

Product designation			Frequency monitoring relays	
Product type designation			PMF20	
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		%	<±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	
Indications				
Indication		1 green LED for power on and tripping and 2 red LEDs for min/max tripping		
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
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Rated impulse withstand voltage Uimp	kV	6
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Operating frequency withstand voltage	kV	4
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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
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Material	Self-extinguishing polyamide
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Mounting	35mm DIN rail (IEC/EN 60715)
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IEC degree of protection	IP40 on front; IP20 at terminals
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Dimensions (W x H x D)	mm	35.8 x 104.7 x 64.9
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Weight	g	125
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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
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