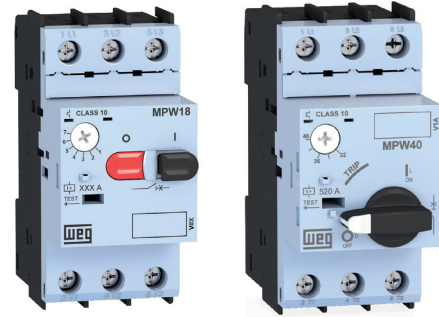


## MPW Series

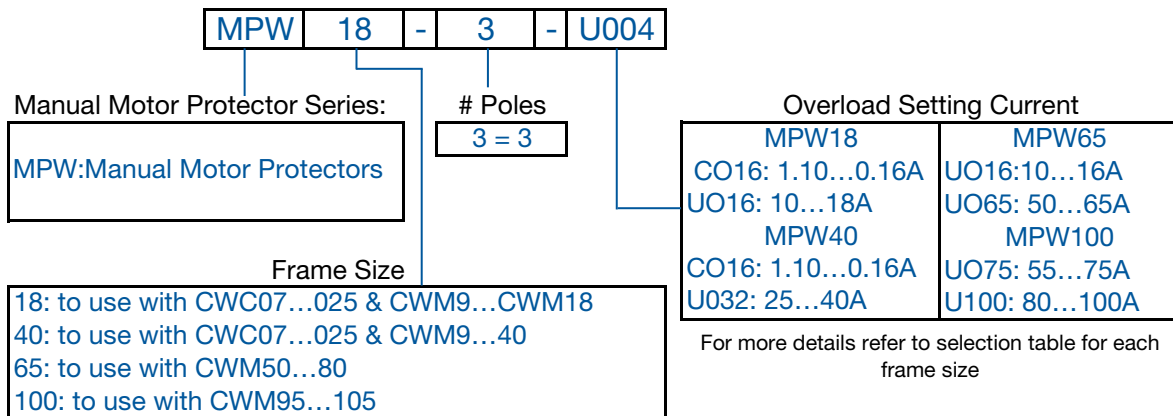
The WEG MPW Series Manual Motor Protectors provide a very compact solution for operation and protection in motor control applications. The NEC requires four functions to be considered a combination motor starter: Motor Disconnect, Branch Circuit Protection, Motor Controller and Motor Overload Protection. The WEG MPW meets all of these requirements, and the requirements of UL for Self-Protected Motor Controllers to be used in Type-E & F applications. With worldwide approvals the WEG MPW can be used in a variety of applications all over the world.



### Standard Features

- High short-circuit interrupting ratings- Up to 50Ka @480V
- Phase Loss sensitivity protection
- UL Type-E self-protected combination starter
- Suitable for Motor Disconnect applications
- Group motor installations (per NEC Article 430)
- Wide variety of Accessories
- Rated for DC applications

### MPW Catalog Number Sequence



*Table intended as reference only and not to create part numbers*

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

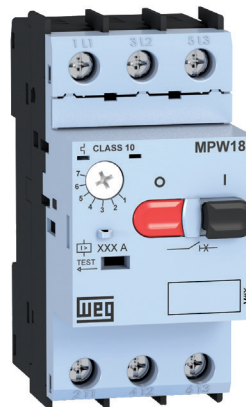
Power Factor Correction

Appendix A

Appendix B

# Motor Protectors

MPW



## MPW18 - Product Selection

- Suitable for manual motor controller and group installation
- Built-in protection: disconnect means, short circuit protection, motor control and overload protection
- Short circuit interrupting capacity up to 50kA@480Vac (10kA@600Vac)
- Fixed short circuit release 13 x I<sub>n</sub>
- Phase loss sensitivity
- Ambient temperature compensation -40...+1400F (-20...+600C)

	Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit interruption capacity		Catalog Number	List Price	Multiplier
	Single Phase		Three Phase					480V	600V			
	115V	230V	200V	230V	460V	575V						
	-	-	-	-	-	-	0.10 - 0.16	50kA	10kA	<a href="#">MPW18-3-C016</a>	\$97	Z4
	-	-	-	-	-	-	0.16 - 0.25	50kA	10kA	<a href="#">MPW18-3-C025</a>	\$97	
	-	-	-	-	-	-	0.25 - 0.40	50kA	10kA	<a href="#">MPW18-3-D004</a>	\$97	
	-	-	-	-	-	-	0.40 - 0.63	50kA	10kA	<a href="#">MPW18-3-C063</a>	\$105	
	-	-	-	-	-	1/2	0.63 - 1.0	50kA	10kA	<a href="#">MPW18-3-U001</a>	\$105	
	-	1/10	-	-	3/4	3/4	1.0 - 1.6	50kA	10kA	<a href="#">MPW18-3-D016</a>	\$105	
	-	1/6	1/2	1/2	1	1 1/2	1.6 - 2.5	50kA	10kA	<a href="#">MPW18-3-D025</a>	\$105	
	1/8	1/3	3/4	3/4	2	3	2.5 - 4.0	50kA	10kA	<a href="#">MPW18-3-U004</a>	\$105	
	1/4	1/2	1	1 1/2	3	5	4.0 - 6.3	50kA	10kA	<a href="#">MPW18-3-D063</a>	\$105	
	1/2	1 1/2	2	3	5	7 1/2	6.3 - 10	50kA	5kA	<a href="#">MPW18-3-U010</a>	\$125	
	1	2	3	5	10	10	10 - 16	30kA	5kA	<a href="#">MPW18-3-U016</a>	\$125	
	1	3	5	5	10	15	12-18	30kA	5kA	<a href="#">MPW18-3-U018</a>	\$145	

Note: Horsepower ratings shown in the table are for reference only.  
Please refer to the Full Load Amps of the Motor for final selection.

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

## Accessories for MPW18 - Summary

Description	Catalog Number	List Price	Multiplier
<b>Auxiliary Contact Blocks</b>			
1NO&1NC auxiliary contact block front mounting - 250Vmax.	ACBF-11	\$20	Z4
1NO&1NC auxiliary contact block left side mounting - 600Vmax.	ACBS-11	\$22	
2NO Auxiliary contact block left side mounting - 600Vmax.	ACBS-20	\$22	
2NC Auxiliary contact block left side mounting - 600Vmax.	ACBS-02	\$22	
<b>Link Modules</b>			
Mechanical and electrical link module for CWB9...38 AC coil	ECCMP-18B38	\$20	Z4
Mechanical and electrical link module for CWC07...16 AC coil	ECCMP-C016	\$20	
Mechanical and electrical link module for CWC025 miniature contactor series	ECCMP-C025	\$20	
<b>Accessories for Group Motor Installation <sup>1</sup></b>			
Three Phase Line Side Feeder Terminal	FTBBS	\$35	Z4
Bus bar system 45mm (for 2 MPW without side mounting auxiliary contacts)	BBS45-2	\$32	
Bus bar system 45mm (for 3 MPW without side mounting auxiliary contacts)	BBS45-3	\$35	
Bus bar system 45mm (for 4 MPW without side mounting auxiliary contacts)	BBS45-4	\$45	
Bus bar system 45mm (for 5 MPW without side mounting auxiliary contacts)	BBS45-5	\$60	
Bus bar system 54mm (for 2 MPW with side mounting auxiliary contacts)	BBS54-2	\$32	
Bus bar system 54mm (for 3 MPW with side mounting auxiliary contacts)	BBS54-3	\$35	
Bus bar system 54mm (for 4 MPW with side mounting auxiliary contacts)	BBS54-4	\$45	
Bus bar system 54mm (for 5 MPW with side mounting auxiliary contacts)	BBS54-5	\$60	
Shroud for unused terminals of BBS bars	CSD	\$10 <sup>2</sup>	
<b>Under Voltage and Shunt Block Releases</b>			
Shunt release block right side mounting - 20-24V 50/60Hz	SRMP D51	\$56	Z4
Shunt release block right side mounting - 100-127V 50/60Hz	SRMP D59	\$56	
Shunt release block right side mounting - 200-240V 50/60Hz	SRMP D65	\$56	
Under voltage release block right side mounting - 24V 60Hz	URMP V05	\$56	
Under voltage release block right side mounting - 120V 60Hz	URMP V18	\$56	
Under voltage release block right side mounting - 208V 60Hz	URMP V23	\$56	
Under voltage release block right side mounting - 240V 60Hz	URMP V30	\$56	
Under voltage release block right side mounting - 480V 60Hz	URMP V47	\$56	
<b>IEC Enclosures</b>			
IEC IP66 enclosure (non-UL)	PE66GN	\$45	Z4
<b>Other Accessories</b>			
Scale cover protection for the current range adjustment - package with 5 units	SCMP	\$5	Z4
Lugs for panel mounting - package with 2 pieces (one MPW mounting)	PLMP	\$0.50	

Notes: <sup>1</sup> Maximum Amps of each Bus bar system (BBS) must not be exceeded by adding multiple MPW. Bus bar capacity is 63Amps.

<sup>2</sup> Unit list price. Product sold in multiples of 5 units.

# Motor Protectors

MPW

## MPW40 - Product Selection

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 50kA@480Vac (25kA@600Vac)
- Fixed short-circuit release 13 x I<sub>n</sub>
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)



\* When associated with line side terminal LST25 and trip indicator TSB-22

	Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit Ratings for Group Installation		Catalog Number	List Price	Multiplier
	Single Phase		Three Phase					480V	600V			
	115V	230V	200V	230V	460V	575V						
Overloads	-	-	-	-	-	-	0.10 - 0.16	50kA	25kA	MPW40-3-C016	\$116	Z4
	-	-	-	-	-	-	0.16 - 0.25	50kA	25kA	MPW40-3-C025	\$116	
	-	-	-	-	-	-	0.25 - 0.40	50kA	25kA	MPW40-3-D004	\$116	
Enclosed Starters	-	-	-	-	-	1/4	0.40 - 0.63	50kA	25kA	MPW40-3-C063	\$137	
	-	-	-	-	1/2	1/2	0.63 - 1.0	50kA	25kA	MPW40-3-U001	\$137	
	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	25kA	MPW40-3-D016	\$137	
Relays	-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	50kA	25kA	MPW40-3-D025	\$137	
	1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	25kA	MPW40-3-U004	\$137	
	1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	50kA	25kA	MPW40-3-D063	\$137	
Pushbuttons and Pilot Lights	1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	50kA	25kA	MPW40-3-U010	\$137	
	1	3	5	5	10	15	10 - 16	50kA	25kA	MPW40-3-U016	\$150	
	1 1/2	3	5	7 1/2	15	15	16 - 20	50kA	25kA	MPW40-3-U020	\$165	
	2	3	7 1/2	7 1/2	15	20	20 - 25	50kA	25kA	MPW40-3-U025	\$195	
	-	5	10	10	20	25	25 - 32	42kA	25kA	MPW40-3-U032	\$210	
Terminal Blocks	-	5	10	15	25	-	32 - 40	20kA	-	MPW40-3-U040	\$250	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

## MPW40 with current Limiter - Product Selection

- Suitable for manual motor controller, group installation, tap conductor and combination starters\* type E & type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 100kA@480Vac (50kA@600Vac)
- Fixed short-circuit release 13 x I<sub>n</sub>
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)



\* When associated with line side terminal LST25 and trip indicator TSB-22

1) Individual Component Catalog Numbers are ordered separately.

Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit interruption capacity		Individual Component Catalog Number <sup>1</sup>				Multiplier
Single Phase		Three Phase					480V	600V	Catalog Number	List Price	Catalog Number	List Price	
115V	230V	200V	230V	460V	575V								
-	-	-	-	-	-	0.10 - 0.16	100kA	50kA	MPW40-3-C016	\$116	CLT32 MPW40	\$100	Z4
-	-	-	-	-	-	0.16 - 0.25	100kA	50kA	MPW40-3-C025	\$116	CLT32 MPW40	\$100	
-	-	-	-	-	-	0.25 - 0.40	100kA	50kA	MPW40-3-D004	\$116	CLT32 MPW40	\$100	
-	-	-	-	-	1/4	0.40 - 0.63	100kA	50kA	MPW40-3-C063	\$137	CLT32 MPW40	\$100	
-	-	-	-	1/2	1/2	0.63 - 1.0	100kA	50kA	MPW40-3-U001	\$137	CLT32 MPW40	\$100	
-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA	50kA	MPW40-3-D016	\$137	CLT32 MPW40	\$100	
-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	100kA	50kA	MPW40-3-D025	\$137	CLT32 MPW40	\$100	
1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA	50kA	MPW40-3-U004	\$137	CLT32 MPW40	\$100	
1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	100kA	50kA	MPW40-3-D063	\$137	CLT32 MPW40	\$100	
1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	100kA	50kA	MPW40-3-U010	\$137	CLT32 MPW40	\$100	
1	3	5	5	10	15	10 - 16	100kA	50kA	MPW40-3-U016	\$150	CLT32 MPW40	\$100	
1 1/2	3	5	7 1/2	15	15	16 - 20	100kA	50kA	MPW40-3-U020	\$165	CLT32 MPW40	\$100	
2	3	7 1/2	7 1/2	15	20	20 - 25	100kA	50kA	MPW40-3-U025	\$195	CLT32 MPW40	\$100	
-	5	10	10	20	25	25 - 32	100kA	50kA	MPW40-3-U032	\$210	CLT32 MPW40	\$100	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

- General Information
- Circuit Protection
- Disconnect Switches
- Motor Protectors
- Contactors
- Overloads
- Enclosed Starters
- Relays
- Pushbuttons and Pilot Lights
- Terminal Blocks
- Power Factor Correction
- Appendix A
- Appendix B

# Motor Protectors

## MPW

### Accessories for MPW40 - Summary

	Description	Catalog Number	List Price	Multiplier	
	<b>Auxiliary Contact Blocks</b>				
	1NO&1NC auxiliary contact block front mounting - 250Vmax.	ACBF-11	\$20	Z4	
	1NO&1NC auxiliary contact block left side mounting - 600Vmax.	ACBS-11	\$22		
	2NO Auxiliary contact block left side mounting - 600Vmax.	ACBS-20	\$22		
	2NC Auxiliary contact block left side mounting - 600Vmax.	ACBS-02	\$22		
	<b>Accessories for Combination Type-E Construction</b>				
	Line power terminal	LST25	\$42	Z4	
	Trip Signaling and Alarm Contact Block (1NO&1NC for Short-circuit and 1NO&1NC for Overload)	TSB-22	\$38		
	<b>Current Limiter</b>				
	Current Limiter	CLT32 MPW40	\$100	Z4	
	<b>Link Modules</b>				
	Mechanical and electrical link module for CWC07... CWC016 miniature contactor series	ECCMP-C0	\$20	Z4	
	Mechanical and electrical link module for CWM9...CWM25 contactor series	ECCMP-25	\$20		
	Mechanical and electrical link module for CWM32...CWM40 contactor series	ECCMP-32	\$25		
	Mechanical and electrical link module for CWB9...CWB38 contactor series	ECCMP-40B38	\$25		
	Mechanical and electrical link module for CWB9...CWB38 DC coil contactor series	ECCMP-40B38DC	\$25		
	<b>Accessories for Group Motor Installation<sup>1</sup></b>				
	Income power terminal for bus bar system	FTBBS	\$35	Z4	
	Bus bar system 45mm (for 2 MPW without side mounting auxiliary contacts)	BBS45-2	\$32		
	Bus bar system 45mm (for 3 MPW without side mounting auxiliary contacts)	BBS45-3	\$35		
	Bus bar system 45mm (for 4 MPW without side mounting auxiliary contacts)	BBS45-4	\$45		
	Bus bar system 45mm (for 5 MPW without side mounting auxiliary contacts)	BBS45-5	\$60		
	Bus bar system 54mm (for 2 MPW with side mounting auxiliary contacts)	BBS54-2	\$32		
	Bus bar system 54mm (for 3 MPW with side mounting auxiliary contacts)	BBS54-3	\$40		
	Bus bar system 54mm (for 4 MPW with side mounting auxiliary contacts)	BBS54-4	\$45		
	Bus bar system 54mm (for 5 MPW with side mounting auxiliary contacts)	BBS54-5	\$60		
	Shroud for unused terminals of BBS bars	CSD	\$10 <sup>2</sup>		
	<b>Through-the-door Rotary Mechanisms</b>				
	Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 130mm shaft	RMMP-130	\$70	Z4	
	Rotary NEMA 1 Through the Door Mechanism - yellow/red handle with 130mm shaft	RMMP-130-E	\$70		
	Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 330mm shaft	RMMP-330	\$85		
	Rotary NEMA 1 Through the Door Mechanism - yellow/red handle with 330mm shaft	RMMP-330-E	\$85		
	Rotary NEMA 4X Through the Door Mechanism - gray/black handle with 130mm shaft	MRX-130	\$105		
	Rotary NEMA 4X Through the Door Mechanism - yellow/red handle with 130mm shaft	MRX-130-E	\$105		
	Rotary NEMA 4X Through the Door Mechanism - gray/black handle with 330mm shaft	MRX-330	\$115		
	Rotary NEMA 4X Through the Door Mechanism - yellow/red handle with 330mm shaft	MRX-330-E	\$115		
	<b>Under Voltage and Shunt Block Releases</b>				
	Shunt release block right side mounting - 20-24V 50/60Hz	SRMP D51	\$56	Z4	
	Shunt release block right side mounting - 100-127V 50/60Hz	SRMP D59	\$56		
	Shunt release block right side mounting - 200-240V 50/60Hz	SRMP D65	\$56		
	Under voltage release block right side mounting - 24V 60Hz	URMP V05	\$56		
	Under voltage release block right side mounting - 120V 60Hz	URMP V18	\$56		
	Under voltage release block right side mounting - 208V 60Hz	URMP V23	\$56		
	Under voltage release block right side mounting - 240V 60Hz	URMP V30	\$56		
	Under voltage release block right side mounting - 480V 60Hz	URMP V47	\$56		
	<b>Mounting adapter</b>				
	Mounting adapter for a D.O.L. assembly with MPW40 and CWM contactors series	MA45DOL	\$40		Z4
	Mounting adapter for a REVERSING assembly with MPW40 and CWM contactors series	MA90RVS	\$50		
	Mounting adapter for a STAR-DELTA assembly with MPW40 and CWM contactors series	MA90SDS	\$85		
	<b>IEC Enclosures</b>				
	IEC IP55 enclosure yellow/red handle (non-UL)	PE55GN-E	\$45	Z4	
	IEC IP55 enclosure + lateral auxiliary device yellow/red handle (non-UL)	LPE55GN-E	\$55		
	IEC IP55 enclosure gray/black handle (non-UL)	PE55GN	\$45		
	IEC IP55 enclosure + lateral auxiliary device gray/black handle (non-UL)	LPE55GN	\$55		
	<b>Other Accessories</b>				
	Scale cover protection for the current range adjustment - package with 5 units	SCMP	\$5	Z4	
	Lugs for panel mounting - package with 2 pieces (one MPW mounting)	PLMP	\$0.50		

Notes: <sup>1</sup> Maximum Amps of each Bus bar system (BBS) must not be exceeded by adding multiple MPW. Bus bar capacity is 63Amps.

