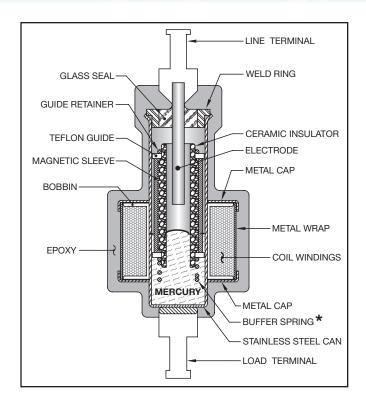
MIDI

MERCURY TO METAL CONTACTORS AND RELAYS



DESCRIPTION

MERCURY TO METAL CONTACTOR: The load terminals are isolated from each other by the glass in the hermetic seal. "The plunger assembly," which includes the ceramic insulator, the magnetic sleeve and related parts, floats on the mercury pool. When the coil is powered causing a magnetic field, the plunger assembly is pulled down into the mercury pool which is in turn displaced and moved up to make contact with the electrode, closing the circuit between the top and bottom load terminal which is connected to the stainless steel can.

TRAFFIC CONTROL (CONSTANT DUTY)

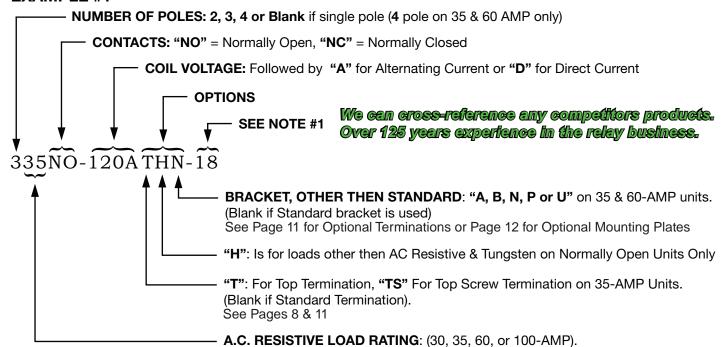
SP-1132- VOLTAGE- (A or D) 35 AMPS @ 600 VAC SP-1130- VOLTAGE- (A or D) 60 AMPS @ 480 VAC

* A return spring replaces the buffer spring for this application

HOW TO ORDER

SPECIFY AS SHOWN BELOW

EXAMPLE #1



NOTES: 1) Other designations are -1 thru -99. These are suffix numbers, and are reserved for units with dead special detail, construction and/or features. -11 MOV on coil (see page 29), -13 MOV & Metal Strap, -17 DIN Rail Mount, -20 DIN Rail & Metal Strap (see page 12), -18 Metal Strap (see page 7). (See example #2).

EXAMPLE #2 100NO-120AH-6A

The **-6A** stands for HIGH VOLTAGE contactor. Used in ultraviolet curing ovens and other high voltage applications. See page 9 for ratings.

30-AMP NORMALLY OPEN CONTACTORS





SINGLE POLE



TWO POLE STANDARD MOUNT



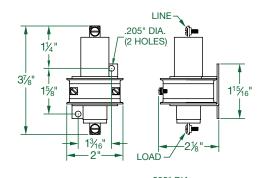
TWO POLE UNIVERSAL MOUNT

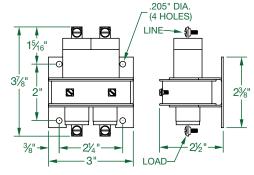


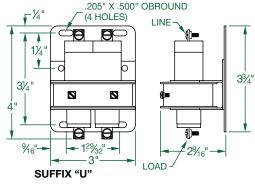
THREE POLE
STANDARD MOUNT

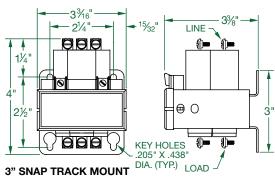


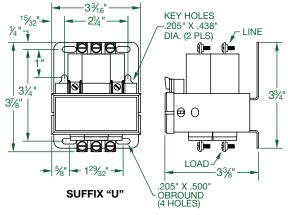
THREE POLE UNIVERSAL MOUNT











GENERAL INFORMATION

The 30 Amp model is designed to save space and simplify mounting methods. The standard mounting bracket on the three pole model allows the unit to be mounted in standard 3" snap track channel. If you do not use snap track mounting, the standard three pole bracket has key hole slots for easy mounting in any panel arrangement. The universal three pole mounting bracket has various mounting holes and key hole slots to meet a variety of mounting centers.

