

MPW40-3-U001

Overview

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, as well as 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 globe.

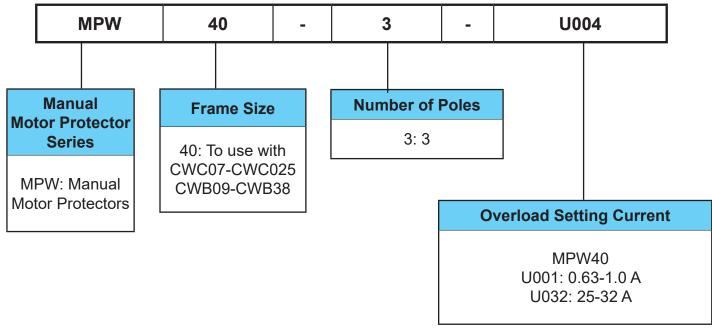
Features

- High short-circuit interrupting ratings (up to 65kA @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



UL File No. E172121

MPW Manual Motor Protectors Catalog Number Sequence



For more details refer to selection table for each frame size

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



MPW40

- 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 $\rm I_{U}$
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)
- * When associated with line side terminal LST25 and trip indicator TSB

	MPW Series Manual Motor Protectors Selection Guide												
Part Number	Price	Sinale	M -Phase	laximum UL		er Phase	Thermal Setting		it Ratings for stallation	Dimensional			
	11100	115V	230V	200V	230V	460V	575V	- <i>(A</i>)	480V	600V	Drawing		
MPW40-3-U001	\$54.00	-	_	-	-	1/2	1/2	0.63 - 1.0	50kA	25kA	PDF		
MPW40-3-D016	\$54.00	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	25kA	PDF		
MPW40-3-D025	\$54.00	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	50kA	25kA	PDF		
MPW40-3-U004	\$54.00	1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	25kA	PDF		
MPW40-3-D063	\$54.00	-	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	50kA	25kA	PDF		
MPW40-3-U010	\$54.00	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	50kA	25kA	PDF		
MPW40-3-U016	\$59.00	1	3	5	5	10	15	10 - 16	50kA	25kA	PDF		
MPW40-3-U020	\$65.00	1-1/2	3	5	7-1/2	15	20	16 - 20	50kA	25kA	PDF		
MPW40-3-U025	\$77.00	2	3	7-1/2	7-1/2	15	20	20 - 25	50kA	25kA	PDF		
MPW40-3-U032	\$82.00	-	5	10	10	20	25	25 - 32	42kA	25kA	PDF		

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





CLT32MPW40

MPW40-3-U001

MPW40 With Current Limiter

- 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 Iu
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to $+60^{\circ}\text{C})$
- MPW motor protectors and <u>CLT32MPW40</u> current limiter are ordered separately
- * When associated with line side terminal LST25 and trip indicator TSB

	MPW Series CLT32MPW40 Current Limiter Selection Guide																															
Current Limiter Part Number Price	Price	Dimensional Drawing	Use With MPW Motor Protector Part	Single	Ma -Phase	aximum UL	. Horsepow Three	ver Phase		Thermal Setting	Short-Circuit Ratings for Group Installation																					
		Diawiliy	Number	115V	230V	200V	230V	460V	575V	(A)	480V	600V																				
		MPW40-3-U001	-	-	-	-	1/2	1/2	0.63 - 1.0	100kA	50kA																					
			MPW40-3-D016	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA	50kA																				
			MPW40-3-D025	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	100kA	50kA																				
			MPW40-3-U004	1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA	50kA																				
	¢45.00	DDE	MPW40-3-D063	1/4	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	100kA	50kA																				
<u>CLT32MPW40</u>	\$45.00											<u>PDF</u>	MPW40-3-U010	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	100kA	50kA										
													-		-	-								MPW40-3-U016	1	3	5	5	10	15	10 - 16	100kA
												MPW40-3-U020	1-1/2	3	5	7-1/2	15	20	16 - 20	100kA	50kA											
										MPW40-3-U025	2	3	7-1/2	7-1/2	15	20	20 - 25	100kA	50kA													
			MPW40-3-U032	-	5	10	10	20	25	25 - 32	100kA	50kA																				

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

Accessories

	Accessories for MPW Series Manual Motor Protectors – Selection Guide										
Part Number	Price	Description	Dimensional Drawing								
		Auxiliary Contact Blocks									
<u>ACBF-11</u>	\$8.25	Field installable auxiliary contact, front mount, (1) N.O./(1) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF								
<u>ACBS-11</u>	\$9.00	Field installable auxiliary contact, left side mount, (1) N.O./(1) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF								
ACBS-20	\$9.00	Field installable auxiliary contact, left side mount, (2) N.O. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF								
<u>ACBS-02</u>	\$9.00	Field installable auxiliary contact, left side mount, (2) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF								
Accessories for Combination Type-E Construction											
<u>LST25</u>	\$17.00	Incoming power terminal block, 3-pole, maximum current 63A, 20-8 AWG. For use with MPW40 series manual motor protectors. Required when using a MPW40 in a UL Type E application 32A and less.	PDF								
<u>TSB</u>	\$15.00	Field installable short circuit alarm contact, left side mount, (2) N.O./(2) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF								
		Current Limiter									
CLT32MPW40	\$45.00	Current limiter, 35mm DIN rail mount. For use with MPW40 series manual motor protectors.	PDF								
		Link Modules									
ECCMP-C0	\$8.50	Link module, for use with MPW40 protectors and CWC07 through CWC016 series miniature contactors with AC or DC coils. Not for use with 4-Pole CWC series miniature contactors.	PDF								
<u>ECCMP-C025</u>	\$8.50	Link module, for use with MPW40 protectors and CWC025 series miniature contactors with AC coils. Not for use with 4-Pole CWC series miniature contactors.	PDF								
ECCMP-40B38	\$10.00	Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with AC coils.	PDF								
ECCMP-40B38DC	\$10.00	Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with DC coils.	PDF								













ACBF-11

ACBS-11

ACBS-20

ACBS-02

LST25

TSB



CLT32MPW40

ECCMP-C0



ECCMP-C025





ECCMP-40B38



ECCMP-40B38DC



Accessories, continued

Access	ories fo	or MPW Series Manual Motor Protectors – Sel	ection Guide
Part Number	Price	Description	Dimensional Drawing
Through-the-Door	Rotary N	lechanisms	
<u>RMMP-130</u>	\$28.50	Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-130E</u>	\$28.50	Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-330</u>	\$34.50	Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-330E</u>	\$34.50	Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-130</u>	\$42.50	Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-130E</u>	\$42.50	Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-330</u>	\$46.50	Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-330E</u>	\$46.50	Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
Under Voltage and	Shunt T	rip Releases	
<u>SRMPD51</u>	\$22.50	Field installable shunt trip, right side mount, 20-24 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.	PDF
<u>SRMPD59</u>	\$22.50	Field installable shunt trip, right side mount, 100-127 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.	PDF
<u>SRMPD65</u>	\$22.50	Field installable shunt trip, right side mount, 200-240 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 series manual motor protectors.	PDF
<u>URMPV18</u>	\$22.50	Field installable undervoltage trip device, right side mount, 110 VAC (50Hz)/120 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF
<u>URMPV23</u>	\$22.50	Field installable undervoltage trip device, right side mount, 180 VAC (50Hz)/208 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF
<u>URMPV30</u>	\$22.50	Field installable undervoltage trip device, right side mount, 208 VAC (50Hz)/240 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF
<u>URMPV37</u>	\$22.50	Field installable undervoltage trip device, right side mount, 230-240 VAC (50Hz)/240-277 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF
<u>URMPV47</u>	\$22.50	Field installable undervoltage trip device, right side mount, 400-415 VAC (50Hz)/480 VAC (60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF
<u>URMPD02</u>	\$22.50	Field installable undervoltage trip device, right side mount, 24 VAC (50/60Hz) sensing range, screw terminals. For use with MPW40 series manual motor protectors.	PDF



