw

Coil Voltage Vac	1 Pole 1NO+1 Shunt		2 Poles 2NO	
	Product	Part Number	Product	Part Number
24	Ex9CK40A10B7	1311584	Ex9CK40A20B7	1311598
48	Ex9CK40A10E7	1313781	Ex9CK40A20E7	1313795
110	Ex9CK40A10F7	1311586	Ex9CK40A20F7	1311600
120	Ex9CK40A10G7	1311588	Ex9CK40A20G7	1311602
220	Ex9CK40A10M7	1313785	Ex9CK40A20M7	1313799
230	Ex9CK40A10P7	1311592	Ex9CK40A20P7	1311606
240	Ex9CK40A10U7	1311596	Ex9CK40A20U7	1311610
277	Ex9CK40A10N7	1311590	Ex9CK40A20N7	1311604
380	Ex9CK40A10Q7	1313789	Ex9CK40A20Q7	1313803
440	Ex9CK40A10R7	1313793	Ex9CK40A20R7	1313807
480	Ex9CK40A10T7	1311594	Ex9CK40A20T7	1311608
600	Ex9CK40A10Y7	1313783	Ex9CK40A20Y7	1313797

40 A Ratings	1 P, 2 P, & 3 P		
Full Load Amperes (A)	40		
Resistive Current (A)	50		
Line Voltage (Vac)	240/277	480	600
Locked Rotor (A)	240	200	160

Specifications .....E149 to 151
Dimensions.....E152 to 153
Wiring Diagram.....E154
Mounting Positions E162
Accessories.....E155 to 156

2020 NOARK Electric

Definite Purpose Contactors

Ex9CK 50~90 A

- Auxiliary contacts for 3 pole only; see page E150 for part numbers
- Enclosed coils available for 3 pole



Certifications

IEC/EN 60947-4-1

50 A Lug / 60 A Lug

Coil Voltage Vac	3 Poles 3NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number
24	Ex9CK50B30B7	1311654	Ex9CK60B30B7	1311668
48	Ex9CK50B30E7	1313851	Ex9CK60B30E7	1313865
110	Ex9CK50B30F7	1311656	Ex9CK60B30F7	1311670
120	Ex9CK50B30G7	1311658	Ex9CK60B30G7	1311672
220	Ex9CK50B30M7	1313855	Ex9CK60B30M7	1313869
230	Ex9CK50B30P7	1311662	Ex9CK60B30P7	1311676
240	Ex9CK50B30U7	1311666	Ex9CK60B30U7	1311680
277	Ex9CK50B30N7	1311660	Ex9CK60B30N7	1311674
380	Ex9CK50B30Q7	1313859	Ex9CK60B30Q7	1313873
440	Ex9CK50B30R7	1313863	Ex9CK60B30R7	1313877
480	Ex9CK50B30T7	1311664	Ex9CK60B30T7	1311678
600	Ex9CK50B30Y7	1313853	Ex9CK60B30Y7	1313867

Ratings	50 A 3 P			60 A 3 P		
Full Load Amperes (A)	50			60		
Resistive Current (A)	65			75		
Line Voltage (Vac)	240/277	480	600	240/277	480	600
Locked Rotor (A)	300	250	200	360	300	240

75 A Lug / 90 A Lug

Coil Voltage Vac	3 Poles 3NO		3 Poles 3NO	
	Product	Part Number	Product	Part Number
24	Ex9CK75B30B7	1311682	Ex9CK90B30B7	1311696
48	Ex9CK75B30E7	1313879	Ex9CK90B30E7	1313893
110	Ex9CK75B30F7	1311684	Ex9CK90B30F7	1311698
120	Ex9CK75B30G7	1311686	Ex9CK90B30G7	1311700
220	Ex9CK75B30M7	1313883	Ex9CK90B30M7	1313897
230	Ex9CK75B30P7	1311690	Ex9CK90B30P7	1311704
240	Ex9CK75B30U7	1311694	Ex9CK90B30U7	1311708
277	Ex9CK75B30N7	1311688	Ex9CK90B30N7	1311702
380	Ex9CK75B30Q7	1313887	Ex9CK90B30Q7	1313901
440	Ex9CK75B30R7	1313891	Ex9CK90B30R7	1313905
480	Ex9CK75B30T7	1311692	Ex9CK90B30T7	1311706
600	Ex9CK75B30Y7	1313881	Ex9CK90B30Y7	1313895

Ratings	75 A 3 P			90 A 3 P		
Full Load Amperes (A)	75			90		
Resistive Current (A)	90			120		
Line Voltage (Vac)	240/277	480	600	240/277	480	600
Locked Rotor (A)	450	375	300	540	450	360

Specifications ..... E149 to 151
Dimensions E161
Wiring Diagram E154
Mounting Positions E162
Accessories ..... E155 to 156

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Definite Purpose Contactors

Ex9CK Pole Specifications

Description	Poles	Full Load Amperage (A)			Resistive @ 600 Vac (A)	Locked Rotor (A)			Horsepower (hp)		
		240/277 V	480 V	600 V		240/277 V	480 V	600 V	Voltage (V)	1-Phase	3-Phase
Ex9CK20	1+Shunt	20			35	150	125	100	120	1	-
									240	2	
	2								120		
									240	3	
	3	25							120	2	
									240/277	5	10
									480	-	15
									600		20
Ex9CK25	1+Shunt	25							120	1	-
									240	2	
	2								120		
									240	3	
	3								120	2	
									240/277	5	10
									480	-	15
									600		20
Ex9CK30	1+Shunt	32			40	200	150	120	120	1	-
									240	2	
	2								120		
									240	3	
	3								120	2	
									240/277	5	10
									480	-	15
									600		20
Ex9CK32	1+Shunt								120	1	-
									240	2	
	2								120		
									240	3	
	3								120	2	
									240/277	5	10
									480	-	15
									600		20
Ex9CK40	1+Shunt	40			50	240	200	160	120	2	-
									240	3	
	2								120	2	-
									240	3	
	3								120	3	
									240/277	7.5	10
									480	-	20
									600		25

2020 NOARK Electric

Definite Purpose Contactors

Ex9CK Coil Specifications

Ex9CK			20			25			30			32			40		
Poles			1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles	1 Pole+ Shunt	2 Poles	3 Poles
Power Consumption*	In-Rush (VA) @ 50 Hz		55		51	55		51	55		51	55		51	55		51
	Sealed (VA) @ 50 Hz		13		12	13		12	13		12	13		12	13		12
	In-Rush (VA) @ 60 Hz		25	40	47	25	40	47	25	40	47	25	40	47	25	40	47
	Sealed (VA) @ 60 Hz		6.7	8.8	9.3	6.7	8.8	9.3	6.7	8.8	9.3	6.7	8.8	9.3	6.7	8.8	9.3
Operation Range	Pick-Up Voltage		85~110% Us														
	Drop-Out Voltage		20~65% Us														
Power Supply Voltage Us			50/60 Hz; 24~600 Vac														
Terminal Connection																	
Line and Load Terminals			#10-32 Screw Box Lug														
Copper Cable AWG (mm^2)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)						12~8 (4~10)		16~8 (1.5~10)	2~8 (4~10)		16~8 (1.5~10)	2~8 (4~10)		16~8 (1.5~10)
		Lug	14~8 (2.5~10)														
	Flexible Stranded Wire	Screw	14~12 (2.5~6)														
		Lug	14~8 (2.5~10)														
Tightening Torque in-lb (N.m)	Coil		-														
	Main Circuit	Screw	20 (1.8-2.3)														
		Lug	1P: 20 (1.8-2.3) 2P, 3P: 40 (4-5)														
Quick Connects	Power Terminals		Dual 0.250 QC (2)														
	Coil Terminals																
	0.250 Standard		Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual	Quad	Dual or Quad**	Dual
Insulation System			Class B 266°F (130 °C)														

* Power consumption is the same for 24, 120, 240, 277 and 480 Vac.
** Dual is standard.

Mechanical & Electrical Life

Mechanical	1,000,000 cycles
Electrical	250,000 cycle (AC Resistance Air Heating Load)

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Definite Purpose Contactors

Ex9CK Coil Specifications

Ex9CK			50	60	75	90
Poles			3 Poles			
Power Consumption*	In-Rush (VA) @ 50 Hz		84		165	
	Sealed (VA) @ 50 Hz		14		30	
	In-Rush (VA) @ 60 Hz		83		250	
	Sealed (VA) @ 60 Hz		9.3		27	
Operation Range	Pick-Up Voltage		85~110% Us			
	Drop-Out Voltage		20~65% Us			
Power Supply Voltage Us			50/60 Hz; 24~600 Vac			
Terminal Connection						
Line and Load Terminals			#10-32 Screw Box Lug			
Copper Cable AWG (mm^2)	Ridge Wire with Single Core	Screw	-			
		Lug	10~6 (6~16)	14~6 (2.5~16)	6~3 (16~35)	4~3 (25~35)
	Flexible Stranded Wire	Screw	-			
		Lug	10~8 (4~10)		8~4 (10~25)	8~4 (16~25)
Tightening Torque in-lb (N.m)	Coil		10 (0.8~1.2)			
	Main Circuit	Screw	-			
		Lug	50-60A: 40 (4-5) 75-90A: 50 (5-6)			
Quick Connects	Power Terminals		Dual 0.250 QC (2)	Dual 0.250 QC (2)	Dual 0.250 QC (2)	
	Coil Terminals			6~32 Screw and 0.250 QC (2)		
	0.250 Standard		-			
Covers			Standard			
Insulation System			Class B 266°F (130°C)			

* Power consumption is the same for 24, 120, 240, 277 and 480 Vac.

SCCR Ratings

SCCR: 100kA@480Vac with MCCB; @600Vac max. with Fuse

Poles	Ex9CK 20 & 25A (1-3P)	Ex9CK 30 & 32A (1-3P)	Ex9CK 40A (1-3P)	Ex9CK 50A	Ex9CK 60A	Ex9CK 75A	Ex9CK 90A
CB rated current A	M1N 50A	M1N 50A	M1N 70A	M1N 100A	M1N100A	M2N 125A	M2N 125A
Fuse rated current A	80	80	100	200	200	200	200

1. CB: must be NOARK UL MCCB M1N or M2N
2. Fuse type: Class J or Class L (Class L fuse required for applications with 100A or greater)

Mechanical & Electrical Life

Mechanical	1,000,000 cycles
Electrical	250,000 cycle (AC Resistance Air Heating Load)

2020 NOARK Electric

Definite Purpose Contactors

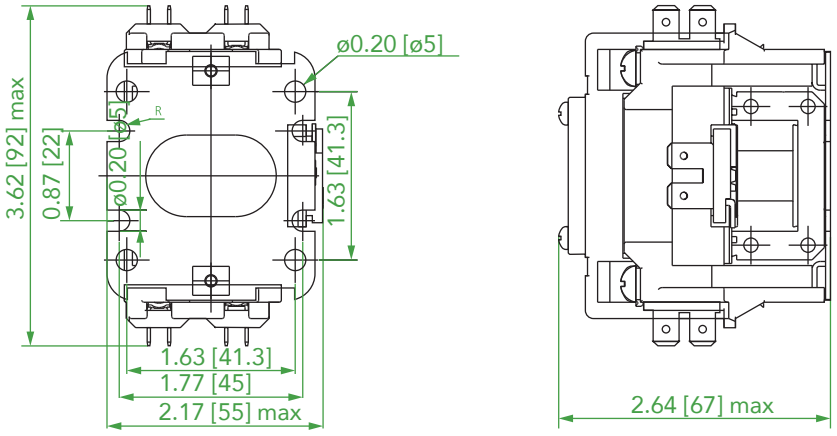
Ex9CK Lighting Data and Dimensions

Lighting Data

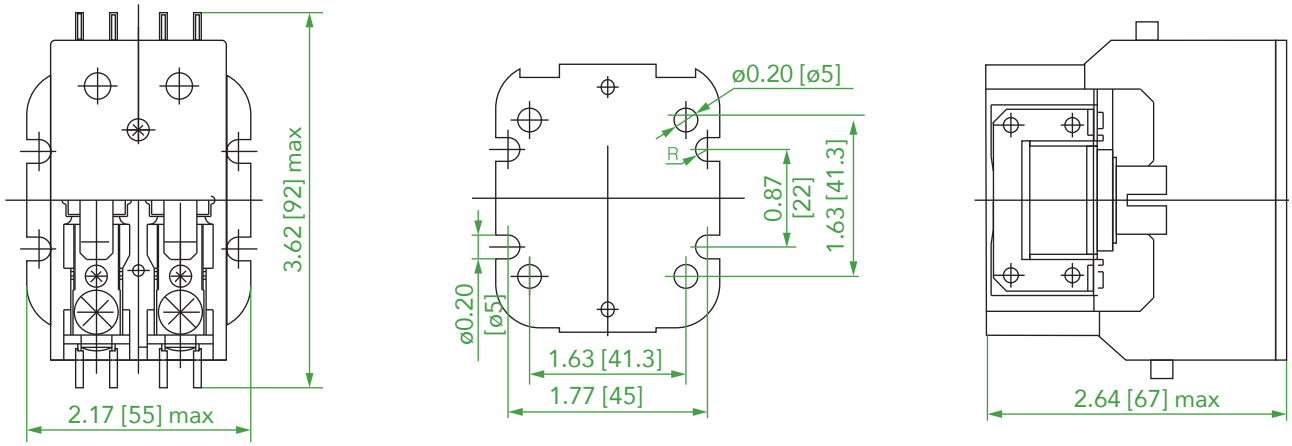
25-50A; 1/2/3P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	50A
50A	60A

Ex9CK20~40
1 Pole+Shunt
Unit: in [mm]



Ex9CK20~40
2 Poles
Unit: in [mm]



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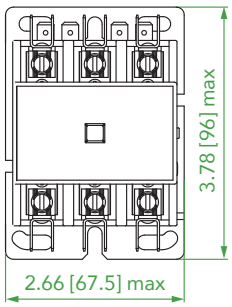
Definite Purpose Contactors

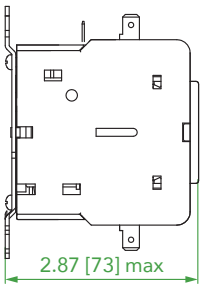
Ex9CK Dimensions

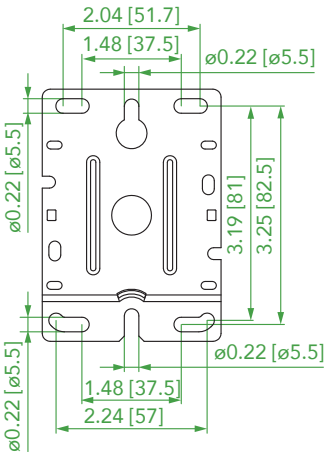
Ex9CK20~40

3 Poles

Unit: in [mm]



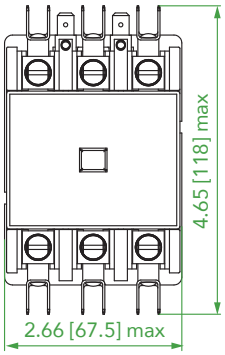


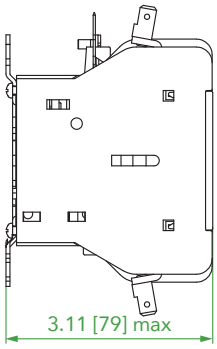


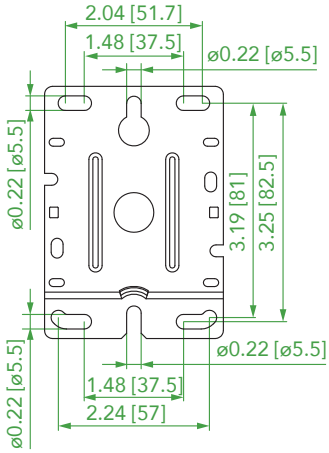
Ex9CK50~60

3 Poles

Unit: in [mm]



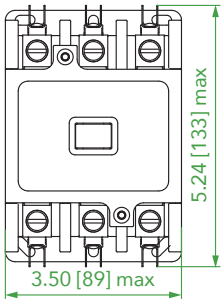


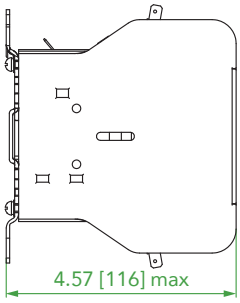


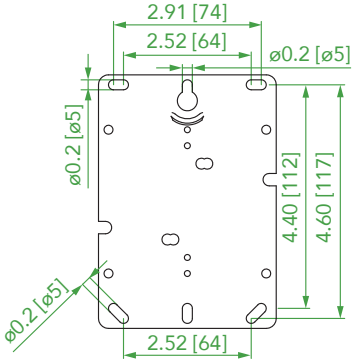
Ex9CK75~90

3 Poles

Unit: in [mm]





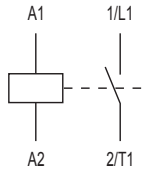


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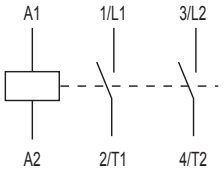
Definite Purpose Contactors

Ex9CK Wiring Diagrams and Mounting Positions

Ex9CK20~40

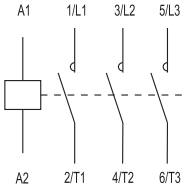


Ex9CK... 1P 1NO+1Shunt



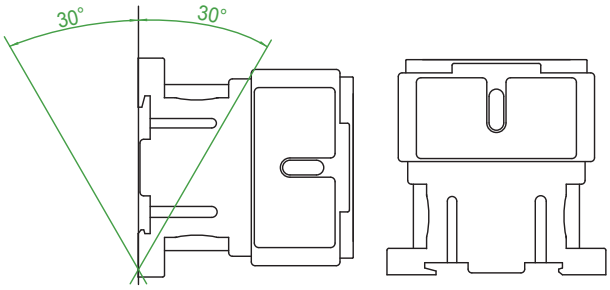
Ex9CK... 2P 2NO

Ex9CK20~95



Ex9CK... 3P 3NO

Ex9CK20~90



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Definite Purpose Contactors

Ex9CK Accessories and Specifications



AXF	C	11	Q
Description	Coil	Pole	Connection
Auxiliary Contact (Side Mount)	C: Auxiliary Contact	11: 1NO+1NC	Q: Quick Connect
	D: Microswitch	22: 2NO+2NC	Blank: Screw Connect

Dimensions..... F156

- Contact a NOARK sales representative for more information.