The 30 Amp series is a more compact line with a well proven switch which is the heart of mercury relays. It is the same switch design that is in our 35 and 60 Amp encapsulated MDR's, which have withstood the test of time and millions of cycles in many different applications.

TYPICAL SPECIFICATIONS

• ON NORMALLY OPEN UNITS:

OPERATE TIME: 50 milliseconds RELEASE TIME: 80 milliseconds

• CONTACT RESISTANCE:

30-AMP=.003 ohm*

• DIELECTRIC WITHSTAND: 2500 VAC RMS

• LONGEVITY:

MILLIONS OF CYCLES

• TEMPERATURE RANGE:

-35°C TO 85°C

• COIL TERMINALS:

#6 BINDING HEAD SCREWS

• LOAD TERMINALS:

#8 BINDING HEAD SCREWS

• UL LISTING: FILE #E62767

• C.S.A.: FILE #LR41198

• TO ORDER SEE PAGE 4

*AFTER CYCLING UNDER LOAD.







Made in the USA

| Resistance | Current | V.A. | Watts | O | 180 Ω | 133 mA | 3.2 | 3.2 |

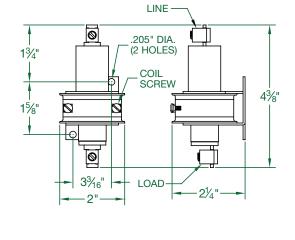
Catalog No.	Resistance	Current	V.A.	Watts
30NO-24D	180 Ω	133 mA	3.2	3.2
230NO-24D	131 Ω	188 mA	4.5	4.5
330NO-24D	73 Ω	329 mA	7.9	7.9
30NO-24A	28 Ω	316 mA	7.6	2.8
230NO-24A	12.5 Ω	610 mA	14.6	4.7
330NO-24A	7.6 Ω	815 mA	19.6	5.0
30NO-120A	725 Ω	65 mA	7.8	3.1
230NO-120A	317 Ω	118 mA	14.2	4.4
330NO-120A	210 Ω	163 mA	19.6	5.6
30NO-220A	3,150 Ω	27 mA	6.0	2.2
230NO-220A	1,300 Ω	56 mA	12.3	4.1
330NO-220A	728 Ω	86 mA	18.9	5.5



L35/L60-AMP NORMALLY OPEN CONTACTORS

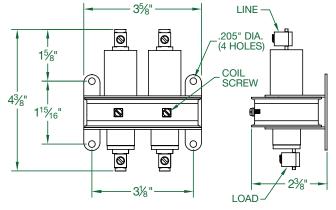


SINGLE POLE NORMALLY OPEN





NORMALLY OPEN



The "L" version of the 35 and 60 amp normally open contactors are designed and manufactured to the same high quality specifications as the standard 35 and 60 amp models. The contactor switch is the same well proven design that has been manufactured since 1975. The mounting centers and physical size are identical to the standard single and two pole 35 and 60 amp molded versions.

The new design provides a cleaner appearance, and is a more economical design. It is available in the single and two pole models only, with top and bottom load terminals or with lead wires. Noted are the typical specifications and UL and CSA file numbers.

