

# Controls

## Manual Motor Protectors - Accessories

### Front Mounting Auxiliary Contact Block - ACBF

For use with		Auxiliary Contacts		Catalog Number	List Price	Multiplier Symbol
		NO	NC			
MPW16 MPW25 MPW65 1)		1	1	ACBF-11	\$20	Z4
MPW100				ACBF-11 MPW100	\$20	Z4

### Left side Auxiliary Contact Block - ACBS

For use with		Auxiliary Contacts		Catalog Number	List Price	Multiplier Symbol
		NO	NC			
MPW16 MPW25 MPW65 1)		1	1	ACBS-11	\$22	Z4
		2	-	ACBS-20		
		-	2	ACBS-02		
MPW100		1	1	ACBS-11 MPW100	\$22	Z4
		2	-	ACBS-20 MPW100		
		-	2	ACBS-02 MPW100		

Note: 1) 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

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#### Trip Signalling Block - TSB-22

For use with		Description	Catalog Number	List Price	Multiplier Symbol
MPW25 MPW65 1)		<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>	TSB-22	\$38	Z4
MPW100		<ul style="list-style-type: none"> <li>- Equipped with 2 auxiliary contacts (1NO + 1NC) for overload and short-circuit trip signalling.</li> <li>- Left side assembly only</li> </ul>	TSB SC11 MPW100	\$38	Z4

#### Undervoltage Release - URMP

For use with		Voltage	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25 MPW65 1)		208V 60Hz 24V 50/60Hz 400-415V 50Hz / 480V 60Hz 110V 50Hz / 120V 60Hz 240V 60Hz	URMP V23 URMP D02 URMP V47 URMP V18 URMP V30	\$56	Z4
MPW100		Note: - Operating voltage $> 0,85 \times U_e$ - Non operating voltage $0,35...0,7 \times U_e$	110V 50Hz / 120V 60Hz 220-230V 50Hz / 240-260V 60Hz 380-400V 50Hz / 440-460V 60Hz	URMP V18 MPW100 URMP V33 MPW100 URMP V43 MPW100	\$56

Note: 1) The following accessories can be coupled at the same time: 1 ACBF + 1 URMP/SRMP + 1 TSB-22 or 1 ACBS + 1 URMP/SRMP + 1 TSB-22

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### Shunt Release - SRMP

For use with		Voltage	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25 MPW65 1)		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

Note: 1) 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 Symbol
MPW16		- For direct connection (electrical and mechanical) of motor circuit breakers to contactors. Note: - Not applicable to CWM contactors with DC coils.	CWC07...16	ECCMP-C016	\$20	Z4
MPW25			CWC07...16 CWC025 CWM9...25 CWM32...40	ECCMP-C0 ECCMP-C025 ECCMP-25 ECCMP-32		

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

For use with	Illustrative picture	Description	Handle color	Catalog Number	Price List	Multiplier Symbol		
MPW25		<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 assembled 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;</li> <li>- Handle can be mounted on panels with a thickness of 1 to 5mm;</li> <li>- Handle can be assembled even with MPW turned in 90° position</li> </ul>	Black	RMMP-130	\$60	Z4		
				RMMP-330	\$70			
MPW65			Red/ Yellow	RMMP-130E	\$60			
				RMMP-330E	\$70			
MPW65			Black	RMMP65-130	\$60			
				RMMP65-330	\$70			
MPW25				<ul style="list-style-type: none"> <li>- Panel door can be opened in ON position (thermometry)</li> <li>- Degree of protection: MRX = 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 assembled 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 a thickness of 1 to 5mm</li> </ul>	Black		-	-
							MRX-130	\$105
MPW25	Red/ Yellow	MRX-330			\$115			
		MRX-130E			\$105			
MPW65	Black	MRX-330E			\$115			
		MRX65-130			\$120			
MPW65	Red/ Yellow	MRX65-330			\$130			
		MRX65-130E			\$120			
MPW100	Black	MRX65-330E			\$130			
		MRX100-115			\$130			
MPW100	Red/ Yellow	MRX100-115-E	\$130					
		MRX100-315	\$140					
		MRX100-315-E	\$140					

