

Controls

Manual Motor Protectors - MPW100 Technical Data

Power Contact Ratings

TYPE			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 I _{th}		[A]	75	90	100.00
Rated Insulation Voltage U _i					
Acc. IEC; VDE 0660		[V]		690	
Acc. UL; CSA		[V]		600	
Rated Operating Voltage U _e					
Acc. IEC; VDE 0660		[V]		690	
Acc. UL; CSA		[V]		600	
Rated Impulse Voltage U _{imp}					
Acc. IEC60947-1		[kV]		6	
Rated Operating Frequency		[Hz]		50/60	
Overvoltage Category				III	
Pollution Degree				3	
Utilization Category					
IEC 60947-2 (Motor Protector)				A	
IEC 60947-4-1 (Motor Starter)				AC-3	
Lifespan					
Mechanical		[ops.]		50,000	
Electrical (I _e max.)		[ops.]		25,000	
Switching Rate (motor starts)	AC-3	[ops/hr]		15	
Ambient Temperature					
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	
Altitude					
Up to 2,000m (6,600ft)				Nominal Values (for higher altitudes refer to page 244)	
Degree of protection				IP20	
Resistance to Shock					
Acc. IEC 60068-2-27		[g]		15	
Resistance to Vibration				IEC 68-2	
Protection against direct contact					
Acc. IEC 536; DIN VDE 0106 Part 100				Finger and back of hand proof	
Phase Failure Sensitivity Protection				Yes	
Overload Protection Characteristics	x I _u	[A]		0.6 - 1	
Magnetic Release	x I _u	[A]		13	
Overload Trip Class				10	
Total Power Loss P _v					
At rated load operating temperature		[W]	10	10	10
Weight		[kg]		1.20	
		[lb]		3.00	
Type of Terminal				Flat Type	
Screw Driver				Allen #4	
Terminal Capacity					
Solid		[mm ²]	Refer to table on page 243		
Stranded		[mm ²]			
Solid or Stranded		[AWG]			
Tightening Torque		[N.m (lb.in)]		4.0 - 4.6 (35 - 55)	
Mounting Position				Any Position	



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UL/CSA DATA					
Rated Operational Current Ie		[A]	75	90	100
Magnetic Release Current		[A]	975	1170	1300
Max. Short Circuit Current					
	480V	[kA]	50		
	600V	[kA]	10		
Motor Load, 1-phase					
	115V	[HP]	5	7 1/2	10
	230V	[HP]	15	20	20
Motor Load, 3-phase					
	200V	[HP]	20	25	30
	230V	[HP]	25	30	30
	460V	[HP]	50	60	75
	575V	[HP]	60	75	100
Max. Rated Current of Protection Device for Group Installation					
	Fuse or MCCB	[A]			
IEC DATA					
Rated Operational Current Ie		[A]	75	90	100
Magnetic Release Current		[A]	975	1170	1300
Back-Up Fuses					
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
Ultimate Short Circuit Breaking Capacity					
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
Rated Service Short Circuit Breaking Capacity					
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