Accessory Description	Matched Contactor	Product	Part Number
Auxiliary Contact (Side Mount)	Ex9CK20~90 3P Ex9CKT20~40 3P & 4P	AXFC11	1311725
		AXFC11Q	1314051
	Ex9CK20~40 3P, Ex9CKT20~40 3P & 4P Microswitch	AXFD11	1314052
		AXFD22	1314053

Auxiliary Contact		AXFC11/AXFC11Q	AXFD11	AXFD22
Microswitch		-	SPDT One Switch Per Side	SPDT Two Switches Per Side
Mounting		Side Mounted (Maximum of two)	One Auxiliary Only	
		1NO+1NC	1NO+1NC	2NO+2NC
Wiring		0.250 Quick Connection Terminals		
		#6~32 Screw Terminal	-	
Contact Ratings - AXFC				
Break (A)	120 Vac	3		
	240 Vac	1.50		
	480 Vac	0.75		
	600 Vac	0.60		
Make (A)	120 Vac	30		
	240 Vac	15		
	480 Vac	7.50		
	600 Vac	6		
Continuous (A)	120 Vac	10		
	240 Vac			
	480 Vac			
	600 Vac			
Contact Ratings - AXFD				
125 or 250 Vac		15A		
120 Vac on Lamp Load		4 A		
125 Vdc		1/2 A		
250 Vdc		1/4 A		

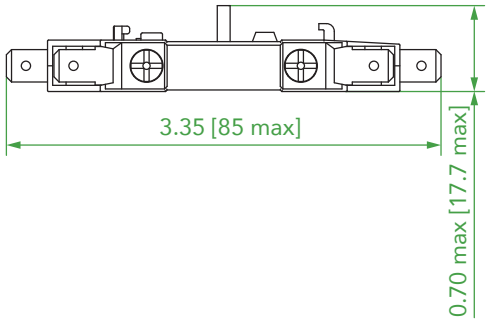
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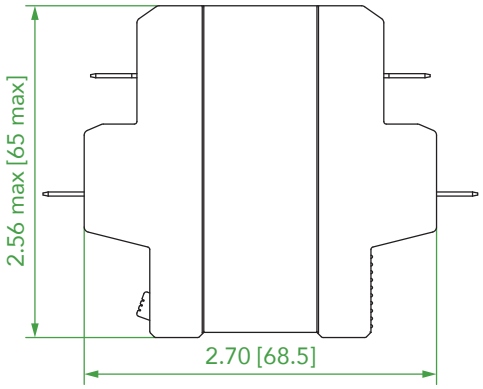
Definite Purpose Contactors

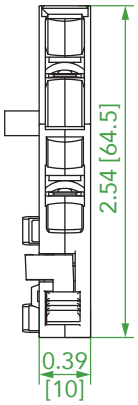
Ex9CK Accessories Dimensions

AXFC11/AXFC11Q

Unit: in. [mm]



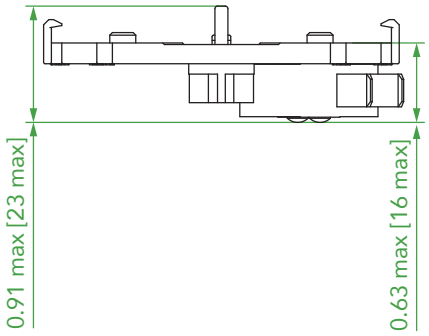


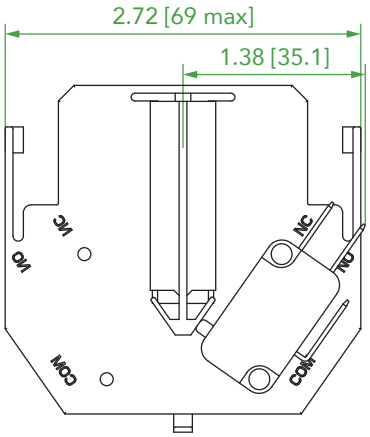


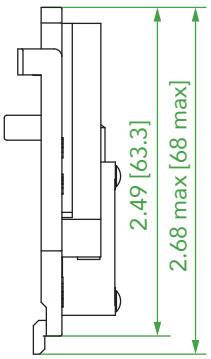
E

AXFD11/AXFD22

Unit: in. [mm]



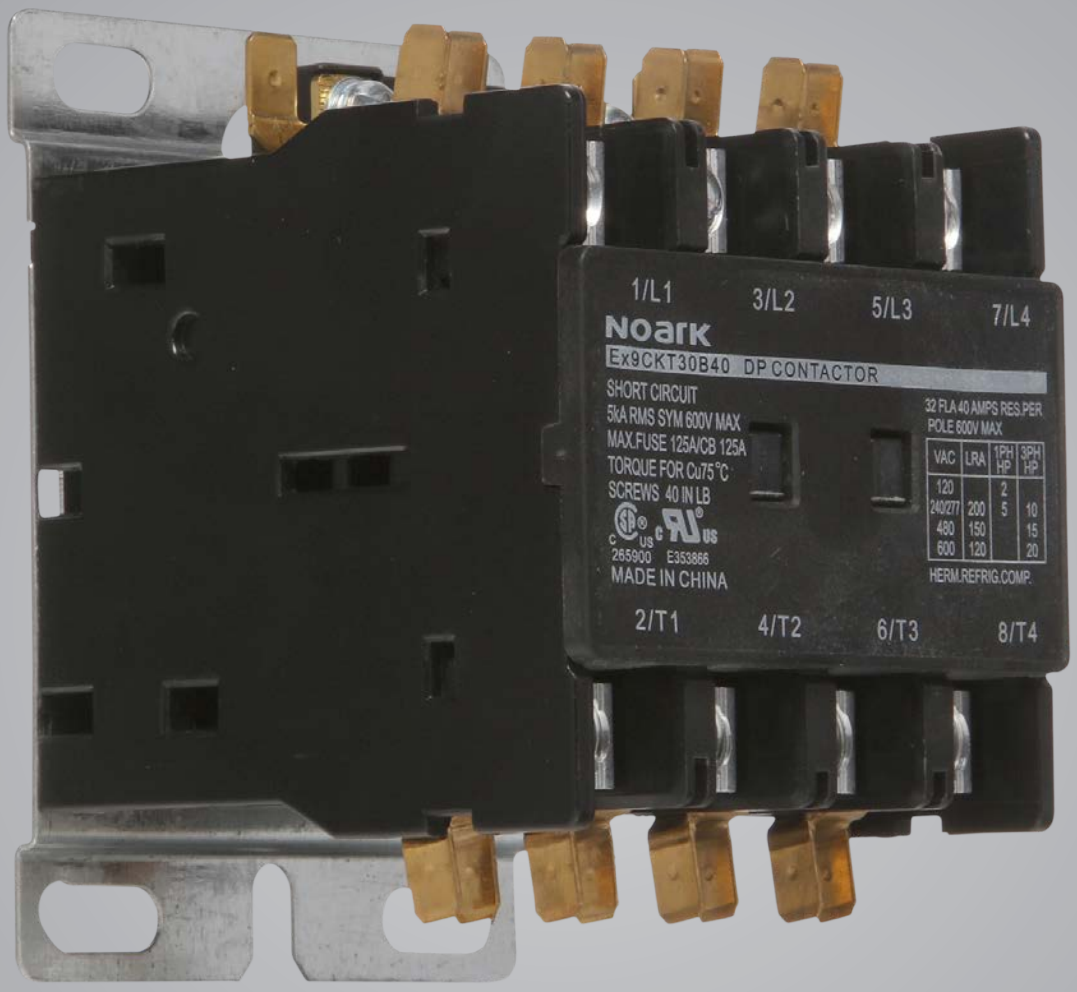




• Contact a NOARK sales representative for AXFB11 and AXFB11Q dimensions.

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DEFINITE PURPOSE CONTACTORS



Ex9CKT

Definite Purpose Contactors

Ex9CKT Product Overview

Features

Ex9CKT Series DP Contactors provide high performance with both flexibility and reliability. They are designed to match numerous applications including:

- Air conditioning
- Resistive heating
- Refrigeration equipment
- Motors
- Welding
- Pumps
- Power supplies
- Food service equipment
- Compressors
- Business machines
- Lighting (25-50A)

Available as:

- 20~40A, 1 to 4 pole available now
- Enclosed coil standard for all 1 to 4 pole frame sizes
- Industry standard mounting plate provides easily accessible mounting holes
- Connection terminal options, including screw or lug connections each with quick connect spades
- Coil is Class B 266°F (130°C) insulation system with a wide range of voltages and 50/60 Hz ratings
- Double E magnet assembly provides optimal performance with reduced power consumption
- Base assembly is made from high arc-resistant polyester
- 100,000 to 250,000 cycles by UL 508/UL60947-4-1 for air resistance heating application

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Definite Purpose Contactors

NOARK Ex9CKT Series

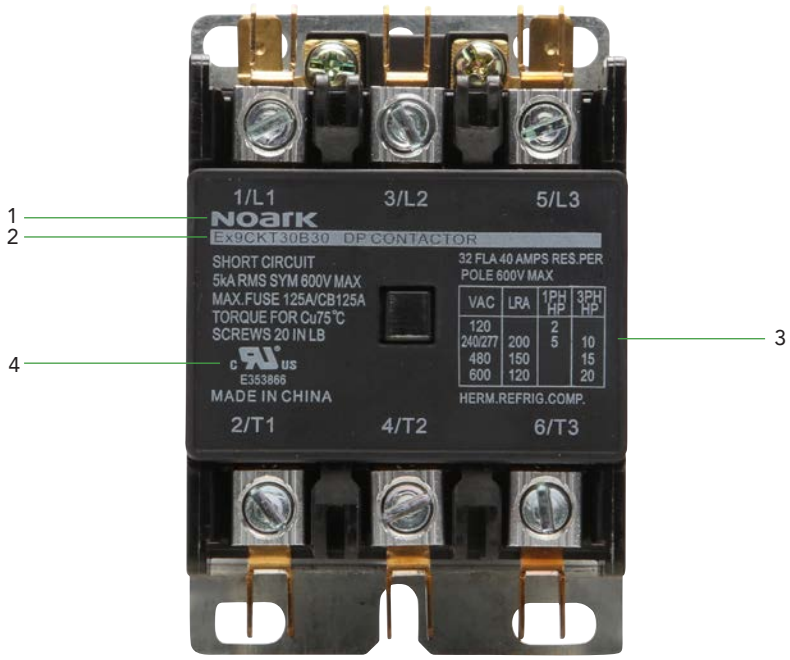
Certifications

- UL 60947-1; UL 60947-4-1; UL 508; UL E353866
- CSA Certified, C22.2 No. 265900
- IEC/EN 60947-4-1 Compliant
- CE Approved
- Compliance to ARI-780 HVAC standards

2020 NOARK Electric

Definite Purpose Contactors
Ex9CKT Product Selection Guide

Label



1. Brand
2. Product Selection
3. AC Coil Voltage
4. UL Recognized Component

F

Product Selection Guide

Ex9CKT	40	A	30	G	7	N	Q
NOARK Ex9CKT Series	Full Load Amperage (FLA)	Terminal	Poles	Coil Voltage	Frequency	Power Pole QCT Option	Coil QCT Option
	20: 20 A 25: 25 A 30: 30 A 32: 32 A 40: 40 A	A: Phillips screw with pressure plate AH*: Phil-slot and hex head washer combination B: Lug Terminal with slot screw C: Lug Terminal with hex socket screw	30: 3NO 40: 4NO 10: 1NO + 1 Shunt 20: 2NO	B: 24 V G: 120 V XU: 208/240 V N: 277 V R**: 440 V T**: 480 V	5: 50 Hz 6: 60 Hz 7: 50/60 Hz (3&4 Pole only)	N: No QCT on power pole Q$^{\Delta}$:Quad QCT (on each pole) Blank: Dual QCT on each pole	Blank: Dual QCT with dual screws - 1 QCT + 1 screw on each side (3 & 4 pole) / Quad QCT on each pole (1 & 2 pole) Q*: Qua QCT (2 on each side) 3 & 4 pole only)

** (3 Poles & 4 Poles Only)
Δ 1& 2 Pole only
* Contact NOARK Sales for more information.

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Definite Purpose Contactors

Ex9CKT 20A





Certifications

IEC/EN 60947-4-1

20A Lug, 60Hz, Dual QCT

20A Lug, 60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT20B10B6	1314684	Ex9CKT20B10B6Q	1314688
120	Ex9CKT20B10G6	1314685	Ex9CKT20B10G6Q	1314689
208~240	Ex9CKT20B10XU6	1314686	Ex9CKT20B10XU6Q	1314690
277	Ex9CKT20B10N6	1314687	Ex9CKT20B10N6Q	1314691

20A Lug, 60Hz, Dual QCT

20A Lug, 60Hz, Quad QCT

20A Lug,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT20B20B6	1314804	Ex9CKT20B20B6Q	1314808	Ex9CKT20B20B6N	1314812
120	Ex9CKT20B20G6	1314805	Ex9CKT20B20G6Q	1314809	Ex9CKT20B20G6N	1314813
208~240	Ex9CKT20B20XU6	1314806	Ex9CKT20B20XU6Q	1314810	Ex9CKT20B20XU6N	1314814
277	Ex9CKT20B20N6	1314807	Ex9CKT20B20N6Q	1314811	Ex9CKT20B20N6N	1314815

20A Screw,60Hz, Dual QCT

20A Screw,60Hz, Quad QCT

20A Screw,60Hz, No QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT20A10B6	1314696	Ex9CKT20A10B6Q	1314700
120	Ex9CKT20A10G6	1314697	Ex9CKT20A10G6Q	1314701
208~240	Ex9CKT20A10XU6	1314698	Ex9CKT20A10XU6Q	1314702
277	Ex9CKT20A10N6	1314699	Ex9CKT20A10N6Q	1314703

20A Screw,60Hz, Dual QCT

20A Screw,60Hz, Quad QCT

20A Screw,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT20A20B6	1314816	Ex9CKT20A20B6Q	1314820	Ex9CKT20A20B6N	1314824
120	Ex9CKT20A20G6	1314817	Ex9CKT20A20G6Q	1314821	Ex9CKT20A20G6N	1314825
208~240	Ex9CKT20A20XU6	1314818	Ex9CKT20A20XU6Q	1314822	Ex9CKT20A20XU6N	1314826
277	Ex9CKT20A20N6	1314819	Ex9CKT20A20N6Q	1314823	Ex9CKT20A20N6N	1314827

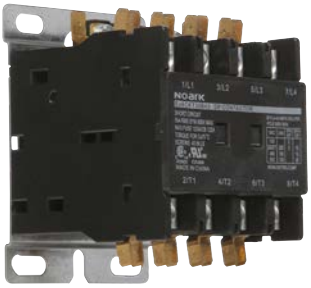
Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram F180

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT 20A





Certifications

IEC/EN 60947-4-1

20 A Lug

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20B30B7	1314282	Ex9CKT20B40B7	1314342
120	Ex9CKT20B30G7	1314283	Ex9CKT20B40G7	1314343
208~240	Ex9CKT20B30XU7	1314284	Ex9CKT20B40XU7	1314344
277	Ex9CKT20B30N7	1314285	Ex9CKT20B40N7	1314345
440	Ex9CKT20B30R7	1314286	Ex9CKT20B40R7	1314346
480	Ex9CKT20B30T7	1314287	Ex9CKT20B40T7	1314347

F

20 A Screw

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT20A30B7	1314312	Ex9CKT20A40B7	1314372
120	Ex9CKT20A30G7	1314313	Ex9CKT20A40G7	1314373
208~240	Ex9CKT20A30XU7	1314314	Ex9CKT20A40XU7	1314374
277	Ex9CKT20A30N7	1314315	Ex9CKT20A40N7	1314375
440	Ex9CKT20A30R7	1314316	Ex9CKT20A40R7	1314376
480	Ex9CKT20A30T7	1314317	Ex9CKT20A40T7	1314377

Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram F180

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Definite Purpose Contactors

Ex9CKT 25A





Certifications

IEC/EN 60947-4-1

25A Lug,60Hz,Dual QCT

25A Lug,60Hz,Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT25B10B6	1314708	Ex9CKT25B10B6Q	1314712
120	Ex9CKT25B10G6	1314709	Ex9CKT25B10G6Q	1314713
208~240	Ex9CKT25B10XU6	1314710	Ex9CKT25B10XU6Q	1314714
277	Ex9CKT25B10N6	1314711	Ex9CKT25B10N6Q	1314715

25A Lug, 60Hz, Dual QCT

25A Lug, 60Hz, Quad QCT

25A Lug,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT25B20B6	1314828	Ex9CKT25B20B6Q	1314832	Ex9CKT25B20B6N	1314836
120	Ex9CKT25B20G6	1314829	Ex9CKT25B20G6Q	1314833	Ex9CKT25B20G6N	1314837
208~240	Ex9CKT25B20XU6	1314830	Ex9CKT25B20XU6Q	1314834	Ex9CKT25B20XU6N	1314838
277	Ex9CKT25B20N6	1314831	Ex9CKT25B20N6Q	1314835	Ex9CKT25B20N6N	1314839

25A Screw, 60Hz, Dual QCT

25A Screw, 60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT25A10B6	1314720	Ex9CKT25A10B6Q	1314724
120	Ex9CKT25A10G6	1314721	Ex9CKT25A10G6Q	1314725
208~240	Ex9CKT25A10XU6	1314722	Ex9CKT25A10XU6Q	1314726
277	Ex9CKT25A10N6	1314723	Ex9CKT25A10N6Q	1314727

25A Screw, 60Hz, Dual QCT

25A Screw, 60Hz, Quad QCT

25A Screw,60Hz, No QCT

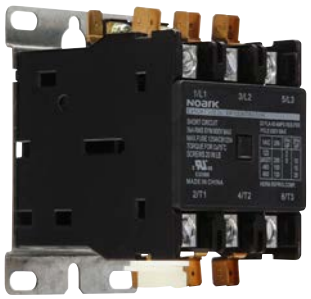
Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT25A20B6	1314840	Ex9CKT25A20B6Q	1314844	Ex9CKT25A20B6N	1314848
120	Ex9CKT25A20G6	1314841	Ex9CKT25A20G6Q	1314845	Ex9CKT25A20G6N	1314849
208~240	Ex9CKT25A20XU6	1314842	Ex9CKT25A20XU6Q	1314846	Ex9CKT25A20XU6N	1314850
277	Ex9CKT25A20N6	1314843	Ex9CKT25A20N6Q	1314847	Ex9CKT25A20N6N	1314851