RMMP-130







SRMPD51





UPD Self Protected Combination Type-E Motor Controller

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. UL 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	Device U	sed for Co	nponent F	unction	
Combination Starter Type	Disconnected	Branch Circuit Protection	Motor Controller	Motor OL Relay	
А		UL 248 Fuses			
В	UL 98 Manual Disconnect	UL 508 Motor Short Circuit Protector	UL 508 Magnetic or	UL 508 Motor	
С		e Time Circuit aker	Solid State Controller	Overload Relay	
D		ntaneous Trip Breaker			
E	UL 508	3 Self-Protected Co	ombination Contro	ller	
F		l Self-Protected n 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.

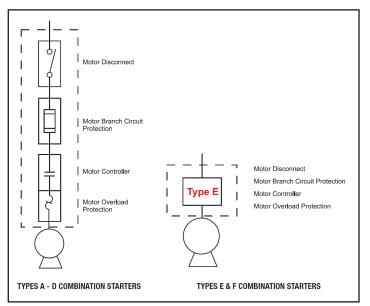
Type F starter consists of a listed manual Type E combined with a UL508 listed contactor. The difference between the two types is related to the absence of self-protected characteristic; hence, Type F has softened tests sequences allowing damages on the contactor after a fault.

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) 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 20Hp@460V motors (0.16 to 32A) with up to 100KA@480V and 50KA@600V interrupting shortcircuit 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 the CWB Series. As this version undergoes the same tests, it has the same horse power ratings and shortcircuit capabilities as the manual Type E. However, it provides remote operation and controlling of the application through the contactor's coil.



UPD Manual Self Protected Combination Type-E Motor Controllers



Manual Self-Protected Combination Type-E Motor Controllers

- No need for upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protection: 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 to +140°F (-20 to +60°C)

Manual Self Protected Combination Type-E Motor Controllers (High Interruption Capacity) Selection Guide

Para	t Number					Short-Circuit				
Manual Motor	Line Side	Tripping	Single	-Phase		Three-	Phase	Thermal Setting (A)	Interruption Capacity	
Protector	Terminal	Indicator	115V	230V	200V	230V	460V	575V		480V
MPW40-3-U001			-	-	-	-	1/2	1/2	0.63 - 1.0	65kA
MPW40-3-D016			_	1/10	1/4	1/3	3/4	1	1.0 - 1.6	65kA
MPW40-3-D025			-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	65kA
MPW40-3-U004			1/8	1/3	3/4	1	2	3	2.5 - 4.0	65kA
MPW40-3-D063	LST25	TOD	1/4	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	65kA
MPW40-3-U010	LS125	TSB	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	65kA
MPW40-3-U016			1	3	5	5	10	15	10 - 16	65kA
MPW40-3-U020			1-1/2	3	5	7-1/2	15	20	16 - 20	50kA
MPW40-3-U025			2	3	7-1/2	7-1/2	15	20	20 - 25	50kA
MPW40-3-U032			_	5	10	10	20	25	25 - 32	42kA

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection. Note: Individual component catalog numbers are ordered separately.

Manual	Manual Self Protected Combination Type-E Motor Controllers (Extra High Interruption Capacity) Selection Guide												
	Part Number		I	Maximum UL	Horsepowe	r		Thermal	Short-Circuit				
Manual Motor	Current Limiter	Line Side	Tripping	Single	-Phase		Three	Phase		Setting	Interruption Capacity		
Protector	Current Limiter	Terminal	Indicator	115V	230V	200V	230V	460V	575V	(A)	480V		
<u>MPW40-3-U001</u>				_	_	-	_	1/2	1/2	0.63 - 1.0	100kA		
<u>MPW40-3-D016</u>				-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA		
MPW40-3-D025				-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	100kA		
MPW40-3-U004				1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA		
MPW40-3-D063	CLT32MPW40	LST25	TSB	1/4	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	100kA		
MPW40-3-U010	GLI 32IVIPVV40	LS125	128	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	100kA		
MPW40-3-U016				1	3	5	5	10	15	10 - 16	100kA		
MPW40-3-U020				1-1/2	3	5	7-1/2	15	20	16 - 20	100kA		
MPW40-3-U025				2	3	7-1/2	7-1/2	15	20	20 - 25	100kA		
<u>MPW40-3-U032</u>				-	5	10	10	20	25	25 - 32	100kA		

Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection. Note: Individual component catalog numbers are ordered separately.

LIED Combination Type-F Motor Controllers



Combination Type-F Motor Controllers

- No need for upstream protective devices such as UL489 MCCB or UL248 fuses
- Built-in protection: 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 to +140°F (-20 to +60°C)
- Remote operation

C	Combination Type-F Motor Controllers (High Interruption Capacity) Selection Guide												
Manual Motor Protector	Link Module				Single-	Maximum UL Horsepower Single-Phase Three-Phase				Thermal Setting (A)	Short- Circuit Interruption Capacity		
	lonnar	maroutor			115V	230V	200V	230V	460V	575V		480V	
<u>MPW40-3-U001</u>				CWB9	-	-	-	-	1/2	1/2	0.63 - 1.0	65kA	
MPW40-3-D016				CWB9	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	65kA	
MPW40-3-D025				CWB9	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	65kA	
<u>MPW40-3-U004</u>				CWB9	1/8	1/3	3/4	1	2	3	2.5 - 4.0	65kA	
MPW40-3-D063	LST25	TSB	ECCMP-40B38	CWB9	1/4	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	65kA	
MPW40-3-U010				CWB9	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	65kA	
MPW40-3-U016			CWB18	1	3	5	5	10	15	10 - 16	65kA		
MPW40-3-U020			CWB18	1-1/2	3	5	7-1/2	15	20	16 - 20	50kA		
MPW40-3-U025				CWB25	2	3	7-1/2	7-1/2	15	20	20 - 25	42kA	

Notes: 1) Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection. 2) Individual component catalog numbers are ordered separately.

