



Frequency monitoring relays
PMF20

Product designation			
Product type designation			
General characteristics			
Description	Minimum and maximum frequency control		
Type of system	Single-phase		
Power supply			
Auxiliary supply voltage U_s	Self powered		
Operating voltage range	0.85...1.1 U_e		
Rated frequency	Hz	50 or 60 Hz selectable	
Power consumption Max	VA	10	
Power dissipation Max	W	1.5	
Control circuit			
Rated voltage to control (U_e)	min	VAC	220
	Max	VAC	240
Frequency set-point (% rated frequency)	min	%	90...99
	Max	%	101...110
Tripping delay		s	0.1...20
Resetting time		s	0.1...20
Resetting hysteresis		%	0.5
Type of reset	Automatic		
Repeat accuracy		%	< \pm 0.1
Voltage inputs			
Frequency range	Hz	40...70	
Relay outputs			
Number of relays	Nr.	1	
Relay state	Normally energised De-energises at tripping		
Contact arrangement	1 changeover SPDT		
Rated operational voltage AC (IEC)	VAC	250	
Maximum switching voltage	VAC	400	
IEC Conventional free air thermal current I_{th}	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	2U		
Minimum AC voltage	Yes		

Maximum AC voltage	Yes
Minimum frequency	No
Maximum frequency	No

Indications

Indication	1 green LED for power on and tripping and 2 red LEDs for min/max tripping
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Connections

Terminals type	Screw
Tightening torque for terminals	max Nm 0.8 max lbin 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 Ui	V	575
Rated impulse withstand voltage Uimp	kV	6
Operating frequency withstand voltage	kV	4

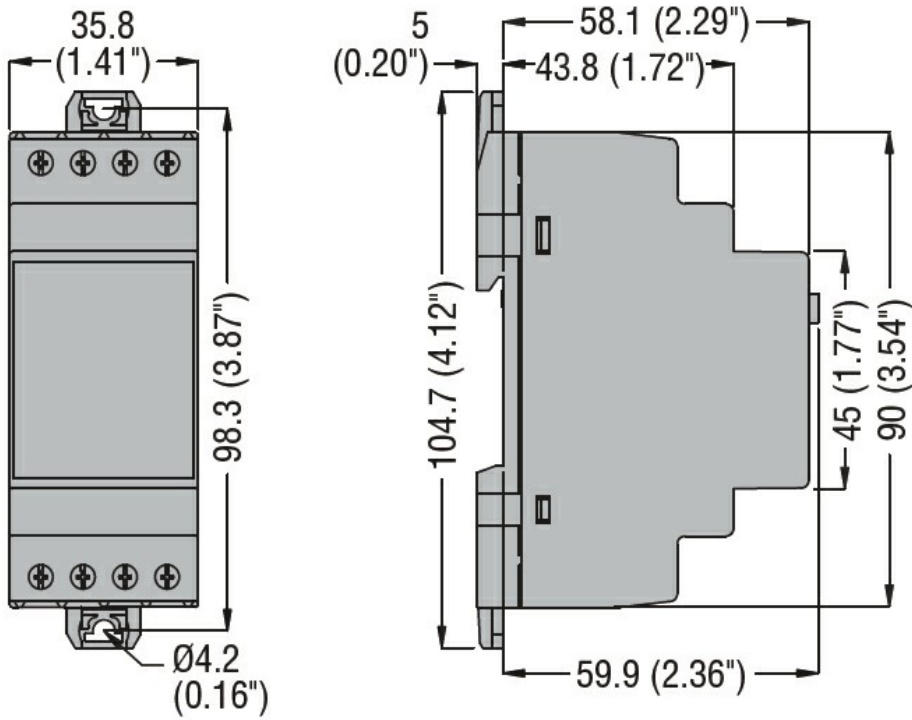
Ambient conditions

Temperature				
	Operating temperature	min	°C	-20
		max	°C	+60
	Storage temperature	min	°C	-30
		max	°C	+80

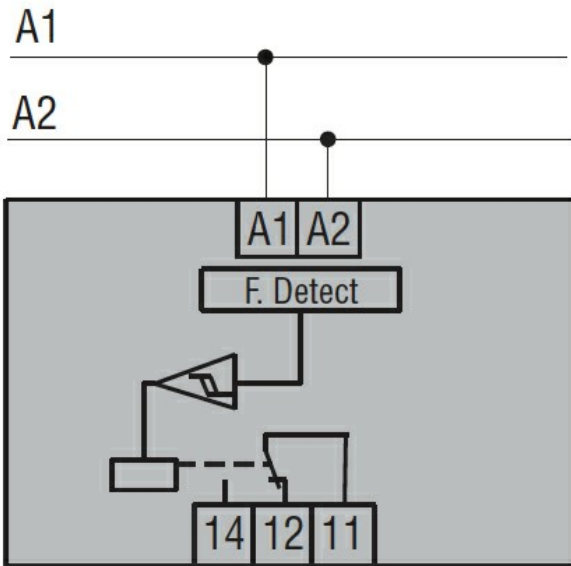
Housing

Execution (n° of modules)	2
Material	Self-extinguishing polyamide
Mounting	35mm DIN rail (IEC/EN 60715)
IEC degree of protection	IP40 on front; IP20 at terminals
Dimensions (W x H x D)	mm 35.8 x 104.7 x 64.9
Weight	g 125

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

EC001442 -
Frequency
monitoring relay