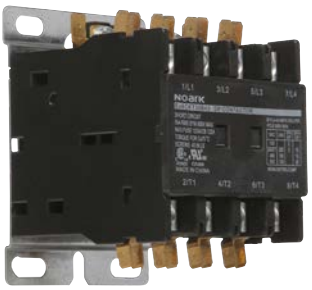
Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram.....F180

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Definite Purpose Contactors

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25 A Lug

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25B30B7	1314288	Ex9CKT25B40B7	1314348
120	Ex9CKT25B30G7	1314289	Ex9CKT25B40G7	1314349
208~240	Ex9CKT25B30XU7	1314290	Ex9CKT25B40XU7	1314350
277	Ex9CKT25B30N7	1314291	Ex9CKT25B40N7	1314351
440	Ex9CKT25B30R7	1314292	Ex9CKT25B40R7	1314352
480	Ex9CKT25B30T7	1314293	Ex9CKT25B40T7	1314353

25 A Screw

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT25A30B7	1314318	Ex9CKT25A40B7	1314378
120	Ex9CKT25A30G7	1314319	Ex9CKT25A40G7	1314379
208~240	Ex9CKT25A30XU7	1314320	Ex9CKT25A40XU7	1314380
277	Ex9CKT25A30N7	1314321	Ex9CKT25A40N7	1314381
440	Ex9CKT25A30R7	1314322	Ex9CKT25A40R7	1314382
480	Ex9CKT25A30T7	1314323	Ex9CKT25A40T7	1314383

F

Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram.....F180

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Ex9CKT 30A





Certifications

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30A Lug,60Hz,Dual QCT

30A Lug,60Hz,Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT30B10B6	1314732	Ex9CKT30B10B6Q	1314736
120	Ex9CKT30B10G6	1314733	Ex9CKT30B10G6Q	1314737
208~240	Ex9CKT30B10XU6	1314734	Ex9CKT30B10XU6Q	1314738
277	Ex9CKT30B10N6	1314735	Ex9CKT30B10N6Q	1314739

30A Lug, 60Hz, Dual QCT

30A Lug, 60Hz, Quad QCT

30A Lug,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT30B20B6	1314852	Ex9CKT30B20B6Q	1314856	Ex9CKT30B20B6N	1314860
120	Ex9CKT30B20G6	1314853	Ex9CKT30B20G6Q	1314857	Ex9CKT30B20G6N	1314861
208~240	Ex9CKT30B20XU6	1314854	Ex9CKT30B20XU6Q	1314858	Ex9CKT30B20XU6N	1314862
277	Ex9CKT30B20N6	1314855	Ex9CKT30B20N6Q	1314859	Ex9CKT30B20N6N	1314863

30A Screw, 60Hz, Dual QCT

30A Screw, 60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT30A10B6	1314744	Ex9CKT30A10B6Q	1314748
120	Ex9CKT30A10G6	1314745	Ex9CKT30A10G6Q	1314749
208~240	Ex9CKT30A10XU6	1314746	Ex9CKT30A10XU6Q	1314750
277	Ex9CKT30A10N6	1314747	Ex9CKT30A10N6Q	1314751

30A Screw, 60Hz, Dual QCT

30A Screw, 60Hz, Quad QCT

30A Screw,60Hz, No QCT

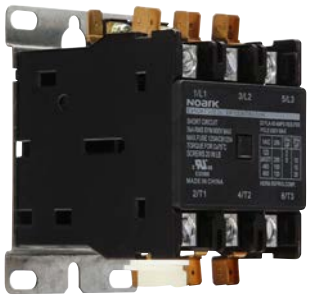
Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT30A20B6	1314864	Ex9CKT30A20B6Q	1314868	Ex9CKT30A20B6N	1314872
120	Ex9CKT30A20G6	1314865	Ex9CKT30A20G6Q	1314869	Ex9CKT30A20G6N	1314873
208~240	Ex9CKT30A20XU6	1314866	Ex9CKT30A20XU6Q	1314870	Ex9CKT30A20XU6N	1314874
277	Ex9CKT30A20N6	1314867	Ex9CKT30A20N6Q	1314871	Ex9CKT30A20N6N	1314875

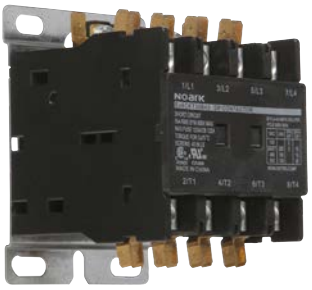
Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram.....F180

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT 30A





Certifications

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30 A Lug

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30B30B7	1314294	Ex9CKT30B40B7	1314354
120	Ex9CKT30B30G7	1314295	Ex9CKT30B40G7	1314355
208~240	Ex9CKT30B30XU7	1314296	Ex9CKT30B40XU7	1314356
277	Ex9CKT30B30N7	1314297	Ex9CKT30B40N7	1314357
440	Ex9CKT30B30R7	1314298	Ex9CKT30B40R7	1314358
480	Ex9CKT30B30T7	1314299	Ex9CKT30B40T7	1314359

30 A Screw

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT30A30B7	1314324	Ex9CKT30A40B7	1314384
120	Ex9CKT30A30G7	1314325	Ex9CKT30A40G7	1314385
208~240	Ex9CKT30A30XU7	1314326	Ex9CKT30A40XU7	1314386
277	Ex9CKT30A30N7	1314327	Ex9CKT30A40N7	1314387
440	Ex9CKT30A30R7	1314328	Ex9CKT30A40R7	1314388
480	Ex9CKT30A30T7	1314329	Ex9CKT30A40T7	1314389

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Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram F180

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Ex9CKT 32A





Certifications

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32A Lug,60Hz,Dual QCT

32A Lug,60Hz,Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT32B10B6	1314756	Ex9CKT32B10B6Q	1314760
120	Ex9CKT32B10G6	1314757	Ex9CKT32B10G6Q	1314761
208~240	Ex9CKT32B10XU6	1314758	Ex9CKT32B10XU6Q	1314762
277	Ex9CKT32B10N6	1314759	Ex9CKT32B10N6Q	1314763

32A Lug, 60Hz, Dual QCT

32A Lug, 60Hz, Quad QCT

32A Lug,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT32B20B6	1314876	Ex9CKT32B20B6Q	1314880	Ex9CKT32B20B6N	1314884
120	Ex9CKT32B20G6	1314877	Ex9CKT32B20G6Q	1314881	Ex9CKT32B20G6N	1314885
208~240	Ex9CKT32B20XU6	1314878	Ex9CKT32B20XU6Q	1314882	Ex9CKT32B20XU6N	1314886
277	Ex9CKT32B20N6	1314879	Ex9CKT32B20N6Q	1314883	Ex9CKT32B20N6N	1314887

32A Screw, 60Hz, Dual QCT

32A Screw, 60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT32A10B6	1314768	Ex9CKT32A10B6Q	1314772
120	Ex9CKT32A10G6	1314769	Ex9CKT32A10G6Q	1314773
208~240	Ex9CKT32A10XU6	1314770	Ex9CKT32A10XU6Q	1314774
277	Ex9CKT32A10N6	1314771	Ex9CKT32A10N6Q	1314775

32A Screw, 60Hz, Dual QCT

32A Screw, 60Hz, Quad QCT

32A Screw,60Hz, No QCT

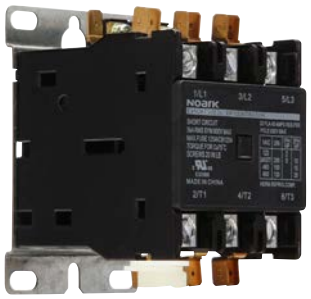
Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT32A20B6	1314888	Ex9CKT32A20B6Q	1314892	Ex9CKT32A20B6N	1314896
120	Ex9CKT32A20G6	1314889	Ex9CKT32A20G6Q	1314893	Ex9CKT32A20G6N	1314897
208~240	Ex9CKT32A20XU6	1314890	Ex9CKT32A20XU6Q	1314894	Ex9CKT32A20XU6N	1314898
277	Ex9CKT32A20N6	1314891	Ex9CKT32A20N6Q	1314895	Ex9CKT32A20N6N	1314899

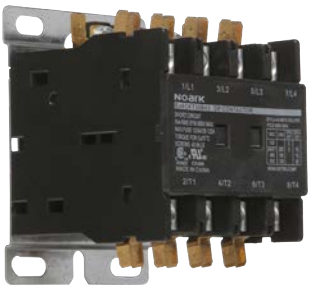
Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram.....F180

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT 32A





Certifications

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32 A Lug

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32B30B7	1314300	Ex9CKT32B40B7	1314360
120	Ex9CKT32B30G7	1314301	Ex9CKT32B40G7	1314361
208~240	Ex9CKT32B30XU7	1314302	Ex9CKT32B40XU7	1314362
277	Ex9CKT32B30N7	1314303	Ex9CKT32B40N7	1314363
440	Ex9CKT32B30R7	1314304	Ex9CKT32B40R7	1314364
480	Ex9CKT32B30T7	1314305	Ex9CKT32B40T7	1314365

32 A Screw

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT32A30B7	1314330	Ex9CKT32A40B7	1314390
120	Ex9CKT32A30G7	1314331	Ex9CKT32A40G7	1314391
208~240	Ex9CKT32A30XU7	1314332	Ex9CKT32A40XU7	1314392
277	Ex9CKT32A30N7	1314333	Ex9CKT32A40N7	1314393
440	Ex9CKT32A30R7	1314334	Ex9CKT32A40R7	1314394
480	Ex9CKT32A30T7	1314335	Ex9CKT32A40T7	1314395

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Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram F180

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Definite Purpose Contactors

Ex9CKT 40A





Certifications

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40A Lug,60Hz,Dual QCT

40A Lug,60Hz,Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT40B10B6	1314780	Ex9CKT40B10B6Q	1314784
120	Ex9CKT40B10G6	1314781	Ex9CKT40B10G6Q	1314785
208~240	Ex9CKT40B10XU6	1314782	Ex9CKT40B10XU6Q	1314786
277	Ex9CKT40B10N6	1314783	Ex9CKT40B10N6Q	1314787

40A Lug, 60Hz, Dual QCT

40A Lug, 60Hz, Quad QCT

40A Lug,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT40B20B6	1314900	Ex9CKT40B20B6Q	1314904	Ex9CKT40B20B6N	1314908
120	Ex9CKT40B20G6	1314901	Ex9CKT40B20G6Q	1314905	Ex9CKT40B20G6N	1314909
208~240	Ex9CKT40B20XU6	1314902	Ex9CKT40B20XU6Q	1314906	Ex9CKT40B20XU6N	1314910
277	Ex9CKT40B20N6	1314903	Ex9CKT40B20N6Q	1314907	Ex9CKT40B20N6N	1314911

40A Screw, 60Hz, Dual QCT

40A Screw, 60Hz, Quad QCT

Coil Voltage Vac	1 Pole 1NO+1Shunt		1 Pole 1NO+1Shunt	
	Product	Part Number	Product	Part Number
24	Ex9CKT40A10B6	1314792	Ex9CKT40A10B6Q	1314796
120	Ex9CKT40A10G6	1314793	Ex9CKT40A10G6Q	1314797
208~240	Ex9CKT40A10XU6	1314794	Ex9CKT40A10XU6Q	1314798
277	Ex9CKT40A10N6	1314795	Ex9CKT40A10N6Q	1314799

40A Screw, 60Hz, Dual QCT

40A Screw, 60Hz, Quad QCT

40A Screw,60Hz, No QCT

Coil Voltage Vac	2 Pole 2NO		2 Pole 2NO		2 Pole 2NO	
	Product	Part Number	Product	Part Number	Product	Part Number
24	Ex9CKT40A20B6	1314912	Ex9CKT40A20B6Q	1314916	Ex9CKT40A20B6N	1314920
120	Ex9CKT40A20G6	1314913	Ex9CKT40A20G6Q	1314917	Ex9CKT40A20G6N	1314921
208~240	Ex9CKT40A20XU6	1314914	Ex9CKT40A20XU6Q	1314918	Ex9CKT40A20XU6N	1314922
277	Ex9CKT40A20N6	1314915	Ex9CKT40A20N6Q	1314919	Ex9CKT40A20N6N	1314923

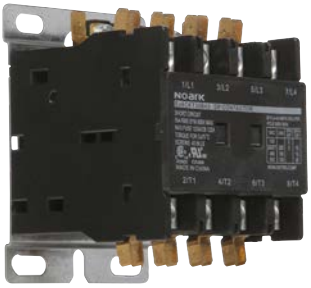
Specifications .....F172 to 176 Dimensions.....F177 to 179 Wiring Diagram.....F180

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT 40A





Certifications

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40 A Lug

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40B30B7	1314306	Ex9CKT40B40B7	1314366
120	Ex9CKT40B30G7	1314307	Ex9CKT40B40G7	1314367
208~240	Ex9CKT40B30XU7	1314308	Ex9CKT40B40XU7	1314368
277	Ex9CKT40B30N7	1314309	Ex9CKT40B40N7	1314369
440	Ex9CKT40B30R7	1314310	Ex9CKT40B40R7	1314370
480	Ex9CKT40B30T7	1314311	Ex9CKT40B40T7	1314371

40 A Screw

Coil Voltage Vac	3 Pole 3NO		4 Poles 4NO	
	Product	Part Number	Product	Part Number
24	Ex9CKT40A30B7	1314336	Ex9CKT40A40B7	1314396
120	Ex9CKT40A30G7	1314337	Ex9CKT40A40G7	1314397
208~240	Ex9CKT40A30XU7	1314338	Ex9CKT40A40XU7	1314398
277	Ex9CKT40A30N7	1314339	Ex9CKT40A40N7	1314399
440	Ex9CKT40A30R7	1314340	Ex9CKT40A40R7	1314400
480	Ex9CKT40A30T7	1314341	Ex9CKT40A40T7	1314401

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Specifications .....F172 to 176 Dimensions.....F1185-187 Wiring Diagram F180

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Definite Purpose Contactors

Ex9CKT Packaging

Packaging

Full Load Amperage (A)	Poles	MOQ	Quantity (pc/carton)	Carton Weight lbs (kgs)		Piece Weight lbs (kgs)		Carton Dimensions in (mm)
				Gross	Net	Gross	Net	
20	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x242x321)
25	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x242x321)
30	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x242x321)
32	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x242x321)
40	1	64	64	45.03 (20.42)	40.96 (18.60)	0.7 (0.32)	0.64(0.29)	15.67x9.53x12.64 (398x242x321)
20	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	15.67x9.53x12.64 (398x242x321)
25	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	15.67x9.53x12.64 (398x242x321)
30	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	15.67x9.53x12.64 (398x242x321)
32	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	15.67x9.53x12.64 (398x242x321)
40	2	64	64	53.62 (24.32)	48.00 (21.77)	0.84(0.38)	0.75(0.34)	15.67x9.53x12.64 (398x242x321)
20	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	18.66x12.68x10.75 (474x322x273)
25	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	18.66x12.68x10.75 (474x322x273)
30	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	18.66x12.68x10.75 (474x322x273)
32	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	18.66x12.68x10.75 (474x322x273)
40	3	54	54	56.48(25.62)	52.14(23.65)	1.04(0.47)	0.97(0.44)	18.66x12.68x10.75 (474x322x273)
20	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	1.39x0.83x0.68 (424x254x206)
25	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	1.39x0.83x0.68 (424x254x206)
30	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	1.39x0.83x0.68 (424x254x206)
32	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	1.39x0.83x0.68 (424x254x206)
40	4	24	24	32.83(14.89)	30.42(13.8)	1.37(0.62)	1.27(0.58)	1.39x0.83x0.68 (424x254x206)

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT Specifications 20~40 A

20~40 FLA

Description	Poles	Full Load Amperage (A)			Resistive @ 600 Vac (A)	Locked Rotor (A)			Horsepower (hp)		
		240/277 V	480 V	600 V		240/277 V	480 V	600 V	Voltage (V)	1-Phase	3-Phase
Ex9CKT20	1&2	25			35	150	125	100	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT25	1&2				35	150	125	100	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT30	1&2	32			40	200	150	120	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT32	1&2				40	200	150	120	120	1	-
									240	2	-
									120	2	-
									240	3	-
Ex9CKT40	1&2	40			50	240	200	160	120	2	-
									240	3	-
									120	2	-
									240	3	-
Ex9CKT20	3 & 4	25			35	150	125	100	120	2	-
									240/277	5	10
									480	-	15
									600		20
Ex9CKT25	3 & 4								120	2	-
									240/277	5	10
									480	-	15
									600		20
Ex9CKT30	3 & 4	32			40	200	150	120	120	2	-
									240/277	5	10
									480	-	15
									600		20
Ex9CKT32	3 & 4								120	2	-
									240/277	5	10
									480	-	15
									600		20
Ex9CKT40	3 & 4	40			50	240	200	160	120	3	-
									240/277	7.5	10
									480	-	20
									600		25

F

Mechanical & Electrical Life

Mechanical	1,000,000 cycles
Electrical	250,000 cycle (AC Resistance Air Heating Load)

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Definite Purpose Contactors

Ex9CKT Specifications 20~40 A

20~40 FLA Coil

1 Pole Contactors (20-40A)

	Coil Data			
	24V	120V	208-240V	277V
Nominal Coil Resistance 50Hz	18	470	1358	2860
Nominal Coil Resistance 60Hz	15	315	1188	1875
Nominal Coil Voltage (Vac)	24	120	208-240	277
Pick-up Voltage (Max.)	20.4	102	177	236
Drop-out Voltage (Min)	4.8	24	48	56
Nominal Inrush (VA)				
50Hz	25	25	25	25
60Hz	27	27	27	27
Nominal Seal (VA)				
50Hz	7.5	7.5	7.5	7.5
60Hz	9	9	9	9

2 Pole Contactors (20-40A)

	Coil Data			
	24V	120V	208-240V	277V
Nominal Coil Resistance 50Hz	10	250	880	1478
Nominal Coil Resistance 60Hz	9	198	715	1075
Nominal Coil Voltage (Vac)	24V	120V	208-240V	277V
Pick-up Voltage (Max.)	20.4	102	177	236
Drop-out Voltage (Min)	4.8	24	48	56
Nominal Inrush (VA)				
50Hz	39	39	39	39
60Hz	44	44	44	44
Nominal Seal (VA)				
50Hz	9.5	9.5	9.5	9.5
60Hz	11	11	11	11