Com	Combination Type-F Motor Controllers (Extra-High Interruption Capacity) Selection Guide														
	Part Number							imum UL			Short-				
Manual Motor Protector			Link Module	Current Limiter	Contactor	Single-Pha		ingle-Phase Three-Phase				Thermal Setting (A)	Circuit Interruption Capacity		
						115V	230V	200V	230V	460V	575V		480V		
MPW40-3-U001					CWB9	-	-	-	-	1/2	1/2	0.63 - 1.0	100kA		
MPW40-3-D016					CWB9	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	100kA		
MPW40-3-D025					CWB9	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	100kA		
MPW40-3-U004				CLT32MPW40	CWB9	1/8	1/3	3/4	1	2	3	2.5 - 4.0	100kA		
MPW40-3-D063		TOD			CWB9	1/4	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	100kA		
MPW40-3-U010	LST25	TSB	ECCMP-40B38		GLT32IVIPVV40	GL152IVIPVV40	CWB9	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	100kA
MPW40-3-U016						CWB18	1	3	5	5	10	15	10 - 16	100kA	
MPW40-3-U020					CWB18	1-1/2	3	5	7-1/2	15	20	16 - 20	100kA		
MPW40-3-U025					CWB25	2	3	7-1/2	7-1/2	15	20	20 - 25	100kA		
MPW40-3-U032					CWB32	-	5	10	10	20	25	25 - 32	100kA		

Notes: 1) Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.

2) Individual component catalog numbers are ordered separately.

LIED Combination Type-F Motor Controllers

Accessories for MPW Series Manual Motor Protectors

Au	Auxiliary Contact Block Accessories Selection Guide											
Part Number	Price	Description	Auxiliary	Contacts	Dimensional							
	Flice	Description	N.O.	N.C.	Drawing							
	Front Mounting Auxiliary Contact Block – CBF											
ACBF-11	\$8.25	For use with MPW40 ¹	1	1	PDF							
		Left Side Auxiliary Contact Block	- ACBS									
ACBS-11	\$9.00		1	1	PDF							
ACBS-20	\$9.00	For use with MPW40 ¹	2	-	PDF							
<u>ACBS-02</u>	\$9.00		_	2	PDF							





ACBF-11

ACBS-11

Trip Signalling Block (TSB) Accessory Selection Guide										
Part Number	Price	For Use With	Description	Dimensional Drawing						
<u>TSB</u>	\$15.00	MPW40 ¹	 Equipped with 2 auxiliary contacts (1 N.O. + 1 N.C.) for overload trip signalling and 2 other auxiliary contacts (1 N.O. + 1 N.C.) for short-circuit trip signalling. To reset the MPW after a short-circuit, the blue flag must be manually reset after the cause of the failure has been solved. Left side auxiliary contacts can be assembled together with the trip signalling block. Left side assembly only. 	PDF						

Unde	Undervoltage Release (URMP) Accessory Selection Guide						
Part Number	Price	For Use With	Voltage	Dimensional Drawing			
URMPV23	\$22.50		208VAC 60Hz	PDF			
URMPD02	\$22.50		24VAC 50/60Hz	<u>PDF</u>			
URMPV47	\$22.50	MPW40 ¹	400-415 VAC 50Hz / 480VAC 60Hz	PDF			
URMPV18	\$22.50	IVIP VV40 ·	110VAC50Hz / 120VAC 60Hz	<u>PDF</u>			
URMPV30	\$22.50		240VAC 60Hz	<u>PDF</u>			
URMPV37	\$22.50		230-240 VAC 50Hz / 277VAC 60Hz	PDF			



ACBS-20



ACBS-02

URMPV18

Shunt Trip Releases Selection Guide							
Part Number	Price	For Use With	Voltage	Dimensional Drawing			
SRMPD51	\$22.50		20-24 VAC 50/60 Hz	PDF			
SRMPD59	\$22.50	MPW40 ¹	100-127 VAC 50/60 Hz	PDF			
SRMPD65	\$22.50		200-240 VAC 50/60 Hz	PDF			

Link Modules for Manual Motor Protector Assembly + Contactors (ECCMP) Selection Guide						
Part Number	Price	For Use With	Description	Contactors	Dimensional Drawing	
ECCMP-CO	\$8.50	MPW40 ¹	For direct connection (electrical and mechanical)	CWC07 through CWC016, AC coils	PDF	
<u>ECCMP-C025</u>	\$8.50		of motor protector to contactors.	CWC025, AC coils	PDF	



URMPD02



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

LIED Combination Type-F Motor Controllers

Accessories (continued)

Co	Connector Links for MPW40 and CWB Contactors Selection Guide						
Part Number	Price	For Use With	Description	Contactors	Dimensional Drawing		
ECCMP-40B38	\$10.00	MPW40	For direct connection	CWB9 through CWB38, AC coils	PDF		
ECCMP-40B38DC	\$10.00	IVIP VV40	(electrical and mechanical) of motor protector to contactors.	CWB9 through CWB38, DC coils	PDF		



ECCMP-40B38

ECCMP-40B38DC

Through-the-Door Rotary Handle – RMMP and MRX Selection Guide

Selection Guide						
Part Number	Price	For Use With	Description	Handle Color	Dimensional Drawing	
<u>RMMP-130</u>	\$28.50		 Degree of protection: IP55/NEMA1. Shows MPW position "1" (ON) or "0" (OFF). Panel door can only be opened in OFF position. 	Case //slassla	PDF	
<u>RMMP-330</u>	\$34.50		 Adjustable shaft length: 130-155 mm [5.12- 6.10 in] (Model 130) and 330-355 mm [12.99-13.98 in] (Model 330). To assemble the handle on the MPW, the shaft 	Gray/black	PDF	
<u>RMMP-130E</u>	\$28.50		 must have a length of at least 80mm [3.15 in] Up to three padlocks can be used in OFF position to block MPW operation and panel door opening 	Red/	PDF	
<u>RMMP-330E</u>	\$34.50		 Handle can be mounted on panels with thickness of 1-5 mm [0.04-0.20 in]. Handle can be assembled even with MPW turned in the 90° position. 	yellow	PDF	
<u>MRX-130</u>	\$42.50	MPW40	 Panel door can be opened in ON position (thermometry) by defeating mechanism, Degree of protection: IP65/NEMA 4X. 		PDF	
<u>MRX-330</u>	\$46.50		 Shows MPW position "1" (ON) or "0" (OFF). Panel door can only be opened in OFF position. Adjustable shaft length: 130-155 mm [5.12- 6.10 in] (Model 130) and 330-355 mm [12.99-13.98 in] (Model 330). 	Gray/black	PDF	
<u>MRX-130E</u>	\$42.50		 To assemble the handle on the MPW, the shaft must have a length of at least 80mm [3.15 in] Up to three padlocks can be used in OFF position to block MPW operation and panel door 	Red/	PDF	
<u>MRX-330E</u>	\$46.50		 Handle can be mounted on panels with thickness of 1-5 mm [0.04-0.20 in]. 	yellow	PDF	

Three-Phase Feeder Terminal – Selection Guide					
Price	For Use With	Description	Dimensional Drawing		
\$17.00	MPW40	Block module for "Type E" Combination Motor Controller" in accordance with UL (LST25+MPW+TSB) Bated insulation voltage: 690VAC	PDF		
		• I _e : 63A			
	Price	Price For Use With	Price For Use With Description \$17.00 MPW40 • Block module for "Type E" Combination Motor Controller" in accordance with UL (LST25+MPW+TSB) \$17.00 MPW40 • Rated insulation voltage: 690VAC.		



