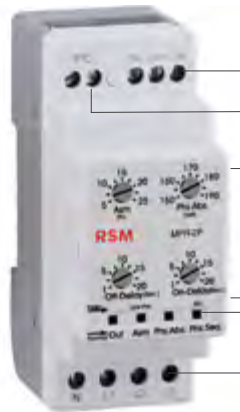
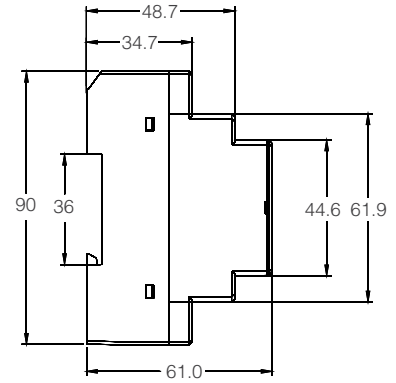
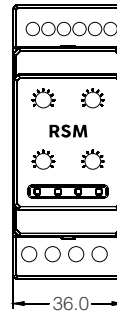


MOTOR PROTECTION RELAYS



- Relay connection points
- PTC connection inlets
- User settings
- Display leds
- Power and phase inlets

Meanings of the display leds	Out	Asm.	Phs. Abs	Phs. Seq
No problem, normal operation, exit relay active	X			
Asm. error occurred (period being counted)	X	X		
Asymmetry error		X		
Phase order error (Phs. Seq)				X
Ptc error (Ptc)				Flash
Insufficient supply (Low Pwr.)		Flash		
Absence of phase error (Phs. Abs)			X	

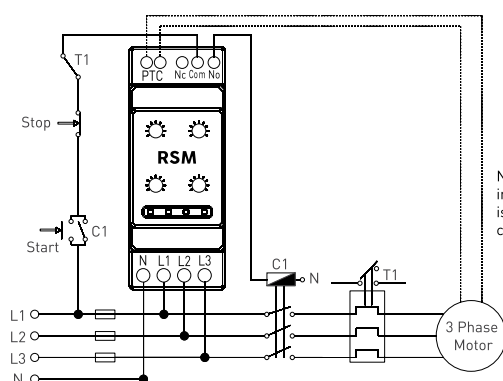
Product Name	Code No	Pcs in Box	Pcs Pack.	Absence of Phase	Phase Order	Ptc	Fixed Asymmetry	Set Asymmetry	Without Neutral	Draw Delay	Open Delay	Insufficient Power Supply Warning
MPR-1	1240.03.1	1	12	●	●	-	●	-	-	-	-	●
MPR-1S	1240.03.2	1	12	●	●	-	●	-	-	-	-	●
MPR-2P	1240.03.3	1	12	●	●	●	-	●	-	●	●	●
MPRN-02P	1240.03.4	1	12	●	●	●	-	●	●	●	●	●

MPR-1 / MPR-1S / MPR-2P / MPRN-02P

Specifications	MPR-1 / MPR-1S	MPR-2P	MPRN-02P
Operation Voltage (Un)	230 V AC	230 V AC	400 V AC
Operation Voltage Interval (U)	150-300V AC / 65-300V AC	150-300 V AC	260-520 V AC
Insufficient Supply Interval	100-120 V AC / 58-60 V AC	100-120V AC	175-210 V AC
Operation Frequency	50 Hz	50 Hz	50 Hz
Power Consumption (Max)	2.5 VA	2.5 VA	2.5 VA
Measurement Method	TrueRMS	TrueRMS	TrueRMS
Asymmetry	%15 Fixed	%5...%25	%5...%25
Phs. Abs. (Absence of Phase)	170 V Fixed	Set at 150...190 V	260...330 V ayarlı
Hysteresis	20% of asymmetry value	20% of asymmetry value	20% of asymmetry value
Off-Delay (Release Delay)	1sec	Set at 1...20 sec	Set at 1...20 sec
On-Delay (Draw Delay)	1sec	Set at 1...20 sec	Set at 1...20 sec
Ptc Operation Interval	None	Opening: more than 1600 ohm Closing: less than 1400 ohm	Opening: more than 1600 ohm Closing: less than 1400 ohm
Setting Accuracy	None	+ or - %5	+ or - %5
Exit Relay	5 A 250 V AC	5 A 250 V AC	5 A 250 V AC
Operation Temperature	Between -20°C...50°C	Between -20°C...50°C	Between -20°C...50°C
Relative Humidity	Less than 90% (Without condensation)	Less than 90% (Without condensation)	Less than 90% (Without condensation)
Cable Sections	2.5 mm2 multi vessel cable	2.5 mm2 multi vessel cable	2.5 mm2 multi vessel cable
Assembly Types	Rail type	Rail type	Rail type
Protection Class	IP20 (Terminals), IP40 (Front Panel)	IP20 (Terminals), IP40 (Front Panel)	IP20 (Terminals), IP40 (Front Panel)
Dimensions	36x90x61	36x90x61	36x90x61
Weight	125gr	125gr	125gr
Insulation	400 V insulation voltage 4 KV source impact	400 V insulation voltage 4 KV source impact	400 V insulation voltage 4 KV source impact

Wiring Diagrams

MPR-1, MPR-2P



Note: The only difference in the MPR-1 model is that there is no PTC connection.

MPRN-02P