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT Specifications 20~40 A

20~40 FLA Coil

3 Pole Contactors (20-40A)

	Coil Data				
	24V	120V	208-240V	277V	480V
Nominal Coil Resistance (Ω)	8.5	178	715	1180	3370
Nominal Coil Voltage (Vac)	24	120	208 - 240	277	480
Pick-up Voltage (Max.)	18	80	158	200	345
Drop-out Voltage (Min)	6-15	20-70	40-140	50-165	120-285
Nominal Inrush (VA)					
50Hz	60	60	60	60	60
60Hz	50	50	50	50	50
Nominal Seal (VA)					
50Hz	8	8	8	8	8
60Hz	6.5	6.5	6.5	6.5	6.5

F

4 Pole Contactors (20-40A)

	Coil Data				
	24V	120V	208-240V	277V	480V
Nominal Coil Resistance (Ω)	6	152.5	527	790	2530
Nominal Coil Voltage (Vac)	24	120	208 - 240	277	480
Pick-up Voltage (Max.)	16	88	157	200	320
Drop-out Voltage (Min)	6-15	20-70	40-140	65-185	110-280
Nominal Inrush (VA)					
50Hz	70	70	70	70	70
60Hz	62	62	62	62	62
Nominal Seal (VA)					
50Hz	8	8	8	8	8
60Hz	6.5	6.5	6.5	6.5	6.5

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Definite Purpose Contactors

Ex9CKT Specifications 20~40 A

20~40 FLA Terminal

1 and 2 Pole

			20	25	30	32	40
Line and Load Terminals			#10-32 Screw Box Lug				
Copper Cable AWG (mm^2)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)
		Lug	14~10 (2.5~6)		12~8 (6~10)		10~8 (4~10)
	Flexible Stranded Wire	Screw	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)
		Lug	14~12 (2.5~4)		14~10 (2.5~6)		14~10 (2.5~6)
Tightening Torque in-lb (N.m)	Coil		-				
	Main Circuit	Screw	20 (1.8-2.3)				
		Lug	40 (4-5)				
Quick Connects	Coil Terminals		Dual 0.250 QC (2)				
	Power Terminals 0.250 Standard		Dual 0.25 QC (2 or 4)				
Insulation System			Class B 266 °F (130 °C)				

3 and 4 Pole

			20	25	30		32		40	
Line and Load Terminals			#10-32 Screw Box Lug							
Copper Cable AWG (mm^2)	Ridge Wire with Single Core	Screw	14~10 (2.5~6)		12~8 (4~10)	16~8 (1.5~10)	2~8 (4~10)	16~8 (1.5~10)	2~8 (4~10)	16~8 (1.5~10)
		Lug	14~8 (2.5~10)							
	Flexible Stranded Wire	Screw	14~12 (2.5~6)							
		Lug	14~8 (2.5~10)							
Tightening Torque in-lb (N.m)	Coil		-							
	Main Circuit	Screw	20 (1.8-2.3)							
		Lug	40 (4-5)							
Quick Connects	Coil Terminals		Dual 0.250 QC (2)							
	Power Terminals 0.250 Standard		3/4P Dual							
Insulation System			Class B 266 °F (130 °C)							

2020 NOARK Electric

Definite Purpose Contactors

Ex9CKT Specifications 20~40 A

SCCR Ratings

SCCR: 100kA@480Vac with MCCB; @600Vac max. with Fuse

	Ex9CKT 20 & 25A 1, 2, 3 & 4P	Ex9CKT 30A 1, 2, 3 & 4P	Ex9CKT 40A 1, 2, 3 & 4P
CB Rated Current A	M1N 50A	M1N 50A	M1N 70A
Fuse Rated Current A	80	80	100

1. CB: must be NOARK UL MCCB M1N
2. Fuse type: Class J or Class L (Class L fuse required for applications with 100A or greater)

Lighting Data

25-40A; 1P/2P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	40A (Ballast) 50A (Tungsten)

25-40A; 3P/4P

Inductive Rating (DP Contactor FLA)	Tungsten & Ballast Rating
25A	30A
30A	40A
40A	50A

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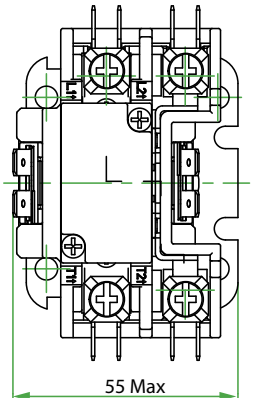
Definite Purpose Contactors

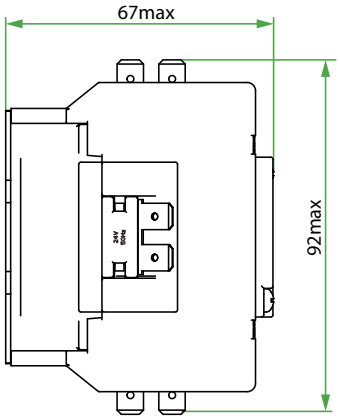
Ex9CKT Dimensions 20~40

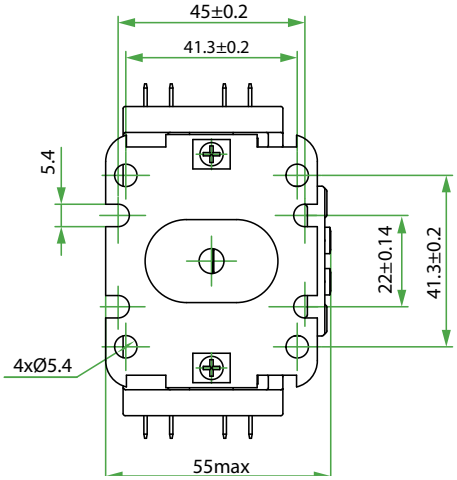
Ex9CKT20~40 Screw

1 Pole

Unit: in. [mm]



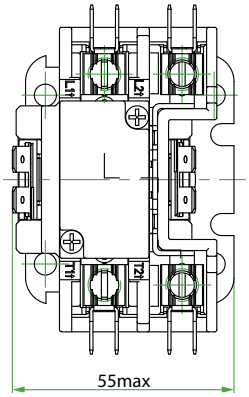


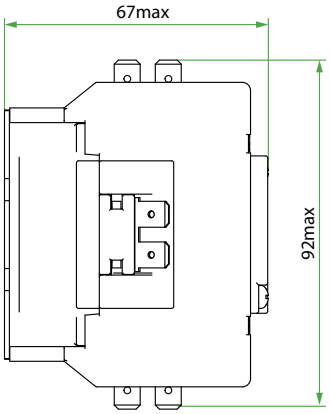


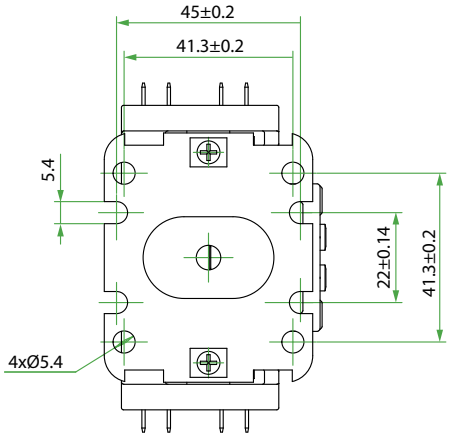
Ex9CKT20~40 Lug

1 Pole

Unit: in. [mm]







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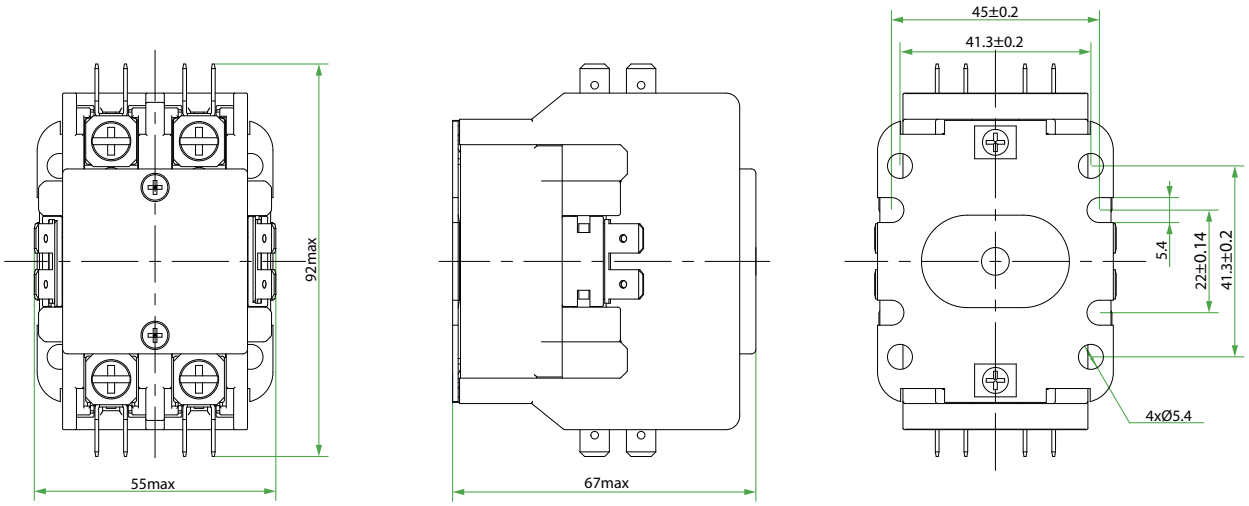
Definite Purpose Contactors

Ex9CKT Dimensions 20~40

Ex9CKT20~40 Screw

2 Pole

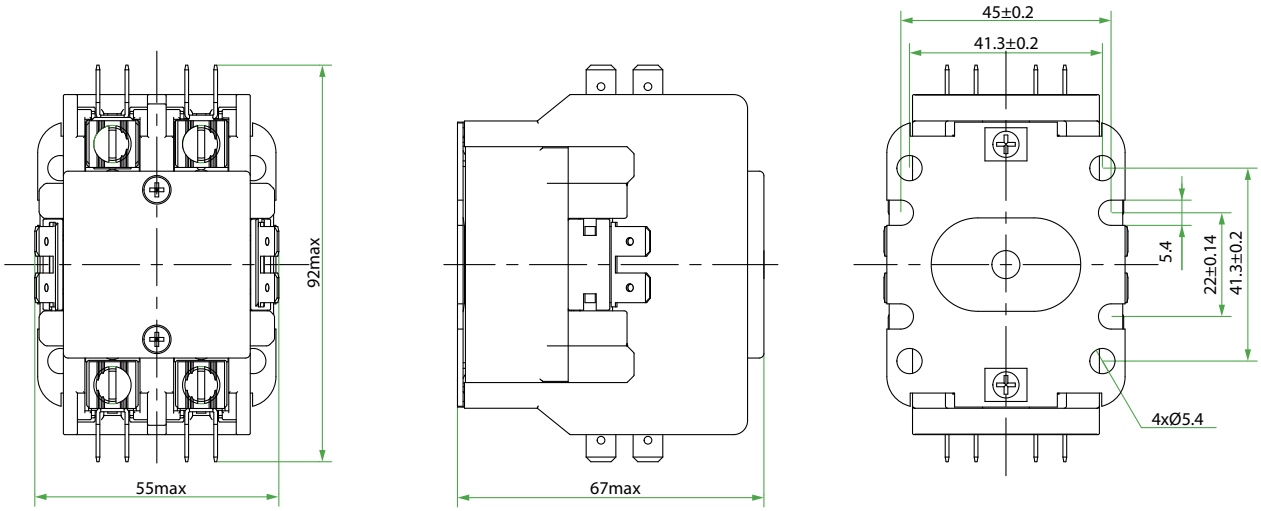
Unit: in. [mm]



Ex9CKT20~40 Lug

2 Pole

Unit: in. [mm]



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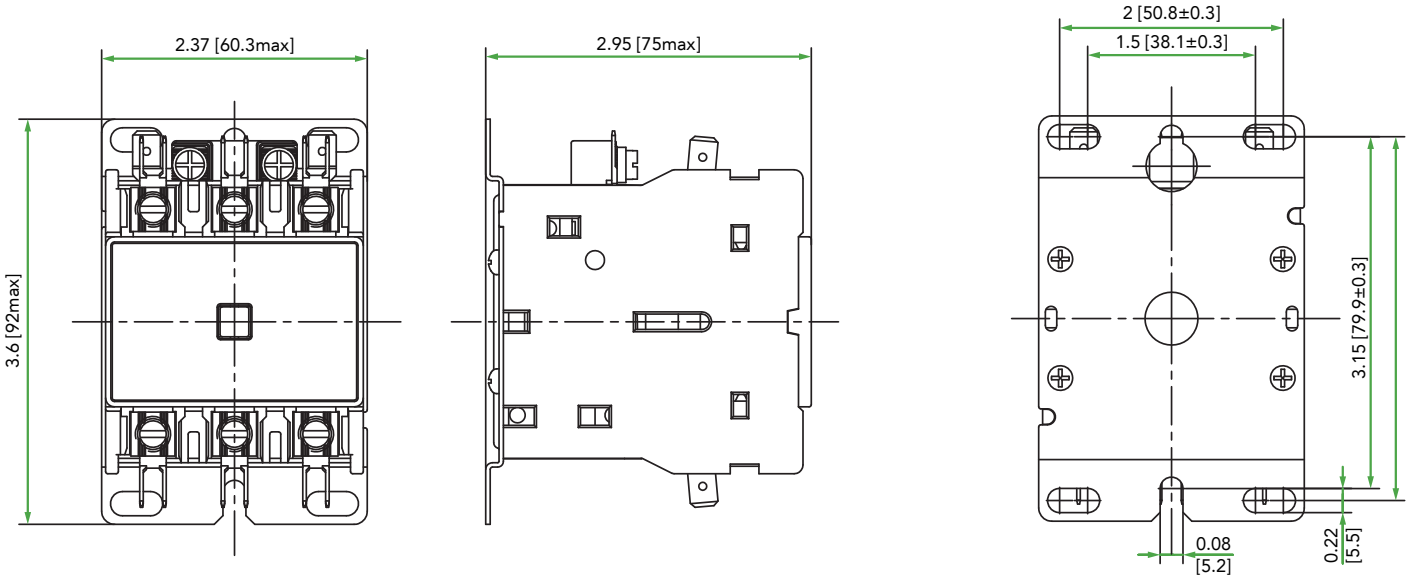
Definite Purpose Contactors

Ex9CKT Dimensions 20~40

Ex9CKT20~40

3 Pole

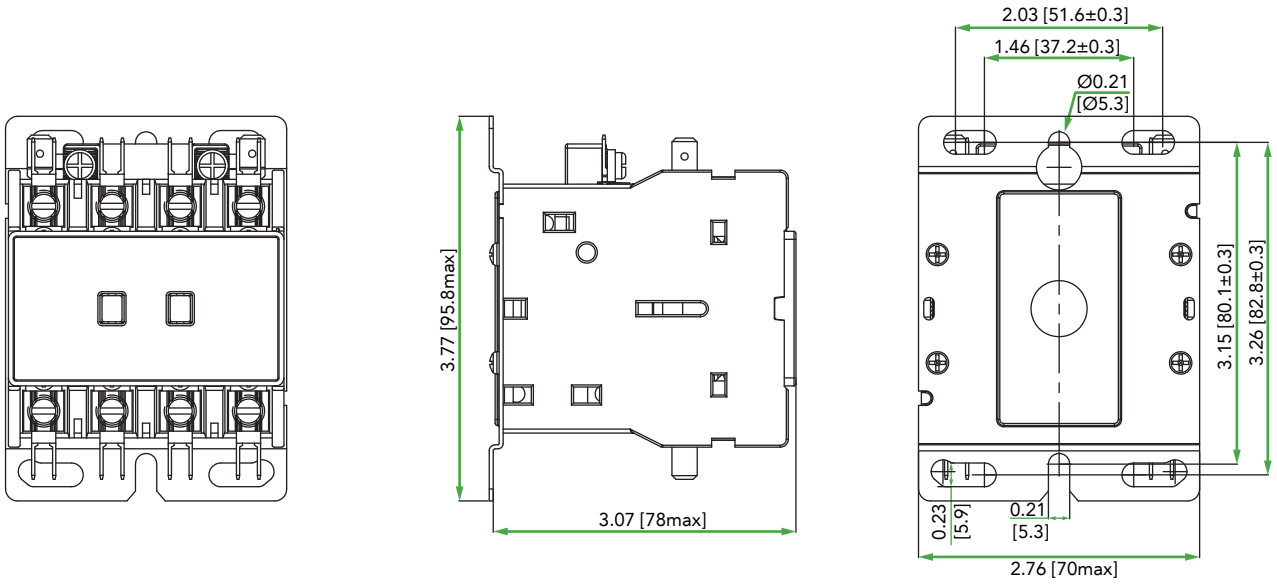
Unit: in. [mm]



Ex9CKT20~40

4 Pole

Unit: in. [mm]



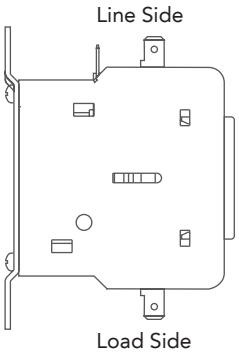
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Definite Purpose Contactors

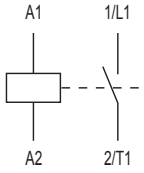
Ex9CKT Wiring Diagram

Wiring Diagram

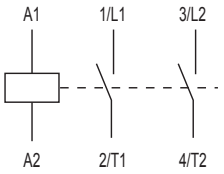
Ex9CKT20~40



Ex9CKT20~40

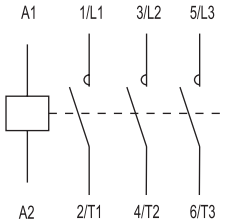


Ex9CKT... 1P 1NO+1Shunt

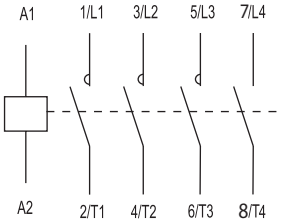


Ex9CKT... 2P 2NO

Ex9CKT20~40



3P 3NO



4P 4NO

NOTE: Ex9CKT shares accessories with the Ex9CK. See pages E155 - E156.

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MANUAL MOTOR STARTERS



Ex9S32

Features

Ex9S32 Manual Motor Starter provide manual isolation, manual motor control, and overcurrent protection. Ex9S32 Manual Motor Starters are electro-mechanical devices combining the functions below in one unit.

- Disconnect for Motor Branch Circuit
- Manual Motor Control
- Branch-Circuit Short Circuit Protection (Magnetic Protection)
- Overload Protection (Thermal Protection) - Trip Class 10
- Switching (Manual)

In North American Electrical Codes require an individual Motor Branch Circuit be protected by a UL/CSA Listed Fuse, Circuit breaker or Self-Protected Combination Motor Controller.