RMMP-130



<u>MRX-130</u>





MPW40 Technical Data

	MPW40	– Specificati	ons				
Туре	<u>MPW40-3-U001</u>	<u>MPW40-3-D016</u>	<u>MPW40-3-D025</u>	<u>MPW40-3-U004</u>	<u>MPW40-3-D063</u>		
Standards	Devices according to	International Standards I Underwriters Laborat	EC 60947-1 / 60947-4-1; tories - UL 508; CSA C.22	European Standards EN .2/14; VDE 0660/102	60947-1 / 60947-4-1;		
Current Setting Range	0.63-1.0 A	1.0 - 1.6 A	1.6 - 2.5 A	2.5-4.0 A	4.0-6.3 A		
Rated Thermal Current I _{th}	1.0 A	1.6 A	2.5 A	4.0 A	6.3 A		
	Rated	I Insulation Voltage U _i			·		
Acc. IEC; VDE 0660			690V				
Acc. UL; CSA		600V					
	Rated	Operating Voltage U _e					
Acc. IEC; VDE 0660		<u>v</u>	690V				
Acc. UL; CSA			600V				
	Rated	Impulse Voltage U _{imp}					
Acc. IEC60947-1		<u> </u>	6kV				
Rated Operating Frequency			50/60 Hz				
Overvoltage Category							
Pollution Degree			3				
	U	tilization Category	•				
IEC 60947-2 (Motor Protector)			A				
IEC 60947-4-1 (Motor Starter)			AC-3				
		Lifespan					
Mechanical			100,000 operations				
Electrical (I _e max.)			100,000 operations				
Switching Rate (motor starts) AC-3			15 operations/hour				
	An	bient Temperature					
Storage		-	C to +80°C (-58°F to +17	6°F)			
Operating			°C to +60°C (-4°F to +140				
Ambient Temperature Compensation			°C to +60°C (-4°F to +140				
Climatic Proofing			60068-2-3 / IEC 60068-2				
5		Altitude					
Up to 2,000m (6,600ft)		Nominal values (for highe	r altitudes refer to Altitude	Correction Factors table)		
Degree of protection			IP20		,		
	Re	esistance to Shock					
Acc. IEC 60068-2-27			15g				
Resistance to Vibration			IEC 68-2				
	Protectio	on Against Direct Conta	ct				
Acc. IEC 536; DIN VDE 0106 Part 100		Fi	nger and back of hand pro	oof			
Phase Failure Sensitivity Protection			Yes				
Overload Protection Characteristics (x I_{μ})			0.6 - 1 A				
Magnetic Release (x I _U)	13A						
Overload Trip Class	10						
	Τα	otal Power Loss P _v					
At rated load operating temperature	6W	6W	6W	6W	6W		
Weight			0.32 kg [0.71 lb]				
Type of Terminal			Flat type				
Screw Driver			Philips #2				
	1	erminal Capacity					
Solid-Stranded		•	1 or 2 x (0.5 to 2.5)				
Tightening Torque			1.2-1.7 N•m [11-16 lb•in]				
Mounting Position			Any position				



MPW40 Technical Data

	MPW40 – Sp	pecifications (o	continued)			
Туре	<u>MPW40-3-U010</u>	MPW40-3-U016	<u>MPW40-3-U020</u>	<u>MPW40-3-U025</u>	<u>MPW40-3-U032</u>	
Standards	Devices according to		IEC 60947-1 / 60947-4-1; tories - UL 508; CSA C.22		60947-1 / 60947-4-1;	
Current Setting Range	6.3 - 10 A	10 - 16 A	16 - 20 A	20 - 25 A	25 - 32 A	
Rated Thermal Current I _{th}	10A	16A	20A	25A	32A	
	Rate	d Insulation Voltage U _j	·			
Acc. IEC; VDE 0660			690V			
Acc. UL; CSA			600V			
	Rate	d Operating Voltage U _e				
Acc. IEC; VDE 0660			690V			
Acc. UL; CSA			600V			
	Rated	l Impulse Voltage U _{imp}				
Acc. IEC60947-1		1	6kV			
Rated Operating Frequency			50/60 Hz			
Overvoltage Category			111			
Pollution Degree			3			
	L	Itilization Category				
IEC 60947-2 (Motor Protector)			А			
IEC 60947-4-1 (Motor Starter)			AC-3			
		Lifespan				
Mechanical			100,000 operations			
Electrical (l _e max.)			100,000 operations			
Switching Rate (motor starts) AC-3			15 operations/hour			
	Ai	mbient Temperature				
Storage		-50°	°C to +80°C (-58°F to +17	6°F)		
Operating		-20	°C to +60°C (-4°F to +140)°F)		
Ambient Temperature Compensation		-20	°C to +60°C (-4°F to +140)°F)		
Climatic Proofing		IEC	60068-2-3 / IEC 60068-2	-30		
		Altitude				
Up to 2,000m (6,600ft)		Nominal values (for highe	er altitudes refer to Altitude	Correction Factor tables)		
Degree of protection			IP20			
	R	esistance to Shock				
Acc. IEC 60068-2-27			15g			
Resistance to Vibration			IEC 68-2			
	Protecti	ion Against Direct Conta				
Acc. IEC 536; DIN VDE 0106 Part 100		Fi	nger and back of hand pro	oof		
Phase Failure Sensitivity Protection			Yes			
Overload Protection Characteristics (x I _u)			0.6 - 1 A			
Magnetic Release (x I _u)	13A					
Overload Trip Class	10A					
	Т	otal Power Loss P _V	1			
At rated load operating temperature	6W	6W	8W	8W	8W	
Weight			0.32 kg [0.71 lb]			
Type of Terminal			Flat type			
Screw Driver			Philips #2			
		Terminal Capacity				
Solid-Stranded			1 or 2 x (0.5 to 2.5)			
Tightening Torque			1.2-1.7 N•m [11-16 lb•in]			
Mounting Position			Any position			



MPW40 Technical Data

MPW40 – Specifications – Power Contact Ratings							
Туре	<u>MPW40-3-U001</u>	<u>MPW40-3-D016</u>	<u>MPW40-3-D025</u>	<u>MPW40-3-U004</u>	<u>MPW40-3-D063</u>		
		UL/CSA Data					
Rated Operational Current le	1.0 A	1.6 A	2.5 A	4.0 A	6.3 A		
Magnetic Release Current	13A	21A	33A	52A	82A		
	Ма	ax. Short Circuit Current	1				
Without CLT32 (480V)	65kA	65kA	65kA	65kA	65kA		
Without CLT32 (600V)	25kA	25kA	25kA	25kA	25kA		
With CLT32 (480V)	100kA	100kA	100kA	100kA	100kA		
With CLT32 (600V)	50kA	50kA	50kA	50kA	50kA		
Motor Load, 1-phase (115V)	-	-	_	1/8 hp	1/4 hp		
Motor Load, 1-phase (230V)	-	1/10 hp	1/6 hp	1/3 hp	3/4 hp		
Motor Load, 3-phase (200V)	-	1/4 hp	1/2 hp	3/4 hp	1 1/2 hp		
Motor Load, 3-phase (230V)	-	1/3 hp	1/2 hp	1 hp	1 1/2 hp		
Motor Load, 3-phase (460V)	1/2	3/4 hp	1 1/2 hp	2 hp	5 hp		
Motor Load, 3-phase (575V)	1/2	1 hp	1 1/2 hp	3 hp	5 hp		
Max. Rated Current of Protection Device for Group Installation							
Fuse or MCCB	125A	125A	125A	125A	125A		

