



Product designation

Interface
protection
system compliant
with VDE-AR-N
4105 and VDE V
0126-1-1
PMVF80

Product type designation

General characteristics

Description

System with or
without neutral.
Dual threshold
minimum and
maximum voltage
and frequency
protection.
ROCOF and
Vector shift

Type of system

Three-phase
with/without
neutral / Single-
phase

Power supply

Operating voltage range

85...264VAC /
93.5...300VDC

Rated frequency

Hz

45...55

Control circuit

Rated current (Ie)

A

CT /5A /1A

Auxiliary supply

Rated auxiliary supply voltage Us

AC

min	VAC	100
Max	VAC	240

DC

min	VDC	110
Max	VDC	250

Power consumption

AC (Max)

VA	4.6VA at 110VAC; 12.5VA at 230VAC
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DC (Max)

VA	23mA at 110VDC; 11mA at 250VDC
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Power dissipation

AC (Max)

INTERFACE PROTECTION SYSTEM COMPLIANT WITH VDE-AR-N 4105 AND VDE V 0126-1-1 FOR THREE-PHASE SYSTEM, WITH OR WITHOUT NEUTRAL, DUAL THRESHOLD MINIMUM AND MAXIMUM VOLTAGE AND FREQUENCY PROTECTION, R.O.C.O.F. AND VECTOR SHIFT

	W	2.5W at 110VAC; 2.7W at 230VAC
DC (Max)	W	2.3W at 110VDC; 2.5W at 250VDC
Immunity time for microbreakings	ms	≤50ms at 100VDC; ≤200ms at 240VDC
Voltage inputs		
Maximum rated operational voltage		400VAC L-L; 230VAC L-N 50Hz
Measurement range	V	20...480VAC L-L; 10...276VAC L-N
Frequency range	Hz	45...55
Current inputs		
Measurement range		For 1A scale: 0.01...1.2A; for 5A scale: 0.01...6A
Measurement method		RMS
Overload peak	A	50A for 1 second
Burden per phase	W	≤0.6W
Relay outputs		
Number of relays	Nr.	2
Contact arrangement		1 changeover contact/SPDT each
Rated operational voltage AC (IEC)	VAC	250
UL/CSA and IEC/EN 60947-5-1 designation		For NO contact: 5A 250VAC AC1/C300; 5A 30VDC For NC contact: 2A 250VAC AC1/C300; 2A 30VDC
Digital inputs		
Number and type of inputs		4 negative (PNP)
Input voltage		12VDC isolated
Input current	mA	7
Connections		
Terminals type		Screw - removable
Tightening torque for terminals	max Nm	0.8
	max lbin	4.5
Conductor cross section		
AWG/Kcmil	min AWG	24
	Max AWG	12
IEC		

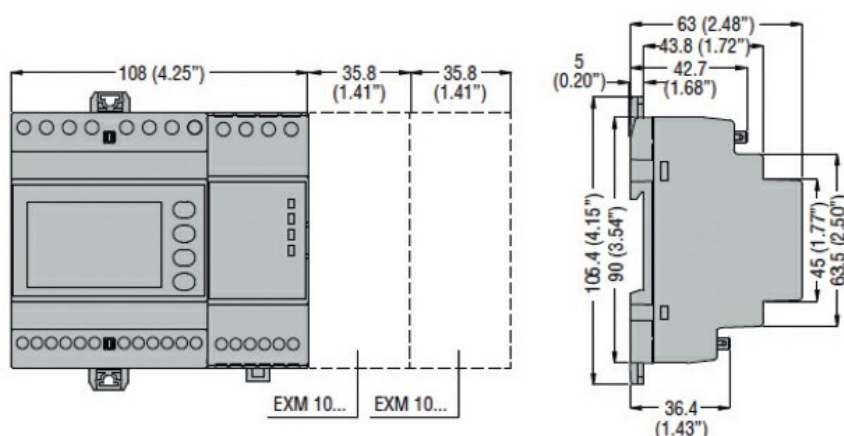
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min	mm ²	0.2
Max	mm ²	4