<sup>2</sup> Unit list price. Product sold in multiples of 5 units.

## MPW65 - Product Selection

- Suitable for manual motor controller, group installation, tap conductor and combination starters<sup>1</sup> Type E & Type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 35kA@480Vac (10kA@600Vac)
- Fixed short-circuit release 13 x I<sub>n</sub>
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)

<sup>1</sup>) When associated with line side terminal (LST65) and Trip indicator (TSB-22)



Maximum UL Horsepower						Thermal Setting	Short-Circuit interruption capacity		Catalog Number	List Price	Multiplier
Single Phase		Three Phase					[A]	480V			
115V	230V	200V	230V	460V	575V						
3	7 1/2	-	15	25	30	32 ... 40	35kA	10kA	MPW65-3-U040	\$380	Z4
-	10	15	15	30	40	40 ... 50	35kA	10kA	MPW65-3-U050	\$380	
5	10	20	20	50	60	50 ... 65	35kA	10kA	MPW65-3-U065	\$380	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection

## MPW100 - Product Selection

- Suitable for manual motor controller, group installation, tap conductor and combination starters<sup>2</sup> type E& type F
- Built-in protection: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 50kA@480Vac (10kA@600Vac)
- Fixed short-circuit release 13 x I<sub>n</sub>
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)

<sup>2</sup> When associated with line side terminal (IB MPW100) and Trip indicator (TSB SC-11 MPW100)



Maximum UL Horsepower						Thermal Setting	Short-Circuit interruption capacity		Catalog Number	List Price	Multiplier
Single Phase		Three Phase					[A]	480V			
115V	230V	200V	230V	460V	575V						
5	15	20	25	50	60	55 ... 75	50kA	10kA	MPW100-3-U075	\$665	Z4
7 1/2	20	25	30	60	75	70 ... 90	50kA	10kA	MPW100-3-U090	\$720	
10	20	30	30	75	100	80 ... 100	50kA	10kA	MPW100-3-U100	\$720	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

- General Information
- Circuit Protection
- Disconnect Switches
- Motor Protectors
- Contactors
- Overloads
- Enclosed Starters
- Relays
- Pushbuttons and Pilot Lights
- Terminal Blocks
- Power Factor Correction
- Appendix A
- Appendix B

## MPW

### Accessories for MPW65 - Summary

Description	Catalog Number	List Price	Multiplier
<b>Auxiliary Contact Blocks</b>			
1NO&1NC auxiliary contact block front mounting - 250Vmax.	<a href="#">ACBF-11</a>	\$20	Z4
1NO&1NC auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-11</a>	\$22	
2NO Auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-20</a>	\$22	
2NC Auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-02</a>	\$22	
<b>Accessories for Combination Type-E Construction</b>			
Line power terminal (for MPW65-3-U040 to MPW65-3-U065)	<a href="#">LST65</a>	\$85	Z4
Trip Signaling and Alarm Contact Block (1NO&1NC for Short-circuit and 1NO&1NC for Overload)	<a href="#">TSB-22</a>	\$38	
<b>Through-the-door Rotary Mechanisms</b>			
Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 130mm shaft	<a href="#">RMMP65-130</a>	\$80	Z4
Rotary NEMA 1 Through the Door Mechanism - yellow/red handle with 130mm shaft	<a href="#">RMMP65-130-E</a>	\$80	
Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 330mm shaft	<a href="#">RMMP65-330</a>	\$90	
Rotary NEMA 1 Through the Door Mechanism - yellow/red handle with 330mm shaft	<a href="#">RMMP65-330-E</a>	\$90	
Rotary NEMA 4X Through the Door Mechanism - black/red handle with 130mm shaft	<a href="#">MRX65-130</a>	\$120	
Rotary NEMA 4X Through the Door Mechanism - yellow/red handle with 130mm shaft	<a href="#">MRX65-130-E</a>	\$120	
Rotary NEMA 4X Through the Door Mechanism - black/red handle with 330mm shaft	<a href="#">MRX65-330</a>	\$130	
Rotary NEMA 4X Through the Door Mechanism - yellow/red handle with 330mm shaft	<a href="#">MRX65-330-E</a>	\$130	
<b>Under Voltage and Shunt Block Releases</b>			
Shunt release block right side mounting - 20-24V 50/60Hz	<a href="#">SRMP D51</a>	\$56	Z4
Shunt release block right side mounting - 100-127V 50/60Hz	<a href="#">SRMP D59</a>	\$56	
Shunt release block right side mounting - 200-240V 50/60Hz	<a href="#">SRMP D65</a>	\$56	
Under voltage release block right side mounting - 24V 60Hz	<a href="#">URMP V05</a>	\$56	
Under voltage release block right side mounting - 120V 60Hz	<a href="#">URMP V18</a>	\$56	
Under voltage release block right side mounting - 208V 60Hz	<a href="#">URMP V23</a>	\$56	
Under voltage release block right side mounting - 240V 60Hz	<a href="#">URMP V30</a>	\$56	
Under voltage release block right side mounting - 480V 60Hz	<a href="#">URMP V47</a>	\$56	
<b>Other Accessories</b>			
Scale cover protection for the current range adjustment - package with 5 units	<a href="#">SCMP</a>	\$5	Z4
Lugs for panel mounting - package with 2 pieces (one MPW mounting)	<a href="#">PLMP</a>	\$0.50	

### Accessories for MPW100 - Summary

Description	Catalog Number	List Price	Multiplier
<b>Auxiliary Contact Blocks</b>			
1NO&1NC auxiliary contact block front mounting - 250Vmax.	<a href="#">ACBF-11 MPW100</a>	\$35	Z4
1NO&1NC auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-11 MPW100</a>	\$27 <sup>1</sup>	
2NO Auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-20 MPW100</a>	\$27 <sup>1</sup>	
2NC Auxiliary contact block left side mounting - 600Vmax.	<a href="#">ACBS-02 MPW100</a>	\$27 <sup>1</sup>	
<b>Accessories for Combination Type-E Construction</b>			
Insulators	<a href="#">IB MPW100</a>	\$30	Z4
Trip Signaling and Alarm Contact Block (1NO&1NC for Short-circuit and Overload)	<a href="#">TSB-SC-11 MPW100</a>	\$38 <sup>1</sup>	
<b>Through-the-door Rotary Mechanisms</b>			
Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 115mm shaft	<a href="#">MR MPW100-115</a>	\$100	Z4
Rotary NEMA 1 Through the Door Mechanism - gray/black handle with 315mm shaft	<a href="#">MR MPW100-315</a>	\$115	
Rotary NEMA 4X Through the Door Mechanism - gray/black handle with 130mm shaft	<a href="#">MRX100-130</a>	\$130	
Rotary NEMA 4X Through the Door Mechanism - yellow/red handle with 130mm shaft	<a href="#">MRX100-130E</a>	\$130	
<b>Under Voltage and Shunt Block Releases</b>			
Shunt release block right side mounting - 120V 50/60Hz	<a href="#">SRMP V18 MPW100</a>	\$56	Z4
Shunt release block right side mounting - 240-260V 60Hz	<a href="#">SRMP V33 MPW100</a>	\$56	
Under voltage release block right side mounting - 120V 60Hz	<a href="#">URMP V18 MPW100</a>	\$56	
Under voltage release block right side mounting - 240V 60Hz	<a href="#">URMP V33 MPW100</a>	\$56	
Under voltage release block right side mounting - 460V 60Hz	<a href="#">URMP V43 MPW100</a>	\$56	

Notes: <sup>1</sup> Unit list price. Product sold in multiples of 2 units.



## WEG's Self Protected Combination Type-E Motor Controller with Unmatched Features and Benefits

Combination starters are the most common type of packaged motor controllers. They are called combination because of their construction and combined functions required by the US National Electric Code (NEC): Motor Disconnect, Motor Branch Circuit Protection, Motor Controller and Motor Overload Protection. UL1 currently recognizes six different types of combination starters that meet the requirements of a motor branch circuit.

Constructions Types A through D are traditional starters that use either a listed disconnect switch and fuses or a listed circuit breakers as the disconnect means and for short circuit protection. Each type uses a separate UL 508 listed motor controller and overload relay. Recently revisions on UL508 introduced the Type E and Type F starters.

UL Combination Starter Type	Device Used for Component Function			
	Disconnected	Branch Circuit Protection	Motor Controller	Motor OL Relay
A		UL 248 Fuses	UL 508 Magnetic or Solid State Controller	UL 508 Motor Overload Relay
B	UL 98 Manual Disconnect	UL 508 Motor Short Circuit Protector		
C	UL 489 Inverse Time Circuit Breaker			
D	UL 489 Instantaneous Trip Circuit Breaker			
E	UL 508 Self-protected Combination Controller			
F	UL 508 Manual Self-protected Combination Controller	UL 508 Magnetic or Solid State Controller	UL 508 Manual Self-Protected Combination Controller	

Type E starter is a self-protected combination motor controller that combines in a single device all the required functions of a combination starter and eliminates any additional requirements for upstream fuses or circuit breakers. These starters clear faults within their rating without sustaining damage to themselves or the rest of the system, being able to get back into operation. There are two arrangements for a Type E starter: manual (as stand-alone) and associated with a contactor. Both are submitted to the same tests sequences.

Type F starter consists of a listed manual Type E combined with a UL508 listed contactor. The difference between the two types is related to the absence of self-protected characteristic; hence, Type F has softened tests sequences allowing damages on the contactor after a fault.

Tests performed in order to fulfill the Type E requirements are considered the hardest in UL508, including short-circuit and endurance tests on the same sample. As a comparison, UL Type E exceeds the requirements for Type F and IEC60947-4-1 Coordination type 2.

WEG's self-protected combination Type E combines

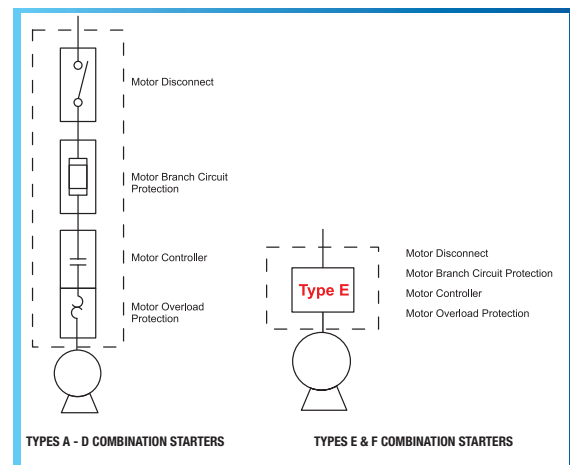
all of these functions within a single product for a manual operation or within a set of two products (with a listed contactor) for a remote operation. Both options must be associated with the accessories Line Side Terminal (LST25) and Tripping Signaling Block (TSB-22) to accomplish UL508/UL489 requirements for spacing (clearance and creepage) and short-circuit indication.

They are recommended for a wide range of applications where full voltage combination starters are required. Some examples are: Pumps, Industrial Washing Machines, Compressors, Blowers, Cutting Machines, Conveyors, Lumber Processing and many others.

The Manual Type E Starter is a stand-alone product – MPW series – that ranges from fractional up to 75Hp@460V motors (0.16 to 100A) with up to 100KA@480V and 50KA@600V interrupting short-circuit capability. Together with some accessories that complete this product line, the MPW series are a compact and reliable solution for starting and protecting motors.

WEG also offers an option for a remote Type E & F Starter, combining the MPW series (as a manual type E) together with a contactor from CWM Series. As this version undergoes the same tests, it has the same horse power ratings and short-circuit capabilities as the manual Type E. However, it provides remote operation and controlling of the application through the contactor's coil.

In addition to its popular line of UL enclosed starters, WEG is also providing a NEMA 4X (IP65) enclosed Type E & F Starter – ESWE & ESWF – featuring as standard a handle for disconnect means through the door and a contactor for remote operation. Provisions for control circuit transformer installation as well as pilot lights are also included.



General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

# Motor Protectors

MPW

## Manual Self-Protected Combination Motor Controller Type-E

- No need of upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protections: disconnect means, short-circuit protection, motor control and over load protection
- Short-circuit interrupting capacity up to 100kA@480Vac (50kA@600Vac)
- Compact combination starter
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)



### High Interruption Capacity

Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit Interruption Capacity 480V	Individual Component Catalog Number <sup>1</sup>				Multiplier
Single Phase		Three Phase						Manual Motor Protector	Line Side Terminal	Tripping Indicator	List Price	
115V	230V	200V	230V	460V	575V							
-	-	-	-	-	-	0.10 - 0.16	50kA	MPW40-3-C016	LST25	TSB-22	\$192	Z4
-	-	-	-	-	-	0.16 - 0.25	50kA	MPW40-3-C025	LST25	TSB-22		
-	-	-	-	-	-	0.25 - 0.40	50kA	MPW40-3-D004	LST25	TSB-22		
-	-	-	-	-	1/4	0.40 - 0.63	50kA	MPW40-3-C063	LST25	TSB-22	\$213	
-	-	-	-	1/2	1/2	0.63 - 1.0	50kA	MPW40-3-U001	LST25	TSB-22		
-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	MPW40-3-D016	LST25	TSB-22		
-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	50kA	MPW40-3-D025	LST25	TSB-22		
1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	MPW40-3-U004	LST25	TSB-22		
1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	50kA	MPW40-3-D063	LST25	TSB-22		
1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	50kA	MPW40-3-U010	LST25	TSB-22	\$245	
1	3	5	5	10	15	10 - 16	50kA	MPW40-3-U016	LST25	TSB-22		
1 1/2	3	5	7 1/2	15	15	16 - 20	50kA	MPW40-3-U020	LST25	TSB-22		
2	3	7 1/2	7 1/2	15	20	20 - 25	50kA	MPW40-3-U025	LST25	TSB-22	\$275	
-	5	10	10	20	25	25 - 32	42kA	MPW40-3-U032	LST25	TSB-22	\$290	
-	10	15	15	30	40	40 ... 50	35kA	MPW65-3-U050	LST65	TSB-22	\$503	
5	10	20	20	50	60	50 ... 65	35kA	MPW65-3-U065	LST65	TSB-22		
5	15	20	25	50	60	55 ... 75	50kA	MPW100-3-U075	IB MPW100	TSB SC-11 MPW100	\$733	
7 1/2	20	25	30	60	75	70 ... 90	50kA	MPW100-3-U090	IB MPW100	TSB SC-11 MPW100	\$788	
10	20	30	30	75	100	80 ... 100	50kA	MPW100-3-U100	IB MPW100	TSB SC-11 MPW100		

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

<sup>1</sup> Individual Component Catalog Numbers are ordered separately. Multiplier Z4.

### Extra High Interruption Capacity

Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit Interruption Capacity 480V	Individual Component Catalog Number <sup>1</sup>				Multiplier	
Single Phase		Three Phase						Manual Motor Protector	Current Limiter	Line Side Terminal	Tripping Indicator		List Price
115V	230V	200V	230V	460V	575V								
-	-	-	-	-	-	0.10 - 0.16	100kA	MPW40-3-C016	CLT32 MPW40	LST25	TSB-22	\$292	Z4
-	-	-	-	-	-	0.16 - 0.25	100kA	MPW40-3-C025	CLT32 MPW40	LST25	TSB-22		
-	-	-	-	-	-	0.25 - 0.40	100kA	MPW40-3-D004	CLT32 MPW40	LST25	TSB-22		
-	-	-	-	-	1/4	0.40 - 0.63	100kA	MPW40-3-C063	CLT32 MPW40	LST25	TSB-22	\$313	
-	-	-	-	1/2	1/2	0.63 - 1.0	100kA	MPW40-3-U001	CLT32 MPW40	LST25	TSB-22		
-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA	MPW40-3-D016	CLT32 MPW40	LST25	TSB-22		
-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	100kA	MPW40-3-D025	CLT32 MPW40	LST25	TSB-22		
1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA	MPW40-3-U004	CLT32 MPW40	LST25	TSB-22		
1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	100kA	MPW40-3-D063	CLT32 MPW40	LST25	TSB-22		
1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	100kA	MPW40-3-U010	CLT32 MPW40	LST25	TSB-22	\$345	
1	3	5	5	10	15	10 - 16	100kA	MPW40-3-U016	CLT32 MPW40	LST25	TSB-22		
1 1/2	3	5	7 1/2	15	15	16 - 20	100kA	MPW40-3-U020	CLT32 MPW40	LST25	TSB-22		
2	3	7 1/2	7 1/2	15	20	20 - 25	100kA	MPW40-3-U025	CLT32 MPW40	LST25	TSB-22	\$375	
-	5	10	10	20	25	25 - 32	100kA	MPW40-3-U032	CLT32 MPW40	LST25	TSB-22	\$390	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

<sup>1</sup> Individual Component Catalog Numbers are ordered separately. Multiplier Symbol Z4.