Available as:

- Up to 32A @600Vac
- Type E and F combinations
- Built-in fault indication
- Full range of accessories
- Lockable handle

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Manual Motor Starters
NOARK Ex9S32 Series

Certifications

- UL60947-1/UL60947-4-1 listed, file No. E467185
- UL508 listed, file No. E476273
- IEC/EN 60947-2/-4-1
- CCC Certified

Standards Compliance

- IEC/EN 60947-1, -2, -4-1, -5-1
- UL 508
- UL 60947-1; -4-1
- UL 489
- GB 14048.2
- GB 14048.4

2020 NOARK Electric

Label



1. Brand
2. Adjustable Current Range
3. Rotary Handle with Padlock
4. Test Button
5. Product Selection
6. Rated Current

Product Selection Guide

Ex9S	32	A	25A
NOARK Manual Motor Starter	Frame Sizes	Operation Type	Setting Current
	32: Up to 32A	A: Rotary Operation	0.16A: 0.1-0.16A 0.25A: 0.16-0.25A 0.4A: 0.25-0.4A 0.63A: 0.4-0.63A 1A: 0.63-1A 1.6A: 1-1.6A 2.5A: 1.6-2.5A 4A: 2.5-4A 6.3A: 4-6.3A 10A: 6-10A 14A: 9-14A 18A: 13-18A 23A: 17-23A 25A: 20-25A 32A: 24-32A

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Manual Motor Starters

Ex9S32 Specifications



Certifications

IEC/EN 60947-4-1

CE cULus LISTED

32 A

Rated Current Amp (Min-Max)	Rotary Handle	
	Product	Part Number
0.10~0.16	Ex9S32A0.16A	1600046
0.16~0.25	Ex9S32A0.25A	1600047
0.25~0.40	Ex9S32A0.4A	1600048
0.40~0.63	Ex9S32A0.63A	1600049
0.63~1	Ex9S32A1A	1600050
1~1.6	Ex9S32A1.6A	1600051
1.6~2.5	Ex9S32A2.5A	1600052
2.5~4	Ex9S32A4A	1600053

32 A

Rated Current Amp (Min-Max)	Rotary Handle	
	Product	Part Number
4~6.3	Ex9S32A6.3A	1600054
6~10	Ex9S32A10A	1600055
9~14	Ex9S32A14A	1600056
13~18	Ex9S32A18A	1600057
17~23	Ex9S32A23A	1600058
20~25	Ex9S32A25A	1600059
24~32	Ex9S32A32A	1600060

Technical Data

(Table 1)

Description		Ex9S32
Rated operational current I_e (A)		32A
Conventional rated thermal current Ith (A)		0.16~32A
Tripping Class		10
Rated insulation voltage U_i (Vac)		690/IEC; 600/UL, CSA
Rated operational voltage U_e (AC)		230/240, 400/415, 460/480, 575/600
Rated impulse withstand voltage U_{imp} (AC)		6000V
Rated Operational Frequency (Hz)		50/60Hz
Resistance to shock		30 gn -11 ms
Resistance to vibrations		5gn (5 -150Hz)
Enviornmental Temperature	Transportation or Storage	-76 to 176°F (-60 to 80°C)[1]
	Working at	-4 to 158°F (-20 to 70°C)[2]
	Testing at	23 to 104°F (-5 to 40°C)
Altitude ft (m)		Not to exceed 6,562 (2,000)
Ambient Conditions		At mounting site, relative humidity not exceed 90% at the max testing temperature 104°F (40°C), higher relative humidity is allowable under lower temperature
Pollution Grade		III
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 30°; The product shall be installed and operated at a place without obvious shake, impact and vibration.
Interrupting Rating Icu		Check Table 3 & 4
Service life* (cycles)	Electrical	100,000*
	Mechanical	100,000*
Duty Class (cycles/hr)		30, max. operating rate
Degree of Protection		IP 20

1: 24 hours max. at the ultimated temperature
2: with temperature reduction factor, table 8
*: close/open operation, and 30 cycles/hr for AC-3 Duty@400/415Vac

Specifications .....G185 to 188 Dimensions.....G189 Accessories.....G190 to 196

2020 NOARK Electric

Manual Motor Starters

Ex9S32 Specifications

(Table 2)

Overload Protection Properties					
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.05	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.25	Heat Status (right after test 1)	t<2h	Tripping	
3	1.50		t<4 min		
4	7.20	Cold Status	4s<t≤10s		

Phase Failure Protection Properties						
Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	t<2h	Tripping	

Temperature Compensation Properties					
Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.0	Cold Status	t≥2h	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)
2	1.25	Heat Status (right after test 1)	t<2h	Tripping	
3	1.05	Cold Status	t≥2h	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)
4	1.3	Heat Status (right after test 1)	t<2h	Tripping	

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Interrupting Capacity

For IEC (Table 3)

Type	400Vac		690Vac	
	Icu kA	**Ics** kA	**Icu** kA	**Ics** kA
0.16A	100	100	100	100
0.25A	100	100	100	100
0.4A	100	100	100	100
0.63A	100	100	100	100
1A	100	100	100	100
1.6A	100	100	100	100
2.5A	100	100	100	4
4A	100	100	6	4
6.3A	100	100	6	4
10A	100	100	6	4
14A	100	100	6	4
18A	50	30	6	4
23A	50	30	6	4
25A	50	30	6	4
32A	50	30	6	4

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Manual Motor Starters
Ex9S32 Specifications

Interrupting Capacity continued

For UL (Table 4)

Type	Short-Circuit Rating 240/ 480Vac kA	Manual motor controllers for motor disconnect 600 Vac kA	Max. Horsepower Rating 1PH 110/120Vac	1PH 230/240Vac	3PH 200/208Vac	3PH 230/240Vac	3PH 460/480Vac	3PH 575/600Vac
0.16A	65	5	-	-	-	-	-	-
0.25A	65	5	-	-	-	-	-	-
0.4A	65	5	-	-	-	-	-	-
0.63A	65	5	-	-	-	-	-	-
1A	65	5	-	-	-	-	-	1/2
1.6A	65	5	-	1/10	-	-	3/4	3/4
2.5A	65	5	-	1/6	1/2	1/2	1	1.5
4A	65	5	1/8	1/3	3/4	3/4	2	3
6.3A	65	5	1/4	1/2	1	1.5	3	5
10A	65	5	1/2	1.5	2	3	5	7.5
14A	65	5	3/4	2	3	3	10	10
18A	42	5	1	3	5	5	10	15
23A	42	5	1.5	3	5	7.5	15	20
25A	42	5	2	-	-	7.5	15	20
32A	42	5	2	5	7.5	10	20	25

Short-Circuit Current Rating

Type E: Self-Protected Combination Motor Controller (with AL5111 and CCT51/CCE51) (Table 5)

Manual self-protected starter	Overload Trip Range	Max. HP Rating 1PH 110/120Vac	1PH 230/240Vac	3PH 200/208Vac	3PH 230/240Vac	3PH 460/480Vac	3PH 575/600Vac	SCCR (kA) 240/480V	SCCR (kA) 600V
Ex9S32A 0.16A	0.1 - 0.16A	-	-	-	-	-	-	65	10
Ex9S32A 0.25A	0.16- 0.25A	-	-	-	-	-	-	65	10
Ex9S32A 0.4A	0.25 - 4A	-	-	-	-	-	-	65	10
Ex9S32A 0.63A	0.4 - 0.63A	-	-	-	-	-	-	65	10
Ex9S32A 1A	0.63 - 1A	-	-	-	-	-	1/2	65	10
Ex9S32A 1.6A	1 - 1.6A	-	1/10	-	-	3/4	3/4	65	10
Ex9S32A 2.5A	1.6 - 2.5A	-	1/6	1/2	1/2	1	1.5	65	10
Ex9S32A 4A	2.5 - 4A	1/8	1/3	3/4	3/4	2	3	65	10
Ex9S32A 6.3A	4 - 6.3A	1/4	1/2	1	1.5	3	5	65	10
Ex9S32A 10A	6 - 10A	1/2	1.5	2	3	5	7.5	65	10
Ex9S32A14A	9 - 14A	3/4	2	3	3	10	10	65	10
Ex9S32A18A	13 - 18A	1	3	5	5	10	-	42	-
Ex9S32A23A	17 - 23A	1.5	3	5	7.5	15	-	42	-
Ex9S32A25A	20 - 25A	2	-	-	7.5	15	-	42	-
Ex9S32A32A	24 - 32A	2	5	7.5	10	20	-	42	-

2020 NOARK Electric

Manual Motor Starters
Ex9S32 Specifications

Short-Circuit Current Rating Continued

Type F: Manual Self-Protected Combination Motor Controller (Table 6)

Manual Self-Protected Starter	Associated Cable, AWG 75°C, Cu	Type of Contactor Required	Overload Trip Range(A)	Standard Motor Ratings@50/60						SCCR (kA)			Combination Block	Mounting Bracket
				1 PH		3 PH				240V	480Y/ 277V	600Y/ 347V		
				110/120V	230/240V	200/208V	230/240V	460/480V	575/600V					
Ex9S32A0.16A	14	Ex9CS12/ Ex9C12	0.1-0.16	-	-	-	-	-	-	65		10	CC51/CC52	-/DRA51
Ex9S32A0.25A			0.16-0.25	-	-	-	-	-	-					
Ex9S32A0.4A			0.25-0.4	-	-	-	-	-	-					
Ex9S32A0.63A			0.4-.63	-	-	-	-	-	-					
Ex9S32A1A			0.63-1	-	-	-	-	-	1/2					
Ex9S32A1.6A			1-1.6	-	1/10	-	-	3/4	3/4					
Ex9S32A2.5A			1.6-2.5	-	1/6	1/2	1/2	1	1.5					
Ex9S32A4A			2.5-4	1/8	1/3	3/4	3/4	2	3					
Ex9S32A6.3A			4-6.3	1/4	1/2	1	1.5	3	5					
Ex9S32A10A			6-10	1/2	1.5	2	3	5	7.5					
Ex9S32A14A	12	Ex9C18	9-14	3/4	2	3	3	10	10				CC52	DRA51
Ex9S32A18A		Ex9C25	13-18	1	3	5	5	10	-	42		-	CC53	
Ex9S32A23A	10		17-23	1.5	3	5	7.5	15	-					
Ex9S32A25A		Ex9C38	20-25	2	-	-	7.5	15	-					
Ex9S32A32A	8		24-32	2	5	7.5	10	20	-					

Thermal Settings And Magnetic Trip Current*

***Rated supply current Ambient Temperature at 40°C (Table 7)**

Ex9S Heater Designation	Thermal Setting (A)		Magnetic Trip Rating (A)
	Minimum	Maximum	
0.16A	0.1	0.16	2.1
0.25	.16	0.25	3.2
0.4A	0.25	4	4.8
0.63A	0.4	0.63	7.2
1A	0.63	1	11
1.6A	1	1.6	20
2.5A	1.6	2.5	30
4A	2.5	4	50

Ex9S Heater Designation	Thermal Setting (A)		Magnetic Trip Rating (A)
	Minimum	Maximum	
6.3A	4	6.3	72.5
10A	6	10	130
14A	9	14	175
18A	13	18	230
23A	17	23	280
25A	20	25	280
32A	24	32	416

Rated supply current (Ith) at Ambient Temperature: Check Ex9S32 Temperature Reduction Factor table

Temperature Reduction Factor

For Ex9S32 (Table 8)

Device	-20°(-4°F)		-5°(23°F)		40°(104°F)		60°(140°F)		70°(158°F)	
	single	group	single	group	single	group	single	group	single	group
Ex9S32A0.16A						1.00	1.00	0.98		
Ex9S32A0.25A						0.99	0.98	0.97		
Ex9S32A0.4A						0.96	0.96	0.93		
Ex9S32A0.63A						0.97	0.96	0.94	0.90	0.85
Ex9S32A1A						0.96	0.94	0.91		
Ex9S32A1.6A						0.96	0.96	0.93		
Ex9S32A2.5A						1.00	1.00	0.99		
Ex9S32A4A			1.00			0.98	0.98	0.96		
Ex9S32A6.3A						0.98	0.96	0.95		
Ex9S32A10A						0.94	0.95	0.91	0.88	0.83
Ex9S32A14A						0.92	0.95	0.90		
Ex9S32A18A						0.93	0.92	0.90		
Ex9S32A23A						0.96	0.93	0.90	0.85	0.80
Ex9S32A25A						0.96	0.93	0.90		
Ex9S32A32A						0.91	0.92	0.87		

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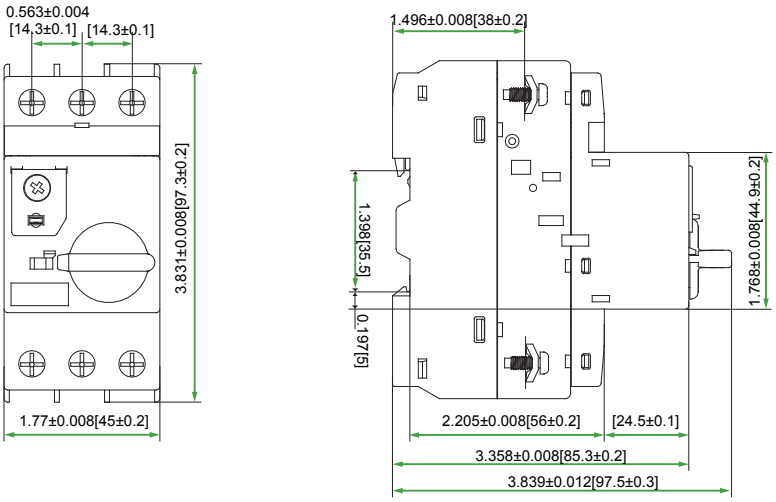
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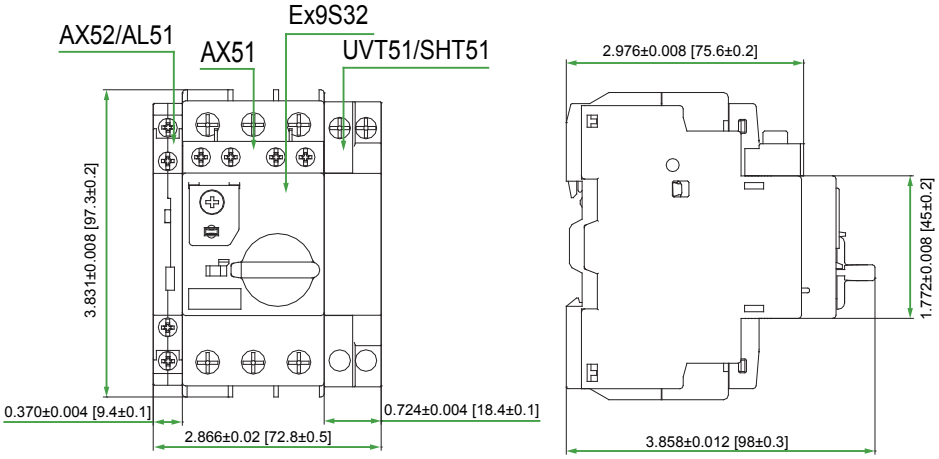
Manual Motor Starters

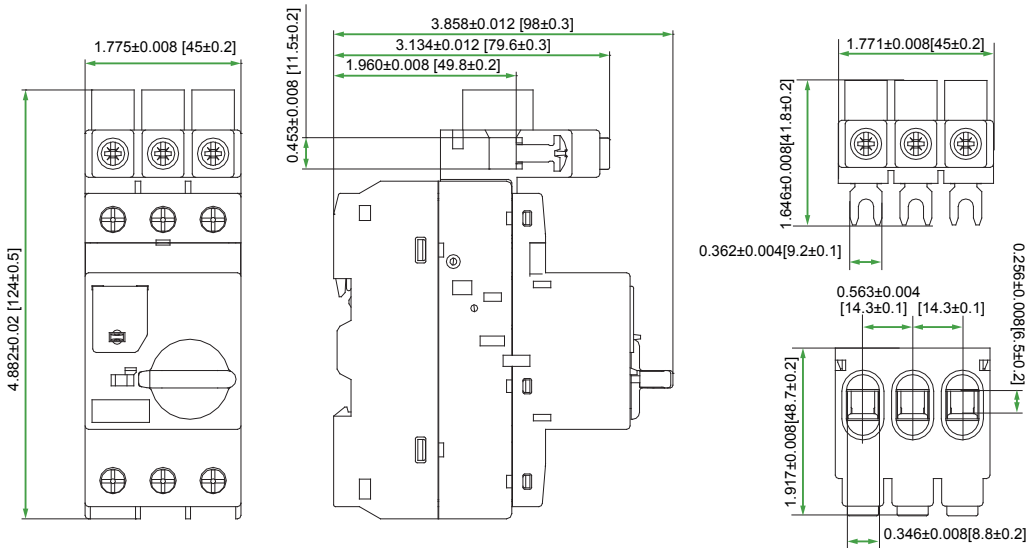
Ex9S32 Dimensions

Ex9S32

Unit: in. [mm]







2020 NOARK Electric

Manual Motor Starters

Ex9S32 Accessories Selection Guide

Selection

AX51	A	G
Description	**Auxiliary Contact**	**Rated Voltage**
AX51: Auxiliary contact (front mount only) AX52: Auxiliary contact (left side only) AL51: Fault Signaling Contact (left side only) UVT51: Undervoltage release (right side only) SHT51: Shunt release (right side only) CCT51: Terminal Block	11: 1NO+1NC (AX51,AX52,AL51) 20: 2NO (AX51,AX52) 02: 2NC (AX52)	A: 100~130V 50/60Hz(SHT51) 110~120V 60Hz(UVT51) B: 190~330V 50/60Hz(SHT51) 110~120V 50Hz & 127V 60Hz(UVT51) C:330~440V 50/60Hz(SHT51) 208V 60Hz(UVT51) D: 480~500V 50/60Hz(SHT51) 240V 60Hz(UVT51)" E: 575~600V 50/60Hz(SHT51) 480V 60Hz(UVT51) F: 600V 60Hz(UVT51) G: 220~240V 50Hz(UVT51) H: 380~415V 50Hz(UVT51)

CC	51
Description	**Type**
Combination Block	51:Ex9CS 12A
	52: Ex9C 9-18A
	53: Ex9C 25-38A

DRA	51
Description	**Type**
Mounting Bracket	51: for mounting Ex9S32 with Ex9C 9-38A

ERH	51	B
Description	**Type**	**Color of Handle**
Extended Rotary Handle	51: for Ex9S32	B: Black/Gray
		Y: Yellow/Red

