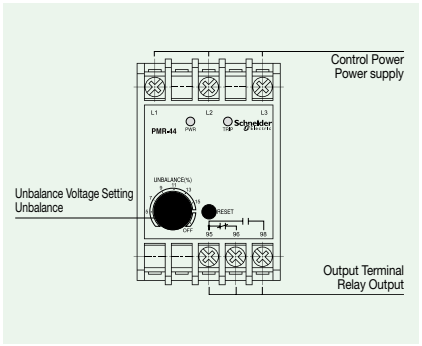
PMR

Electronic reverse phase/phase loss relay

- Phase Monitoring Relay with built-in MCU
- Reverse phase/Phase loss/Voltage unbalance protection
- Voltage unbalance factor: 2 - 15%
- Trip cause check function: 2-LED
- Strong environmental resistance
- Fail-safe Operation



Protection Function

List	Operation Time
Reverse phase	0.1 seconds
Phase loss	1 second
Voltage unbalance	5 seconds [(Three phase arithmetical average voltage - Minimum line voltage) ÷ Three phase arithmetical average voltage] × 100% 2 - 15%
Fail-safe	No relay will be energized if the input power is abnormal.

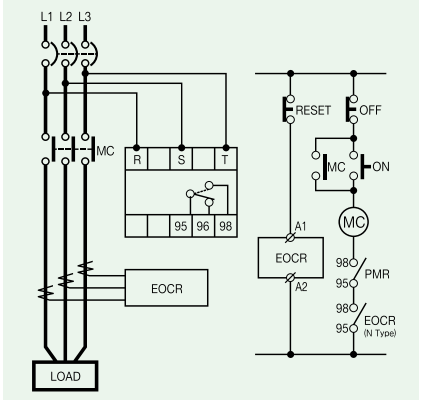
Specifications

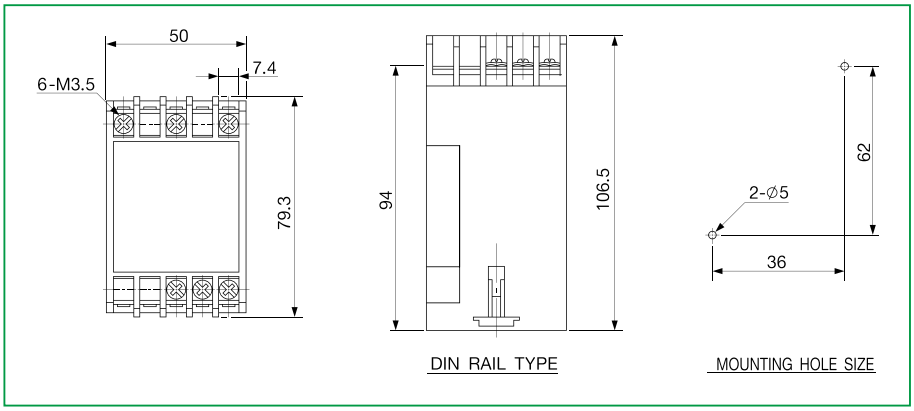
Input Voltage	Type	Setting range
	22	3 Φ 160 - 300V, 50/60Hz
	44	3 Φ 340 - 480V, 50/60Hz
Reset		Manual (Instant)/Electrical (distant) reset ※ If it is tripped due to abnormal input power, it will auto-reset 5 seconds after the input power returns to normal
Auxiliary Contact	Format	1 - SPDT (1C)
	Rating	AC250V/5A Resistive load
	Status	Normally energized (If input power is normal, 95 - 96 open and 95 - 98 close.)
Installation		35mm DIN-rail/Rail

Trip Cause Check

Condition			LED Signal (Pulse Chart)			
			Green LED		Red LED	
Normal operation			On		Off	
Unbalance			On		On	
Trip	Unbalance		Off		On	
	Phase Loss	R	Off		Blinks once	
		S	Off		Blinks 2 times	
		T	Off		Blinks 3 times,	
Reverse phase trip					Alternate blinking	

※ If the cause of a trip occurs during the first time the power is supplied, the relay will not be energized and the cause will be displayed as shown in the table above.





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How to Order

Reference		Input Voltage [V]	Frequency [Hz]	Remark
PMR	-220N7	AC220V	50/60	Panel/DIN Rail
	-440N7	AC440V	50/60	Panel/DIN Rail

Ordering Example

To order a PMR:

P M R – 2 2 0 N 7

❶ ❷ ❸

❶	**Input Voltage**	**220**	AC220V
		440	AC440V
❷	**Output Contact Condition**	**N**	Normally Energized
❸	**Frequency**	**7**	50/60Hz