## Combination Motor Controller Type-F

- No need of upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protections: disconnect means, short-circuit protection, motor control and overload protection
- Short-circuit interrupting capacity up to 100kA@480Vac (50kA@600Vac)
- Compact combination starter
- Phase loss sensitivity
- Ambient temperature compensation -4...+140°F (-20...+60°C)
- Remote operation



(4)

### High interruption capacity

Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit Interruption Capacity 480V	Individual Component Catalog Number <sup>1</sup>					
Single Phase		Three Phase						Manual Motor Protector	Line Side Terminal	Tripping Indicator	List Price <sup>2</sup>	Contactor <sup>3</sup>	List Price <sup>3</sup>
115V	230V	200V	230V	460V	575V								
-	-	-	-	-	-	0.10 - 0.16	50kA	MPW40-3-C016	LST25	TSB-22	\$192	CWM9	\$72
-	-	-	-	-	-	0.16 - 0.25	50kA	MPW40-3-C025	LST25	TSB-22		CWM9	
-	-	-	-	-	-	0.25 - 0.40	50kA	MPW40-3-D004	LST25	TSB-22		CWM9	
-	-	-	-	-	1/4	0.40 - 0.63	50kA	MPW40-3-C063	LST25	TSB-22		CWM9	
-	-	-	-	1/2	1/2	0.63 - 1.0	50kA	MPW40-3-U001	LST25	TSB-22		CWM9	
-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	MPW40-3-D016	LST25	TSB-22		CWM9	
-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	50kA	MPW40-3-D025	LST25	TSB-22		CWM9	
1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	MPW40-3-U004	LST25	TSB-22		CWM9	
1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	50kA	MPW40-3-D063	LST25	TSB-22		CWM9	
1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	50kA	MPW40-3-U010	LST25	TSB-22		CWM9	
1	3	5	5	10	15	10 - 16	50kA	MPW40-3-U016	LST25	TSB-22	CWM18	\$103	
1 1/2	3	5	7 1/2	15	15	16 - 20	50kA	MPW40-3-U020	LST25	TSB-22	CWM25	\$118	
2	3	7 1/2	7 1/2	15	20	20 - 25	50kA	MPW40-3-U025	LST25	TSB-22	CWM32	\$140	
-	5	10	10	20	25	25 - 32	42kA	MPW40-3-U032	LST25	TSB-22	CWM40	\$164	
-	10	15	15	30	40	40 ... 50	30kA	MPW65-3-U050	LST65	TSB-22	CWM65	\$215	
5	10	20	20	50	60	50 ... 65	30kA	MPW65-3-U065	LST65	TSB-22	CWM80	\$261	
5	15	20	25	50	60	55 ... 75	50kA	MPW100-3-U075	IB MPW100	TSB SC-11 MPW100	CWM95	\$294	
7 1/2	20	25	30	60	75	70 ... 90	50kA	MPW100-3-U090	IB MPW100	TSB SC-11 MPW100	CWM95	\$294	
10	20	30	30	75	100	80 ... 100	50kA	MPW100-3-U100	IB MPW100	TSB SC-11 MPW100	CWM105	\$393	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

<sup>1</sup> Individual Component Catalog Numbers are ordered separately.

<sup>2</sup> Multiplier Symbol Z4

<sup>3</sup> Multiplier Symbol Z1

<sup>4</sup> For Link Module, see accessories

### Extra-High interruption capacity

Maximum UL Horsepower						Thermal Setting [A]	Short-Circuit Interruption Capacity 480V	Individual Component Catalog Number <sup>1</sup>						
Single Phase		Three Phase						Manual Motor Protector	Current Limiter	Line Side Terminal	Tripping Indicator	List Price <sup>2</sup>	Contactor <sup>3</sup>	List Price <sup>3</sup>
115V	230V	200V	230V	460V	575V									
-	-	-	-	-	-	0.10 - 0.16	100kA	MPW40-3-C016	CLT32 MPW40	LST25	TSB-22	\$292	CWM9	\$72
-	-	-	-	-	-	0.16 - 0.25	100kA	MPW40-3-C025	CLT32 MPW40	LST25	TSB-22		CWM9	
-	-	-	-	-	-	0.25 - 0.40	100kA	MPW40-3-D004	CLT32 MPW40	LST25	TSB-22		CWM9	
-	-	-	-	-	1/4	0.40 - 0.63	100kA	MPW40-3-C063	CLT32 MPW40	LST25	TSB-22		CWM9	
-	-	-	-	1/2	1/2	0.63 - 1.0	100kA	MPW40-3-U001	CLT32 MPW40	LST25	TSB-22		CWM9	
-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA	MPW40-3-D016	CLT32 MPW40	LST25	TSB-22		CWM9	
-	1/6	1/2	1/2	1 1/2	1 1/2	1.6 - 2.5	100kA	MPW40-3-D025	CLT32 MPW40	LST25	TSB-22		CWM9	
1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA	MPW40-3-U004	CLT32 MPW40	LST25	TSB-22		CWM9	
1/4	3/4	1 1/2	1 1/2	3	5	4.0 - 6.3	100kA	MPW40-3-D063	CLT32 MPW40	LST25	TSB-22		CWM9	
1/2	1 1/2	3	3	5	7 1/2	6.3 - 10	100kA	MPW40-3-U010	CLT32 MPW40	LST25	TSB-22		CWM9	
1	3	5	5	10	15	10 - 16	100kA	MPW40-3-U016	CLT32 MPW40	LST25	TSB-22	CWM18	\$103	
1 1/2	3	5	7 1/2	15	15	16 - 20	100kA	MPW40-3-U020	CLT32 MPW40	LST25	TSB-22	CWM25	\$118	
2	3	7 1/2	7 1/2	15	20	20 - 25	100kA	MPW40-3-U025	CLT32 MPW40	LST25	TSB-22	CWM32	\$140	
-	5	10	10	20	25	25 - 32	100kA	MPW40-3-U032	CLT32 MPW40	LST25	TSB-22	CWM40	\$164	

Note: Horsepower ratings shown in the table are for reference only. Please refer to the Full Load Amps of the Motor for final selection.

<sup>1</sup> Individual Component Catalog Numbers are ordered separately.

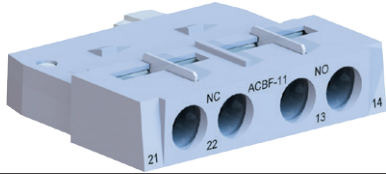
<sup>2</sup> Multiplier Symbol Z4

<sup>3</sup> Multiplier Symbol Z1

## MPW

### Front Mounting Auxiliary Contact Block - ACBF

For use with	Auxiliary Contacts		Catalog Number	List Price	Multiplier
	NO	NC			
MPW18 MPW40 <sup>1</sup> MPW65			<b>ACBF-11</b>	<b>\$20</b>	Z4
MPW100	1	1	<b>ACBF-11 MPW100</b>	<b>\$35</b>	Z4



### Left side Auxiliary Contact Block - ACBS

For use with	Auxiliary Contacts		Catalog Number	List Price	Multiplier
	NO	NC			
MPW18 MPW40 <sup>1</sup> MPW65 <sup>1</sup>	1	1	<b>ACBS-11</b>	<b>\$22</b>	Z4
	2	-	<b>ACBS-20</b>		
	-	2	<b>ACBS-02</b>		
MPW100	1	1	<b>ACBS-11 MPW100</b>	<b>\$27<sup>2</sup></b>	Z4
	2	-	<b>ACBS-20 MPW100</b>		
	-	2	<b>ACBS-02 MPW100</b>		



Note:

<sup>1</sup> The following accessories can be assembled at the same time: 1 ACBF + 1 URMP/SRMP + 1 TSB-22 or 1 ACBS + 1 URMP/SRMP + 1 TSB-22

<sup>2</sup> Unit list price. Product sold in multiples of 2 units

General Information

Circuit Protection

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Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks


Power Factor Correction

Appendix A


Appendix B

## Accessories

### Trip Signalling Block - TSB-22

For use with		Description	Catalog Number	List Price	Multiplier
MPW40 <sup>1</sup> MPW65 <sup>1</sup>		<ul style="list-style-type: none"> <li>- Equipped with 2 auxiliary contacts (1NO + 1NC) for overload trip signalling and 2 other auxiliary contacts (1NO + 1NC) for short-circuit trip signalling.</li> <li>- To reset the MPW after a short-circuit, the blue flag must be manually reset after the cause of the failure has been solved.</li> <li>- Left side auxiliary contacts can be assembled together with the trip signalling block.</li> <li>- Left side assembly only</li> </ul>	<b>TSB-22</b>	<b>\$38</b>	Z4
MPW100		<ul style="list-style-type: none"> <li>- Equipped with 2 auxiliary contacts (1NO + 1NC) for short-circuit trip signalling.</li> <li>- Left side assembly only</li> </ul>	<b>TSB SC-11 MPW100</b>	<b>\$38<sup>2</sup></b>	Z4

### Undervoltage Release - URMP

For use with		Voltage	Catalog Number	List Price	Multiplier
MPW18 <sup>1</sup> MPW40 <sup>1</sup> MPW65 <sup>1</sup>		208V 60Hz 24V 50/60Hz 400-415V 50Hz / 480V 60Hz 110V 50Hz / 120V 60Hz 240V 60Hz	<b>URMP V23</b> <b>URMP D02</b> <b>URMP V47</b> <b>URMP V18</b> <b>URMP V30</b>	<b>\$56</b>	Z4
MPW100		Note: - Operating voltage > 0,85 x Ue - Non operating voltage 0,35...0,7 x Ue	110V 50Hz / 120V 60Hz 220-230V 50Hz / 240V 60Hz 380-400V 50Hz / 460V 60Hz	<b>URMP V18 MPW100</b> <b>URMP V33 MPW100</b> <b>URMP V43 MPW100</b>	<b>\$56</b>

Note: <sup>1</sup>The following accessories can be assembled at the same time: 1 ACBF + 1 URMP/SRMP + 1 TSB-22 -B or 1 ACBS + 1 URMP/SRMP + 1 TSB-22-B

<sup>2</sup>Unit list price. Product sold in multiples of 2 units

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

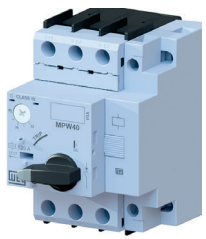
Appendix A

Appendix B

MPW

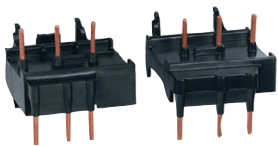
## Accessories

### Shunt Release - SRMP

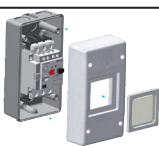


For use with		Voltage	Catalog Number	List Price	Multiplier
MPW18 <sup>1</sup> MPW40 <sup>1</sup> MPW65 <sup>1</sup>		20-24V 50/60Hz 100-127V 50/60Hz 200-240V 50/60Hz	SRMP D51 SRMP D59 SRMP D65	\$56	Z4
MPW100	Note: - Operating voltage > 0.7 x Ue	110V 50Hz / 120V 60Hz 220-230V 50Hz / 240-260V 60Hz	SRMP V18 MPW100 SRMP V33 MPW100	\$56	Z4

Note: <sup>1</sup> The following accessories can be coupled at the same time:  
1 ACBF + 1 URMP/SRMP + 1 TSB or 1 ACBS + 1 URMP/SRMP + 1 TSB

### Link modules for manual motor protector assembly + contactors – ECCMP

For use with		Description	Contactors	Catalog Number	List Price	Multiplier
MPW18		- For direct connection (electrical and mechanical) of motor circuit breakers to contactors. Note: - Not applicable to CWM contactors with DC coils.	CWC07...16 CWC025	ECCMP-C016 ECCMP-C025	\$20	Z4
MPW40			CWC07...16 CWM9...25 CWM32...40	ECCMP-C0 ECCMP-25 ECCMP-32		

### Standard IEC Enclosure - PE

For use with		Description	Terminals	Handle color	Catalog Number	List Price	Multiplier
MPW18		- Degree of protection: IP66 - Two cable entry knockouts, top and bottom - Allows installing: MPW18 + ACBF11/PL lamps + ACBS	With neutral and ground terminals	-	PE66GN	\$45	Z4
MPW40		- Degree of protection: IP55 - Allows installing: MPW40 + ACBF11/PL lamps + ACBS - Two cable entry knockouts, top and bottom - Handle can be locked with up to 3 padlocks at OFF position.	With neutral and ground terminals	Black	PE55GN	\$45	
				Red with yellow background	PE55GNE	\$45	Z4

## Accessories

### Connector Links for MPW18/40 & CWB Contactors

For use with		Description	Contactors	Catalog Number	List Price	Multiplier
MPW18		For direct connection (electrical and mechanical) of motor circuit breakers to contactors.	CWB9...38 AC coil	<a href="#">ECCMP-18B38</a>	\$20	24
MPW40			CWB9...38 AC coil	<a href="#">ECCMP-40B38</a>	\$25	
			CWB9...38 DC coil	<a href="#">ECCMP-40B38DC</a>		

### Through-the-door Rotary Handle - RMMP and MRX


For use with		Description	Handle color	Catalog Number	Price List	Multiplier
MPW40		<ul style="list-style-type: none"> <li>- Degree of protection IP55/NEMA1;</li> <li>- Shows MPW position "I"(ON) or "O"(OFF);</li> <li>- Panel door can only be opened in OFF position;</li> <li>- Adjustable shaft length. There are 2 standard shaft sizes: 130-155mm (Model 130) and 330-355mm (Model 330). To assemble the handle on the MPW the shaft must have a length of at least 80mm;</li> <li>- Up to 3 padlocks can be used in the OFF position. This blocks MPW operation and panel door opening;</li> <li>- Handle can be mounted on panels with thickness of 1 to 5mm;</li> <li>- Handle can be assembled even with MPW turned in 90° position</li> </ul>	Gray/Black	<a href="#">RMMP-130</a>	\$70	24
			Gray/Black	<a href="#">RMMP-330</a>	\$85	
MPW65			Red/Yellow	<a href="#">RMMP-130E</a>	\$70	
			Red/Yellow	<a href="#">RMMP-330E</a>	\$85	
			Gray/Black	<a href="#">RMMP65-130</a>	\$60	
			Gray/Black	<a href="#">RMMP65-330</a>	\$70	
Red/Yellow	<a href="#">RMMP65-130E</a>	\$60				
MPW100		<ul style="list-style-type: none"> <li>- Degree of protection NEMA1;</li> <li>- Shows MPW position "I"(ON) or "O"(OFF);</li> <li>- Panel door can be opened at ON position (thermometry) by defeating mechanism;</li> <li>- Adjustable shaft length. There are 2 standard shaft sizes: 115mm (Model 115) and 315mm (Model 315). To assemble the handle to the MPW, the shaft must have a min. length of at least 80mm;</li> <li>- Up to 3 padlocks can be used in the OFF position. This blocks the MPW operation and opens panel door.</li> </ul>	Gray/Black	<a href="#">MR MPW100-115</a>	\$100	
			Gray/Black	<a href="#">MR MPW100-315</a>	\$115	
MPW40		<ul style="list-style-type: none"> <li>- Panel door can be opened in ON position (thermometry) by defeating mechanism.</li> <li>- Degree of protection: IP65/NEMA 4X</li> <li>- Shows MPW position "I"(ON) or "O"(OFF)</li> <li>- Adjustable shaft length. There are 2 standard shaft sizes: 130-155mm (Model 130) and 330-355mm (Model 330). To assemble the handle ON the MPW the shaft must have a length of at least 80mm</li> <li>- Up to 3 padlocks can be used in the OFF position. This blocks MPW operation and opens panel door. Handle can be mounted on panels with thickness of 1 to 5mm</li> </ul>	Gray/Black	<a href="#">MRX-130</a>	\$105	24
			Gray/Black	<a href="#">MRX-330</a>	\$115	
MPW65			Red/Yellow	<a href="#">MRX-130E</a>	\$105	
			Red/Yellow	<a href="#">MRX-330E</a>	\$115	
MPW100			Gray/Black	<a href="#">MRX65-130</a>	\$120	
			Gray/Black	<a href="#">MRX65-330</a>	\$130	
MPW100			Red/Yellow	<a href="#">MRX65-130E</a>	\$120	
			Red/Yellow	<a href="#">MRX65-330E</a>	\$130	
Gray/Black	<a href="#">MRX100-130-E</a>	\$130				
Red/Yellow	<a href="#">MRX100-130-E</a>	\$130				

# Motor Protectors


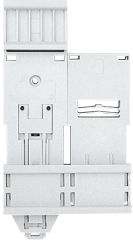

MPW

## Accessories

### Large IEC Enclosure - LPE55

For use with	Description	Terminals	Handle color	Catalog Number	List Price	Multiplier
MPW40	 <ul style="list-style-type: none"> <li>- Degree of protection: IP55</li> <li>- For use with MPW40 + URMP/SRMP + ACBF11 + ACBS + PL lamps</li> <li>- Two cable entry knockouts. top and bottom</li> <li>- Handle can be locked with up to 3 padlocks at OFF position.</li> </ul>	With neutral and ground terminals	Black	LPE55GN	\$55	Z4
			Red with yellow background	LPE55GN-E		


### Manual Motor Protector mounting adapter - MA

For use with	MPW40	Description	Contactors	Catalog Number	List Price	Multiplier
MPW40		Used for direct on line starters 45mm width	CWC07...25 CWM9...CWM25	MA45DOL	\$40	Z4
MPW40		Used for reversing starters 90mm width	2 x CWC07...25 2x CWM9...CWM25	MA90RVS	\$50	
MPW40		Used for star-delta motor starters 90mm width	2 x CWC07...25 2x CWM9...CWM25	MA90SDS	\$85	





## Accessories

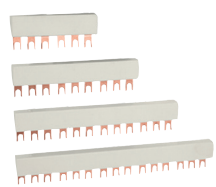
### Insulators - IB

For use with		Description	Catalog Number	List Price	Multiplier
MPW100		Insulators for increasing creepage distance and clearances according to UL requirements.	IB MPW100	\$30	Z4

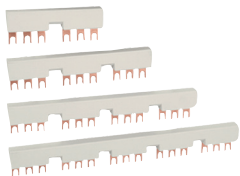
### Three-phase feeder terminal – FTBBS and LST25

For use with		Description	Catalog Number	List Price	Multiplier
MPW18 MPW40		- For feeding the feeder terminals; - Rated insulation voltage: 690VAC; - I <sub>e</sub> : 63A; - Terminals: 6-25mm <sup>2</sup> rigid wire and 6-16mm <sup>2</sup> flexible wire with terminal.	FTBBS	\$35	Z4
MPW40		- Block module for “ Type E” Combination motor Controller” in accordance with UL (LST25+MPW+TSB-22-B); - Rated insulation voltage: 690VAC; - I <sub>e</sub> : 63A. - Terminals: 8-20AWG.	LST25	\$42	

### Three-phase feeder terminals for MPW without side auxiliary contacts – BBS45

For use with		Description	Numbers of MPW	Catalog Number	List Price	Multiplier
MPW18 MPW40		- For parallel blocking of side-by-side mounted MPW, without side auxiliary contacts; - Enables the use of frontal auxiliary contact block ACBF-11; - U <sub>e</sub> : 690VAC - I <sub>e</sub> : 63A	2	BBS45-2	\$32	Z4
			3	BBS45-3	\$35	
			4	BBS45-4	\$45	
			5	BBS45-5	\$60	

### Three-phase feeder terminals for MPW with side auxiliary contacts – BBS54


For use with		Description	Numbers of MPW	Catalog Number	List Price	Multiplier
MPW18 MPW40		- For parallel blocking of side-by-side mounted MPW; - Enables the use of frontal auxiliary contact block ACBF-11 and side auxiliary contact block ACBS; - U <sub>e</sub> : 690VAC; - I <sub>e</sub> : 63A.	2	BBS54-2	\$32	Z4
			3	BBS54-3	\$35	
			4	BBS54-4	\$45	
			5	BBS54-5	\$60	

# Motor Protectors


MPW

## Accessories


### Current Limiter - CLT32

For use with	Description	Catalog Number	List Price	Multiplier
MPW40	 <p>- For protecting electrical circuits where extra high short-circuit breaking capacity is required: 100kA @ 480VAC</p> <p>Note: This accessory must be used together with a MPW motor protector.</p>	CLT32 MPW40	\$100	Z4


### Shroud for unused terminals – CSD

For use with	Description	Catalog Number	List Price	Multiplier
BBS45 and BBS54	 <p>Protection against direct contact on unused terminals on energized BBS45 and BBS54 three-phase feeder terminals.</p>	CSD	\$10 <sup>1</sup>	Z4

### Scale Cover - SCMP

For use with	Description	Catalog Number	List Price	Multiplier
MPW18 MPW40 MPW65	 <p>Protects the current adjustment dial against direct contact while enabling the set current to be viewed.</p>	SCMP	\$5	Z4

### Push-in-lugs - PLMP

For use with	Description	Catalog Number	List Price	Multiplier
MPW18 MPW40 MPW65	 <p>For direct assembly of motor protective circuit breaker onto any surface using screws.</p>	PLMP	\$0.50	Z4

Notes: <sup>1</sup> Unit list price. Product sold in multiples of 5 units.

