



General characteristics

Description

Medium-voltage system. Dual threshold minimum and maximum voltage and frequency protection

Power supply

Operating voltage range 90...440VAC / 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	400
DC	min	VDC	110
	Max	VDC	250

Power consumption

AC (Max)	VA	7.5VA at 110VAC; 10VA at 230VAC; 14VA at 400VAC
DC (Max)	VA	35mA at 110VDC; 14mA at 250VDC

Power dissipation

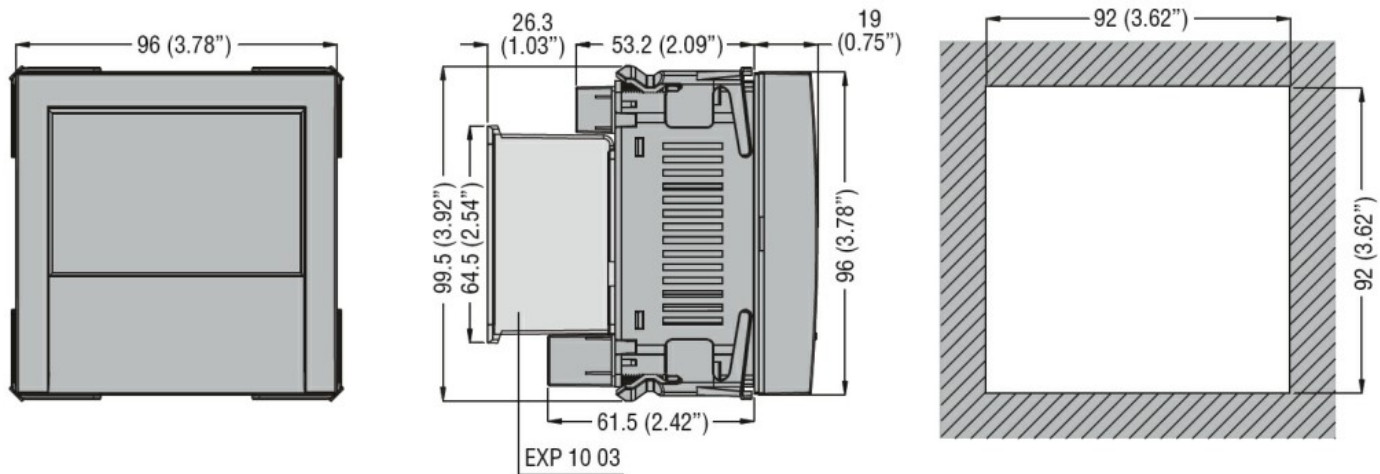
AC (Max)	W	4W at 110VAC; 4.2W at 220VAC; 5W at 400VAC
DC (Max)	W	3.8W at 110VDC; 4W at 250VDC