TYPICAL SPECIFICATIONS

Made in the USA

• ON NORMALLY OPEN UNITS:

OPERATE TIME: 50 milliseconds RELEASE TIME: 80 milliseconds

• CONTACT RESISTANCE:

35-AMP = .003 ohm* 60-AMP = .002 ohm*

111110 ZUU. = 111111

• DIELECTRIC WITHSTAND: 2500 VAC RMS



MILLIONS OF CYCLES

- TEMPERATURE RANGE:
 - -35°C TO 85°C
- COIL TERMINALS:

#6 BINDING HEAD SCREWS

• LOAD TERMINALS:

PRESSURE CONNECTORS FOR A.W.G. #4-#14 ON 35-AMP AND A.W.G. #2-#8 ON 60-AMP UNITS

• UL LISTING:

FILE #E62767 FOR L35 AND L60-AMP N.O. UNITS 1-2 POLES

• C.S.A.:

FILE #LR41198 FOR L35 AND L60-AMP N.O. UNITS 1-2 POLES

* AFTER CYCLING UNDER LOAD

COIL DATA L35 AND L60 SERIES.

Catalog No.		Resistance	Current	V.A.	Watts
L35NO-24D	L60NO-24D	188 Ω	135 mA	3.3	3.3
L235NO-24D	L260NO-24D	92 Ω	260 mA	6.2	6.2
L35NO-24A	L60NO-24A	28 Ω	325 mA	7.8	3.0
L235NO-24A	L260NO-24A	10.3 Ω	660 mA	15.8	4.5
L35NO-120A	L60NO-120A	725 Ω	75 mA	9.0	4.0
L235NO-120A	L260NO-120A	350 Ω	115 mA	13.8	4.6
L35NO-220A	L60NO-220A	3,150 Ω	27 mA	5.9	2.2
L235NO-220A	L260NO-220A	1,000 Ω	69 mA	15.2	4.8







35/60-AMP NORMALLY OPEN CONTACTORS

MIDI



SINGLE POLE—NORMALLY OPEN



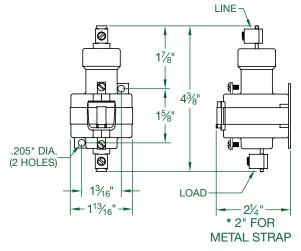
TWO POLE—NORMALLY OPEN

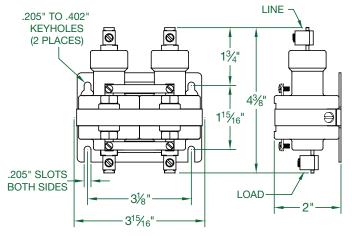


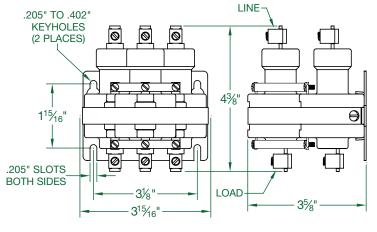
THREE POLE—NORMALLY OPEN

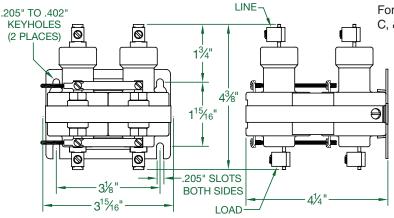


FOUR POLE—NORMALLY OPEN











TYPICAL SPECIFICATIONS

NORMALLY OPEN UNITS:
 OPERATE TIME: 50 milliseconds
 RELEASE TIME: 80 milliseconds

NORMALLY CLOSED UNITS:
 OPERATE TIME: 30 milliseconds
 RELEASE TIME: 35 milliseconds

CONTACT RESISTANCE:
 35 AMP = .003 ohm*
 60 AMP = .002 ohm*

• TEMPERATURE RANGE: -35°C to 85°C

• COIL TERMINALS: #6 WIRE BINDING SCREWS

LOAD TERMINALS:
 PRESSURE CONNECTORS
 4 TO 14 AWG ON 35 AMP
 2 TO 8 AWG ON 60 AMP

RATINGS:
 SEE PAGE 13 FOR COIL DATA
 SEE PAGE 14 FOR RATINGS

• UL LISTING: FILE #E-62767 FOR

• C.S.A.: FILE # LR 41198 FOR

TO ORDER SEE PAGE 4

* AFTER CYCLING UNDER LOAD

Made in the USA

TRAFFIC CONTROL (CONSTANT DUTY)