## MPW18 Technical Data

### General Ratings

Model			MPW18-3-C016	MPW18-3-C025	MPW18-3-D004	MPW18-3-C063	MPW18-3-U001	MPW18-3-D016	MPW18-3-D025
<b>Standards</b>			Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102						
Current Setting Range		[A]	0.10 - 0.16	0.16 - 0.25	0.25 - 0.40	0.40 - 0.63	0.63 - 1.0	1.0 - 1.6	1.6 - 2.5
Rated Thermal Current I <sub>th</sub>		[A]	0.16	0.25	0.40	0.63	1.0	1.6	2.5
<b>Rated Insulation Voltage U<sub>i</sub></b>									
Acc. IEC; VDE 0660		[V]	690						
Acc. UL; CSA		[V]	600						
<b>Rated Operating Voltage U<sub>e</sub></b>									
Acc. IEC; VDE 0660		[V]	690						
Acc. UL; CSA		[V]	600						
<b>Rated Impulse Voltage U<sub>imp</sub></b>									
Acc. IEC60947-1		[kV]	6						
Rated Operating Frequency		[Hz]	50/60						
Overvoltage Category			III						
Pollution Degree			3						
<b>Utilization Category</b>									
IEC 60947-2 (Motor Protector)			A						
IEC 60947-4-1 (Motor Starter)			AC-3						
<b>Lifespan</b>									
Mechanical		[ops.]	100,000						
Electrical (I <sub>e</sub> max.)		[ops.]	100,000						
Switching Rate (motor starts)	AC-3	[ops/hr]	15						
<b>Ambient Temperature</b>									
Storage		[°C (°F)]	-50 to +80 (-58 to +176)						
Operating		[°C (°F)]	-20 to +60 (-4 to +140)						
Ambient Temperature Compensation		[°C (°F)]	-20 to +60 (-4 to +140)						
Climatic Proofing			IEC 60068-2-3 / IEC 60068-2-30						
<b>Altitude</b>									
Up to 2,000m (6,600ft)			Nominal Values (for higher altitudes refer to page 119)						
Degree of protection			IP20						
<b>Resistance to Shock</b>									
Acc. IEC 60068-2-27		[g]	15						
Resistance to Vibration			IEC 68-2						
<b>Protection against direct contact</b>									
Acc. IEC 536; DIN VDE 0106 Part 100			Finger and back of hand proof						
Phase Failure Sensitivity Protection			Yes						
Overload Protection Characteristics	x I <sub>u</sub>	[A]	0.6 - 1						
Magnetic Release	x I <sub>u</sub>	[A]	13						
Overload Trip Class			10						
<b>Total Power Loss P<sub>v</sub></b>									
At rated load operating temperature		[W]	6	6	6	6	6	6	6
Weight		[kg]	0.30						
		[lb]	0.70						
Type of Terminal			Flat Type						
Screw Driver			Phillips #2						
<b>Terminal Capacity</b>									
Solid - Stranded	[mm <sup>2</sup> ]	[AWG]	Refer to table on page 118						
Tightening Torque	N.m)	lb.in	1.2 - 1.7 (11 - 16)						
Mounting Position			Any Position						

## MPW

### MPW18 Technical Data

#### General Ratings

TYPE			MPW18-3-U004	MPW18-3-D063	MPW18-3-U010	MPW18-3-U016	MPW-3-U018
<b>Standards</b>			Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102				
Current Setting Range		[A]	2.5 - 4.0	4.0 - 6.3	6.3 - 10	10 - 16	12-18
Rated Thermal Current I <sub>th</sub>		[A]	4.0	6.3	10	16	18
<b>Rated Insulation Voltage U<sub>i</sub></b>							
Acc. IEC; VDE 0660		[V]	690				
Acc. UL; CSA		[V]	600				
<b>Rated Operating Voltage U<sub>e</sub></b>							
Acc. IEC; VDE 0660		[V]	690				
Acc. UL; CSA		[V]	600				
<b>Rated Impulse Voltage U<sub>imp</sub></b>							
Acc. IEC60947-1		[kV]	6				
Rated Operating Frequency		[Hz]	50/60				
Overtoltage Category			III				
Pollution Degree			3				
<b>Utilization Category</b>							
IEC 60947-2 (Motor Protector)			A				
IEC 60947-4-1 (Motor Starter)			AC-3				
<b>Lifespan</b>							
Mechanical		[ops.]	100,000				
Electrical (I <sub>e</sub> max.)		[ops.]	100,000				
Switching Rate (motor starts)	AC-3	[ops/hr]	15				
<b>Ambient Temperature</b>							
Storage		[°C (°F)]	-50 to +80 (-58 to +176)				
Operating		[°C (°F)]	-20 to +60 (-4 to +140)				
Ambient Temperature Compensation		[°C (°F)]	-20 to +60 (-4 to +140)				
Climatic Proofing			IEC 60068-2-3 / IEC 60068-2-30				
<b>Altitude</b>							
Up to 2,000m (6,600ft)			Nominal Values (for higher altitudes refer to page 119)				
Degree of protection			IP20				
<b>Resistance to Shock</b>							
Acc. IEC 60068-2-27		[g]	15				
Resistance to Vibration			IEC 68-2				
<b>Protection against direct contact</b>							
Acc. IEC 536; DIN VDE 0106 Part 100			Finger and back of hand proof				
Phase Failure Sensitivity Protection			Yes				
Overload Protection Characteristics	x I <sub>u</sub>	[A]	0.6 - 1				
Magnetic Release	x I <sub>u</sub>	[A]	12				
Overload Trip Class			10				
<b>Total Power Loss P<sub>v</sub></b>							
At rated load operating temperature		[W]	6	6	6	6	6
Weight		[kg]	0.3				
		[lb]	0.7				
Type of Terminal			Flat Type				
Screw Driver			Phillips #2				
<b>Terminal Capacity</b>							
Solid - Stranded	[mm <sup>2</sup> ]	[AWG]	Refer to table on page 118				
Tightening Torque	N.m)	lb.in	1.2 - 1.7 (11 - 16)				
Mounting Position			Any Position				

## MPW18 Technical Data

### Power Contact Ratings

TYPE UL/CSA DATA			MPW18-3-C016	MPW18-3-C025	MPW18-3-D004	MPW18-3-C063	MPW18-3-U001	MPW18-3-D016	MPW18-3-D025
Rated Operational Current I <sub>e</sub>		[A]	0.16	0.25	0.40	0.63	1.0	1.6	2.5
Magnetic Release Current		[A]	2	3	5	8	13	21	33

#### Max. Short Circuit Current

	480V	[kA]	50						
	600V	[kA]	10						

#### Motor Load, 1-phase

	115V	[HP]	-	-	-	-	-	-	-
	230V	[HP]	-	-	-	-	-	1/10	1/6

#### Motor Load, 3-phase

	200V	[HP]	-	-	-	-	-	1/4	1/2
	230V	[HP]	-	-	-	-	-	1/3	1/2
	460V	[HP]	-	-	-	-	1/2	3/4	1 1/2
	575V	[HP]	-	-	-	1/4	1/2	1	1 1/2

#### Max. Rated Current of Protection Device for Group Installation

	Fuse or MCCB	[A]	125	125	125	125	125	125	125
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### IEC DATA

TYPE UL/CSA DATA			MPW18-3-C016	MPW18-3-C025	MPW18-3-D004	MPW18-3-C063	MPW18-3-U001	MPW18-3-D016	MPW18-3-D025
Rated Operational Current I <sub>e</sub>		[A]	0.16	0.25	0.4	0.63	1	1.6	2.5
Magnetic Release Current		[A]	2	3	5	8	13	21	33

#### Back-Up Fuses

gL/gG	220/240V	[A]	-	-	-	-	-	-	-
	380/400V	[A]	-	-	-	-	-	-	-
	415/440V	[A]	-	-	-	-	-	-	-
	500V	[A]	-	-	-	-	-	-	-
	660/690V	[A]	-	-	-	-	-	-	25

#### Ultimate Short Circuit Breaking Capacity

I <sub>cu</sub>	220/240V	[kA]	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	100	100	100	100
	415/440V	[kA]	100	100	100	100	100	100	100
	500V	[kA]	100	100	100	100	100	100	100
	660/690V	[kA]	100	100	100	100	100	100	8

#### Rated Service Short Circuit Breaking Capacity

I <sub>cs</sub>	220/240V	[kA]	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	100	100	100	100
	415/440V	[kA]	100	100	100	100	100	100	100
	500V	[kA]	100	100	100	100	100	100	100
	660/690V	[kA]	100	100	100	100	100	100	8

## MPW

### MPW18 Technical Data

#### Power Contact Ratings

TYPE UL/CSA DATA	Voltage	Units	MPW18- 3-U004	MPW18- 3-D063	MPW18- 3-U010	MPW18- 3-U016	MPW18- 3-U018
Rated Operational Current Ie		[A]	4.0	6.3	10	16	18
Magnetic Release Current		[A]	52	82	130	208	-
<b>Max. Short Circuit Current</b>							
	480V	[kA]	50	50	50	30	30
	600V	[kA]	10	10	5	5	5
<b>Motor Load, 1-phase</b>							
	115V	[HP]	1/8	1/4	1/2	1	1
	230V	[HP]	1/3	3/4	1 1/2	3	3
<b>Motor Load, 3-phase</b>							
	200V	[HP]	3/4	1 1/2	3	3	5
	230V	[HP]	1	1 1/2	3	5	5
	460V	[HP]	2	5	7 1/2	10	10
	575V	[HP]	3	5	10	15	15
<b>Max. Rated Current of Protection Device for Group Installation</b>							
	Fuse or MCCB	[A]	125	125	125	160	160

#### IEC DATA

TYPE UL/CSA DATA	Voltage	Units	MPW18- 3-U004	MPW18- 3-D063	MPW18- 3-U010	MPW18- 3-U016	MPW18- 3-U018
Rated Operational Current Ie		[A]	4	6.3	10	16	18
Magnetic Release Current		[A]	52	82	130	208	234
<b>Back-Up Fuses</b>							
gL/gG	220/240V	[A]	-	-	-	-	-
	380/400V	[A]	-	-	100	100	100
	415/440V	[A]	-	-	80	80	80
	500V	[A]	-	-	63	80	80
	660/690V	[A]	35	50	50	63	80
<b>Ultimate Short Circuit Breaking Capacity</b>							
Icu	220/240V	[kA]	100	100	100	100	100
	380/400V	[kA]	100	100	50	10	10
	415/440V	[kA]	100	100	50	10	10
	500V	[kA]	100	100	10	10	10
	660/690V	[kA]	8	8	5	4	4
<b>Rated Service Short Circuit Breaking Capacity</b>							
Ics	220/240V	[kA]	100	100	100	100	100
	380/400V	[kA]	100	100	10	10	10
	415/440V	[kA]	100	100	10	10	10
	500V	[kA]	100	100	10	10	8
	660/690V	[kA]	8	8	5	3	3

## MPW40 Technical Data

### General Ratings

TYPE	Units		MPW40-3-C016	MPW40-3-C025	MPW40-3-D004	MPW40-3-C063	MPW40-3-U001	MPW40-3-D016	MPW40-3-D025
			Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102						
Current Setting Range	[A]		0.10 - 0.16	0.16 - 0.25	0.25 - 0.40	0.40 - 0.63	0.63 - 1.0	1.0 - 1.6	1.6 - 2.5
Rated Thermal Current I <sub>th</sub>	[A]		0.16	0.25	0.40	0.63	1.0	1.6	2.5
<b>Rated Insulation Voltage Ui</b>									
Acc. IEC; VDE 0660	[V]		690						
Acc. UL; CSA	[V]		600						
<b>Rated Operating Voltage U<sub>e</sub></b>									
Acc. IEC; VDE 0660	[V]		690						
Acc. UL; CSA	[V]		600						
<b>Rated Impulse Voltage U<sub>imp</sub></b>									
Acc. IEC60947-1	[kV]		6						
Rated Operating Frequency	[Hz]		50/60						
Oversvoltage Category			III						
Pollution Degree			3						
<b>Utilization Category</b>									
IEC 60947-2 (Motor Protector)			A						
IEC 60947-4-1 (Motor Starter)			AC-3						
<b>Lifespan</b>									
Mechanical	[ops.]		100,000						
Electrical (I <sub>e</sub> max.)	[ops.]		100,000						
Switching Rate (motor starts)	AC-3	[ops/hr]	15						
<b>Ambient Temperature</b>									
Storage	[°C (°F)]		-50 to +80 (-58 to +176)						
Operating	[°C (°F)]		-20 to +60 (-4 to +140)						
Ambient Temperature Compensation	[°C (°F)]		-20 to +60 (-4 to +140)						
Climatic Proofing			IEC 60068-2-3 / IEC 60068-2-30						
<b>Altitude</b>									
Up to 2,000m (6,600ft)			Nominal Values (for higher altitudes refer to page 119)						
Degree of protection			IP20						
<b>Resistance to Shock</b>									
Acc. IEC 60068-2-27	[g]		15						
Resistance to Vibration			IEC 68-2						
<b>Protection against direct contact</b>									
Acc. IEC 536; DIN VDE 0106 Part 100			Finger and back of hand proof						
Phase Failure Sensitivity Protection			Yes						
Overload Protection Characteristics	x I <sub>u</sub>	[A]	0.6 - 1						
Magnetic Release	x I <sub>u</sub>	[A]	13						
Overload Trip Class			10						
<b>Total Power Loss P<sub>v</sub></b>									
At rated load operating temperature	[W]		6	6	6	6	6	6	6
Weight	[kg]		0.32						
	[lb]		0.71						
Type of Terminal			Flat Type						
Screw Driver			Philips #2						
<b>Terminal Capacity</b>									
Solid - Stranded	[mm <sup>2</sup> ]	[AWG]	Refer to table on page 118						
Tightening Torque	N.m)	lb.in	1.2 - 1.7 (11 - 16)						
Mounting Position			Any Position						

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

## MPW

### MPW40 Technical Data

#### General Ratings

TYPE	Units	MPW40-3-U004	MPW40-3-D063	MPW40-3-U010	MPW40-3-U016	MPW40-3-U020	MPW40-3-U025	MPW40-3-U032	MPW40-3-U040
Standards		Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102							
Current Setting Range	[A]	2.5 - 4.0	4.0 - 6.3	6.3 - 10	10 - 16	16 - 20	20 - 25	25 - 32	32 - 40
Rated Thermal Current Ith	[A]	4.0	6.3	10	16	20	25	32	40
<b>Rated Insulation Voltage Ui</b>									
Acc. IEC; VDE 0660	[V]	690							
Acc. UL; CSA	[V]	600							
<b>Rated Operating Voltage Ue</b>									
Acc. IEC; VDE 0660	[V]	690							
Acc. UL; CSA	[V]	600							
<b>Rated Impulse Voltage Uimp</b>									
Acc. IEC60947-1	[kV]	6							
Rated Operating Frequency	[Hz]	50/60							
Oversvoltage Category		III							
Pollution Degree		3							
<b>Utilization Category</b>									
IEC 60947-2 (Motor Protector)		A							
IEC 60947-4-1 (Motor Starter)		AC-3							
<b>Lifespan</b>									
Mechanical	[ops.]	100,000							
Electrical (Ie max.)	[ops.]	100,000							
Switching Rate (motor starts)	AC-3 [ops/hr]	15							
<b>Ambient Temperature</b>									
Storage	[oC (oF)]	-50 to +80 (-58 to +176)							
Operating	[oC (oF)]	-20 to +60 (-4 to +140)							
Ambient Temperature Compensation	[oC (oF)]	-20 to +60 (-4 to +140)							
Climatic Proofing		IEC 60068-2-3 / IEC 60068-2-30							
<b>Altitude</b>									
Up to 2,000m (6,600ft)		Nominal Values (for higher altitudes refer to page 119)							
Degree of protection		IP20							
<b>Resistance to Shock</b>									
Acc. IEC 60068-2-27	[g]	15							
Resistance to Vibration		IEC 68-2							
<b>Protection against direct contact</b>									
Acc. IEC 536; DIN VDE 0106 Part 100		Finger and back of hand proof							
Phase Failure Sensitivity Protection		Yes							
Overload Protection Characteristics	x Iu [A]	0.6 - 1							
Magnetic Release	x Iu [A]	13							
Overload Trip Class		10							
<b>Total Power Loss Pv</b>									
At rated load operating temperature	[W]	6	6	6	6	8	8	8	8
Weight	[kg]	0.32							
	[lb]	0.71							
Type of Terminal		Flat Type							
Screw Driver		Phillips #2							
<b>Terminal Capacity</b>									
Solid - Stranded	[mm <sup>2</sup> ] [AWG]	Refer to table on page 118							
Tightening Torque	N.m) lb.in	1.2 - 1.7 (11 - 16)							
Mounting Position		Any Position							



