

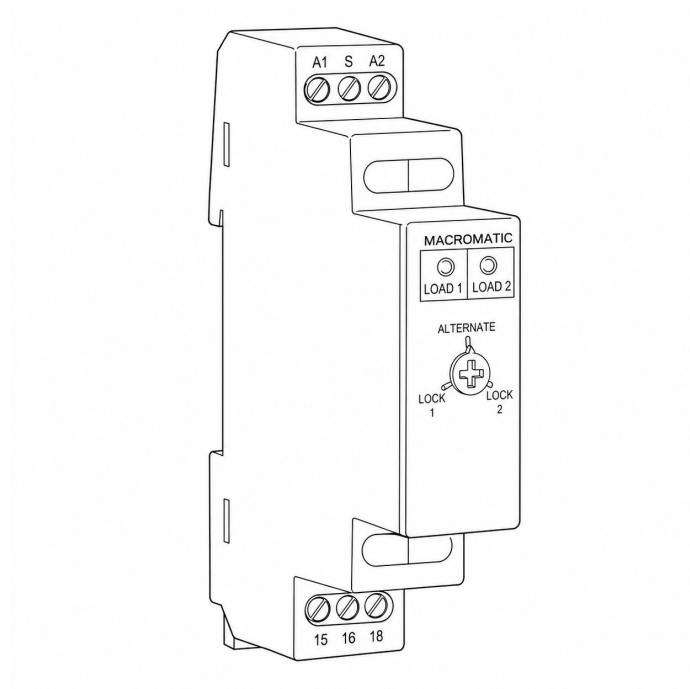


AE1 ALTERNATING RELAYS

17.5MM DIN-RAIL MOUNTED

Data Sheet

Alternating Relays - AE1 Series



PRODUCT INTRODUCTION

Macromatic/Trystar alternating relays automatically balance the run-time between two loads such as pumps, compressors, or fans, by alternating which device is energized each cycle. By equalizing run-time, they help extend equipment life, reduce maintenance, and improve system reliability. Offered in a compact 17.5MM DIN-Rail Mounted form factor, these relays support a wide range of control voltages, duplex or cross-wired configurations, and sequence control. Their narrow DIN footprint, rugged construction, and easy integration make them well suited for water and wastewater, industrial processing, HVAC, and commercial building applications where dependable load sharing is essential.

