

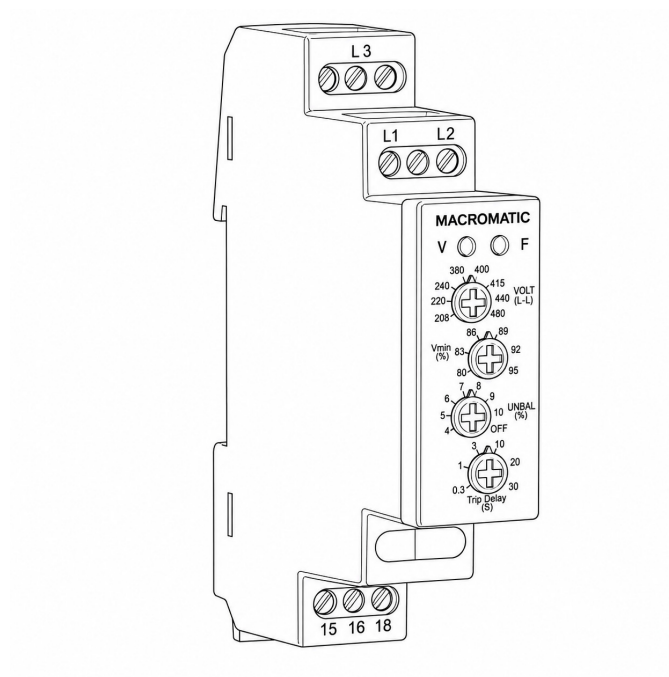


PxE THREE-PHASE MONITORING RELAYS

17.5MM DIN-RAIL MOUNTED

Data Sheet

Three-Phase Voltage Monitoring Relays - PxE Series



PRODUCT INTRODUCTION

Macromatic/Trystar phase monitor relays protect three-phase motors and equipment by continuously supervising line conditions and signaling unsafe phase events. Depending on the model, the product detects phase loss (single-phasing), phase reversal, phase unbalance, undervoltage, and overvoltage. Upon the recognition of an unsafe phase event, the product provides a control output to alarm, inhibit start, or de-energize a contactor to prevent damage. Adjustable sensitivity and time delays allow coordination with process needs and helps reduce nuisance trips from brief disturbances. Available in the compact DIN-rail style, phase monitors integrate easily into modern control panels for HVAC, water/wastewater, industrial processing, and commercial building systems.

Key Features

- Phase loss detection
Prevents overheating and failure caused by single phasing
- Phase reversal detection
Helps avoid reverse rotation and mechanical damage
- Phase unbalance monitoring
Reduces excessive current draw and motor stress
- Under and Over Voltage
Verifies equipment runs within tolerance
- Adjustable sensitivity and time delay
Tunes response to application needs and reduces nuisance trips
- Compact DIN rail footprint
Saves panel space and supports high density designs
- LED status indication
Speeds commissioning and troubleshooting
- Industrial grade construction
Designed for continuous duty performance