## MPW40 Technical Data

### Power Contact Ratings

TYPE	Voltage	Units	MPW40-3-C016	MPW40-3-C025	MPW40-3-C040	MPW40-3-C063	MPW40-3-U001	MPW40-3-D016	MPW40-3-D025
<b>UL/CSA DATA</b>									
Rated Operational Current I <sub>e</sub>		[A]	0.16	0.25	0.40	0.63	1.0	1.6	2.5
Magnetic Release Current		[A]	2	3	5	8	13	21	33
<b>Max. Short Circuit Current</b>									
without CLT25									
	480V	[kA]							50
	600V	[kA]							25
with CLT25									
	480V	[kA]							100
	600V	[kA]							50
Motor Load, 1-phase									
	115V	[HP]	-	-	-	-	-	-	-
	230V	[HP]	-	-	-	-	-	1/10	1/6
Motor Load, 3-phase									
	200V	[HP]	-	-	-	-	-	1/4	1/2
	230V	[HP]	-	-	-	-	-	1/3	1/2
	460V	[HP]	-	-	-	-	1/2	3/4	1 1/2
	575V	[HP]	-	-	-	1/4	1/2	1	1 1/2
<b>Max. Rated Current of Protection Device for Group Installation</b>									
	Fuse or MCCB	[A]	125	125	125	125	125	125	125
<b>IEC DATA</b>									
Rated Operational Current I <sub>e</sub>		[A]	0.16	0.25	0.4	0.63	1	1.6	2.5
Magnetic Release Current		[A]	2	3	5	8	13	21	33
<b>Back-Up Fuses</b>									
gL/gG	220/240V	[A]	-	-	-	-	-	-	-
	380/400V	[A]	-	-	-	-	-	-	-
	415/440V	[A]	-	-	-	-	-	-	-
	500V	[A]	-	-	-	-	-	-	-
	660/690V	[A]	-	-	-	-	-	-	25
<b>Ultimate Short Circuit Breaking Capacity</b>									
I <sub>cu</sub>	220/240V	[kA]	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	100	100	100	100
	415/440V	[kA]	100	100	100	100	100	100	100
	500V	[kA]	100	100	100	100	100	100	100
	660/690V	[kA]	100	100	100	100	100	100	8
<b>Rated Service Short Circuit Breaking Capacity</b>									
I <sub>cs</sub>	220/240V	[kA]	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	100	100	100	100
	415/440V	[kA]	100	100	100	100	100	100	100
	500V	[kA]	100	100	100	100	100	100	100
	660/690V	[kA]	100	100	100	100	100	100	8

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### MPW40 Technical Data

#### Power Contact Ratings

TYPE	Voltage	Units	MPW40-3-U004	MPW40-3-D063	MPW40-3-U010	MPW40-3-U016	MPW40-3-U020	MPW40-3-U025	MPW40-3-U032	MPW40-3-U040
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#### UL/CSA DATA

Rated Operational Current Ie		[A]	4.0	6.3	10	16	20	25	32	40
Magnetic Release Current		[A]	52	82	130	208	260	325	416	520

#### Max. Short Circuit Current

without CLT25

	480V	[kA]	50					42	20
	600V	[kA]	25					25	-

with CLT25

	480V	[kA]	100						
	600V	[kA]	50						

Motor Load, 1-phase

	115V	[HP]	1/8	1/4	1/2	1	1 1/2	2	-	-
	230V	[HP]	1/3	3/4	1 1/2	3	3	3	5	5

Motor Load, 3-phase

	200V	[HP]	3/4	1 1/2	3	5	5	7 1/2	10	10
	230V	[HP]	1	1 1/2	3	5	7 1/2	7 1/2	10	10
	460V	[HP]	2	5	7 1/2	10	15	15	20	25
	575V	[HP]	3	5	10	15	20	20	25	30

#### Max. Rated Current of Protection Device for Group Installation

	Fuse or MCCB	[A]	125	125	125	160	250	250	300	300
--	--------------	-----	-----	-----	-----	-----	-----	-----	-----	-----

#### IEC DATA

Rated Operational Current Ie		[A]	4	6.3	10	16	20	25	32	40
Magnetic Release Current		[A]	52	82	130	208	260	325	416	520

#### Back-Up Fuses

gL/gG	220/240V	[A]	-	-	-	-	-	-	-	-
	380/400V	[A]	-	-	-	100	125	125	125	125
	415/440V	[A]	-	-	80	80	80	100	100	125
	500V	[A]	-	-	63	80	80	80	80	125
	660/690V	[A]	35	50	50	63	63	63	63	125

#### Ultimate Short Circuit Breaking Capacity

Icu	220/240V	[kA]	100	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	50	50	50	50	30
	415/440V	[kA]	100	100	50	50	50	50	25	20
	500V	[kA]	100	100	42	10	10	10	10	10
	660/690V	[kA]	8	8	8	5	5	5	5	5

#### Rated Service Short Circuit Breaking Capacity

Ics	220/240V	[kA]	100	100	100	100	100	100	100	100
	380/400V	[kA]	100	100	100	25	25	25	25	15
	415/440V	[kA]	100	100	25	15	15	15	15	10
	500V	[kA]	100	100	21	8	8	8	8	5
	660/690V	[kA]	8	8	8	5	5	5	5	2

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## MPW65 Technical Data

### General Rating

TYPE	Units	MPW65-3-U016	MPW65-3-U020	MPW65-3-U025	MPW65-3-U032	MPW65-3-U040	MPW65-3-U050	MPW65-3-U065
Standards		Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102						
Current Setting Range	[A]	10 - 16	16 - 20	20 - 25	25 - 32	32 - 40	40 - 50	50 - 65
Rated Thermal Current I <sub>th</sub>	[A]	16	20	25.00	32	40.0	50	65
<b>Rated Insulation Voltage U<sub>i</sub></b>								
Acc. IEC; VDE 0660	[V]				690			
Acc. UL; CSA	[V]				600			
<b>Rated Operating Voltage U<sub>e</sub></b>								
Acc. IEC; VDE 0660	[V]				690			
Acc. UL; CSA	[V]				600			
<b>Rated Impulse Voltage U<sub>imp</sub></b>								
Acc. IEC60947-1	[kV]				6			
Rated Operating Frequency	[Hz]				50/60			
Oversvoltage Category					III			
Pollution Degree					3			
<b>Utilization Category</b>								
IEC 60947-2 (Motor Protector)					A			
IEC 60947-4-1 (Motor Starter)					AC-3			
<b>Lifespan</b>								
Mechanical	[ops.]				50,000			
Electrical (I <sub>e</sub> max.)	[ops.]				25,000			
Switching Rate (motor starts)	AC-3 [ops/hr]				15			
<b>Ambient Temperature</b>								
Storage	[°C (°F)]				-50 to +80 (-58 to +176)			
Operating	[°C (°F)]				-20 to +60 (-4 to +140)			
Ambient Temperature Compensation	[°C (°F)]				-20 to +60 (-4 to +140)			
Climatic Proofing					IEC 60068-2-3 / IEC 60068-2-30			
<b>Altitude</b>								
Up to 2,000m (6,600ft)					Nominal Values (for higher altitudes refer to page 119)			
Degree of protection					IP20			
<b>Resistance to Shock</b>								
Acc. IEC 60068-2-27	[g]				15			
Resistance to Vibration					IEC 68-2			
<b>Protection against direct contact</b>								
Acc. IEC 536; DIN VDE 0106 Part 100					Finger and back of hand proof			
Phase Failure Sensitivity Protection					Yes			
Overload Protection Characteristics	x I <sub>u</sub> [A]				0.6 - 1			
Magnetic Release	x I <sub>u</sub> [A]				13			
Overload Trip Class					10			
<b>Total Power Loss P<sub>v</sub></b>								
At rated load operating temperature	[W]				8			
Weight	[kg]				0.60			
	[lb]				1.42			
Type of Terminal					Flat Type			
Screw Driver					Allen #4			
<b>Terminal Capacity</b>								
Solid - Stranded	[mm <sup>2</sup> ] [AWG]				Refer to table on page 118			
Tightening Torque	N.m) lb.in				1.2 - 1.7 (11 - 16)			
Mounting Position					Any Position			

# Motor Protectors

MPW

## MPW65 Technical Data

### Power Contact Ratings

TYPE	Voltage	Units	MPW65-3-U016	MPW65-3-U020	MPW65-3-U025	MPW65-3-U032	MPW65-3-U040	MPW65-3-U050	MPW65-3-U065	
<b>UL/CSA DATA</b>										
Rated Operational Current Ie		[A]	16	20	25	32	40	50	65	
Magnetic Release Current		[A]	208	260	325	416	520	650	845	
<b>Max. Short Circuit Current</b>										
	480V	[kA]	50				35			
	600V	[kA]	30				10			
<b>Motor Load, 1-phase</b>										
	115V	[HP]					3	-	5	
	230V	[HP]					7 1/2	10	10	
<b>Motor Load, 3-phase</b>										
	200V	[HP]					-	15	20	
	230V	[HP]					15	15	20	
	460V	[HP]					25	30	50	
	575V	[HP]					30	40	60	
<b>Max. Rated Current of Protection Device for Group Installation</b>										
	Fuse or MCCB	[A]								
<b>IEC DATA</b>										
Rated Operational Current Ie		[A]	16	20	25	32	40	50	65	
Magnetic Release Current		[A]	208	260	325	416	520	650	845	
<b>Back-Up Fuses</b>										
gL/gG	220/240V	[A]	-	-	-	-	-	-	-	
	380/400V	[A]	100	125	125	125	160	160	160	
	415/440V	[A]	80	80	80	100	125	125	125	
	500V	[A]	80	80	100	80	100	100	100	
	660/690V	[A]	63	63	63	63	63	80	80	
<b>Ultimate Short Circuit Breaking Capacity</b>										
Icu	220/240V	[kA]	100	100	100	100	100	100	100	
	380/400V	[kA]	50	50	50	50	50	50	50	
	415/440V	[kA]	50	50	50	50	50	50	50	
	500V	[kA]	15	15	15	15	15	15	15	
	660/690V	[kA]	8	8	8	5	5	5	5	
<b>Rated Service Short Circuit Breaking Capacity</b>										
Ics	220/240V	[kA]	100	100	100	100	100	100	100	
	380/400V	[kA]	50	50	50	50	50	50	50	
	415/440V	[kA]	50	50	50	50	50	50	50	
	500V	[kA]	15	15	15	15	10	10	10	
	660/690V	[kA]	8	8	8	5	5	5	5	

## MPW100 Technical Data

### General Contact Ratings

TYPE	Units	MPW100-3-U075	MPW100-3-U090	MPW100-3-U100
Standards		Devices according to International Standards IEC 60947-1 / 60947-4-1, European Standards EN 60947-1 / 60947-4-1, Underwriters Laboratories - UL 508; CSA C.22.2/14; VDE 0660/102		
Current Setting Range	[A]	55 - 75	70 - 90	80 - 100
Rated Thermal Current Ith	[A]	75	90	100.00
<b>Rated Insulation Voltage Ui</b>				
Acc. IEC; VDE 0660	[V]		690	
Acc. UL; CSA	[V]		600	
<b>Rated Operating Voltage Ue</b>				
Acc. IEC; VDE 0660	[V]		690	
Acc. UL; CSA	[V]		600	
<b>Rated Impulse Voltage Uimp</b>				
Acc. IEC60947-1	[kV]		6	
Rated Operating Frequency	[Hz]		50/60	
Overtoltage Category			III	
Pollution Degree			3	
<b>Utilization Category</b>				
IEC 60947-2 (Motor Protector)			A	
IEC 60947-4-1 (Motor Starter)			AC-3	
<b>Lifespan</b>				
Mechanical	[ops.]		50,000	
Electrical (Ie max.)	[ops.]		25,000	
Switching Rate (motor starts)	AC-3 [ops/hr]		15	
<b>Ambient Temperature</b>				
Storage	[°C (°F)]		-50 to +80 (-58 to +176)	
Operating	[°C (°F)]		-20 to +60 (-4 to +140)	
Ambient Temperature Compensation	[°C (°F)]		-20 to +60 (-4 to +140)	
Climatic Proofing			IEC 60068-2-3 / IEC 60068-2-30	
<b>Altitude</b>				
Up to 2,000m (6,600ft)			Nominal Values (for higher altitudes refer to page 119)	
Degree of protection			IP20	
<b>Resistance to Shock</b>				
Acc. IEC 60068-2-27	[g]		15	
Resistance to Vibration			IEC 68-2	
<b>Protection against direct contact</b>				
Acc. IEC 536; DIN VDE 0106 Part 100			Finger and back of hand proof	
Phase Failure Sensitivity Protection			Yes	
Overload Protection Characteristics	x Iu [A]		0.6 - 1	
Magnetic Release	x Iu [A]		13	
Overload Trip Class			10	
<b>Total Power Loss Pv</b>				
At rated load operating temperature	[W]		10	
Weight	[kg]		1.20	
	[lb]		3.00	
Type of Terminal			Flat Type	
Screw Driver			Allen #4	
<b>Terminal Capacity</b>				
Solid	[mm <sup>2</sup> ]		Refer to table on page 118	
Stranded	[mm <sup>2</sup> ]			
Solid or Stranded	[AWG]			
Tightening Torque	[N.m (lb.in)]		4.0 - 4.6 (35 - 55)	
Mounting Position			Any Position	

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## MPW

### MPW100 Technical Data

#### Power Contact Ratings

TYPE	Voltage	Units	MPW100-3-U075	MPW100-3-U090	MPW100-3-U100
<b>UL/CSA DATA</b>					
Rated Operational Current Ie		[A]	75	90	100
Magnetic Release Current		[A]	975	1170	1300
<b>Max. Short Circuit Current</b>					
	480V	[kA]	50		
	600V	[kA]	10		
<b>Motor Load, 1-phase</b>					
	115V	[HP]	5	7 1/2	10
	230V	[HP]	15	20	20
<b>Motor Load, 3-phase</b>					
	200V	[HP]	20	25	30
	230V	[HP]	25	30	30
	460V	[HP]	50	60	75
	575V	[HP]	60	75	100
<b>Max. Rated Current of Protection Device for Group Installation</b>					
	Fuse or MCCB	[A]			
<b>IEC DATA</b>					
Rated Operational Current Ie		[A]	75	90	100
Magnetic Release Current		[A]	975	1170	1300
<b>Back-Up Fuses</b>					
gL/gG	220/240V	[A]	-	-	-
	380/400V	[A]	-	-	-
	415/440V	[A]	200	200	200
	500V	[A]	160	160	160
	660/690V	[A]	125	160	160
<b>Ultimate Short Circuit Breaking Capacity</b>					
Icu	220/240V	[kA]	100	100	100
	380/400V	[kA]	75	75	75
	415/440V	[kA]	50	50	50
	500V	[kA]	12	12	12
	660/690V	[kA]	6	6	6
<b>Rated Service Short Circuit Breaking Capacity</b>					
Ics	220/240V	[kA]	100	100	100
	380/400V	[kA]	50	50	50
	415/440V	[kA]	38	38	38
	500V	[kA]	9	9	9
	660/690V	[kA]	6	6	6

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## MPW Technical Data

### Auxiliary Contact Block Ratings

TYPE	Voltage	Units	ACBF-11	ACBF-11 MPW100	ACBS-11	ACBS-20	ACBS-02	ACBS-11 MPW100	ACBS-20 MPW100	ACBS-02 MPW100
<b>Rated Insulation Voltage Ui</b>										
Acc. IEC; VDE 0660		[V]		300					690	
Acc. UL; CSA		[V]		240					600	
<b>Rated Operating Voltage Ue</b>										
Acc. IEC; VDE 0660		[V]		250					690	
Acc. UL; CSA		[V]		240					600	
<b>Rated Impulse Voltage Uimp</b>										
Acc. IEC60947-1		[kV]		4					6	
Overvoltage Category				III						
Pollution Degree				3						
<b>Life Span</b>										
Mechanical		[ops.]							100,000	
Electrical (Ie max.)		[ops.]							100,000	
Rated Thermal Current Ith		[A]		2.5					10	
<b>Rated Operating Current Ie</b>										
Acc. IEC 60947-5-1 / AC-15	24V	[A]		2					6	
	110-127V	[A]		0.5					6	
	220-240V	[A]		0.5					6	
	380-400V	[A]		-					3	
	415-450V	[A]		-					1	
	500V	[A]		-					1	
	660-690V	[A]		-					1	
Acc. UL; CSA				C300					A600	
<b>Rated Operating Current Ie</b>										
Acc. IEC 60947-5-1 / DC-13	24V	[A]		1					2	
	48V	[A]		0.3					0.8	
	60V	[A]		0.15					0.5	
	110V	[A]		-					0.5	
	220V	[A]		-					0.25	0.25
	440V	[A]		-					0.1	0.1
Acc. UL; CSA				R300					Q600	
<b>Short Circuit rating without welding</b>										
gL/gG		[A]							10	
MCB		[A]							6	
Type of Terminal									Screwdriver; Philips #2	
<b>Terminal Capacity</b>										
Solid or Stranded		[mm <sup>2</sup> ]							1 or 2 x (0.5 to 2.5)	
Solid or Stranded		[AWG]							1 or 2 x (18 to 14)	
Tightening Torque		[N.m (lb.in)]							1.0 - 1.25 (8.85 - 11.06)	