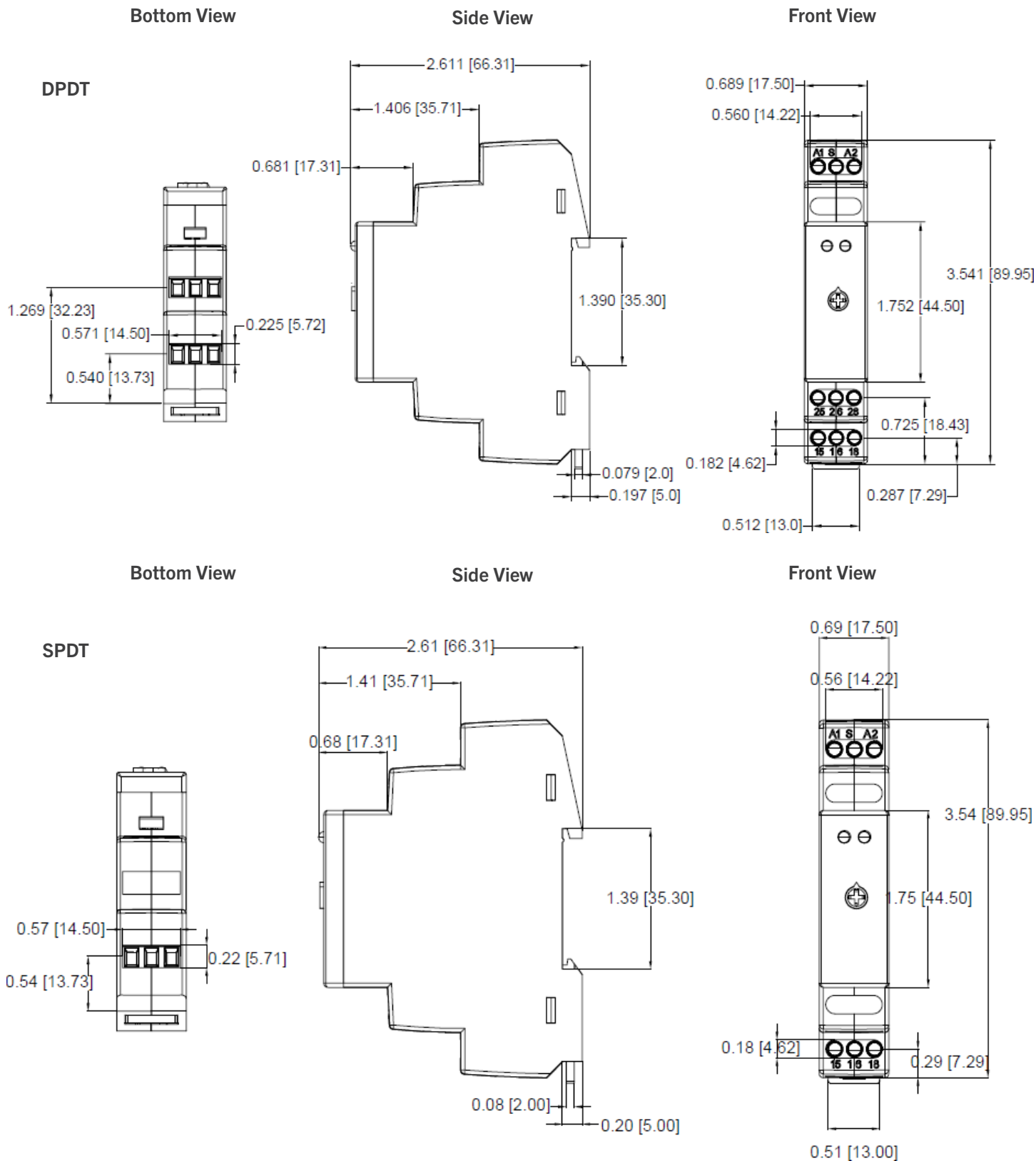
Key Features

- Automatic load alternation
Balances runtime across pumps, compressors, or fans to extend equipment life and reduce premature failures.
- Sequence control configurations
Ensures redundancy and prioritization of critical loads for higher system availability.
- Wide control voltage compatibility
Simplifies system design and supports global and multi-platform control architectures.
- Clear status indication
Two LEDs; Green load 1, Red load 2, improves visibility, troubleshooting, and reduces maintenance time.
- Industrial-grade construction
Delivers reliable, continuous-duty performance in harsh HVAC, water/wastewater, and industrial applications.
- Simple integration into control systems
Reduces engineering time and accelerates commissioning for OEMs and panel builders.

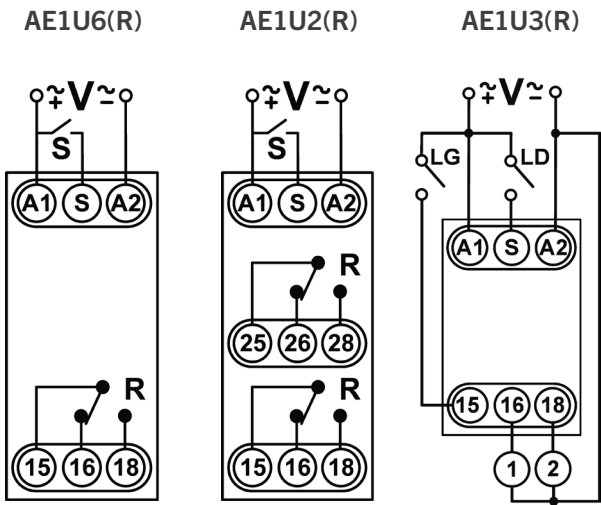
PRODUCT SPECIFICATIONS

Voltage Tolerance:		
	Control Voltage	24-240V AC 12-240V DC AC Operation +10 / -15% of nominal at 50/60 Hz DC Operation +10 / -15% of nominal
Load (Burden):		
	Maximum	4VA
Timing Setting Accuracy:		
	Maximum Setting (Adjustable)	+5% / - 0%
	Minimum Setting (Adjustable)	+0% / - 50%
	Fixed Time Delay	±2% or 50ms, whichever is greater
Repeat Accuracy:		
	Constant Voltage and Temperature	±0.1% or ± 0.05 seconds, whichever is greater
	Variable Voltage and Temperature	±5% or ± 0.1 seconds, whichever is greater
Life:		
	Mechanical	10,000,000 operations
	Full Load	100,000 operations
Output Contact Ratings:		
		8A @ 250V AC / 8A @ 30V DC SPDT/DPDT
Approvals:		
	UL Listed (cULus)	E236146

DIMENSIONAL DRAWINGS



WIRING DIAGRAMS



ORDERING INFORMATION

AE1 17.5MM Alternating Relays									
Family		Product Series		Monitored Voltage (Line to Line)		Function / Output		Switch Option	
AE	17.5MM Alternating	1	Single Function	U	24-240V AC 12-240V DC	2	DPDT	Nil	No switch
						3	Cross-wired DPDT	R	Selector switch: Load 1 Alternate Load 2
						6	SPDT		



TRYSTAR®