MPW40 – Specifications – Power Contact Ratings								
Туре	<u>MPW40-3-U010</u>	<u>MPW40-3-U016</u>	<u>MPW40-3-U020</u>	<u>MPW40-3-U025</u>	<u>MPW40-3-U032</u>			
		UL/CSA Data						
Rated Operational Current le	10A	16A	20A	25A	32A			
Magnetic Release Current	130A	208A	260A	325A	416A			
	Ма	x. Short Circuit Current						
Without CLT32 (480V)	65kA	50kA	50kA	50kA	50kA			
Without CLT32 (600V)	25kA	25kA	25kA	25kA	25kA			
With CLT32 (480V)	100kA	100kA	100kA	100kA	100kA			
With CLT32 (600V)	50kA	50kA	50kA	50kA	50kA			
Motor Load, 1-phase (115V)	1/2 hp	1 hp	1 1/2 hp	2 hp	-			
Motor Load, 1-phase (230V)	1 1/2 hp	3 hp	3 hp	3 hp	5 hp			
Motor Load, 3-phase (200V)	3 hp	5 hp	5 hp	7 1/2 hp	10 hp			
Motor Load, 3-phase (230V)	3 hp	5 hp	7 1/2 hp	7 1/2 hp	10 hp			
Motor Load, 3-phase (460V)	7 1/2 hp	10 hp	15 hp	15 hp	20 hp			
Motor Load, 3-phase (575V)	10 hp	15 hp	20 hp	20 hp	25 hp			
	Max. Rated Current of Protection Device for Group Installation							
Fuse or MCCB	125A	160A	250A	250A	300A			



		Auxiliary	Contact Ratings			
Туре		<u>ACBF-11</u>	<u>ACBS-11</u>	<u>ACBS-20</u>	<u>ACBS-02</u>	
		Rated In	sulation Voltage U _i			
Acc. IEC; VDE 0660		300V	690V	690V	690V	
Acc. UL; CSA		240V	600V	600V	600V	
		Rated Op	erating Voltage U _e			
Acc. IEC; VDE 0660		250V	690V	690V	690V	
Acc. UL; CSA		240V	600V	600V	600V	
	·	Rated Im	pulse Voltage U _{imp}		•	
Acc. IEC60947-1		4kv	6kv	6kv	6kv	
Overvoltage Category		III				
Pollution Degree				3	1	
			Life Span			
Mechanical				operations		
Electrical (l _e max.)				operations		
Rated Thermal Current Ith		2.5 A	10A	10A	10A	
		-	perating Current I _e			
	24V	2A	6A	6A	6A	
Acc. IEC 60947-5-1 / AC-15	110-127V	0.5 A	6A 6A	6A 6A	6A 6A	
	220-240V	0.5 A	6A	6A	6A	
	380-400V	- -	3A	3A	3A	
	415-450V		 1A	1A	1A	
	415-450V 500V	-	1A	1A	1A	
	660-690V	-	1A 1A	1A	1A 1A	
Acc. 111 : CSA	000-090V	-	A600			
Acc. UL; CSA		C300 A600 A600 A600 A600				
	0.01/			04	0.1	
	24V	1A	2A	2A	2A	
	48V	0.3 A	0.8 A	0.8 A	0.8A	
Acc. IEC 60947-5-1 / DC-13	60V	0.15 A	0.5 A	0.5 A	0.5 A	
	110V	-	0.5 A	0.5 A	0.5 A	
	220V	-	0.25 A	0.25 A	0.25 A	
Acc. 111 - CSA	440V	-	0.1 A	0.1 A	0.1 A	
Acc. UL; CSA		R300	Q600	Q600	Q600	
		Short Circuit	Rating Without Welding			
RK5				A		
MCB				A		
Type of Terminal				r; Philips #2		
		Tern	ninal Capacity	0		
Solid or Stranded				to 2.5 mm ²)		
Solid or Stranded		1 or 2 x (18 to 14 AWG)				
Tightening Torque			1.0-1.25 N•m [8	3.85-11.06 lb•in]		



Trin Si	nnalling F	Block Ratings	
Туре	gnanng	TSB	
	ated Insulation		
		•	
Acc. IEC; VDE 0660		690V	
Acc. UL; CSA	ted Operating	600V	
	ated Operating	.	
Acc. IEC; VDE 0660		690V	
Acc. UL; CSA		600V	
	ted Impulse Vo		
Acc. IEC60947-1		6kv	
Overvoltage Category			
Pollution Degree		3	
	Life Spa		
Mechanical		100,000 operations	
Electrical (I _e max.)		100,000 operations	
Rated Thermal Current I _{th}		10A	
R	ated Operating	Current I _e	
	24V	6A	
	110-127V	6A	
	220-240V	6A	
Acc. IEC 60947-5-1 / AC-15	380-400V	3A	
	415-450V	3A	
	500V	2A	
	660-690V	1A	
Acc. UL; CSA		A600	
R	ated Operating	Current I _e	
	24V	2A	
	48V	0.5 A	
Acc. IEC 60947-5-1 / DC-13	60V	0.5 A	
	110V	0.5 A	
	220V	0.25 A	
	440V	0.1 A	
Acc. UL; CSA		Q600	
	Circuit Rating V	Vithout Welding	
Fuse RK5		6A	
МСВ		6A	
Type of Terminal	Screwdriver; Philips #2		
	Terminal Ca		
Solid or Stranded		1 or 2 x (0.5 to 2.5 mm2)	
Solid or Stranded		1 or 2 x (18 to 14 AWG)	
Tightening Torque		1.0-1.25 N•m [8.85-11.06 lb•in]	



Shunt Trip Ratings									
Туре	SRMP								
Rated Insul	lation Voltage U _j								
Acc. IEC; VDE 0660	690V								
Acc. UL; CSA	600V								
Rated Operating Voltage U _e									
Acc. IEC; VDE 0660	690V								
Acc. UL; CSA	600V								
Rated Impulse Voltage U _{imp}									
Acc. IEC60947-1	6kv								
Overvoltage Category	III								
Pollution Degree	3								
Lii	fe Span								
Mechanical	100,000 operations								
Electrical (l _e max.)	100,000 operations								
Actuating Voltage (x U _s)	0.7-1.1 V								
Power (Consumption								
Pull-In	20.2 VA [13W]								
Hold	7.2 VA [2.4 W]								
Maximum Opening Time	20ms								
Short Circuit Ra	ting Without Welding								
Fuse RK5	10A								
МСВ	6A								
Type of Terminal	Screwdriver; Philips #2								
Termin	al Capacity								
Solid or Stranded	1 or 2 x (0.5 to 2.5 mm ²)								
Solid or Stranded	1 or 2 x (18 to 14 AWG)								
Tightening Torque	1.0-1.25 N•m [8.85-11.06 lb•in]								