WPB	51	B
Description	**Type**	**Color of Handle**
Waterproof Enclosure	51: with rotary handle	B: Black/Gray
		Y: Yellow/Red

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Manual Motor Starters

Ex9S32 Accessories: Specifications

Auxiliary Contact Blocks

Description	Mounting Location	Max. No. of Blocks	Contact Type	SKU
Instantaneous auxiliary contacts	Front	1	NO+NC	AX5111
			NO+NO	AX5120
	Left Side	2	NO+NC	AX5211
			NO+NO	AX5220
			NC+NC	AX5202
Fault Signaling Contact		1	NO+NC	AL5111

AX51



AX52



AL51



Electrical Trip Unit

Description	Mounting Location	Voltage	Hz	SKU
Undervoltage Release	Right Side	110-120V	60	UVT51A
		127V	60	UVT51B
		110-120V	50	UVT51B
		208V	60	UVT51C
		240V	60	UVT51D
		480V	60	UVT51E
		600V	60	UVT51F
		220-240V	50	UVT51G
		380-415V	50	UVT51H
Shunt Release	Right Side	100-130V	50/60	SHT51A
		190-330V	50/60	SHT51B
		330-440V	50/60	SHT51C
		480-500V	50/60	SHT51D
		575-600V	50/60	SHT51E

UVT51



SHT51



Terminal Block

Description	Mounting Location	Pole	SKU
Large spacing, UL 508 Type E	Line-in Side	3	CCT51

CCT51



BBUM 4



Busbars

Description	No. of Ex9S32 Starter	No. of Side-Mounted Aux Contact on each Ex9S32 starter	Busbar Pitch (mm)	SKU
Sets of 3-pole, 63A Busbar	2	None	45	BBUM 245
		1 of AX52, AL51	54	BBUM 254
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 263
	3	None	45	BBUM 345
		1 of AX52, AL51	54	BBUM 354
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 363
	4	None	45	BBUM 445
		1 of AX52, AL51	54	BBUM 454
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 463
	5	None	45	BBUM 545
		1 of AX52, AL51	54	BBUM 554
		2 of AX52 or 1 UVT51, SHT51	63	BBUM 563

DRA51



Ex9S32 + CC53 + Ex9C32 + DRA51



CCE51



Wiring Accessories

Description	Application	SKU
Input Terminal for CBB51 Busbar	Terminal block for power supply to one or more CBB51 bus bar	FD51
Protective end cover	For unused busbar outlets	PC51
Terminal Cover	Terminal cover for Ex9S32 for use in type E application	CCE51

Mounting Accessories

Description	Application	SKU
Combination Block	Between Ex9S32 and Ex9C Mini Type Contactor, 09-12A	CC51
	Between Ex9S32 and Ex9C Standard Type Contactor, 09-18A	CC52
	Between Ex9S32 and Ex9C Standard Type Contactor, 25-38A	CC53
Mounting Bracket	For mounting a Ex9S32 to a Ex9C Standard Type Contactor, 09-38A	DRA51

CC51



CC52



CC53



Enclosures

Description	Type	Color	Rating	SKU
Waterproof Enclosure; Ex9S32 Protectors	Operation by rotary handle	Black/ Gray	NEMA 4X/4, IP 65	WPB51B
		Yellow/ Red		WPB51Y

WPB51B



WPB51Y



Operation Handle

The extended rotary handle makes it possible for a door-mounted rotary handle to operate starter installed on the inside back panel of an enclosure. The extended rotary handle consists of the following:

- a set of screws onto the handle of the starter
- an assembly (handle and front plate) that fits on the enclosure door
- an extension shaft which must be adjusted according to the distance between the mounting surface and the door: 9 inch (230 mm)
- a bracket that install with starter and the shaft through

Description	Type	Color	Rating	SKU
Extended Rotary Handle	9 inch (230mm) shaft, with bracket	Black/ Gray	NEMA 4X/4, IP65	ERH51B
		Yellow/ Red		ERH51Y

ERH51B



2020 NOARK Electric

Manual Motor Starters

Ex9S32 Accessories: Specifications

Technical Data

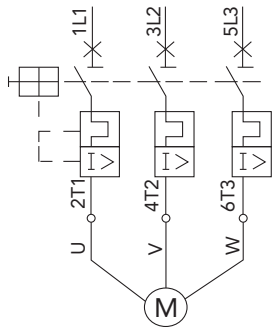
	Auxiliary contacts - AX51	Auxiliary contacts - AX52	Auxiliary contacts - AL51
Rated operational voltage Ue	300V	600V	600V
Rated frequency	50/60Hz	50/60Hz	50/60Hz
Rated impulse withstand voltage Uimp	2500V	6000V	6000V
Conventional rated thermal current (Ith)"	2.5A	5A	5A
Mechanical life (C-O operations)	100000	100000	100000
Electrical life (C-O operations) (for AC-3 duty)	AC-15 : 10,000	AC-15 : 10,000	AC-14 : 1000

Terminal Wiring

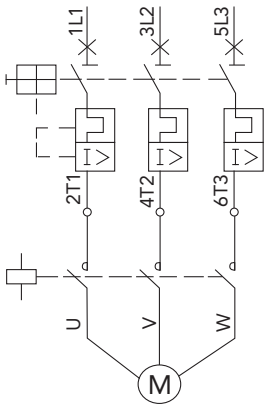
Ex9S32 Main Terminal	**Screw Type**	**M4, Phil-Slot head**
	Pull wire length inch (mm)	0.4 (10)
	Wire range AWG	(1)x14-(2)x8
	Torques in-lb (N.m)	1.85 (2.5)

Model	Wire Ranges(AWG)	Torques in-lb (N.m)	Screw Type	
AX51	(1)x18-(2)x12	0.59 (0.8)	M3	Phil-Slot Head
AX52	(1)x18-(2)x12	0.59 (0.8)	M3	
AL51	(1)x18-(2)x12	0.59 (0.8)	M3	
UVT51	(1)x18-(2)x12	1.254 (1.7)	M3.5	
SHT51	(1)x18-(2)x12	1.254 (1.7)	M3.5	
CCT51	(1)x14-(1)x6	1.844 (3.5)	M5	

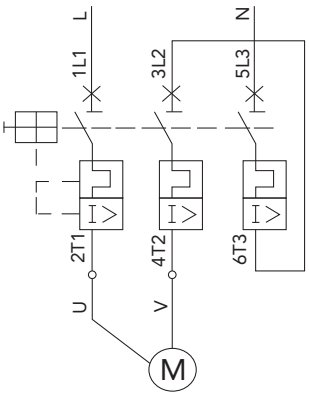
Electrical Diagram



Operating principle diagram of starter



Principle connection diagram of starter and contractor



Principle connection diagram of single-phase or DC Motor

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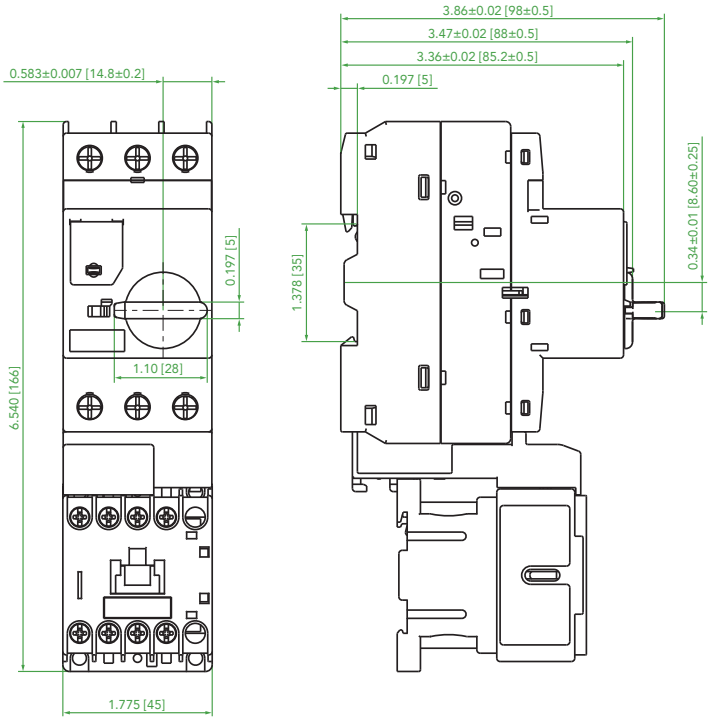
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Manual Motor Starters

Ex9S32 Accessory Dimensions

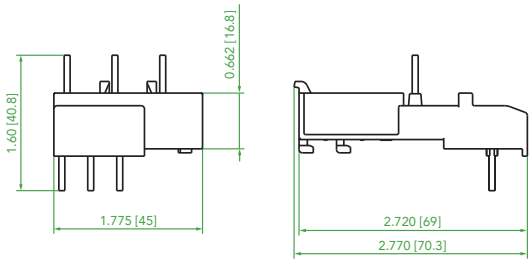
Ex9S32 + CC51 + Ex9CS06, 09, 12

Unit: in [mm]



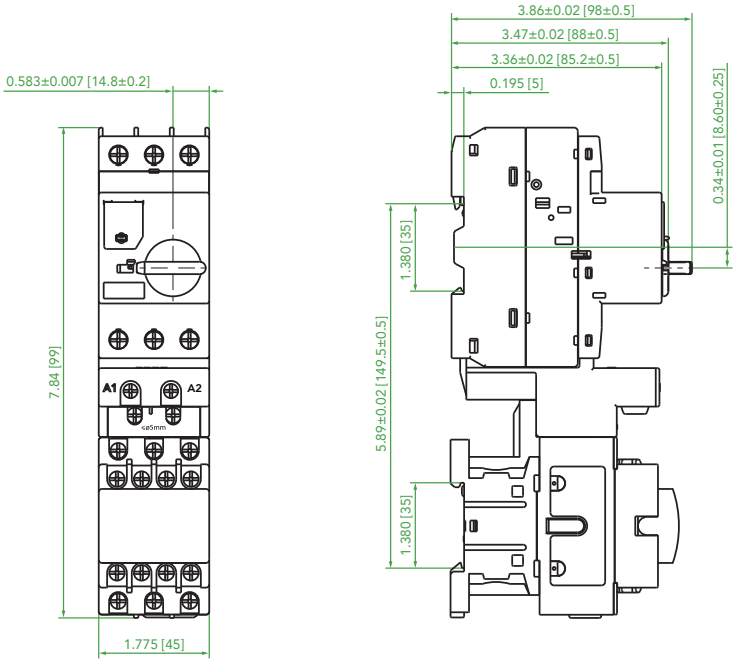
CC51

Unit: in [mm]



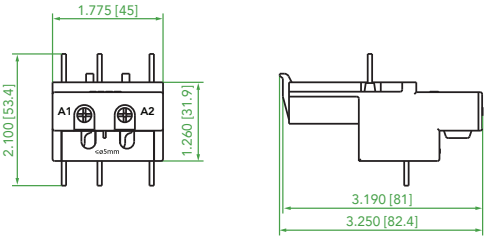
Ex9S32 + CC52 + Ex9C09, 12 18

Unit: in [mm]



CC52

Unit: in [mm]

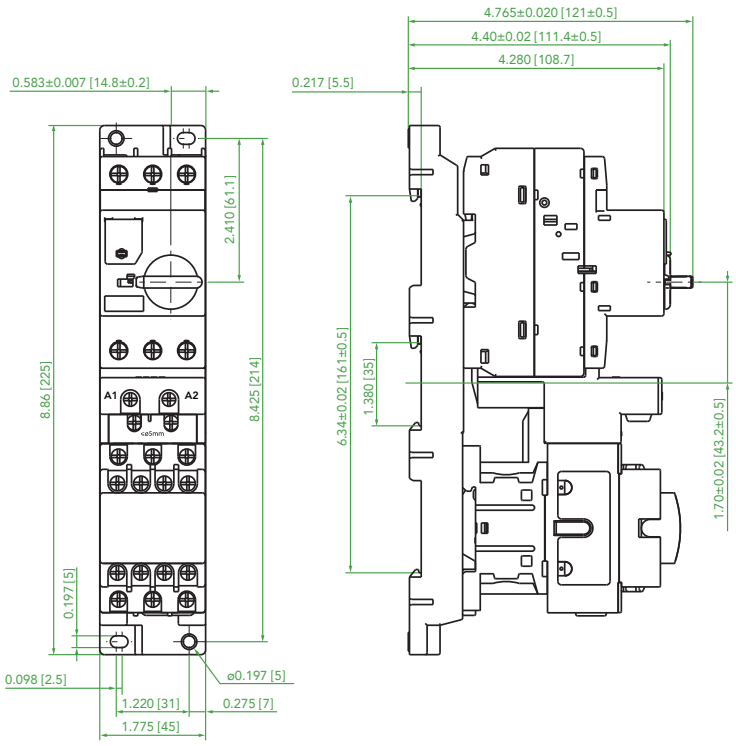


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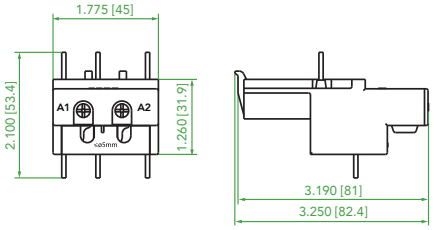
Manual Motor Starters

Ex9S32 Accessory Dimensions

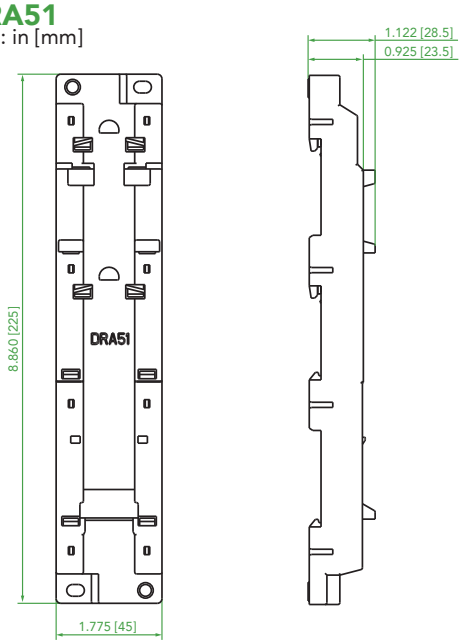
Ex9S32 + CC52 + Ex9C09, 12, 18 + DRA51
Unit: in [mm]



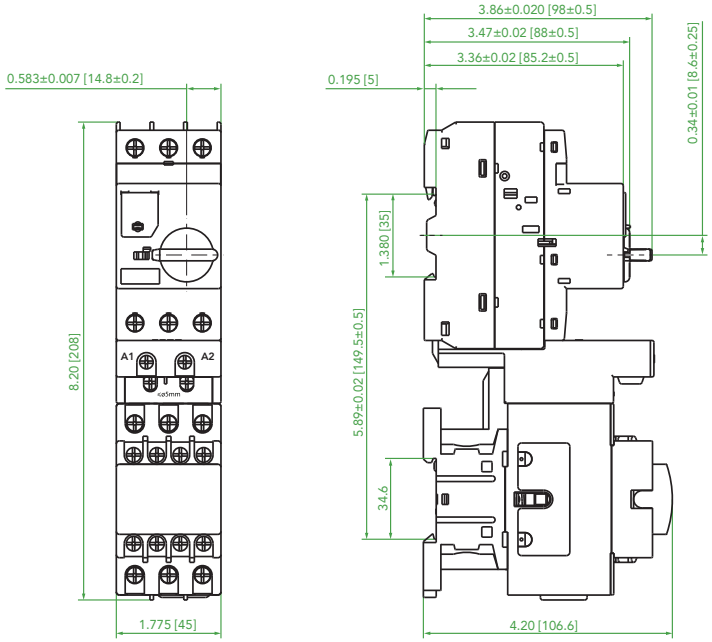
CC52
Unit: in [mm]



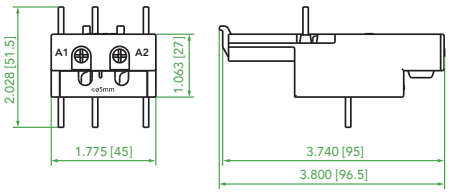
DRA51
Unit: in [mm]



Ex9S32 + CC53 + Ex9C25, 32, 38
Unit: in [mm]



CC53
Unit: in [mm]



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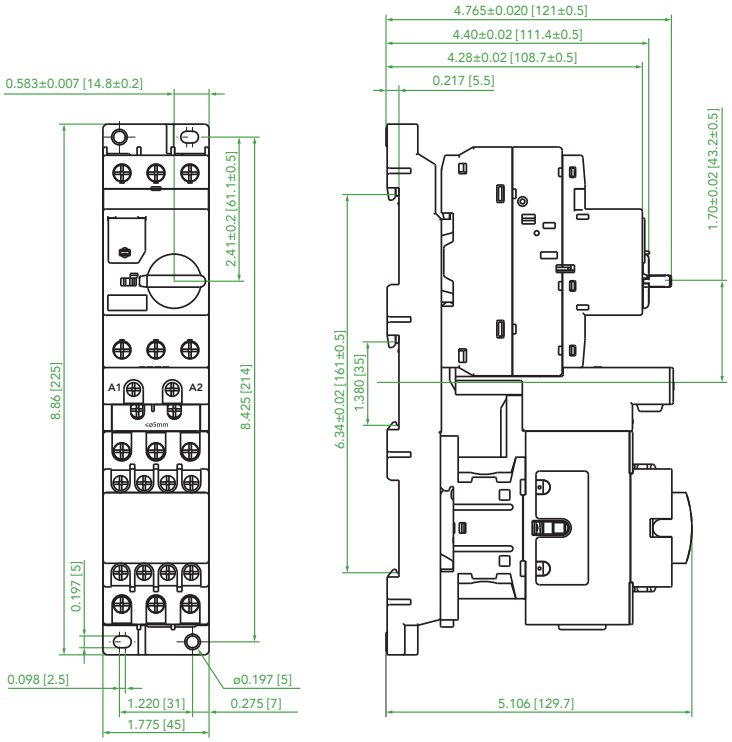
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Manual Motor Starters

Ex9S32 Accessory Dimensions

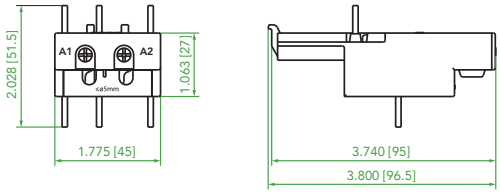
Ex9S32 + CC53 + Ex9C25, 32, 38 + DRA51

Unit: in [mm]