### Standard IEC Enclosure - PE

For use with	Illustrative picture	Description	Terminals	Handle color	Catalog Number	List Price	Multiplier Symbol
MPW16		<ul style="list-style-type: none"> <li>- Degree of protection: IP66</li> <li>- Two cable entry knockouts, top and bottom</li> <li>- Allows installing: MPW16 + ACBF11/PL lamps + ACBS</li> </ul>	With neutral and ground terminals	-	PE66GN	\$45	Z4
MPW25		<ul style="list-style-type: none"> <li>- Degree of protection: IP55</li> <li>- Allows installing: MPW25 + ACBF11/PL lamps + ACBS</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	PE55GN	\$45	
				Red with yellow background	PE55GNE	\$45	



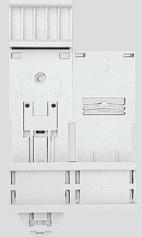
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## Manual Motor Protectors - Accessories

### Large IEC Enclosure - LPE55

For use with		Description	Terminals	Handle color	Catalog Number	List Price	Multiplier Symbol
MPW25		<ul style="list-style-type: none"> <li>- Degree of protection: IP55</li> <li>- For use with MPW25 + 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 + contactor - MA

For use with		Description	Contactors	Catalog Number	List Price	Multiplier Symbol
MPW25		Used for direct on line starters 45mm width	CWC07...25 CWM9...CWM25	MA45DOL	\$40	Z4
MPW25		Used for reversing starters 90mm width	2 x CWC07...25 CWM9...CWM25	MA90RVS	\$50	
PW25		Used for star-delta motor starters 90mm width	2 x CWC07...25 CWM9...CWM25	MA90SDS	\$50	

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### Manual Motor Protectors - Accessories

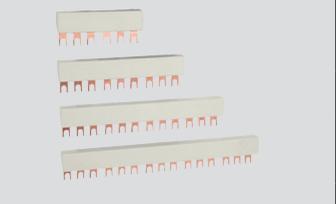
#### Insulators - IB

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

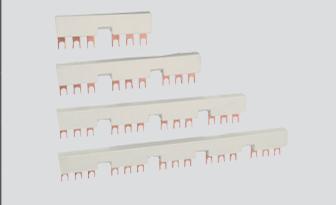
#### Three-phase feeder terminal – FTBBS and LST25

For use with		Description	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25		<ul style="list-style-type: none"> <li>- For feeding the commoning blocks;</li> <li>- Rated insulation voltage: 690VAC;</li> <li>- <math>I_n</math>: 63A;</li> <li>- Terminals: 6-25mm<sup>2</sup> rigid wire and 6-16mm<sup>2</sup> flexible wire with terminal.</li> </ul>	FTBBS	\$32	Z4
MPW25		<ul style="list-style-type: none"> <li>- Block module for "Type E" Combination motor Controller" in accordance with UL (LST25+MPW+TSB-22);</li> <li>- Rated insulation voltage: 690VAC;</li> <li>- <math>I_n</math>: 63A.</li> <li>- Terminals: 8-20AWG.</li> </ul>	LST25	\$30	Z4

#### Three-phase commoning blocks for MPW without side auxiliary contacts – BBS45

For use with		Description	Numbers of MPW	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25		<ul style="list-style-type: none"> <li>- For parallel blocking of side-by-side mounted MPW, without side auxiliary contacts;</li> <li>- Enables the use of frontal auxiliary contact block ACBF-11;</li> <li>- <math>U_n</math>: 690VAC;</li> <li>- <math>I_n</math>: 63A.</li> </ul>	2	BBS45-2	\$22	Z4
			3	BBS45-3	\$24	
			4	BBS45-4	\$31	
			5	BBS45-5	\$41	

#### Three-phase commoning blocks for MPW with side auxiliary contacts – BBS54

For use with		Description	Numbers of MPW	Catalog Number	List Price	Multiplier Symbol
MPW16/ MPW25		<ul style="list-style-type: none"> <li>- For parallel blocking of side-by-side mounted MPW;</li> <li>- Enables the use of side auxiliary contact block ACBS;</li> <li>- <math>U_n</math>: 690VAC;</li> <li>- <math>I_n</math>: 63A.</li> </ul>	2	BBS54-2	\$22	Z4
			3	BBS54-3	\$24	
			4	BBS54-4	\$31	
			5	BBS54-5	\$41	



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## Manual Motor Protectors - Accessories