SP-1132- VOLTAGE- (A or D) 35 AMPS @ 600 VAC SP-1130- VOLTAGE- (A or D) 60 AMPS @ 480 VAC A return spring replaces the buffer spring for this application

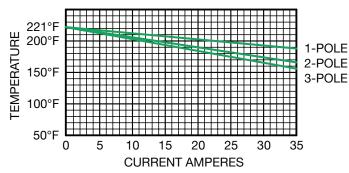
HAZARDOUS LOCATIONS SUFFIX "X"

Available in 1, 2 & 3 Pole Units Auxiliary devices for use in hazardous locations For CLASS 1, GROUPS A, B, C, & D – Division 2 only.

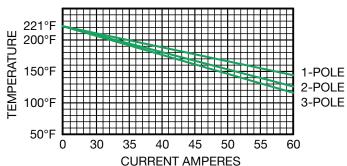


DE-RATING CHARTS

35-AMP NORMALLY OPEN LOAD DE-RATING DUE TO AMBIENT TEMPERATURE



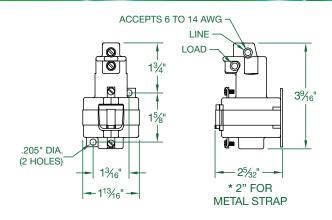
60-AMP NORMALLY OPEN
LOAD DE-RATING DUE TO AMBIENT TEMPERATURE



35-AMP T-TOP CONTACTORS



SINGLE POLE—NORMALLY OPEN



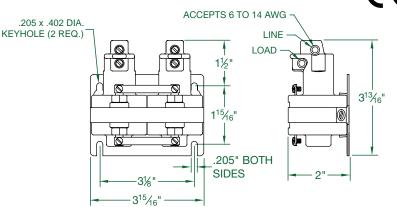




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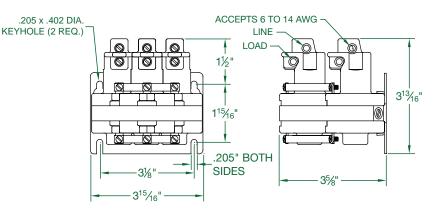


TWO POLE—NORMALLY OPEN





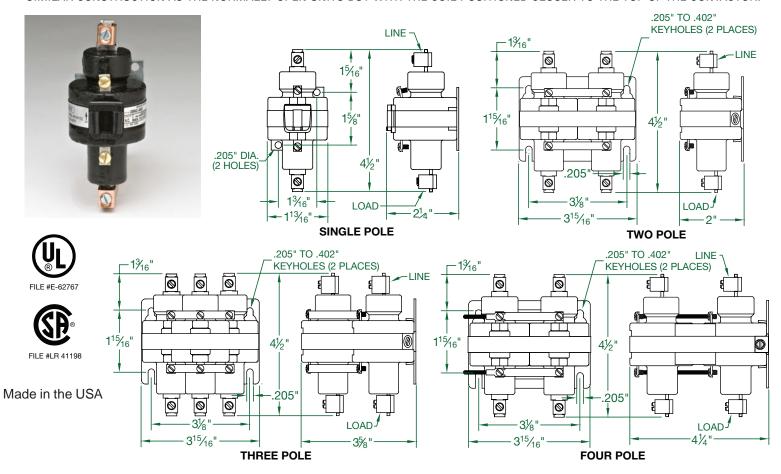
THREE POLE—NORMALLY OPEN



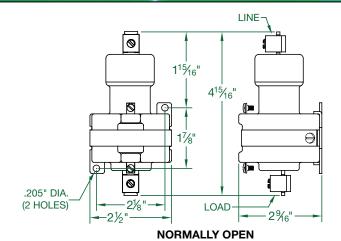
35/60-AMP NORMALLY CLOSED CONTACTORS

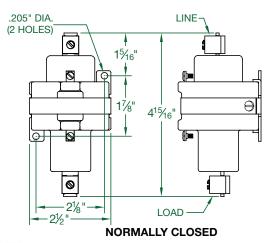


SIMILAR CONSTRUCTION AS THE NORMALLY OPEN UNITS BUT WITH THE COIL POSITIONED CLOSER TO THE TOP OF THE CONTACTOR.



