



Interface protection system units compliant with G59 (ENA) technical guide PMVF70

Product designation

Product type designation

General characteristics

Description

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

Type of system

Single-phase and three-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

DC (Max)

VA

23mA at 110VDC; 11mA at 250VDC

Power dissipation

AC (Max)

INTERFACE PROTECTION UNIT COMPLIANT WITH ENA (ENERGY NETWORK ASSOCIATION) G59/G99 FOR THREE-PHASE SYSTEM, WITH OR WITHOUT NEUTRAL, LOW AND HIGH VOLTAGE, MIN AND MAX VOLTAGE AND FREQUENCY DUAL THRESHOLD PROTECTION, R.O.C.O.F AND VECTOR SHIFT, 230VAC - 400VAC

	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		

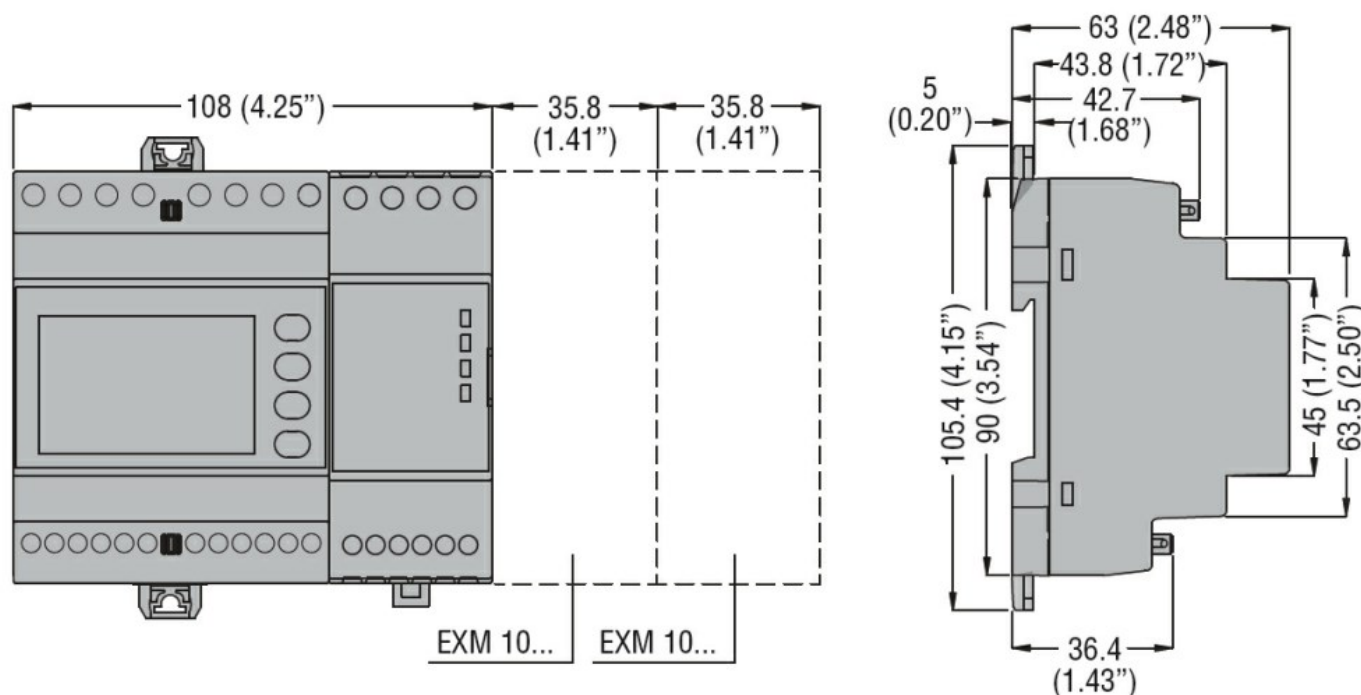
INTERFACE PROTECTION UNIT COMPLIANT WITH ENA (ENERGY NETWORK ASSOCIATION) G59/G99 FOR THREE-PHASE SYSTEM, WITH OR WITHOUT NEUTRAL, LOW AND HIGH VOLTAGE, MIN AND MAX VOLTAGE AND FREQUENCY DUAL THRESHOLD PROTECTION, R.O.C.O.F AND VECTOR SHIFT, 230VAC - 400VAC