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## MPW

### MPW Technical Data

#### Trip Signalling Block

	TYPE	Voltage	Units	TSB-22	TSB-11 MPW100
General Information	<b>Rated Insulation Voltage <math>U_i</math></b>				
	Acc. IEC; VDE 0660		[V]		690
Circuit Protection	Acc. UL; CSA		[V]		600
	<b>Rated Operating Voltage <math>U_e</math></b>				
Disconnect Switches	Acc. IEC; VDE 0660		[V]		690
	Acc. UL; CSA		[V]		600
Motor Protectors	<b>Rated Impulse Voltage <math>U_{imp}</math></b>				
	Acc. IEC60947-1		[kV]		6
	Overvoltage Category				III
	Pollution Degree				3
Contactors	<b>Life Span</b>				
	Mechanical		[ops.]		100000
	Electrical (Ie max.)		[ops.]		100000
	Rated Thermal Current Ith		[A]		10
Overloads	<b>Rated Operating Current Ie</b>				
	Acc. IEC 60947-5-1 / AC-15	24V	[A]		6
		110-127V	[A]		6
		220-240V	[A]		6
		380-400V	[A]		3
		415-450V	[A]		3
		500V	[A]		2
660-690V	[A]		1		
Acc. UL; CSA				A600	
Relays	<b>Rated Operating Current Ie</b>				
	Acc. IEC 60947-5-1 / DC-13	24V	[A]		2
		48V	[A]		0.5
		60V	[A]		0.5
		110V	[A]		0.5
		220V	[A]		0.25
		440V	[A]		0.1
Acc. UL; CSA				Q600	
Pushbuttons and Pilot Lights	<b>Short Circuit rating without welding</b>				
	gL/gG		[A]		6
	MCB		[A]		6
Terminal Blocks	Type of Terminal				Screw Driver - Philips #2
	<b>Terminal Capacity</b>				
Power Factor Correction	Solid or Stranded		[mm <sup>2</sup> ]		1 or 2 x (0.5 to 2.5)
	Solid or Stranded		AWG		1 or 2 x (18 to 14)
	Tightening Torque		N.m (lb.in)		1.0 - 1.25 8.85 - 11.06

Appendix A

Appendix B



## MPW Technical Data

### Shunt Release Block

TYPE	Units	SRMP	SRMP MPW100
<b>Rated Insulation Voltage Ui</b>			
Acc. IEC; VDE 0660	[V]	690	
Acc. UL; CSA	[V]	600	
<b>Rated Operating Voltage Ue</b>			
Acc. IEC; VDE 0660	[V]	690	
Acc. UL; CSA	[V]	600	
<b>Rated Impulse Voltage Uimp</b>			
Acc. IEC60947-1	[kV]	6	
Overvoltage Category		III	
Pollution Degree		3	
<b>Life Span</b>			
Mechanical	[ops.]	100000	
Electrical (Ie max.)	[ops.]	100000	
Actuating Voltage	x Us [V]	0.7 - 1.1	
<b>Power Consumption</b>			
Pull-In	[VA (W)]	20.2 (13)	8.5 (6)
Hold	[VA (W)]	7.2 (2.4)	3 (1.2)
Maximum Opening Time	[ms]	20	
<b>Short Circuit Rating without Welding</b>			
Fuse gL/gG	[A]	10	
MCB	[A]	6	
Type of Terminal		Screw Driver - Philips #2	
<b>Terminal Capacity</b>			
Solid or Stranded	[mm <sup>2</sup> ]	1 or 2 x (0.5 to 2.5)	
Solid or Stranded	AWG	1 or 2 x (18 to 14)	
Tightening Torque	[N.m (lb.in)]	1.0 - 1.25 (8.85 - 11.06)	

### Under Voltage Release Block

TYPE	Units	URMP	URMP MPW100
<b>Rated Insulation Voltage Ui</b>			
Acc. IEC; VDE 0660	[V]	690	
Acc. UL; CSA	[V]	600	
<b>Rated Operating Voltage Ue</b>			
Acc. IEC; VDE 0660	[V]	690	
Acc. UL; CSA	[V]	600	
<b>Rated Impulse Voltage Uimp</b>			
Acc. IEC60947-1	[kV]	6	
Overvoltage Category		III	
Pollution Degree		3	
<b>Life Span</b>			
Mechanical	[ops.]	100000	
Electrical (Ie max.)	[ops.]	100000	
Pick-Up Voltage	x Us [V]	0.85 - 1.1	
Drop-Out Voltage	x Us [V]	0.7 - 0.35	
<b>Power Consumption</b>			
Pull-In	[VA (W)]	20.2 (13)	8.5 (6)
Hold	[VA (W)]	7.2 (2.4)	3 (1.2)
Maximum Opening Time	[ms]	20	
<b>Short Circuit Rating without Welding</b>			
Fuse gL/gG	[A]	10	
MCB	[A]	6	
Type of Terminal		Screw Driver - Philips #2	
<b>Terminal Capacity</b>			
Solid or Stranded	[mm <sup>2</sup> ]	1 or 2 x (0.5 to 2.5)	
Solid or Stranded	AWG	1 or 2 x (18 to 14)	
Tightening Torque	[lb. in]	1.0 - 1.25 (8.85 - 11.06)	

General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

## MPW

### MPW Technical Data

#### Main Terminal Capacity

Catalog Number	Type	Number of conductors	Cross-Section
<b>MPW18</b>	Rigid or flexible cable	1 or 2	1...4 mm <sup>2</sup>
			18...12 AWG
<b>MPW40</b>	Rigid or flexible cable	1 or 2	1...2.5 mm <sup>2</sup>
			2.5...6 mm <sup>2</sup>
<b>MPW65</b>	Type	1 conductor connection in upper part only	Cross-Section
	Rigid cable		1...35 mm <sup>2</sup>
	Cable without terminal		1.5...35 mm <sup>2</sup>
	Cable with terminal		1...35 mm <sup>2</sup>
	Flexible cable		1.5...35 mm <sup>2</sup>
			16...2 AWG
	Type	1 conductor connection in lower part only	Cross-Section
	Rigid cable		2.5...35mm <sup>2</sup>
	Cable without terminal		6...35mm <sup>2</sup>
	Cable with terminal		2.5...35mm <sup>2</sup>
	Flexible cable		6...35mm <sup>2</sup>
			12...2 AWG
Type	Connection of 2 conductors - Conductor in upper part	Cross-Section	
Rigid cable		1...35mm <sup>2</sup>	
Cable without terminal		1.5...35mm <sup>2</sup>	
Cable with terminal		1...35mm <sup>2</sup>	
Flexible cable		1.5...35mm <sup>2</sup>	
		16...2 AWG	
Type	Conductor in lower part	Cross-Section	
Rigid cable		2.5...35mm <sup>2</sup>	
Cable without terminal		6...35mm <sup>2</sup>	
Cable with terminal		2.5...35mm <sup>2</sup>	
Flexible cable		6...35mm <sup>2</sup>	
		12...2 AWG	
<b>MPW100</b>	Type	Number of conductors	Cross-Section
	Rigid cable	1	2.5...70 mm <sup>2</sup>
		2	12...2/0 AWG
	Flexible cable	1	2.5...50 mm <sup>2</sup>
		2	12...1/0 AWG
			2.5...50 mm <sup>2</sup>
		12...1/0 AWG	
		2.5...35 mm <sup>2</sup>	
		10...2 AWG	

Note: 1) 8 AWG for flexible cable only

## MPW Technical Data

### Altitude - Correction factor

The MPW manual motor protectors do not undergo any change to their specified performance when applied at an altitude of up to 2000 meters above sea level. However, as the altitude increases, the reduced atmospheric pressure produces decreasing dielectric properties. Therefore, current and voltage correction factors must be applied for altitudes exceeding 2000 meters, as shown in the table on the right.

Altitude (above sea level) - h	Rated operational voltage $U_e$	Current correction factor $I_u$
$h \leq 2000$ m	690 V	$1 \times I_u$
$2000 < h \leq 3000$ m	550 V	$0,96 \times I_u$
$3000 < h \leq 4000$ m	480 V	$0,93 \times I_u$
$4000 < h \leq 5000$ m	420 V	$0,90 \times I_u$

### DC operation

The MPW18, MPW40 and MPW65 motor protective circuit breakers can also be used for operating DC loads. For such operation it is necessary to connect 2 or 3 poles in series. See recommended circuits and their voltage limits in the table on the right.

Time constant  $t = 5$  ms

Short-circuit breaking capacity  $I_{cu} = 10$  kA for all configurations

Circuits	Max. VDC	Notes
	150 VDC	System not grounded 2 pole series connected
	300 VDC	System grounded 2 pole series connected
	450 VDC	System grounded 3 pole series connected

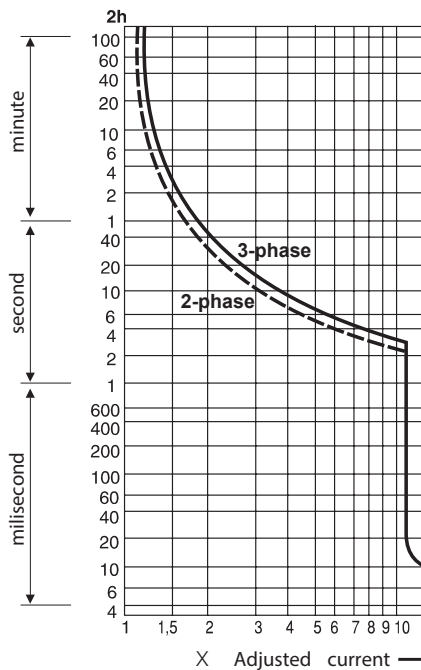
## Characteristic Curves

### Time Current Characteristic MPW40 Class 10

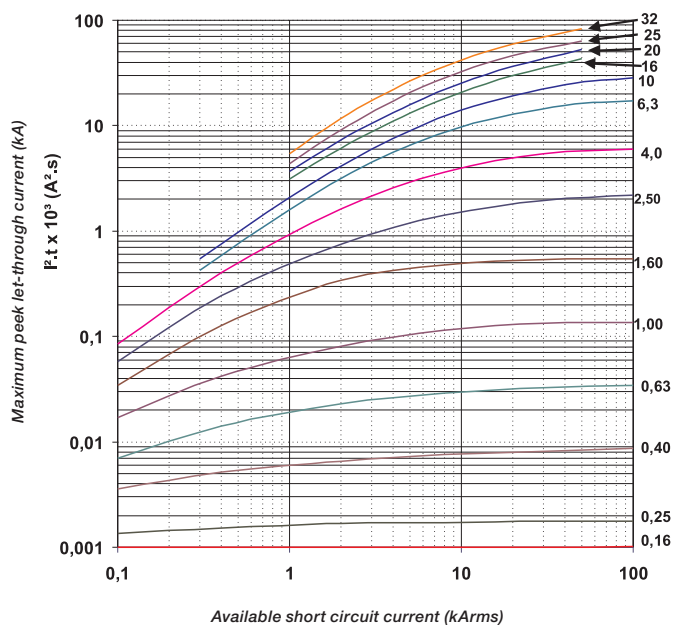
The tripping characteristic indicates the manual motor protector trip time in relation to the rated current.

The curves show average tolerance range values for an ambient temperature of 20°C (68°F), starting in cold state. Thermal trip time when working in operating temperature is reduced to around 25% of the listed values. Under normal operating conditions, all 3 manual motor protector phases must be conducting.

### MPW18/40/65

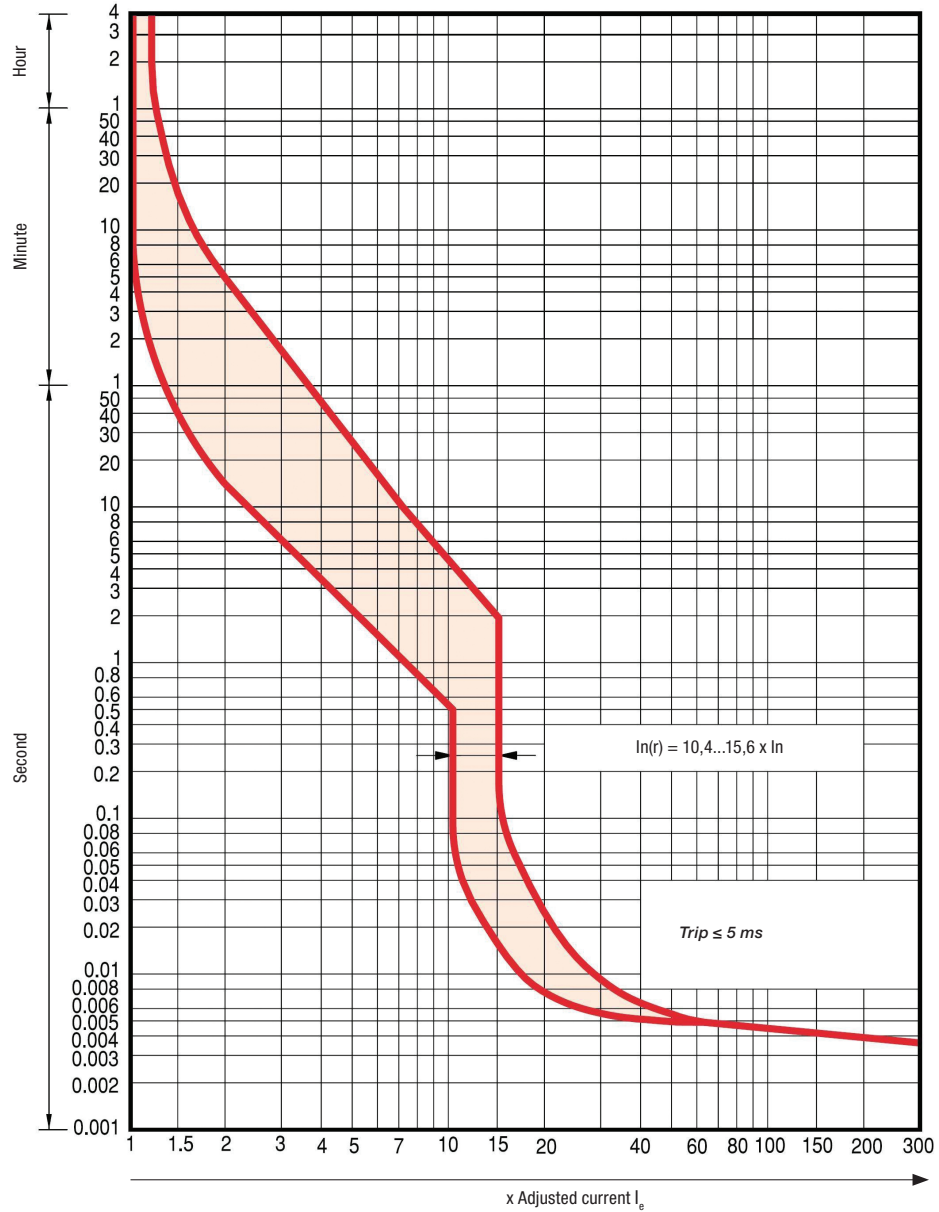


### Characteristic I<sup>2</sup>t at 460V - MPW40



## Characteristics Curves

### MPW100



Notes: 1) Thermal Tripping current: Curve presented for an ambient temperature of 20°C(68°F) starting from cold state.

## MPW

### Short Circuit Interruption Capacity UL/CSA for MPW18, MPW40, MPW65, MPW100

Catalog Number	Setting Overload Release (A)	Manual Motor Controller High Capacity				Combination Motor Controller (Type E/F) High Capacity				Combination Motor Controller (Type E/F) Extra High Capacity			
		240VAC kA	480VAC Y/277VAC kA	600VAC Y/347VAC kA	Max. Fuse or MCCB A	240VAC kA	480VAC Y/277VAC kA	600VAC Y/347VAC kA	Max. Fuse or MCCB A	240VAC kA	480VAC Y/277VAC kA	600VAC Y/347VAC kA	Max. Fuse or MCCB A
MPW18	0.10 - 0.16	50	50	10	125	-	-	-	-	-	-	-	-
	0.16 - 0.25	50	50	10	125	-	-	-	-	-	-	-	-
	0.25 - 0.40	50	50	10	125	-	-	-	-	-	-	-	-
	0.40 - 0.63	50	50	10	125	-	-	-	-	-	-	-	-
	0.63 - 1.0	50	50	10	125	-	-	-	-	-	-	-	-
	1.0 - 1.6	50	50	10	125	-	-	-	-	-	-	-	-
	1.6 - 2.5	50	50	10	125	-	-	-	-	-	-	-	-
	2.5 - 4.0	50	50	10	125	-	-	-	-	-	-	-	-
	4.0 - 6.3	50	50	10	125	-	-	-	-	-	-	-	-
	6.3 - 10	50	50	5	125	-	-	-	-	-	-	-	-
	10 - 16	30	30	5	160	-	-	-	-	-	-	-	-
12 - 18	30	30	5	160	-	-	-	-	-	-	-	-	
MPW40	0.10 - 0.16	50	50	25	125	50	50	25	-	100	100	50	-
	0.16 - 0.25	50	50	25	125	50	50	25	-	100	100	50	-
	0.25 - 0.40	50	50	25	125	50	50	25	-	100	100	50	-
	0.40 - 0.63	50	50	25	125	50	50	25	-	100	100	50	-
	0.63 - 1.0	50	50	25	125	50	50	25	-	100	100	50	-
	1.0 - 1.6	50	50	25	125	50	50	25	-	100	100	50	-
	1.6 - 2.5	50	50	25	125	50	50	25	-	100	100	50	-
	2.5 - 4.0	50	50	25	125	50	50	25	-	100	100	50	-
	4.0 - 6.3	50	50	25	125	50	50	25	-	100	100	50	-
	6.3 - 10	50	50	25	125	50	50	25	-	100	100	50	-
	10 - 16	50	50	25	160	50	50	25	-	100	100	50	-
	16 - 20	50	50	25	250	50	50	25	-	100	100	50	-
	20 - 25	50	50	25	250	50	50	25	-	100	100	50	-
	25 - 32	42	42	25	500	42	42	25	-	100	100	50	-
32 - 40	20	20	0	520	-	-	-	-	-	-	-	-	
MPW65	10 ... 16	50	50	30	160	50	50	30	-	-	-	-	-
	16 ... 20	50	50	30	250	50	50	30	-	-	-	-	-
	20 ... 25	50	50	30	250	50	50	30	-	-	-	-	-
	25 ... 32	50	50	30	500	50	50	30	-	-	-	-	-
	32 ... 40	35	35	10	500	35	35	10	-	-	-	-	-
	40 ... 50	35	35	10	750	35	35	10	-	-	-	-	-
MPW100	55 ... 75	50	50	10	1250	50	50	10	-	-	-	-	-
	70 ... 90	50	50	10	1250	50	50	10	-	-	-	-	-
	80 ... 100	50	50	10	1250	50	50	10	-	-	-	-	-

Note: - Fuse or MCCB not required.