Immunity time for microbreakings ms ≤30ms at 110VAC; ≤140ms at 230VDC

Voltage inputs

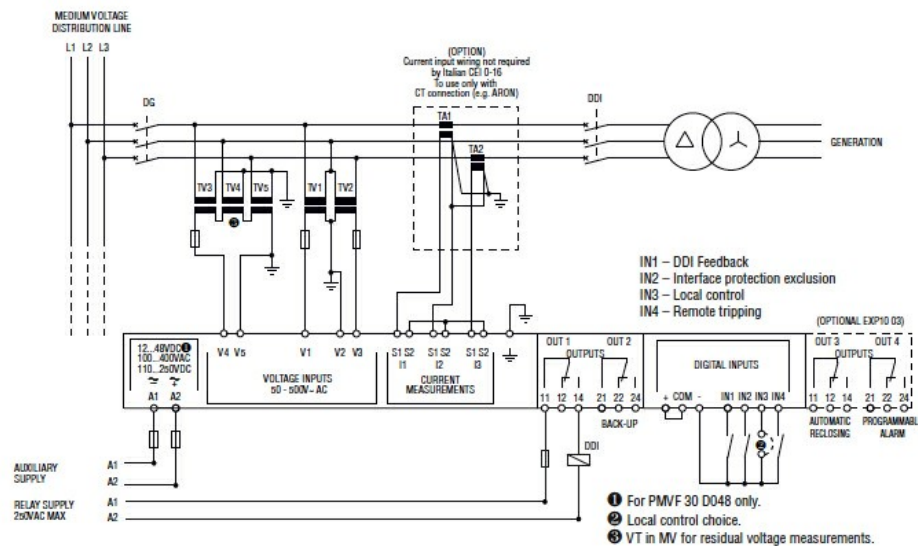
Maximum rated operational voltage			50...500VAC (for voltages/frequency / 50...150V (for residual voltage measurement))
Measurement range	V		400-150000V (VT primary)
Frequency range	Hz		45...55
Current inputs			
Measurement range			For 1A scale: 0.01...1.2A; for 5A scale: 0.01...6A
Type of input			Shunts powered by external current transformer (low voltage) 5A max
Measurement method			RMS
Overload peak	A		50A for 1 second
Burden per phase	W		≤0.3W
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			5A 250VAC AC1/B300; 5A 30VDC
Digital inputs			
Number and type of inputs			4 negative (NPN)
Input voltage			24VDC isolated
Input current	mA		7
Connections			
Terminals type			Screw - removable
Tightening torque for terminals			
	max	Nm	0.5
	max	lbin	4.5
Conductor cross section			
AWG/Kcmil			
	min	AWG	24
	Max	AWG	12
IEC			
	min	mm ²	0.2
	Max	mm ²	2.5
Housing			
Material			Polyamide
Mounting			Flush mount 96x96mm / 3.78x3.78"
IEC degree of protection			IP65 on front; IP20 at terminals
Dimensions (W x H x D)	mm		96 x 96 x 53.2
Weight	g		566

Dimensions

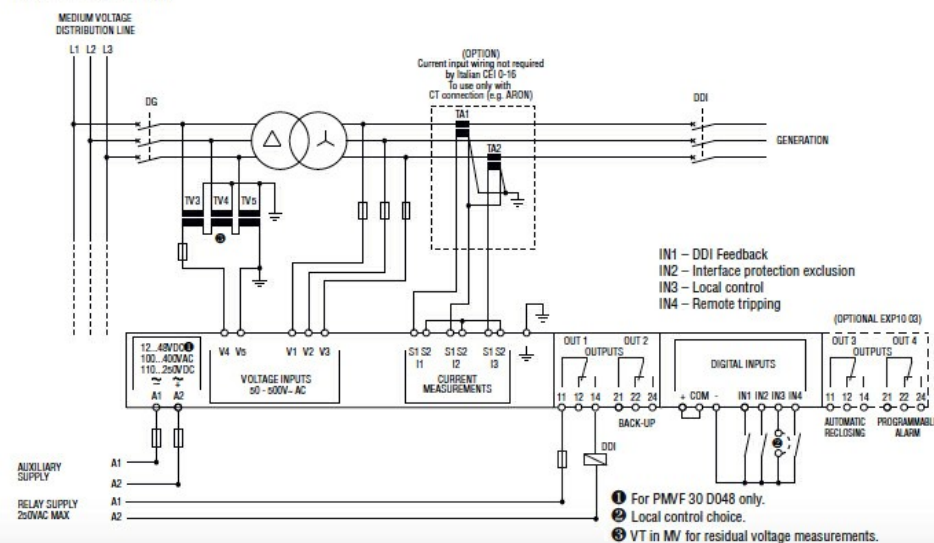


Wiring diagrams

Connection through VTs in Medium Voltage Three-phase connection



Direct connection in Low Voltage Three-phase connection



Certifications and compliance

Compliance

INTERFACE PROTECTION SYSTEM UNIT COMPLIANT WITH ITALIAN STANDARD CEI 0-16,
FOR MV SYSTEM, DUAL THRESHOLD MINIMUM AND MAXIMUM VOLTAGE AND FREQUENCY
PROTECTION, MEASUREMENTS VIA VTS IN MV OR DIRECT IN LV

IEC/EN 60255-5

IEC/EN 61000-6-2

IEC/EN 61000-6-3

IEC/EN 61010-1

Certificates

CEI 0-16

ETIM classification

ETIM 8.0

EC001438 -
Voltage
monitoring relay