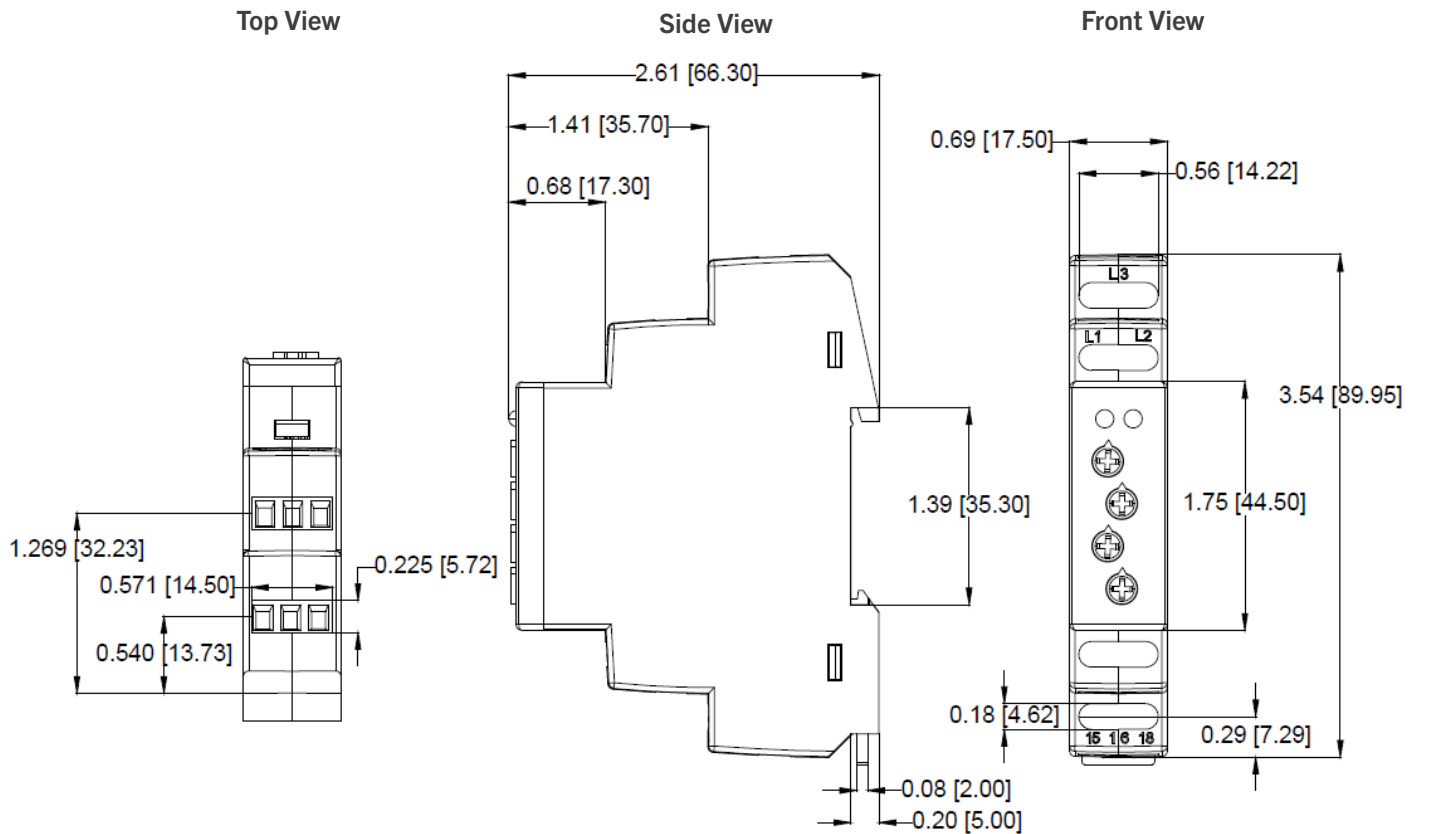
PRODUCT SPECIFICATIONS

Load (Burden):		
	Maximum	25VA
Temperature:		
	Operating	-28° to 65°C (-18° to 149°F)
	Storage	-40° to 85°C (-40° to 185°F)
Trip Delay:		
	Unbalance, Overvoltage, Undervoltage:	0.1-30 seconds Adjustable
	Phase Loss and Reversal:	100ms fixed
	PAE Undervoltage trip:	4 seconds fixed
	Restart	Automatically after 2 seconds
Life:		
	Mechanical	10,000,000 operations
	Full Load	100,000 operations
Output Contact Ratings:		
	8A @ 250V AC / 8A @ 24V DC SPDT	
Approvals:		
	UL Listed (cULus)	E236146

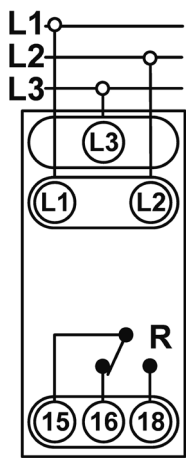
Voltage Requirements:				
	Catalog Number	Sensing Range (50/60Hz ± 5%)	Min	Max
	U	208-480V AC	166.4V	528V
	120	102-138V AC	81.6V	151.8V
	575	460-600V AC	368V	660V

LED Status:			
GREEN		Monitored Voltage Present	
			
RED	OFF		No Fault
		W/ Green, Phase Reversal	
		W/O Green Phase Loss	
		Unbalanced	
		Low Volt (Undervoltage)	
		High Volt (Overvoltage)	

DIMENSIONAL DRAWING



WIRING DIAGRAM



ORDERING INFORMATION

Family		Function	Product Series		Monitored Voltage (Line to Line)	
P	Phase Monitoring	M	E	17.5MM Relay	U	208-480V AC
		A			120	102-138V AC
		L			575	460-600V AC
		C				
		D				
		B				



TRYSTAR®