## Short-Circuit Interruption Capacity (IEC 60947-2) for MPW18 , MPW40, MPW65, MPW100

Catalog Number	Setting Overload Release (A)	220-230VAC			380-415VAC			440VAC			460-500VAC			630-690VAC		
		I <sub>cu</sub>	I <sub>cs</sub>	Max. Fuse (gL/gG)	I <sub>cu</sub>	I <sub>cs</sub>	Max. Fuse (gL/gG) <sup>1)</sup>	I <sub>cu</sub>	I <sub>cs</sub>	Max. Fuse (gL/gG) <sup>1)</sup>	I <sub>cu</sub>	I <sub>cs</sub>	Max. Fuse (gL/gG) <sup>1)</sup>	I <sub>cu</sub>	I <sub>cs</sub>	Max. Fuse (gL/gG) <sup>1)</sup>
		kA	kA	A	kA	kA	A	kA	kA	A	kA	kA	A	kA	kA	A
MPW18	0.10...0.16	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	0.16...0.25	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	0.25...0.4	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	0.4...0.63	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	0.63...1	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	1...1.6	100	100	-	100	100	-	100	100	-	100	100	-	10	10	-
	1.6...2.5	100	100	-	100	100	-	100	100	-	100	100	-	8	8	25
	2.5...4	100	100	-	100	100	-	100	100	-	100	100	-	8	8	35
	4...6.3	100	100	-	100	100	-	100	100	-	100	100	-	8	8	50
	6.3...10	100	100	-	50	10	100	50	10	80	10	10	63	5	5	50
	10...16	100	100	-	10	10	100	10	10	80	10	10	80	4	3	63
12...18	100	100	-	10	10	100	10	10	80	10	10	80	10	10	80	
MPW40	0.10...0.16	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	0.16...0.25	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	0.25...0.4	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	0.4...0.63	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	0.63...1	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	1...1.6	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
	1.6...2.5	100	100	-	100	100	-	100	100	-	100	100	-	8	8	25
	2.5...4	100	100	-	100	100	-	100	100	-	100	100	-	8	8	32
	4...6.3	100	100	-	100	100	-	100	100	-	100	100	-	8	8	50
	6.3...10	100	100	-	100	100	-	50	25	80	42	21	63	8	8	50
	10...16	100	100	-	50	25	100	50	15	80	10	8	80	5	5	63
	16...20	100	100	-	50	25	125	50	15	80	10	8	80	5	5	63
	20...25	100	100	-	50	25	125	50	15	100	10	8	80	5	5	63
	25...32	100	100	-	50	25	125	25	15	100	10	8	80	5	5	63
32...40	100	100	-	50	25	125	25	15	100	10	8	80	5	2	63	
MPW65	10...16	100	100	-	50	50	100	50	50	80	15	15	80	8	8	63
	16...20	100	100	-	50	50	125	50	50	80	15	15	80	8	8	63
	20...25	100	100	-	50	50	125	50	50	100	15	15	80	8	8	63
	25...32	100	100	-	50	50	125	50	50	100	15	15	80	5	5	63
	32...40	100	100	-	50	50	160	50	50	125	15	10	100	5	5	63
	40...50	100	100	-	50	50	160	50	50	125	15	10	100	5	5	80
MPW100	55...75	100	100	-	75	50	-	50	38	200	12	9	160	6	6	125
	70...90	100	100	-	75	50	-	50	38	200	12	9	160	6	6	160
	80...100	100	100	-	75	50	-	50	38	200	12	9	160	6	6	160

Self protected against short-circuits up to 100kA

- Back-up fuse not required

1) Fuse required for greater short-circuit currents.

General Information

Circuit Protection

Disconnect Switches

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Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A  
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## MPW

### Short-Circuit Interruption Capacity (IEC 60947-2) Limiter Function MPW40 + CLT25

Catalog Number	Setting Overload Release (A)	380-415VAC			440VAC			460-500VAC			630-690VAC		
		$I_{cu}$	$I_{cs}$	Max. Fuse (gL/gG)	$I_{cu}$	$I_{cs}$	Max. Fuse (gL/gG)	$I_{cu}$	$I_{cs}$	Max. Fuse (gL/gG)	$I_{cu}$	$I_{cs}$	Max. Fuse (gL/gG)
		kA	kA	A	kA	kA	A	kA	kA	A	kA	kA	A
MPW40 + CLT32 MPW40	0.10...0.16	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	0.16...0.25	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	0.25...0.4	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	0.4...0.63	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	0.63...1	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	1...1.6	◆	◆	-	◆	◆	-	◆	◆	-	◆	◆	-
	1.6...2.5	◆	◆	-	◆	◆	-	◆	◆	-	50	50	-
	2.5...4	◆	◆	-	◆	◆	-	◆	◆	-	50	50	-
	4...6.3	◆	◆	-	◆	◆	-	◆	◆	-	50	50	-
	6.3...10	◆	◆	-	100	100	-	100	100	-	50	50	-
	10...16	100	100	-	100	100	-	100	100	-	50	50	-
	16...20	100	100	-	100	100	-	100	100	-	50	50	-
	20...25	100	100	-	100	100	-	100	100	-	10	10	-
25...32	100	100	-	100	100	-	100	100	-	10	10	-	

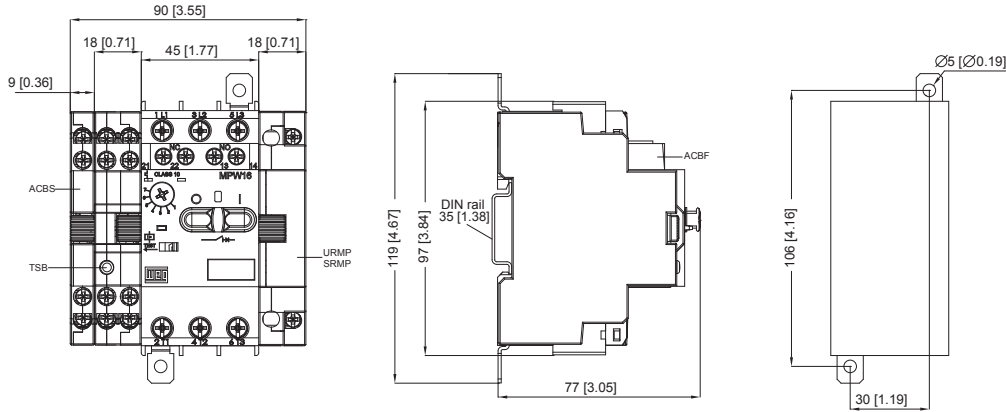
- Notes:
- Self protected against short-circuits up to 100kA
  - Back-up fuse not required
  - ◆ Not applicable due to MPW40 already having 100 kA of  $I_{cu}$  /  $I_{cs}$  in referred ranges.

General Information  
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 Motor Protectors  
 Contactors  
 Overloads  
 Enclosed Starters  
 Relays  
 Pushbuttons and Pilot Lights  
 Terminal Blocks  
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 Appendix A  
 Appendix B

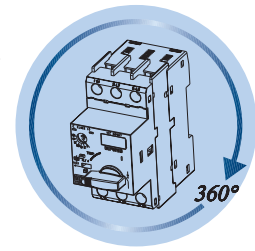


## Dimensions mm (in)

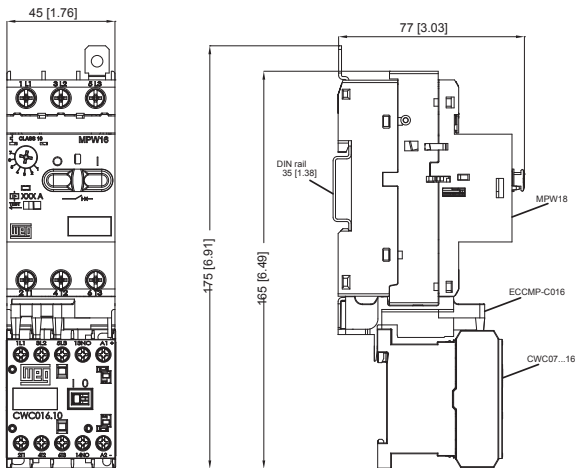
### MPW18 + Accessories



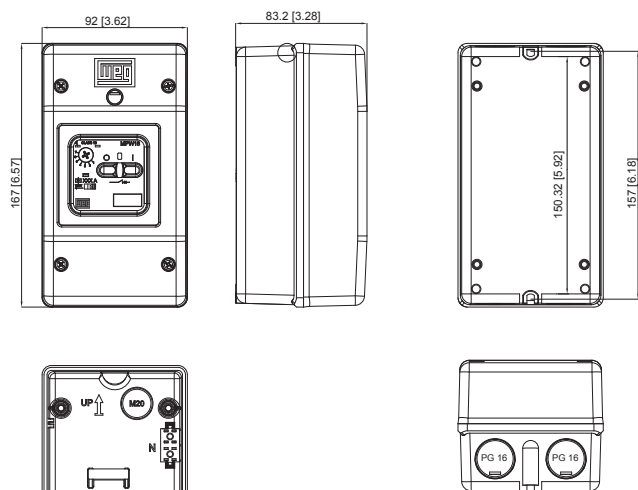
### Mounting Position



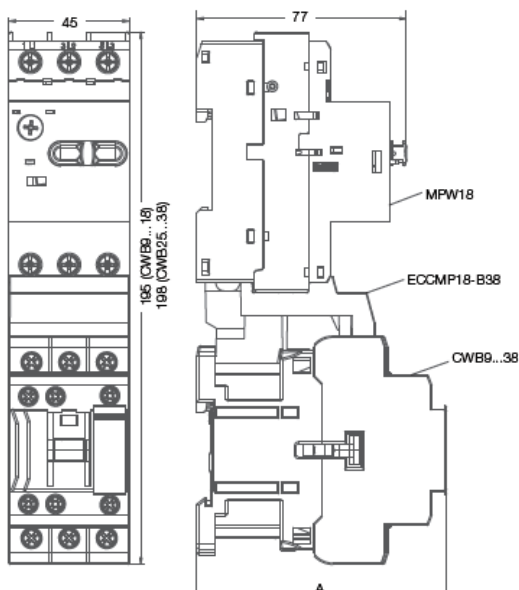
### MPW18 + CWC07...16



### Insulated Enclosure - PE66 (IP66)



### MPW18 + CWB9...18 / CWB25...38



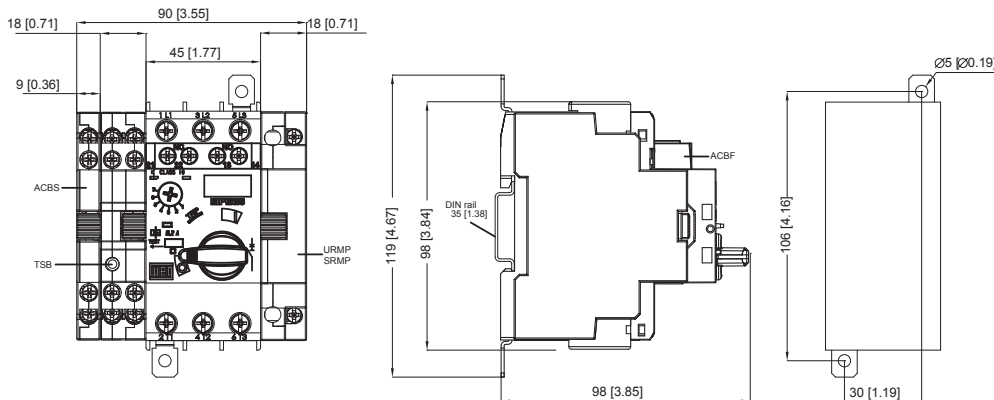
A	CWB9...18	CWB25...38
AC coil	89.5	93

# Motor Protectors

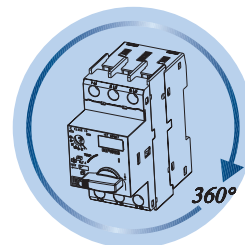
MPW

Dimensions mm (in)