Undervoltage Trip Ratings										
Туре	URMP									
Rated Insu	lation Voltage U _j									
Acc. IEC; VDE 0660	690V									
Acc. UL; CSA	600V									
Rated Oper	ating Voltage U _e									
Acc. IEC; VDE 0660	690V									
Acc. UL; CSA	600V									
Rated Impu	lse Voltage U _{imp}									
Acc. IEC60947-1	6kv									
Overvoltage Category	III									
Pollution Degree	3									
Lii	fe Span									
Mechanical	100,000 operations									
Electrical (l _e max.)	100,000 operations									
Pick-Up Voltage (x U _S)	0.85-1.1 V									
Drop-Out Voltage (x U _s)	0.7-0.35 V									
Power	Consumption									
Pull-In	20.2 VA [13W]									
Hold	7.2 VA [2.4 W]									
Maximum Opening Time	20ms									
Short Circuit Ra	ting Without Welding									
Fuse gL/gG	10A									
МСВ	6A									
Type of Terminal	Screwdriver; Philips #2									
Termin	nal Capacity									
Solid or Stranded	1 or 2 x (0.5 to 2.5 mm ²)									
Solid or Stranded	1 or 2 x (18 to 14 AWG)									
Tightening Torque	1.0-1.25 N•m [8.85-11.06 lb•in]									

Main Terminal Capacity											
Part Number	Туре	Number of Conductors	Cross-Section								
MPW40-x-xxxx	Rigid or flexible cable	1 or 2	1 to 2.5 mm ² 2.5 to 6 mm ² 14 to 8 AWG								



Altitude – Correction Factor

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

Altitude h (above sea level)	Rated operational voltage U _e	Current correction factor I _U
h ≤ 2000 m	690V	1 x l _u
2000 < h ≤ 3000 m	550V	0.96 x I _u
3000 < h ≤ 4000 m	480V	0.93 x l _u
4000 < h ≤ 5000 m	420V	0.90 x I _u

DC Operation

The MPW40 motor protective circuit breaker 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 at right.

Time constant t = 5ms

Short-circuit breaking capacity Icu = 10 kA for all configurations

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

UED MPW Technical Data

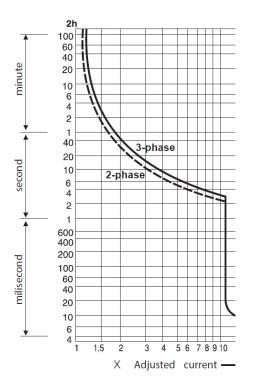
Time Current Characteristic MPW40 Class 10

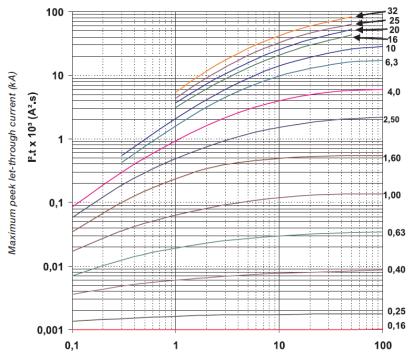
The tripping characteristic indicates the manual motor protector trip time in relation to the rated current.

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

MPW40/80

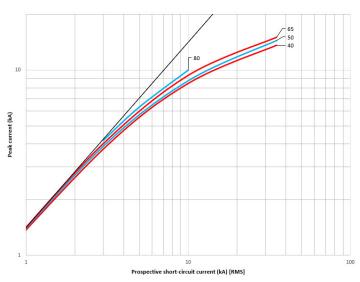
Characteristic I²t at 460V – MPW40



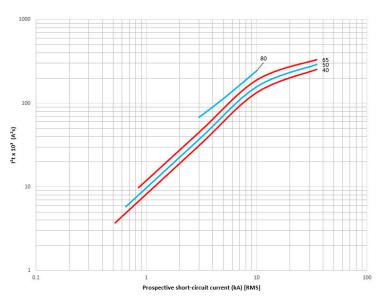


Available short circuit current (kArms)

Short-Circuit Current Limitation Curve at 500V – MPW80



Characteristic I²t at 500V – MPW80



UPD MPW Technical Data

	Short Circuit Interruption Capacity UL/CSA for MPW40														
		al Motor Cont ligh Capacity			Combin	ation Motor High C		pe E/F)	Combination Motor Controller (Type E/F) Extra High Capacity						
Setting Overload Release	240VAC	480Y 277VAC	600Y 347VAC	Max. Fuse or MCCB	240VAC	480VAC Y/277VAC	600VAC Y/347VAC	Max. Fuse or MCCB	240VAC	480VAC Y/277VAC	600VAC Y/347VAC	Max. Fuse or MCCB			
(A)	kA	kA	kA	Α	kA	kA	kA	Α	kA	kA	kA	А			
0.63 - 1.0	50	65	25	125	50	50	25	-	100	100	50	-			
1.0 - 1.6	50	65	25	125	50	50	25	-	100	100	50	-			
1.6 - 2.5	50	65	25	125	50	50	25	-	100	100	50	-			
2.5 - 4.0	50	65	25	125	50	50	25	-	100	100	50	-			
4.0 - 6.3	50	65	25	125	50	50	25	-	100	100	50	-			
6.3 - 10	50	65	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	50	25	500	42	42	25	-	100	100	50	-			
32 - 40	20	20	5	520	-	-	-	-	-	-	-	-			

Note: Fuse or MCCB not required.

	Short-Circuit Interruption Capacity (IEC 60947-2) for MPW40														
	2	20-230 VA	С	3	80-415 VA	С	440VAC			460-500 VAC			630-690 VAC		
Setting Overload Release (A)	I _{CU} (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	I _{cu} (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	I _{cu} (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	I _{CU} (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	I _{CU} (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)
0.63 - 1.0	100	100	-	100	100	-	100	100	-	100	100	-	100	100	-
1.0 - 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 - 4.0	100	100	-	100	100	-	100	100	-	100	100	-	8	8	32
4.0 - 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

Self-protected against short-circuits up to 100kA.

Back-up fuse not required

1) Fuse required for greater short-circuit currents.

MPW Technical Data

Short	Short-Circuit Interruption Capacity (IEC 60947-2) With Current Limiter (MPW40 + <u>CLT32MPW40</u>)														
Setting		380-415 VAC	;		440VAC			460-500 VAC	;	630-690 VAC					
Overload Release (A)	l cu (kA)	I _{cs} (kA)	Max. Fuse (RK5) (A)	l cu (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	l cu (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)	I cu (kA)	I _{CS} (kA)	Max. Fuse (RK5) (A)			
0.63 - 1.0	•	•	-	•	•	-	•	•	-	•	•	-			
1.0 - 1.6	•	•	_	۰	•	-	•	•	-	٠	•	-			
1.6 - 2.5	•	•	-	•	•	-	•	•	-	50	50	-			
2.5 - 4.0	•	•	-	•	•	-	•	•	-	50	50	-			
4.0 - 6.3	•	•	-	٠	•	-	•	•	-	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	-			

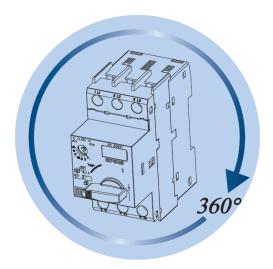
Note: Self protected against short-circuits up to 100kA

Back-up fuse not required

• Not applicable due to MPW40 already having 100 kA of I_{CU} / I_{CS} in referred ranges.