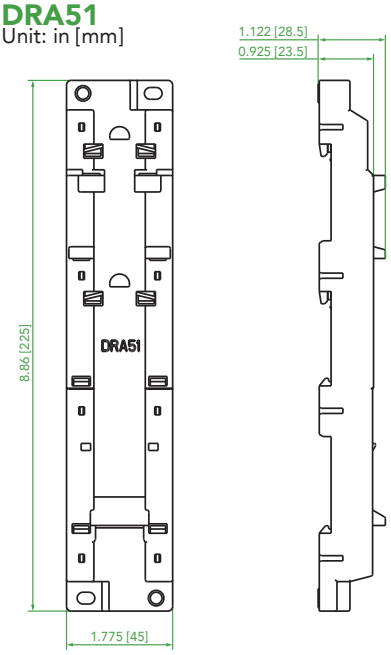
CC53

Unit: in [mm]



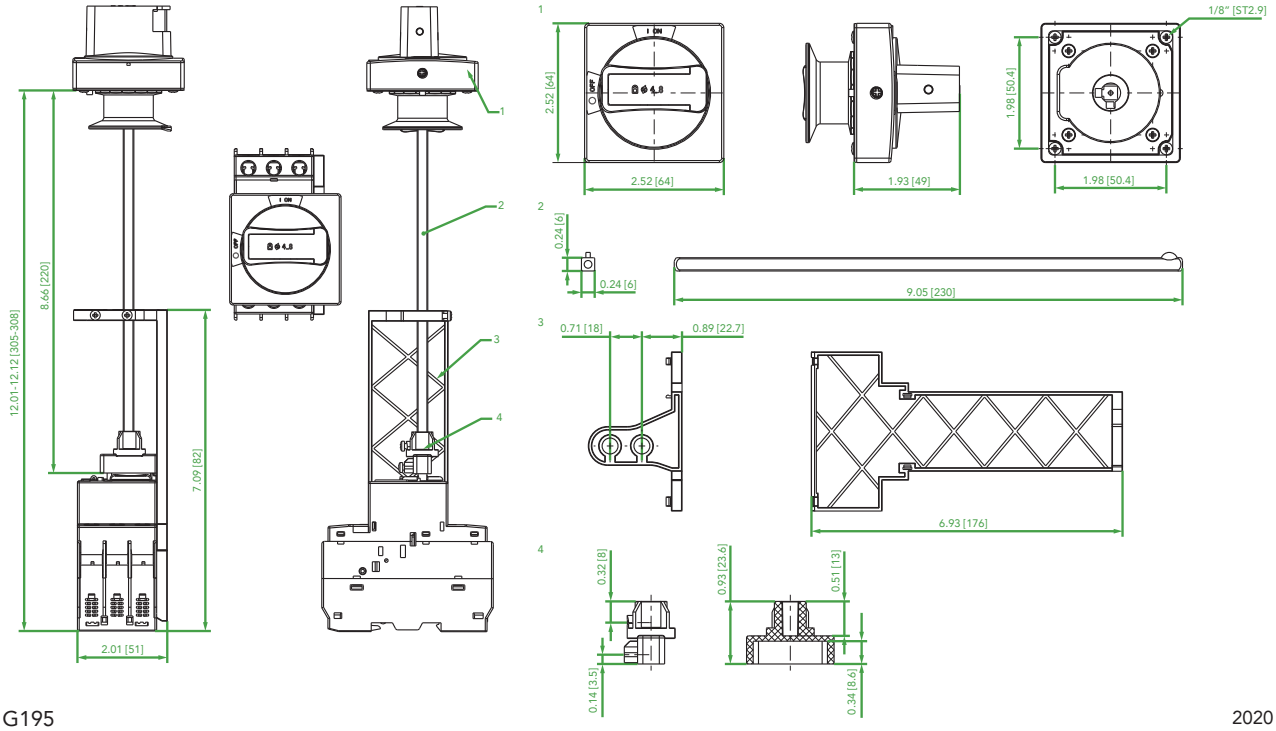
DRA51

Unit: in [mm]



ERH51

Unit: in [mm]

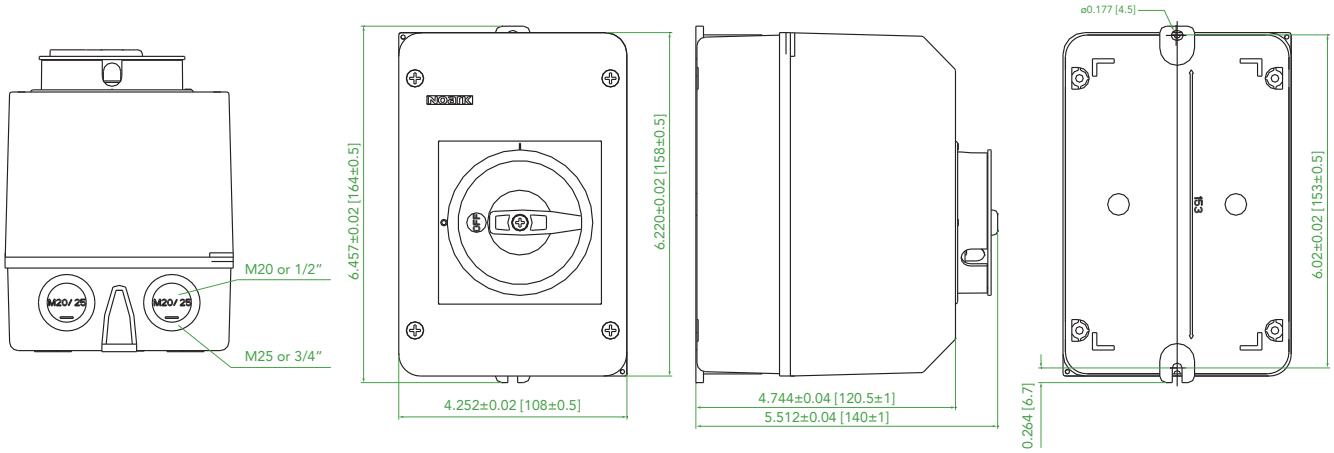


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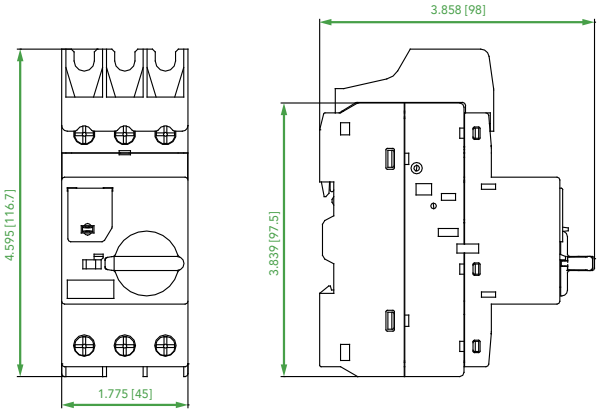
Manual Motor Starters

Ex9S32 Accessory Dimensions

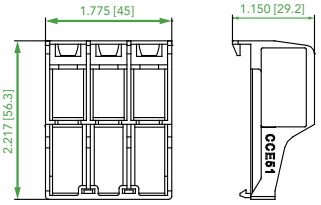
WPB51
Unit: in [mm]



Ex9S32 + CCE51
Unit: in [mm]



CCE51
Unit: in [mm]



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MANUAL MOTOR STARTERS



Ex9SN

Features

Manual motor starters are electromechanical protection devices for the main circuit. They are used mainly to switch motors manually ON/OFF and protect them fuse less against short circuit and loss-phase. None-fuss protection with a manual motor starter saves costs, space and ensures a quick reaction under short-circuit condition, by switching off the motor within milliseconds. Manual motor starter combinations are setup together with contactors and overload relays.

- Available with enclosed coils for protection against particle contamination
- Short-circuit protection
- Disconnect function
  - Overload protection
  - Loss-phase protection
- Suitable for three and single-phase application
- Trip-free mechanism
- Clear switch position indication ON/OFF/TRIP
- Lockable handle

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Manual Motor Starters

Ex9SN National and International Standards

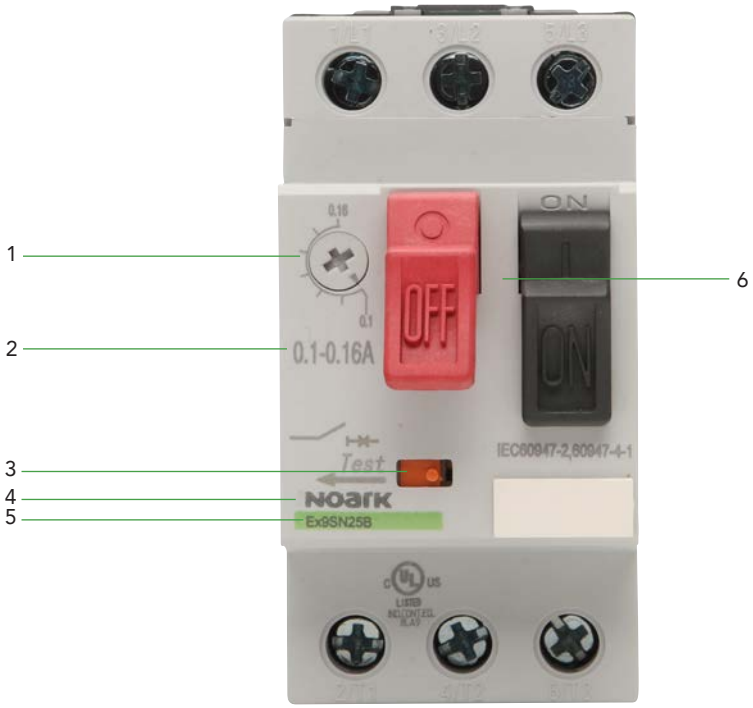
Certifications

- UL 508 Listed, File Number E467185, UL 60947-1 and 60947-4-1
- Certified for Canada according to CSA standards 22.2 No. 14
- IEC/EN 60947-2 and 60947-4-1
- CE Approved
- RoHS Compliant

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Manual Motor Starters
Ex9SN Product Selection Guide

Label



1. Adjustable Current Range
2. Rated Current
3. Test Button
4. Brand
5. Product Selection
6. OFF/ON Push Buttons or Rotary Handle with Padlock

H

Product Selection Guide

Ex9SN	25	A	0.16A
NOARK Ex9SN Series	Frame Size	Style	Rated Current
	25: 25 A	A: Rotary Handle	0.16A: 0.10~0.16 A 0.25A: 0.16~0.25 A 0.4A: 0.25~0.40 A 0.63A: 0.40~0.63 A 1A: 0.63~1 A 1.6A: 1~1.6 A 2.5A: 1.6~2.5 A 4A: 2.5~4 A 6.3A: 4~6.3 A 10A: 6~10 A 14A: 9~14 A 18A: 13~18 A 23A: 17~23 A 25A: 20~25 A
		B: Pushbutton	

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Manual Motor Starters

Ex9SN 25 A

Certifications

IEC/EN 60947-4-1





25 A

Rated Current Amp (Min-Max)	Rotary Handle		Pushbutton	
	Product	Part Number	Product	Part Number
0.10~0.16	Ex9SN25A0.16A	1600001	Ex9SN25B0.16A	1600015
0.16~0.25	Ex9SN25A0.25A	1600002	Ex9SN25B0.25A	1600016
0.25~0.40	Ex9SN25A0.4A	1600003	Ex9SN25B0.4A	1600017
0.40~0.63	Ex9SN25A0.63A	1600004	Ex9SN25B0.63A	1600018
0.63~1	Ex9SN25A1A	1600005	Ex9SN25B1A	1600019
1~1.6	Ex9SN25A1.6A	1600006	Ex9SN25B1.6A	1600020
1.6~2.5	Ex9SN25A2.5A	1600007	Ex9SN25B2.5A	1600021
2.5~4	Ex9SN25A4A	1600008	Ex9SN25B4A	1600022
4~6.3	Ex9SN25A6.3A	1600009	Ex9SN25B6.3A	1600023
6~10	Ex9SN25A10A	1600010	Ex9SN25B10A	1600024
9~14	Ex9SN25A14A	1600011	Ex9SN25B14A	1600025
13~18	Ex9SN25A18A	1600012	Ex9SN25B18A	1600026
17~23	Ex9SN25A23A	1600013	Ex9SN25B23A	1600027
20~25	Ex9SN25A25A	1600014	Ex9SN25B25A	1600028

Specifications .....H202 to 203
Dimensions.....H204
Wiring Diagram.....H205
Accessories.....H206 to 211

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Manual Motor Starters

Ex9SN Specifications

Operating Conditions

Tripping Class		Class 10 A
Environmental Temperature	Transportation or Storage	-76 to 176 °F (-60 to +80 °C)
	Working at	-4 to 131 °F (-20 to +55 °C)
	Testing at	23 to 104 °F (-5 to +40 °C)
Altitude ft (m)		Not to exceed 6,562 (2,000)
Ambient Conditions		At mounting site, relative humidity not exceed 50% at the max temperature of 104 °F (+40 °C), higher relative humidity is allowable under lower temperature
Pollution Grade		Class III
Release Grade		10 A (SN25)
Rated Operational Frequency (Hz)		50/60
Mounting Conditions		The inclination between the mounting plane and the vertical plane shall not exceed 5°. The product shall be installed and operated at a place without obvious shake, impact and vibration.
Rated Insulation Voltage Ui (V)		IEC 690, UL/CSA 600
Rated Operational Voltage Ue (V)		230/240, 400/415, 460/480, 575/600
Rated Impulse Withstand Voltage Uimp (V)		6,000
Interrupting Rating Icu		5 kA
Service Life	Electrical	2,000
	Mechanical	10,000
Degree of Protection		IP 20

Overload Protection Properties

Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.05	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.20	Heat Status (right after test 1)	t<2h	Tripping	
3	1.50		t<2 min		
4	7.20	Cold Status	2s<t≤10s		

Phase Failure Protection Properties

Series Number	Multiple of Setting Current		Initial Status	Time	Expected Results	Ambient Temperature
	Any 2 Phase	The Other Phase				
1	1.0	0.9	Cold Status	t≥2h	Non-Tripping	68°F to ±35.6°F (+20°C to ±2°C)
2	1.15	0	Heat Status (right after test 1)	t<2h	Tripping	

Temperature Compensation Properties

Series Number	Multiple of Setting Current	Initial Status	Time	Expected Results	Ambient Temperature
1	1.0	Cold Status	t≥2h	Non-Tripping	104°F to ±35.6°F (+40°C to ±2°C)
2	1.2	Heat Status (right after test 1)	t<2h	Tripping	
3	1.05	Cold Status	t≥2h	Non-Tripping	-23°F to ±35.6°F (-5°C to ±2°C)
4	1.3	Heat Status (right after test 1)	t<2h	Tripping	

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Manual Motor Starters

Ex9SN Specifications

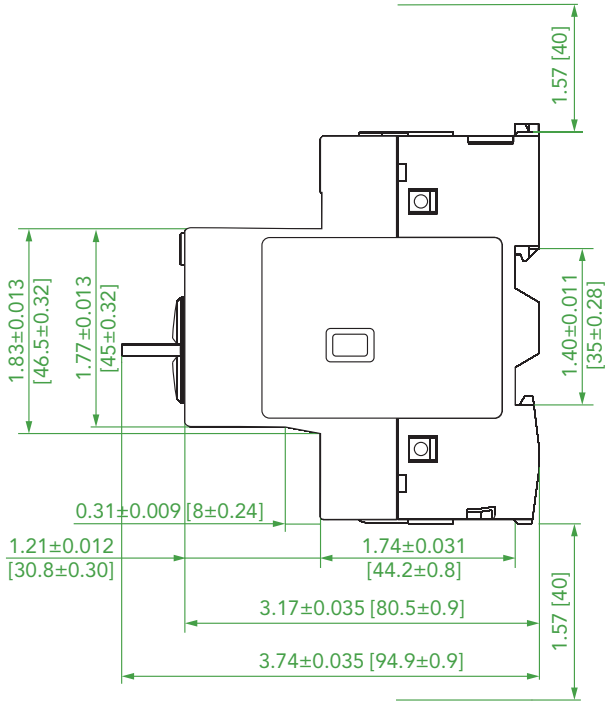
Setting Current Range (A)			0.1~0.16	0.16~0.25	0.25~0.4	0.4~0.63	0.63~1	1~1.6	1.6~2.5	2.5~4	4~6.3	6~10	9~14	13~18	17~23	20~25
Rated Current of Release			0.16	0.25	0.4	0.63	1	1.6	2.5	4	6.3	10	14	18	23	25
UL Ratings																
Single-Phase (HP)	120 Vac		-	-	-	-	-	-	-	1/8	1/4	1/2	3/4	1	1.5	2
	240 Vac							1/10	1/6	1/3	1/2	1.5	2	3		
Three-Phase (HP)	240 Vac							-	1/2	1	1.5	3		10	7.5	
	480 Vac						1/2	3/4	1	2	3	5	10		15	
	600 Vac								1.5	3	5	7.5		15	20	
IEC Ratings																
400/415 Vac	Icu (kA)		100						100			15				
	Ics % Icu											50			40	
690 Vac	Icu (kA)								3							
	Ics % Icu								75							
Rated Ultimate Short-Circuit Breaking Capacity Icu (kA)	230/240 V		100						100		100		100		50	
	400/415 V												15			
	440 V										50	15	8		6	
	480/500 V											10	6		4	
	660/690 V								3							
Rated Service Short-Circuit Breaking Capacity Ics (kA)	230/240 V								100		100		100		50	
	400/415 V												7.5		6	
	440 V										50	15	4		3	
	480/500 V											10	4.5			
	660/690 V								2.25							
Arcing Distance in (mm)			1.57 (40)													
Standard Rated Power of Three-Phase Motor (kW)	230/240 V		-			-	-	-	0.37	0.75	1.1	2.2	3	4	5.5	
	400 V						-	0.37	0.75	1.5	2.2	4	5.5	7.5	11	11
	415 V							-						9		
	440 V						0.37	0.55	1.1		3		7.5			
	500 V							0.75		2.2	3.7	5.5				15
	660/690 V					0.37	0.55	1.1	1.5	3	4	7.5	9	11	15	18.5
Current Setting Value of Instantaneous Electromagnetic Release Ir (A)			1.5	2.4	5	8	13	22.5	33.5	51	78	138	170	223	327	
Current Rating of Fuse-Link of Back-Up Fuse, Which is Only Needed in Case of Icc>Icu (Icc: Prospective Short-Circuit Breaking Current) †: Fuse is not Required	230/240 V	aM A	†						†		†		†		80	
		gI/gG A													100	
	400/415 V	aM A											63		80	
		gI/gG A											80		100	
	440 V	aM A									50				63	
		gI/gG A									63				80	
	500 V	aM A									50					
		gI/gG A									63					
	690 V	aM A							16	25	32		40			
		gI/gG A							20	32	40		50			

