



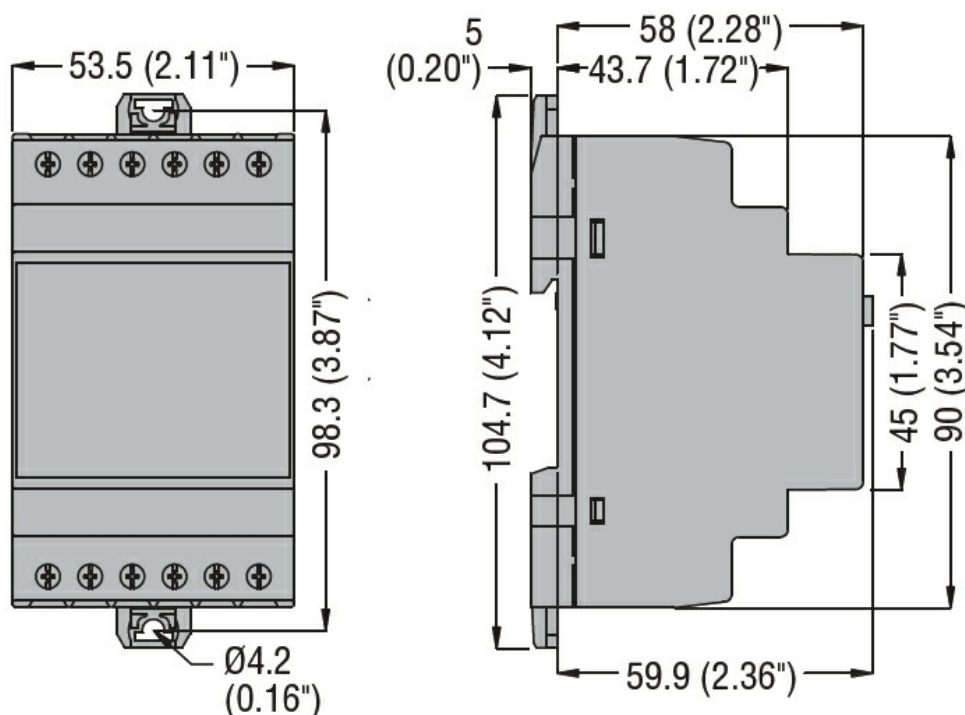
General characteristics

Description	Pump protection relay (motor under-load and over-current control) monitoring for max AC current, min cosφ, phase loss and incorrect phase sequence		
Type of system	Single-phase and three-phase		
Power supply			
Auxiliary supply voltage Us	380...415VAC		
Operating voltage range	0.85...1.1 Us		
Rated frequency	Hz	50/60 ±5%	
Power consumption Max	VA	4.5	
Power dissipation Max	W	2.3	
Control circuit			
Rated current (Ie)	A	5 or 16	
Overload capacity	5Ie for 1s - 160A for 10ms - Constant 16A		
Connection	Direct or by current transformer		
Current set-point (% Ie)	Max	%	10...100
Minimum cosφ set-point	0.1...0.99		
Tripping delay	s	0.1...10	
Automatic resetting delay	min	OFF... 100	
Resetting hysteresis	%	3% for overcurrent, 0.03 for cosφ	
Inhibition time	s	1...60	
Type of reset	Automatic or manual		
External input	Consent input for running/resetting		
Repeat accuracy	%	±1 (with constant parameters)	
Tripping time for phase loss	ms	60	
Voltage inputs			
Measurement range	V	80...660VAC	
Frequency range	Hz	50/60 ±5%	
Relay outputs			

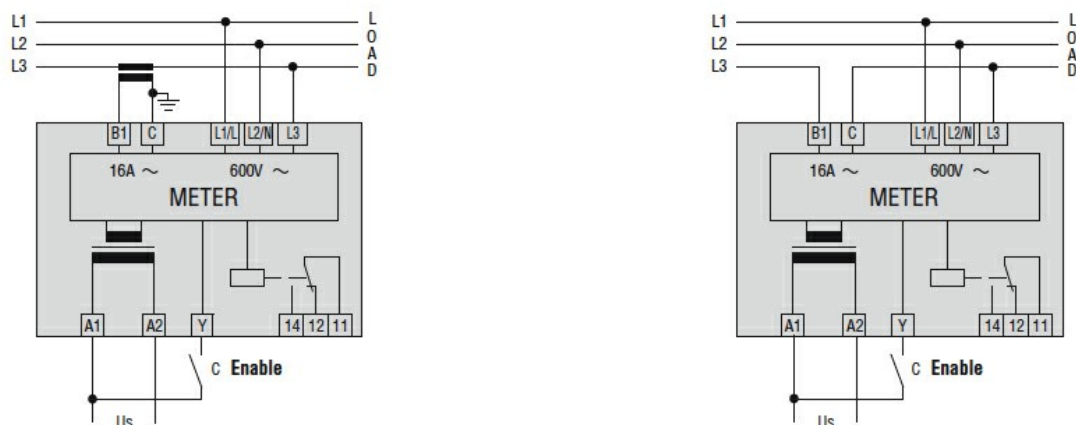
Number of relays	Nr.	1
Relay state		Normally energised De-energises at tripping
Contact arrangement		1 changeover SPDT each
Rated operational voltage AC (IEC)	VAC	250
Maximum switching voltage	VAC	400
IEC Conventional free air thermal current $I_{th} \leq 40^{\circ}\text{C}$	A	8
UL/CSA and IEC/EN 60947-5-1 designation		B300
Electrical life (with rated load)	cycles	100000
Mechanical life	cycles	30000000
Functions		
Modular version		3U
Maximum AC current		Yes
Minimum cosφ for dry running pump protection		Yes
Phase loss		Yes
Incorrect phase sequence		Yes
Indications		
Indication		1 green LED for power on / Inhibition and 2 red LEDs for tripping
Connections		
Tightening torque for terminals	max	Nm 0.8
	max	Ibin 7
Conductor cross section		
AWG/Kcmil	min	AWG 24
	Max	AWG 12
IEC	min	mm ² 0.2
	Max	mm ² 4
Insulations		
Rated insulation voltage U_i	V	600
Rated impulse withstand voltage U_{imp}	kV	6
Operating frequency withstand voltage	kV	2.5
Ambient conditions		
Temperature		
Operating temperature	min	°C -20
	max	°C +60
Storage temperature	min	°C -30
	max	°C +80
Housing		
Execution (n° of modules)		3
Material		Self-extinguishing polyamide
Mounting		Modular DIN 43880 housing

IEC degree of protection		IP40 on front; IP20 at terminals
Dimensions (W x H x D)	mm	53.5 x 104.7 x 64.9
Weight	g	251

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

CSA C22.2 n° 14
IEC/EN 60255-5
IEC/EN 61000-6-2
IEC/EN 61000-6-3
UL 508

Certificates

cULus
EAC

ETIM classification

ETIM 8.0

EC001440 -
Current
monitoring relay