Mounting Position





Features (MPW40 Series)

- 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 times the maximum circuit breaker rated current
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

MPW40-3-U001

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

	MPW40 Series Manual Motor Protectors Selection Guide													
Part Number	Price	Single	M -Phase	laximum UL		er -Phase		Thermal Setting	Short-Circui Group Ins	Drawing				
		115V	230V	200V	230V	460V	575V	- (A)	480V	600V				
MPW40-3-U001	\$54.00	-	-	-	-	1/2	1/2	0.63 - 1.0	50kA	25kA	PDF			
MPW40-3-D016	\$54.00	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	25kA	PDF			
MPW40-3-D025	\$54.00	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	50kA	25kA	PDF			
MPW40-3-U004	\$54.00	1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	25kA	PDF			
MPW40-3-D063	\$54.00	-	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	50kA	25kA	PDF			
MPW40-3-U010	\$54.00	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	50kA	25kA	PDF			
MPW40-3-U016	\$59.00	1	3	5	5	10	15	10 - 16	50kA	25kA	PDF			
MPW40-3-U020	\$65.00	1-1/2	3	5	7-1/2	15	20	16 - 20	50kA	25kA	PDF			
MPW40-3-U025	\$77.00	2	3	7-1/2	7-1/2	15	20	20 - 25	50kA	25kA	PDF			
MPW40-3-U032	\$82.00	_	5	10	10	20	25	25 - 32	42kA	25kA	PDF			
<u>MPW40-3-U040</u>	\$93.00	-	5	10	15	25	-	32 - 40	20kA	5kA	PDF			

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



Features (MPW80 Series)

- Designed to provide operation, overload and short circuit protection of electric motors
- Suitable for manual motor controller, group installation, tap conductor and combination starters* Type E & Type F
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-failure sensitivity according to IEC 60947-4-1
- Can be used as main switch (IEC 60947-2)
- Short-circuit breaking capacity from 65kA up to 80A at 380 VAC according to IEC 60947-2
- Thermomagnetic Motor Protective Circuit Breaker with overload protection (class 10)
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

* When associated with line side terminal LST65 and trip indicator TSB

	MPW80 Series Manual Motor Protectors Selection Guide													
Part Number	Price	Single		aximum UL		er ·Phase	Thermal Setting	Short-Circui Group In	Drawing					
		115V	230V	200V	230V	460V	575V	- (A)	480V	600V				
MPW80-3-U040	\$141.00	3	7.5	_	15	25	30	32-40	35kA	10kA	PDF			
<u>MPW80-3-U050</u>	\$141.00	-	10	15	15	30	40	40-50	35kA	10kA	PDF			
<u>MPW80-3-U065</u>	\$141.00	5	10	20	20	50	60	50-65	35kA	10kA	PDF			

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



MPW40-3-U001

Features (MPW40 Series)

- 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 times the maximum circuit breaker rated current
- Phase-loss sensitivity
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)
- * When associated with line side terminal LST25 and trip indicator TSB

	MPW40 Series Manual Motor Protectors Selection Guide														
Part Number	Price	Single		laximum UL		er -Phase	· · · · · · · · · · · · · · · · · · · ·	Thermal Setting (A)	Short-Circui Group In	Drawing					
		115V	230V	200V	230V	460V	575V	(77)	480V	600V					
MPW40-3-U001	\$54.00	_	_	-	-	1/2	1/2	0.63 - 1.0	50kA	25kA	PDF				
MPW40-3-D016	\$54.00	-	1/10	1/4	1/3	3/4	1	1.0 - 1.6	50kA	25kA	PDF				
MPW40-3-D025	\$54.00	-	1/6	1/2	1/2	1-1/2	1-1/2	1.6 - 2.5	50kA	25kA	PDF				
MPW40-3-U004	\$54.00	1/8	1/3	3/4	1	2	3	2.5 - 4.0	50kA	25kA	PDF				
MPW40-3-D063	\$54.00	-	3/4	1-1/2	1-1/2	5	5	4.0 - 6.3	50kA	25kA	PDF				
<u>MPW40-3-U010</u>	\$54.00	1/2	1-1/2	3	3	7-1/2	10	6.3 - 10	50kA	25kA	PDF				
MPW40-3-U016	\$59.00	1	3	5	5	10	15	10 - 16	50kA	25kA	PDF				
MPW40-3-U020	\$65.00	1-1/2	3	5	7-1/2	15	20	16 - 20	50kA	25kA	PDF				
MPW40-3-U025	\$77.00	2	3	7-1/2	7-1/2	15	20	20 - 25	50kA	25kA	PDF				
MPW40-3-U032	\$82.00	-	5	10	10	20	25	25 - 32	42kA	25kA	PDF				
MPW40-3-U040	\$93.00	-	5	10	15	25	_	32 - 40	20kA	5kA	PDF				

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



Features (MPW80 Series)

- Designed to provide operation, overload and short circuit protection of electric motors
- Suitable for manual motor controller, group installation, tap conductor and combination starters* Type E & Type F
- Fixed short-circuit release 13 times the maximum circuit breaker rated current
- Phase-failure sensitivity according to IEC 60947-4-1
- Can be used as main switch (IEC 60947-2)
- Short-circuit breaking capacity from 65kA up to 80A at 380 VAC according to IEC 60947-2
- Thermomagnetic Motor Protective Circuit Breaker with overload protection (class 10)
- Ambient temperature compensation -4 to +140°F (-20 to +60°C)

* When associated with line side terminal LST65 and trip indicator TSB

	MPW80 Series Manual Motor Protectors Selection Guide													
Part Number	Price	Single	M -Phase	aximum UL	Horsepow Three-	er Phase	Thermal Setting	Short-Circui Group In	Drawing					
		115V	230V	200V	230V	460V	575V	- (A)	480V	600V				
MPW80-3-U040	\$141.00	3	7.5	-	15	25	30	32-40	35kA	10kA	PDF			
MPW80-3-U050	\$141.00	-	10	15	15	30	40	40-50	35kA	10kA	PDF			
MPW80-3-U065	\$141.00	5	10	20	20	50	60	50-65	35kA	10kA	PDF			

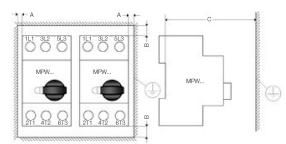
Note: Horsepower ratings shown in the table are for reference only. Please refer to "Full Load Amps of the Motor" for final selection.