min	mm ²	0.2
Max	mm ²	4

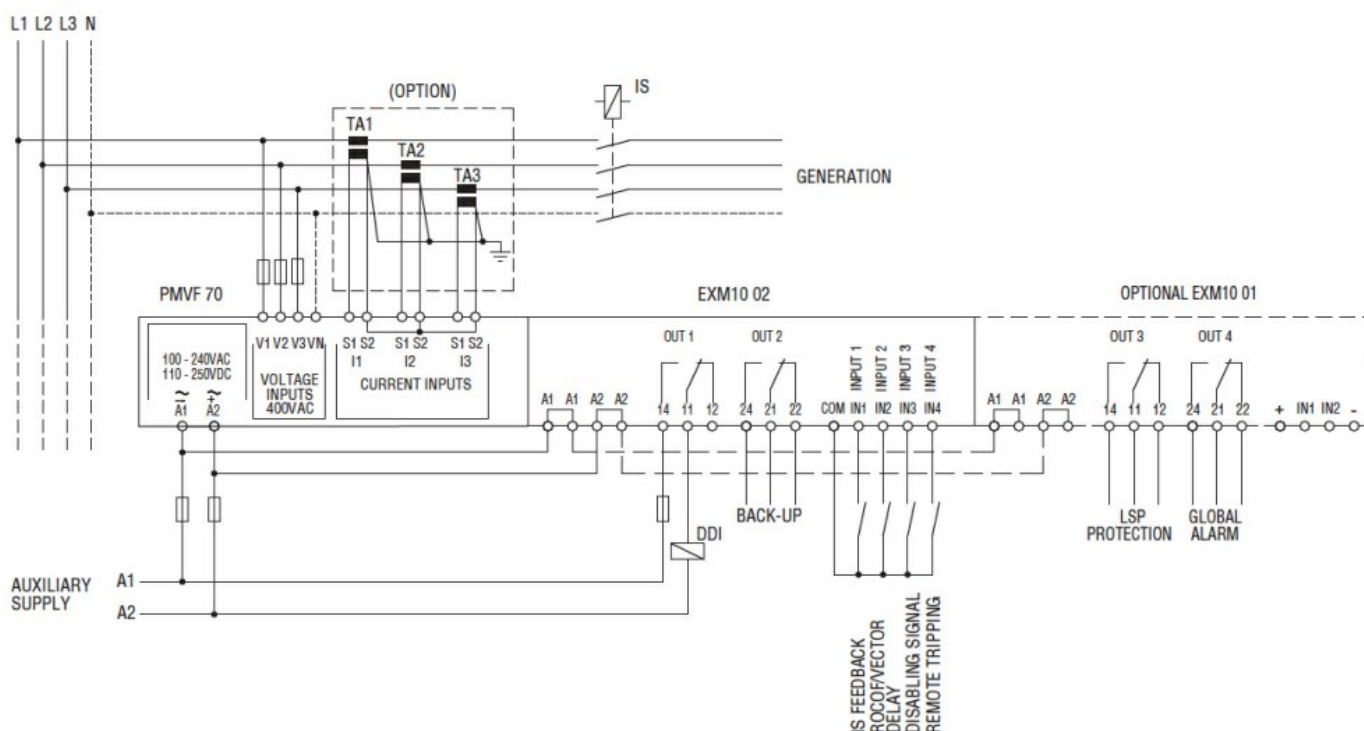
Housing

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



INTERFACE PROTECTION UNIT COMPLIANT WITH ENA (ENERGY NETWORK ASSOCIATION) G59/G99 FOR THREE-PHASE SYSTEM, WITH OR WITHOUT NEUTRAL, LOW AND HIGH VOLTAGE, MIN AND MAX VOLTAGE AND FREQUENCY DUAL THRESHOLD PROTECTION, R.O.C.O.F AND VECTOR SHIFT, 230VAC - 400VAC

Certifications and compliance

Compliance

IEC/EN 61000-6-2

IEC/EN 61000-6-4

IEC/EN 61010-1

Certificates

ENA (Energy Network Association): G59/G99