HIGH VOLTAGE CONTACTORS





For UV Curing, and Various High Voltage applications. Available in Single Pole, Normally Open, and Normally Closed Units. The coils utilize 6-32 Wire Binding Screws, and the Contacts use Compression type terminals for #2 thru #8 AW wire.

• Also available in 2 & 3 pole

RATINGS: 10 AMPS @ 3500 VAC

15 AMPS @ 2500 VAC

AC INDUCTIVE Power Factor .7 or Greater.

COIL DATA

Catalog Number	Coil Voltage	Resistance	Current Draw	Wattage	V.A.
100NC-24D-6A	24 VDC	65 Ω	369 mA	8.9	8.9
100NC-120A-6A	120 VAC	380 Ω	125 mA	5.9	15.0
100NC-220A-6A	220 VAC	1,400 Ω	76 mA	8.1	16.7
100NO-12DH-6A	12 VDC	16 Ω	750 mA	9.0	9.0
100NO-24AH-6A	24 VAC	16 Ω	760 mA	9.2	18.2
100NO-24DH-6A	24 VDC	65 Ω	369 mA	8.9	8.9
100NO-120AH-6A	120 VAC	380 Ω	158 mA	9.5	19.0
100NO-220AH-6A	220 VAC	1,320 Ω	92 mA	11.2	20.2

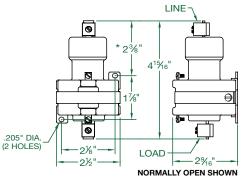
MIDI







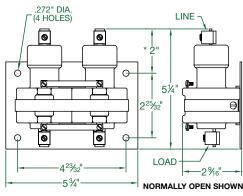
NORMALLY CLOSED UNIT



* THIS DIMENSION IS 1 3/8" FOR NORMALLY CLOSED SINGLE POLE UNITS



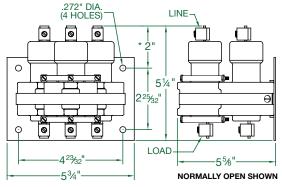
TWO POLE—NORMALLY OPEN



* THIS DIMENSION IS 15% " FOR NORMALLY CLOSED TWO POLE UNITS



THREE POLE—NORMALLY OPEN



* THIS DIMENSION IS 15/6" FOR NORMALLY CLOSED TWO POLE UNITS

TYPICAL SPECIFICATIONS

- ON NORMALLY OPEN UNITS:
 OPERATE TIME: 50 milliseconds
 RELEASE TIME: 80 milliseconds
- ON NORMALLY CLOSED UNITS: OPERATE TIME: 45 milliseconds RELEASE TIME: 60 milliseconds
- CONTACT RESISTANCE: .001 ohm*
- DIELECTRIC WITHSTAND: 2500VAC RMS
- LONGEVITY:
 MILLIONS OF CYCLES
- TEMPERATURE RANGE: -35°C TO 85°C
- COIL TERMINALS: #6 BINDING HEAD SCREWS
- LOAD TERMINALS:
 PRESSURE CONNECTORS.
 STANDARD ACCEPTS A.W.G.
 #2 to #8.
 FOR A.W.G. #1 to #8,
 ADD SUFFIX -5 to CATALOG
 NUMBER (i.e. 100NO-120A-5)
- RATINGS:
 Derate over 240VAC Res.

 See Page 13 for Coil Data.
 See Page 14 for Ratings.
- TO ORDER SEE PAGE 4.

S100NO - SERIES

AVAILABLE IN 1,2 & 3 POLES Ratings: 100 AMPS @ 480 VAC See Page 14 For Ratings

Made in the USA