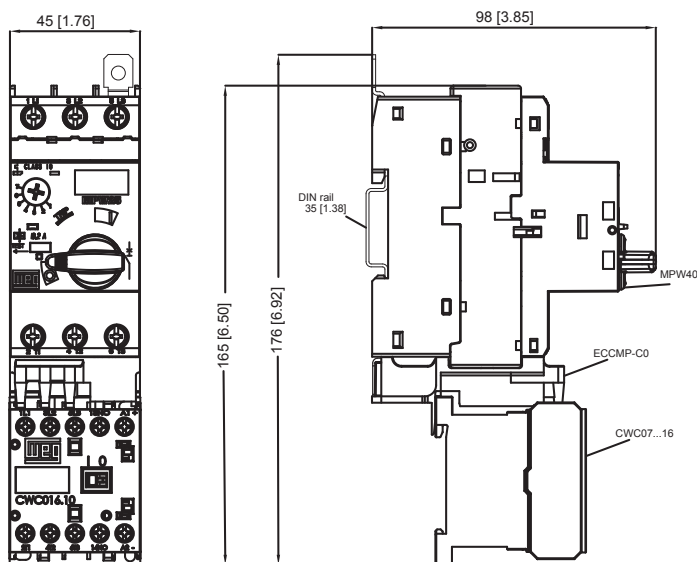
## MPW40 + Accessories



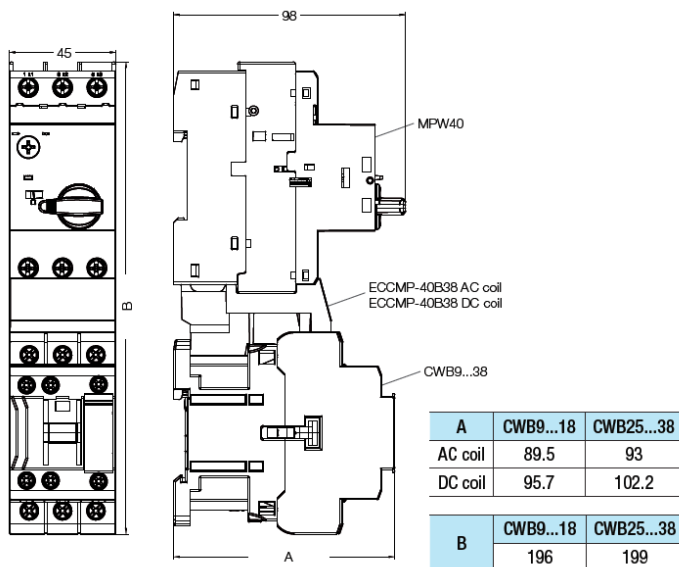
## Mounting Position



## MPW40 + CWC07...16

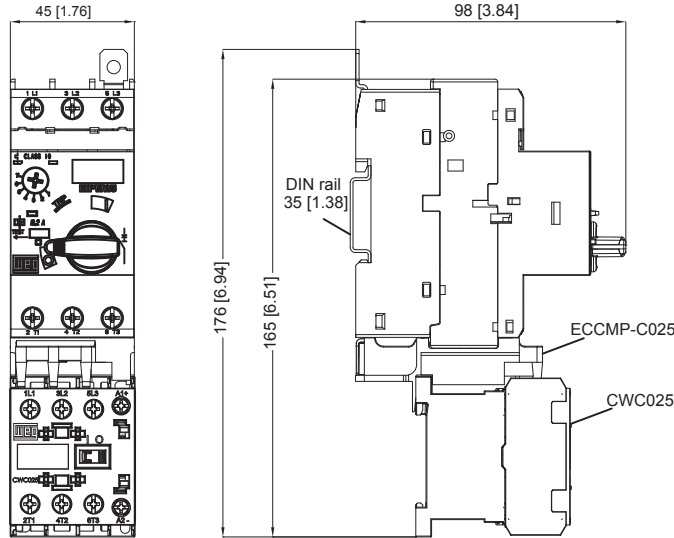


## MPW40 + CWB9...18 / CWB25...38

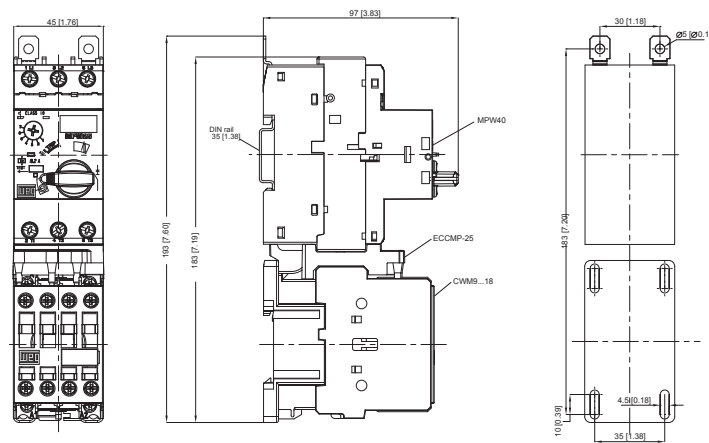


## Dimensions mm (in)

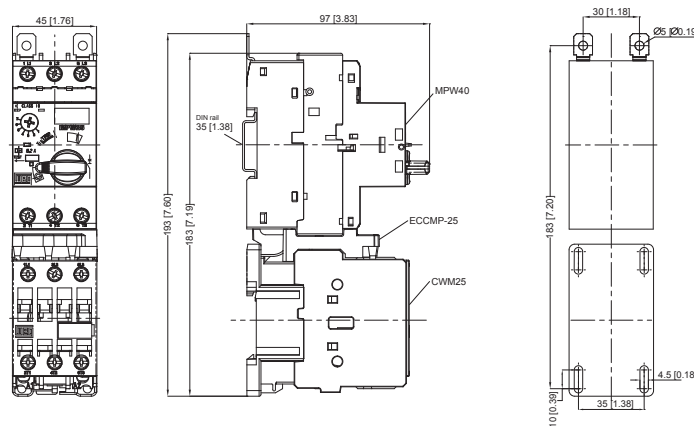
### MPW40 + CWC025



### MPW40 + CWM9...18



### MPW40 + CWM25



General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

Power Factor Correction

Appendix A

Appendix B

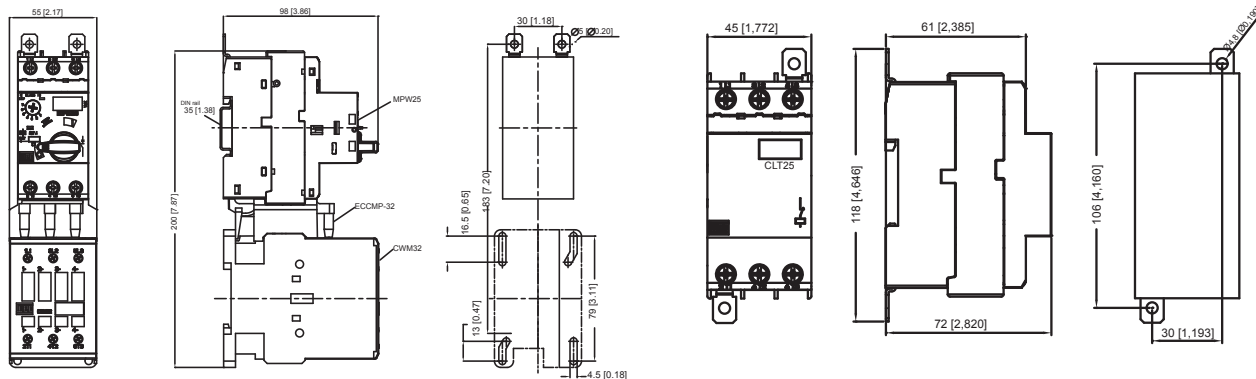
# Motor Protectors

MPW

## Dimensions mm (in)

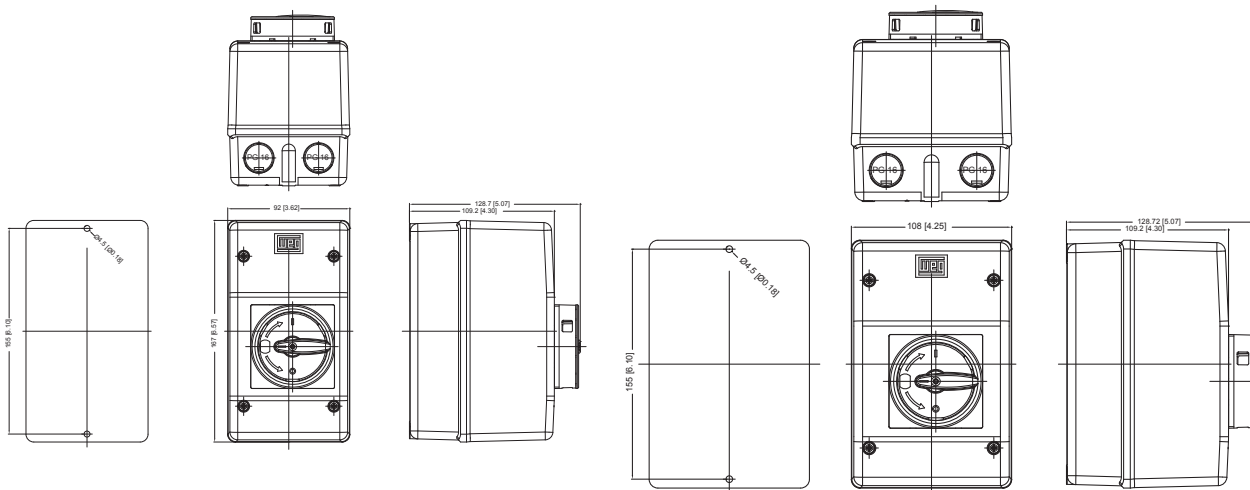
MPW40 + CWM32

Current limiter - CLT32 MPW40



Insulated Enclosure - PE55 (IP55)

Insulated Enclosure - LPE55 (IP55)



General Information

Circuit Protection

Disconnect Switches

Motor Protectors

Contactors

Overloads

Enclosed Starters

Relays

Pushbuttons and Pilot Lights

Terminal Blocks

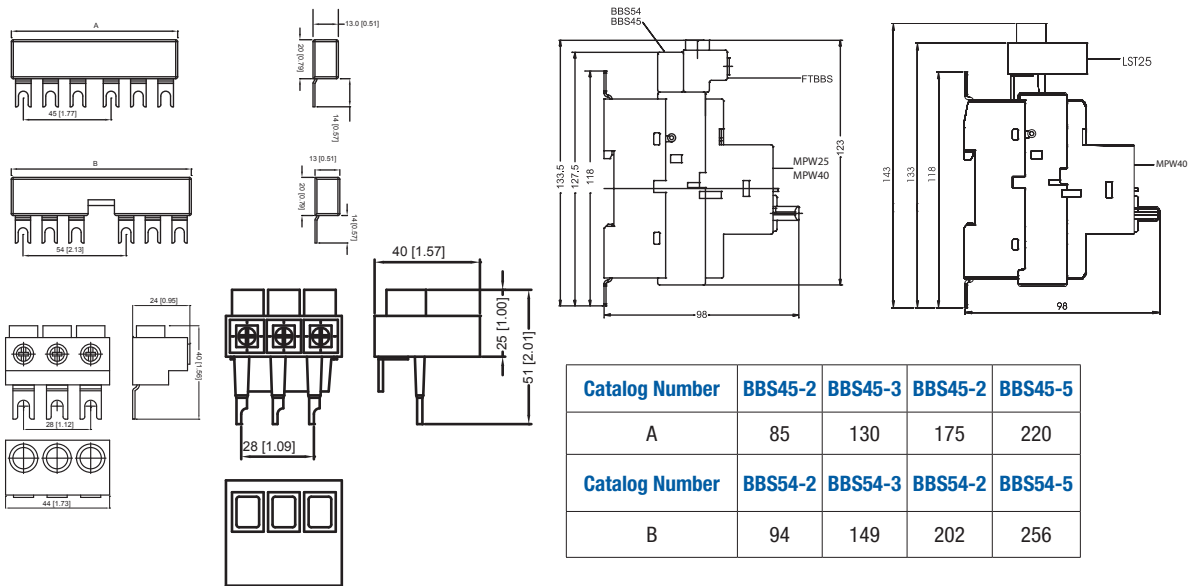
Power Factor Correction

Appendix A

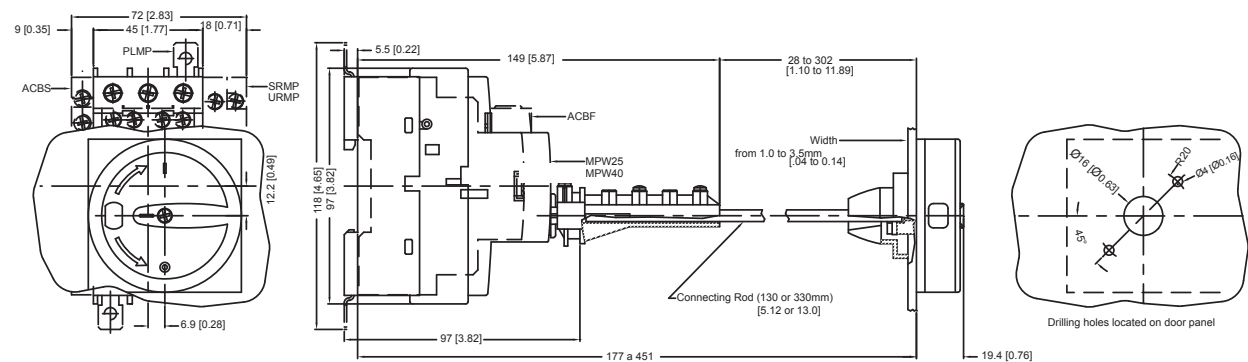
Appendix B

## Dimensions mm (in)

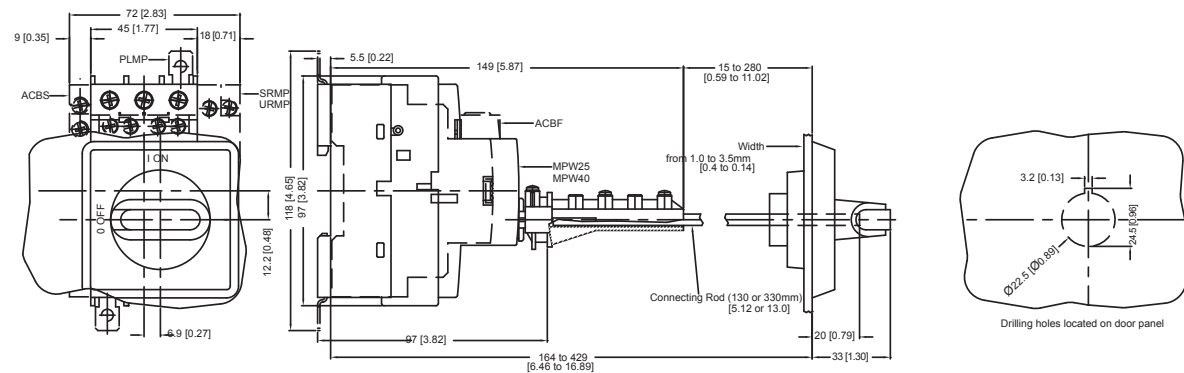
Accessories: BBS45, BBS54, FTBBS, LST25



## Through the Door Rotary Handle - RMPP



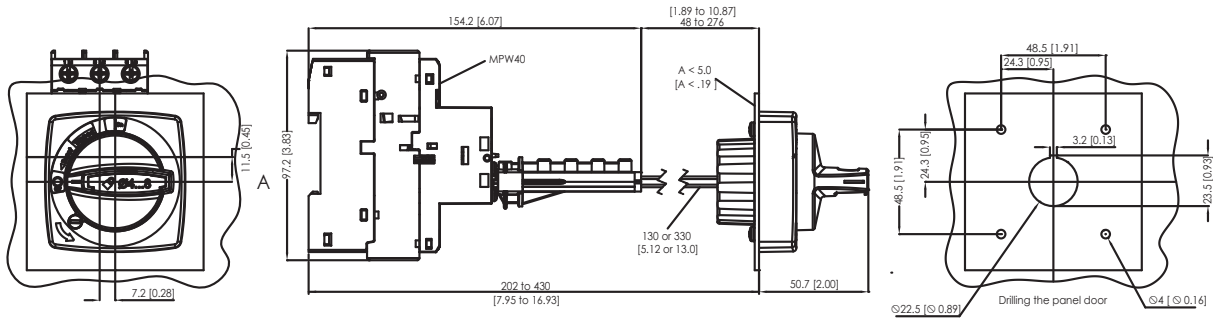
## Through the Door Rotary Handle - MR MPW40



## MPW

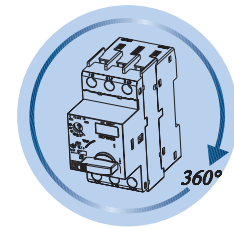
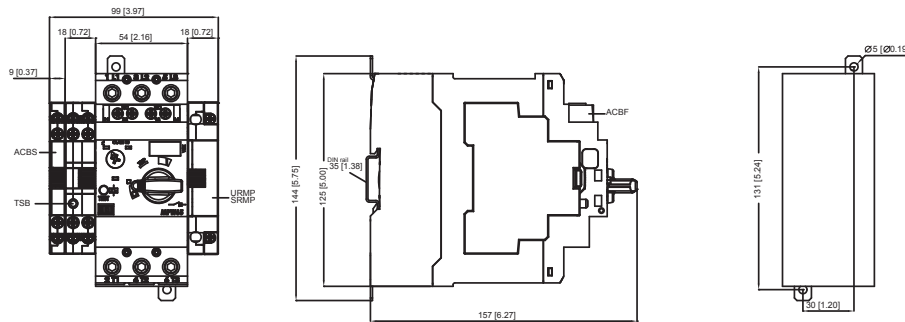
### Dimensions mm (in)

#### Through the Door Rotary Handle - MRX

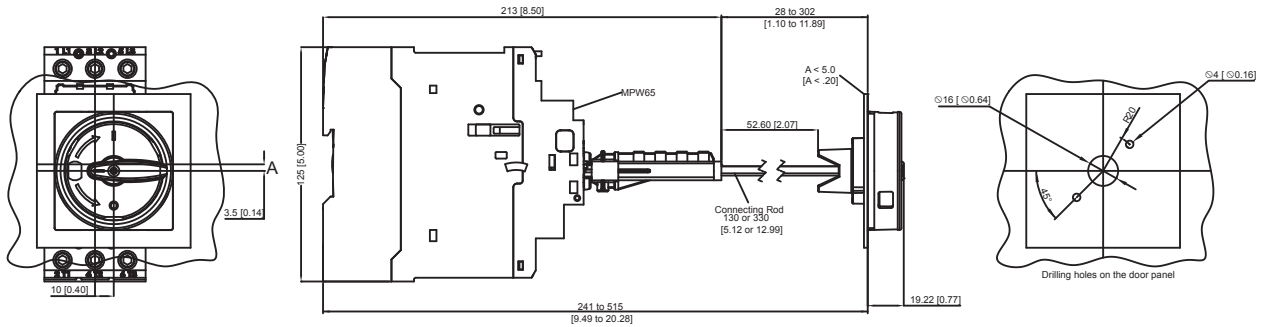


#### MPW65 + Accessories

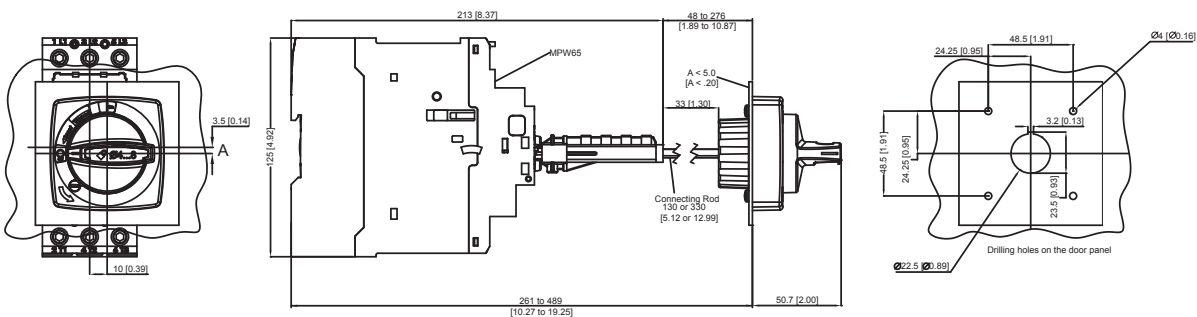
#### Mounting Position



#### Through the Door Rotary Handle - RMMP65

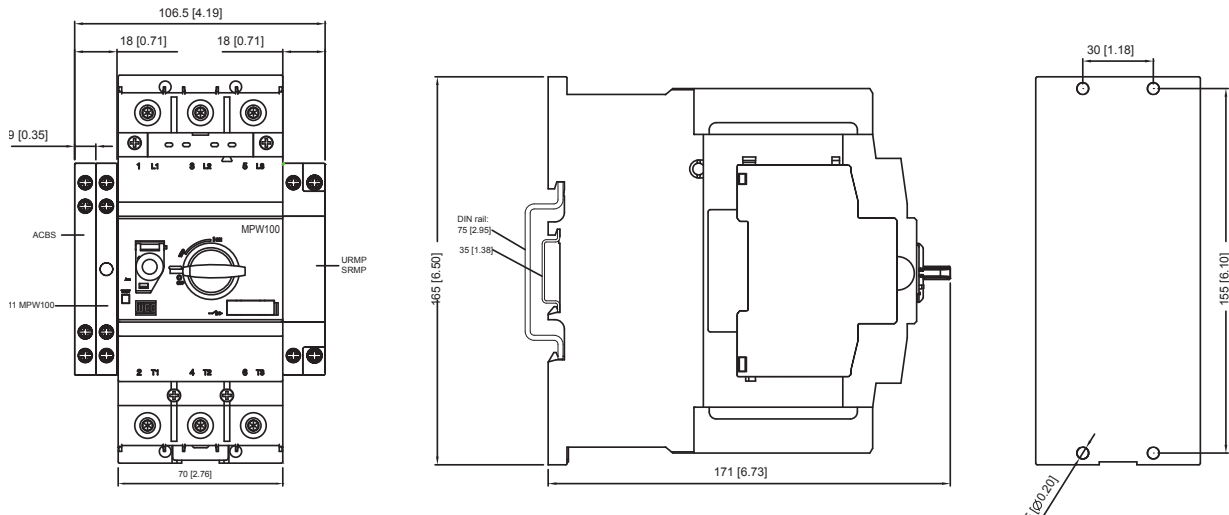


#### Through the Door Rotary Handle - MRX65

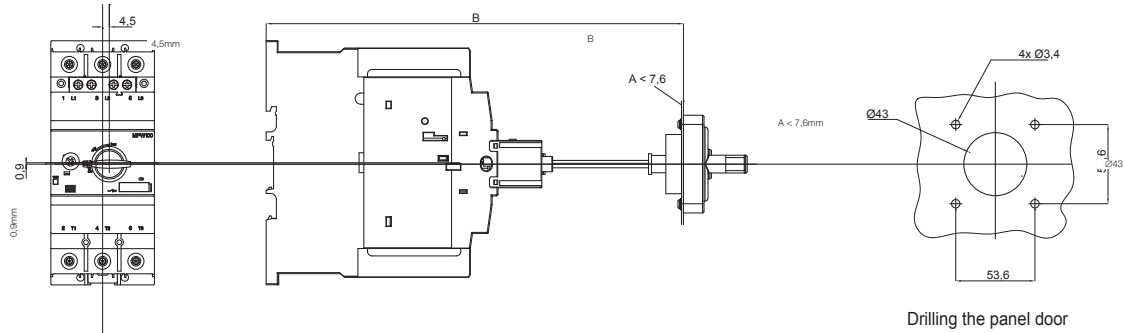


## Dimensions mm (in)

### MPW100



### Through the Door Coupling Rotary Handle - MR MPW100



Part Number	B (mm)
MR MPW100-115	min: 220
	max: 282
MR MPW100-315	min: 220
	max: 482

### Mounting position