### Current Limiter - CLT25

For use with		Description	Catalog Number	List Price	Multiplier Symbol
MPW25		- For protecting electrical circuits where high short-circuit breaking capacity is required:  100kA @ 480VAC;  Note: This accessory must be used together with a MPW motor protective.	CLT25	\$100	Z4

### Shroud for unused terminals – CSD

For use with		Description	Catalog Number	List Price	Multiplier Symbol
BBS45 and BBS54		Protection against direct contact to unused terminals on energized BBS45 and BBS54 three-phase commoning block.	CSD	\$10	Z4

### Scale Cover - SCMP

For use with		Description	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25 MPW65		Protects the current adjustment dial against direct contact while enabling the adjusted current to be viewed.	SCMP	\$5	Z4

### Push-in-lugs - PLMP

For use with		Description	Catalog Number	List Price	Multiplier Symbol
MPW16 MPW25 MPW65		For direct assembly of motor protective circuit breaker onto any surface using screws.	PLMP	\$0.50	Z4

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## Manual Motor Protectors - MPW Technical Data

### Auxiliary Contact Block Ratings

TYPE			ACBF-11	ACBF-11 MPW100	ACBS-11	ACBS-20	ACBS-02	ACBS-11 MPW100	ACBS-20 MPW100	ACBS-02 MPW100
Rated Insulation Voltage Ui										
Acc. IEC; VDE 0660		[V]	300		690					
Acc. UL; CSA		[V]	240		600					
Rated Operating Voltage Ue										
Acc. IEC; VDE 0660		[V]	250		690					
Acc. UL; CSA		[V]	240		600					
Rated Impulse Voltage Uimp										
Acc. IEC60947-1		[kV]	4		6					
Overvoltage Category			III							
Pollution Degree			3							
Life Span										
Mechanical		[ops.]					100,000			
Electrical (Ie max.)		[ops.]					100,000			
Rated Thermal Current Ith		[A]	2.5		10					
Rated Operating Current Ie										
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					
Rated Operating Current Ie										
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					
Short Circuit rating without welding										
gL/gG		[A]					10			
MCB		[A]					6			
Type of Terminal	Screw Driver		Philips #2							
Terminal Capacity										
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]	1.0 - 1.25							



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## Manual Motor Protectors - MPW Technical Data

### Trip Signalling Block

TYPE			TSB-22	TSB-11 MPW100
Rated Insulation Voltage Ui				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Operating Voltage Ue				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Impulse Voltage Uimp				
Acc. IEC60947-1		[kV]	6	
Overvoltage Category			III	
Pollution Degree			3	
Life Span				
Mechanical		[ops.]	100000	
Electrical (Ie max.)		[ops.]	100000	
Rated Thermal Current Ith		[A]	10	
Rated Operating Current Ie				
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	
Rated Operating Current Ie				
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	
Short Circuit rating without welding				
gL/gG		[A]	6	
MCB		[A]	6	
Type of Terminal	Screw Driver		Philips #2	
Terminal Capacity				
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 (6.5 ... 10)	

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## Manual Motor Protectors - MPW Technical Data

### Shunt Release Block

TYPE			SRMP	SRMP MPW100
Rated Insulation Voltage Ui				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Operating Voltage Ue				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Impulse Voltage Uimp				
Acc. IEC60947-1		[kV]	6	
Overvoltage Category			III	
Pollution Degree			3	
Life Span				
Mechanical		[ops.]	100000	
Electrical (Ie max.)		[ops.]	100000	
Actuating Voltage	x Us	[V]	0.7 - 1.1	
Power Consumption				
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	
Short Circuit Rating without Welding				
Fuse gL/gG		[A]	10	
MCB		[A]	6	
Type of Terminal	Screw Driver			Phillips #2
Terminal Capacity				
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 (6.5 ... 10)	

### Under Voltage Release Block

TYPE			URMP	URMP MPW100
Rated Insulation Voltage Ui				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Operating Voltage Ue				
Acc. IEC; VDE 0660		[V]	690	
Acc. UL; CSA		[V]	600	
Rated Impulse Voltage Uimp				
Acc. IEC60947-1		[kV]	6	
Overvoltage Category			III	
Pollution Degree			3	
Life Span				
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	
Power Consumption				
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	
Short Circuit Rating without Welding				
Fuse gL/gG		[A]	10	
MCB		[A]	6	
Type of Terminal	Screw Driver			Phillips #2
Terminal Capacity				
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]	1.0 - 1.25 (6.5 ... 10)	