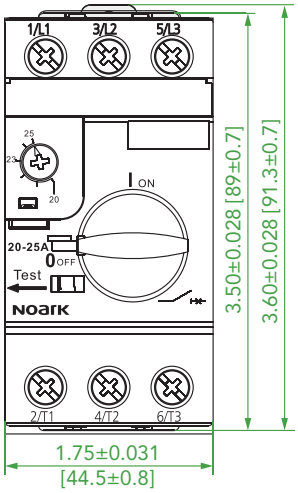
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Manual Motor Starters

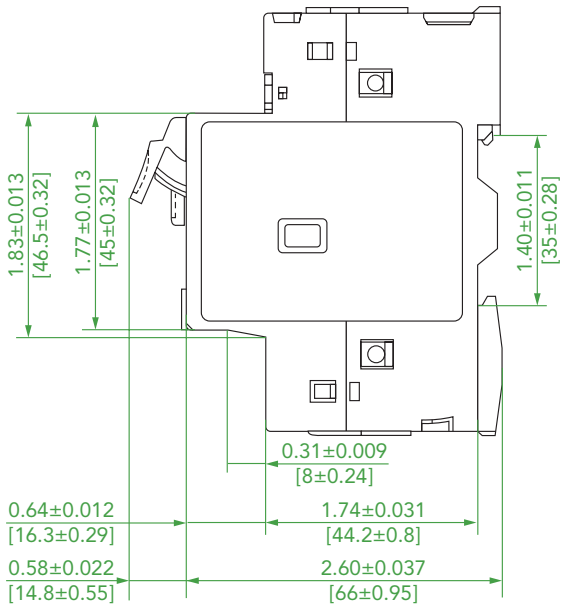
Ex9SN Dimensions

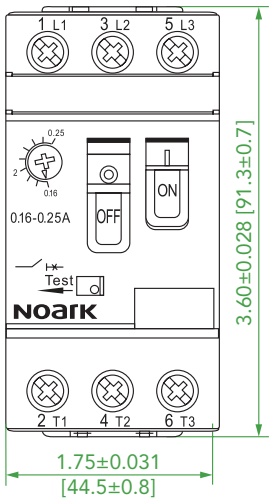
Ex9SN25A
Rotary Handle
Unit: in [mm]





Ex9SN25B
Pushbutton
Unit: in [mm]





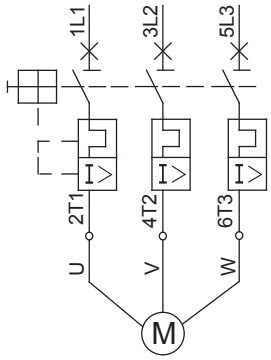
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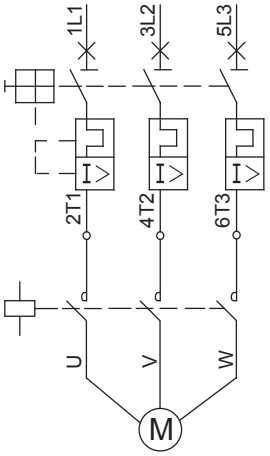
Manual Motor Starters

Ex9SN Wiring Diagrams

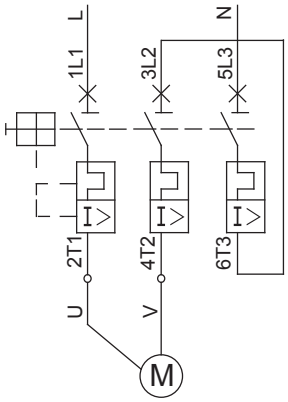
Ex9SN25A/B



Operating principle diagram of starter



Principle connection diagram of starters and contactors



Principle connection diagram of single-phase or DC motor

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Manual Motor Starters

Ex9SN Accessories: Auxiliary Contact and Enclosure



ASNA ASNB



ASNF

ASN	A	11
Description	Type	Auxiliary Contact
Manual Motor Starter Accessory	A: Auxiliary Contact Side Mount	11: 1NO+1NC
	B: Auxiliary Contact Front Mount	20: 2NO
	F: Auxiliary Contact with Fault Signal Contact	1001: 1NO (Fault)+ 1NC (Auxiliary)
		0101: 1NC (Fault)+ 1NC (Auxiliary)
		1010: 1NO (Fault)+ 1NO (Auxiliary)
		0110: 1NC (Fault)+ 1NO (Auxiliary)

Accessory Description	Type	Product	Part Number
Auxiliary Contact	Side Mount	ASNA11	1600030
		ASNA20	1600029
	Front Mount	ASNB11	1600032
		ASNB20	1600031
	Fault Signal Contact	ASNF1001	1600039
		ASNF0101	1600040
		ASNF1010	1600041
		ASNF0110	1600042

Specifications ..... H208 to 209
Dimensions..... H210 to 211



ASNEC1 & ASNEC2

ASN	EA
Description	Type
Manual Motor Starter Accessory	EA: Enclosure with Actuating Diaphragm
	EB: Enclosure with Emergency Stop Pushbutton
	EC1: Enclosure with Rotary Handle (Black/Gray)
	EC2: Enclosure with Rotary Handle (Red./Yellow)



ASNEA



ASNEB

Specifications ..... H208 to 209
Dimensions..... H210 to 211

Accessory Description	Product	Part Number
Enclosure	ASNEA	1600043
	ASNEB	1600044
	ASNEC1	1600045
	ASNEC2	1600081

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Manual Motor Starters

Ex9SN Accessories: Shunt Trip and Under-Voltage Release



Specifications ..... H208 to 209
Dimensions..... H210 to 211

ASN	T	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	T: Shunt Trip Release	A: 110~115 Vac 50 Hz 127 V 60 Hz
		B: 220~240 Vac 60 Hz
		C: 380~400 Vac 50 Hz 440 V 60 Hz

Accessory Description	Product	Part Number
Shunt Trip Release (Side Mount)	ASNTA	1600036
	ASNTB	1600037
	ASNTC	1600038



Specifications ..... H208 to 209
Dimensions..... H210 to 211

ASN	UV	A
Description	Type	Rated Voltage
Manual Motor Starter Accessory	UV: Under-Voltage Release	A: 110~115 Vac 50 Hz 127 V 60 Hz
		B: 220~240 Vac 60 Hz
		C: 380~400 Vac 50 Hz 440 V 60 Hz

Accessory Description	Product	Part Number
Under-Voltage Release (Side Mount)	ASNUVA	1600033
	ASNUVB	1600034
	ASNUVC	1600035

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Manual Motor Starters

Ex9SN Accessory Specifications

	Auxiliary Contact			Enclosure		Shunt Trip Release	Under-Voltage Release
	Side Mount	Front Mount	Fault Signal Contact	Actuating Diaphragm	Emergency Stop Pushbutton		
	ASNA	ASNB	ASNF	ASNEA	ASNEB	ASNT	ASNUV
UL File Number	E467185						
UL Ratings							
Electrical Contact Type	B600	D300	Fault: D300 Auxiliary: B600	-		-	
Rated Insulation Voltage Ui (V)	690	250	690			690	
Voltage Range of Operation (Ue)	-					70~110%	35~70%
Ue Max (V)	690	250	Fault: 240 Auxiliary: 690			-	
Conventional Heating Current Ith (A)	6	2.5	Fault: 2.5 Auxiliary: 6				
AC-15	720 Vac 240 V	120 Vac 240 V	Fault: 720 Vac/240 V Auxiliary: 720 Vac/240 V				
IEC File Number	IEC/EN 60947-5-1					IEC/EN 60947-2	
IEC Ratings							
Pick-Up Voltage (Un)	-			-		-	85~110%
Drop-Off Voltage (Un)						70~110%	35~70%
IP Class				IP 55		-	

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Manual Motor Starters

Ex9SN Accessory Specifications

		Auxiliary Contact		
		Side Mount	Front Mount	Fault Signal Contact
		ASNA	ASNB	ASNF
Utilization Category		AC-15		AC-14
Rated Operational Current Ie (A)	24 Vac	-	2	1.50
	48 Vac	6	1.25	1
	110/127 Vac	4.50	1	0.50
	230/240 Vac	3.30	0.50	0.30
	380/415 Vac	2.20	-	
	440 Vac	1.50		
	500 Vac	1		
	690 Vac	0.60		
		DC-13		
	24 Vdc	6	1	
	48 Vdc	5	0.30	
	60 Vdc	3	0.15	
	110 Vdc	1.30	-	
	220 Vdc	0.50		
Normal Operational Power P (W)			AC-15	AC-14
	24 Vac	-	48	36
	48 Vac	300	60	48
	110/127 Vac	500	127	72
	230/240 Vac	720	120	
	380/415 Vac	850	-	
	440 Vac	650		
	500 Vac	500		
	690 Vac	400		
		DC-13		
	24 Vdc	140	24	
	48 Vdc	240	15	
	60 Vdc	180	9	
	110 Vdc	140	-	
	220 Vdc	120		
Operational Features (Times)		-		1,000

		Auxiliary Contact		
		Fault Signal Contact		
		ASNF		
Utilization Category		AC-14	AC-15	DC-13
Connection	I/Ie	6	10	1.10
	U/Ue	1.10		
	Cos ø or t 0.95	0.70	0.30	6 Pe
Disconnection	I/Ie	6	10	1.10
	U/Ue	1.10		
	Cos ø or t 0.95	0.70	0.30	6 Pe
Number of On/Off Operation Cycles and Operation Frequency	Number of Operation Cycles	10		
	Number of Operation Cycles Per Minute	2		
	On Power Time	0.05		

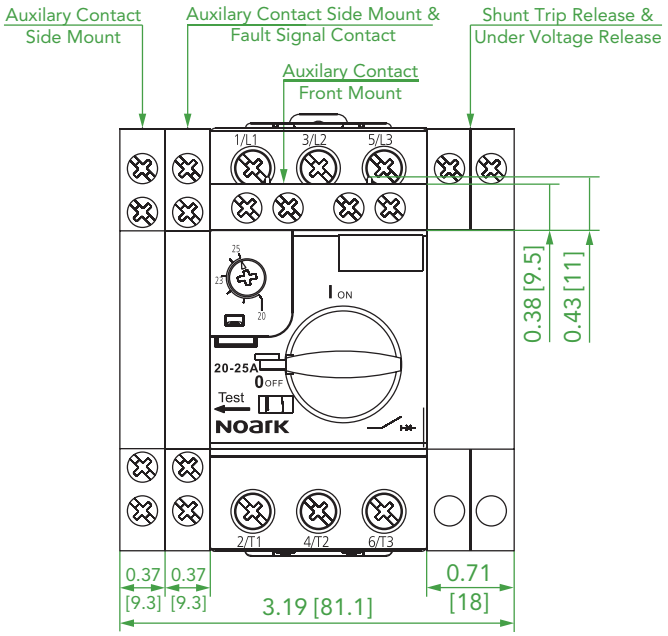
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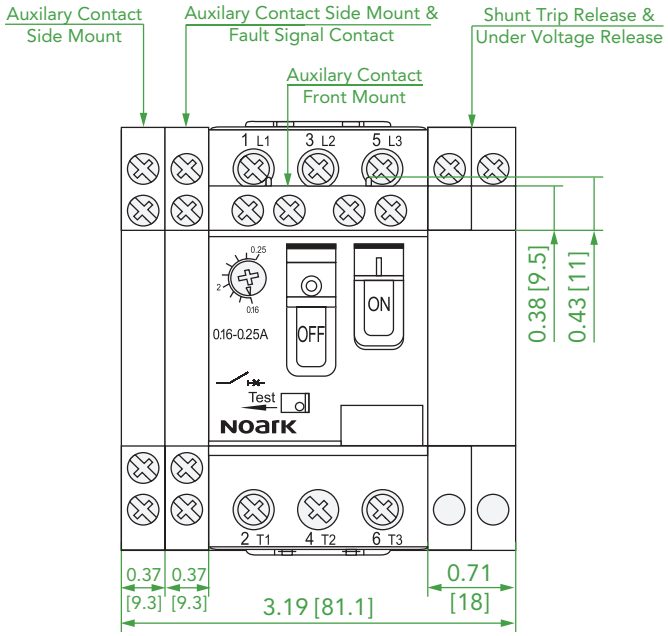
Manual Motor Starters

Ex9SN Accessory Dimensions

Manual Motor Starter with Accessories

Unit: in [mm]





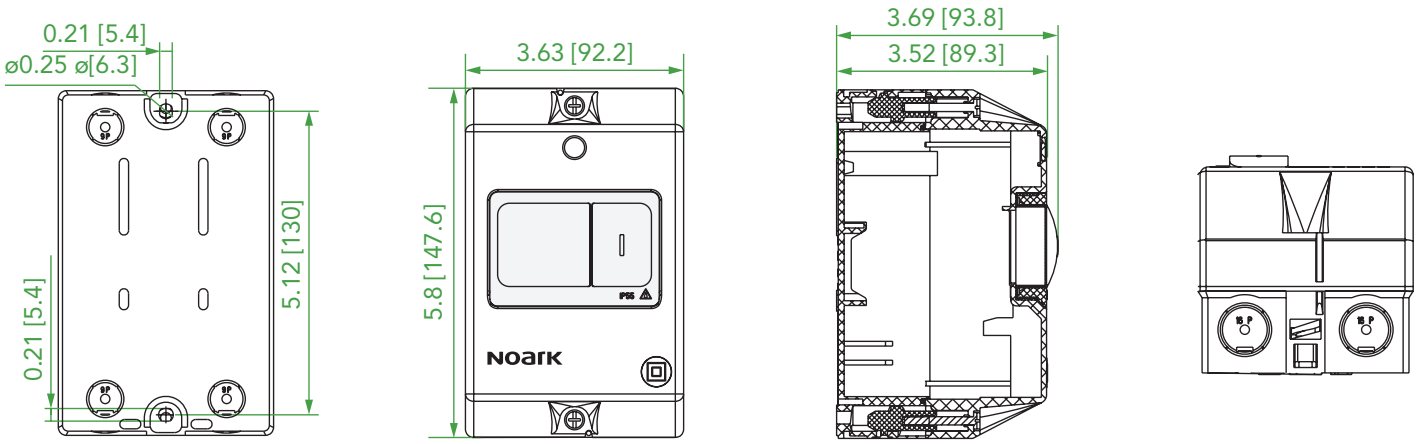
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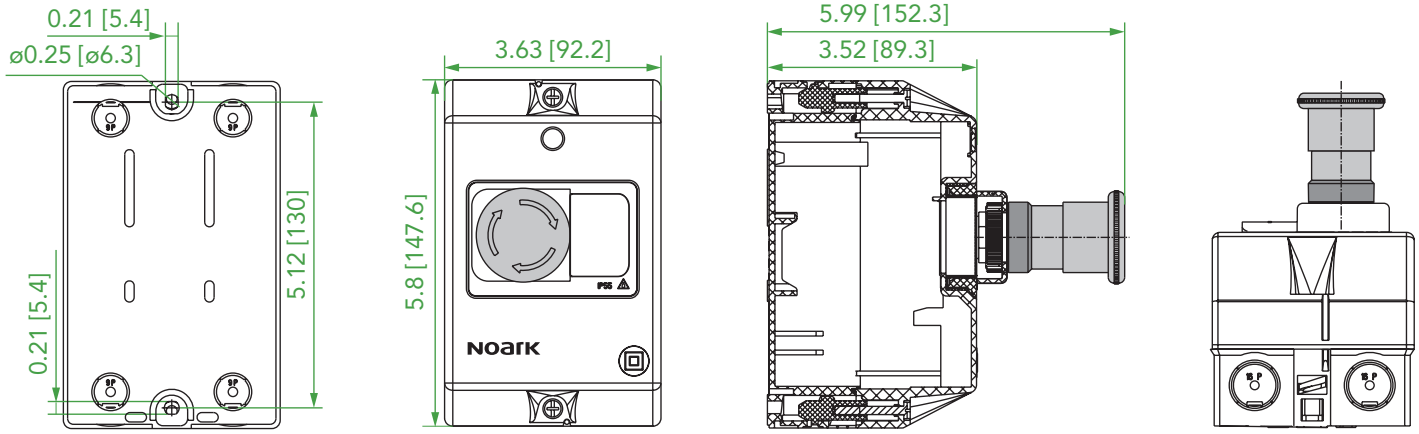
Manual Motor Starters

Ex9SN Accessory Dimensions

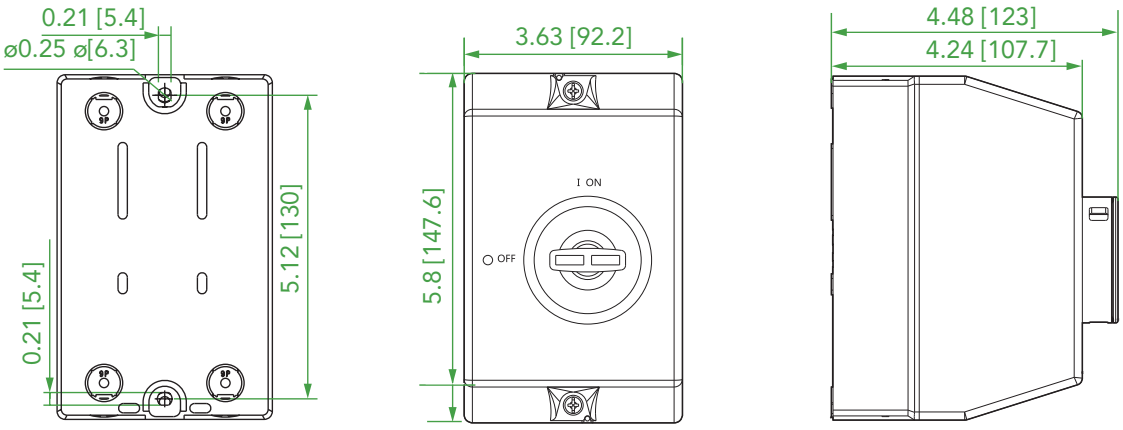
ASNEA
Enclosure with Actuating Diaphragm
Unit: in [mm]



ASNEB
Enclosure with Emergency Stop Pushbutton
Unit: in [mm]



ASNEC
Enclosure with Rotary Handle
Unit: in [mm]



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