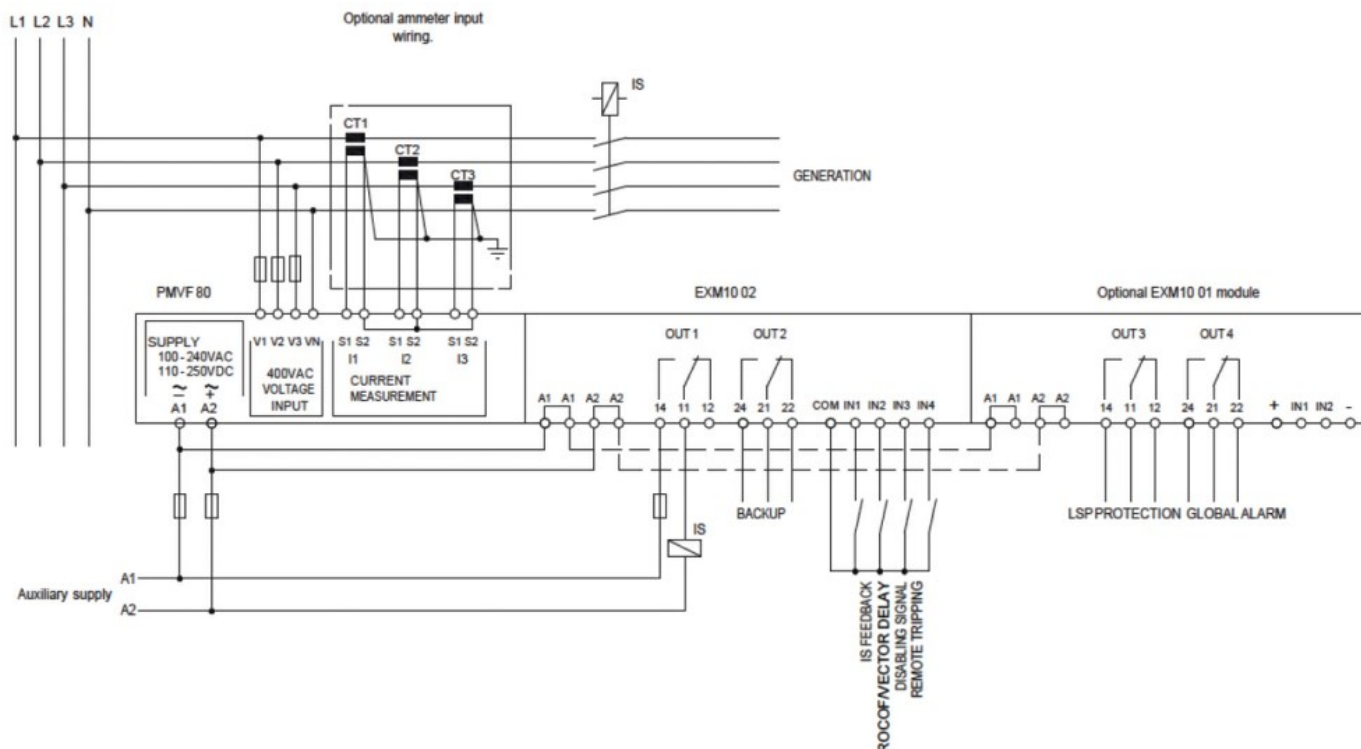
Housing

Execution (n° of modules)	6
Material	Polyamide
Mounting	Modular 6U
IEC degree of protection	IP40 on front; IP20 at terminals
Dimensions (W x H x D)	mm 108 x 105.4 x 63
Weight	g 470

Dimensions



Wiring diagrams



Certifications and compliance

Compliance

IEC/EN 61000-6-2

IEC/EN 61000-6-4

IEC/EN 61010-1

Certificates

CE

INTERFACE PROTECTION SYSTEM COMPLIANT WITH VDE-AR-N 4105 AND VDE V 0126-1-1
FOR THREE-PHASE SYSTEM, WITH OR WITHOUT NEUTRAL, DUAL THRESHOLD MINIMUM
AND MAXIMUM VOLTAGE AND FREQUENCY PROTECTION, R.O.C.O.F. AND VECTOR SHIFT

EAC

VDE V 0126-1-1

VDE-AR-N 4105

ETIM classification

ETIM 8.0

EC001438 -
Voltage
monitoring relay