MPW80-3-U065

MPW80 Series Main Terminal Capacity Specifications			
Connection	Туре	Cross-Section	
1 conductor connection on top only	Rigid Cable	1 - 35 mm ²	
	Cable Without Terminal/Ferrules	1.5 - 35 mm ²	
	Cable With Terminal/Ferrules	1 - 35 mm ²	
	Flexible Cable	1.5 - 35 mm ² 12 - 2 AWG	
1 conductor connection on bottom only	Rigid Cable	2.5 - 35 mm ²	
	Cable Without Terminal/Ferrules	6 - 35 mm ²	
	Cable With Terminal/Ferrules	2.5 - 35 mm ²	
	Flexible Cable	6 - 35 mm ² 12 - 2 AWG	
Connection of 2 conductors	Rigid Cable	(A) 1 - 35 mm ²	
		(B) 2.5 - 35 mm ²	
	Cable Without Terminal/Ferrules	(A) 1.5 - 35 mm ²	
B		(B) 6 - 35 mm ²	
	Cable With Terminal/Ferrules	(A) 1 - 35 mm ²	
		(B) 2.5 - 35 mm ²	
	Flexible Cable	(A) 1.5 - 35 (M) mm ² 12 - 2 AWG	
		(B) 6 - 35 mm ² 12 - 2 AWG	

Mounting Configurations

MPW Series Mounting Configurations				
Live or Grounded Parts – Distance to the Circuit Breaker				
			n distance between the circuit l live or grounded parts (mm [in])	
	C	А	В	C
MPW40	Up to 500 V	9 [0.35]	30 [1.18]	95 [3.74]
	Up to 690 V	30 [1.18]	50 [1.97]	95 [3.74]
MPW80	Up to 690 V	10 [0.39]	50 [1.97]	150 [5.91]



The motor protective circuit breaker can be mounted in any position, but according to IEC 60447 standard, the "On - I" indicator must be to the right or up.

DC Operation

The MPW40-MPW80 can also be used for operating continuous current 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 below. Short-circuit breaking capacity $I_{CU} = 10$ kA for all configurations.

MPW Series DC Operation				
Circuit	Maximum VDC	Notes		
	150VDC	System not grounded; 2 poles in series.		
	300VDC	System grounded; 2 poles in series.		
	450VDC	System grounded; 3 poles in series.		

IDED MPW Series Manual Motor Protectors Accessories

Accessories for MPW Series Manual Motor Protectors – Selection Guide				
Part Number	Price	Description	Drawing	
	Auxiliary Contact Blocks			
<u>ACBF-11</u>	\$8.25	Field installable auxiliary contact, front mount, (1) N.O./(1) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.	<u>PDF</u>	
<u>ACBS-11</u>	\$9.00	Field installable auxiliary contact, left side mount, (1) N.O./(1) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF	
ACBS-20	\$9.00	Field installable auxiliary contact, left side mount, (2) N.O. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF	
ACBS-02	\$9.00	Field installable auxiliary contact, left side mount, (2) N.C. contact(s), 10A @ 600 VAC/2.5A @ 600 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF	
Accessories for Combination Type-E Construction				
<u>LST25</u>	\$17.00	Incoming power terminal block, 3-pole, maximum current 63A, 20-8 AWG. For use with MPW40 series manual motor protectors. Required when using a MPW40 in a UL Type E application 32A and less.	PDF	
<u>LST65</u>	\$32.00	Incoming power terminal block, 3-pole, maximum current 120A, 8-4 AWG. For use with MPW80 series manual motor protectors.		
<u>TSB</u>	\$15.00	Field installable short circuit alarm contact, left side mount, (2) N.O./(2) N.C. contact(s), 2.5A @300 VAC/1A @ 300 VDC, screw terminal. For use with MPW40 series manual motor protectors.	PDF	
		Current Limiter		
CLT32MPW40	\$45.00	Current limiter, 35mm DIN rail mount. For use with MPW40 series manual motor protectors.	PDF	
Link Modules				
ECCMP-C0	\$8.50	Link module, for use with MPW40 protectors and CWC07 through CWC016 series miniature contactors with AC or DC coils. Not for use with 4-Pole CWC series miniature contactors.	PDF	
<u>ECCMP-C025</u>	\$8.50	Link module, for use with MPW40 protectors and CWC025 series miniature contactors with AC coils. Not for use with 4-Pole CWC series miniature contactors.	PDF	
ECCMP-40B38	\$10.00	Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with AC coils.	PDF	
ECCMP-40B38DC	\$10.00	Link module, for use with MPW40 protectors and CWB9 through CWB38 series contactors with DC coils.	PDF	
ECCMP-80B80	\$35.50	Link module, for use with MPW80 protectors and CWB40 through CWB80 series contactors with AC and DC coils.	PDF	
<u>EC-R3</u>	\$38.50	Reversing connection kit, for use with CWB95 to CWB125 series contactors. Line and loadside connection bars included.	PDF	











ACBF-11



ECCMP-C0



ECCMP-40B38DC

ACBS-20

ECCMP-40B38

Accessories, continued

Acces	sories f	or MPW Series Manual Motor Protectors – Selection Guide	9
Part Number	Price	Description	Drawing
Through-the-Door Rotary Mechanisms			
<u>RMMP-130</u>	\$28.50	Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-130E</u>	\$28.50	Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-330</u>	\$34.50	Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>RMMP-330E</u>	\$34.50	Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, NEMA 1/3R, IP55. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-130</u>	\$42.50	Handle, rotary, 130mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-130E</u>	\$42.50	Handle, rotary, 130mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	<u>PDF</u>
<u>MRX-330</u>	\$46.50	Handle, rotary, 330mm length, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX-330E</u>	\$46.50	Handle, rotary, 330mm length, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW40 series manual motor protectors.	PDF
<u>MRX65-130</u>	\$45.00	Rotary handle, selector, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 130mm shaft included.	PDF
<u>MRX65-130E</u>	\$45.00	Rotary handle, selector, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 130mm shaft included.	PDF
<u>MRX65-330</u>	\$48.50	Rotary handle, selector, black/gray, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 330mm shaft included.	PDF
<u>MRX65-330E</u>	\$48.50	Rotary handle, selector, red/yellow, external front mount, 2-position, lockable in OFF only, defeatable, NEMA 4/4X, IP65. For use with MPW80 series manual motor protectors. 330mm shaft included.	PDF
		Under Voltage and Shunt Trip Releases	
SRMPD51	\$22.50	Field installable shunt trip, right side mount, 20-24 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.	PDF
<u>SRMPD59</u>	\$22.50	Field installable shunt trip, right side mount, 100-127 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.	PDF
SRMPD65	\$22.50	Field installable shunt trip, right side mount, 200-240 VAC (50/60Hz) coil voltage, screw terminal. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPV18	\$22.50	Field installable undervoltage trip device, right side mount, 110 VAC (50Hz)/120 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPV23	\$22.50	Field installable undervoltage trip device, right side mount, 180 VAC (50Hz)/208 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPV30	\$22.50	Field installable undervoltage trip device, right side mount, 208 VAC (50Hz)/240 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPV37	\$22.50	Field installable undervoltage trip device, right side mount, 230-240 VAC (50Hz)/240-277 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPV47	\$22.50	Field installable undervoltage trip device, right side mount, 400-415 VAC (50Hz)/480 VAC (60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF
URMPD02	\$22.50	Field installable undervoltage trip device, right side mount, 24 VAC (50/60Hz) sensing range, screw terminals. For use with MPW40 and MPW80 series manual motor protectors.	PDF



RMMP-130







MRX65-130



SRMPD51



URMPV18



URMPD02