Product data sheet Characteristics

REL52125

Easergy P3F30 3CT 2lo ringlug 4VT 6DI 10DO 24-48V DI24V 3BIO 6ARC RS485 RJ45 ANSI



Main	
Range of product	Easergy P3
Product or component type	Protection relay
Relay application	Feeder
Product reference	P3F30-DBGAD-DA1FA-BAAAB
Device mounting	Flush
Power supply	2448 V DC
Measuring inputs	3 1/5 A CT phase current 1 5/1 A CT residual current 1 1/0.2 A CT residual current 4 100 V/110 V VT voltage
Number of sensors	0 temperature 0 arc
Number of Digital Inputs (DI)	6.0
Number of Digital Outputs (DO)	10 DO 1 watchdog
Number of analogue inputs	0
Number of analogue outputs	0
Communication ports	Front USB port 1 Rear RJ45 1 Rear RS485 1
Communication protocols	IEC 61850 ed. 1 IEC 61850 ed. 2 IEC 60870-5-101 DNP3 TCP Modbus TCP Ethernet/IP IEC 60870-5-103 DNP3 Modbus RTU DeviceNet SPAbus
Cybersecurity	Password protection Port hardening

Protection functions	Fault locator 21FL
	Synchro-check 25 Undervoltage 27
	Directional active underpower 37P
	Broken conductor 46BC
	Thermal overload protection 49
	Earth fault overcurrent 50N/51N
	Phase overcurrent 50/51 Breaker failure 50BF
	Switch ON to fault (SOTF)
	Capacitor bank unbalance 51C
	Voltage-restrained overcurrent 51V
	Capacitor overvoltage 59C
	Overvoltage 59 Earth fault overvoltage 59N
	Directional phase overcurrent 67
	Directional earth fault 67N
	Transient earth fault 67NI
	H2 detection 68H2
	H5 detection 68H5 Recloser 79
	Underfrequency 81/81N
	Rate of change of frequency 81R
	Lockout relay 86
	Programmable stages 99
	Programmable curve Cold load pick-up
A G1	
Arc flash protection	Yes
Measurement functions	Current zero seguence
	Current zero sequence Current positive sequence
	Current negative sequence
	Current ratio of negative and positive
	Voltage phase to earth
	Voltage phase to phase
	Voltage zero sequence Voltage positive sequence
	Voltage negative sequence
	Voltage ratio of negative and positive
	Short circuit fault reactance
	Fault location current
	Earth fault reactance
	Frequency Active power
	RMS active power
	Reactive power
	RMS reactive power
	Apparent power
	RMS apparent power Active energy
	Reactive energy
	Cos φ
	Tan φ
	Power angle
	Power factor
	Voltage phasor diagram view
	Current phasor diagram view Current 2nd, 15th harmonics with THD
	Voltage 2nd, 15th harmonics with THD
	Condition monitoring CB wear
	Voltage interruption
Control functions	Switchgear control and monitoring
	Programmable switchgear interlocking
	Local control on single-line diagram Local control with I/O keys
	Local/Remote control
	2 function keys
	Mobile application with Easergy SmartApp
	Web-server
Controllable switchgear devices	3 controlled + 5 displayed
Number of setting groups	4
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Monitorina functions	THE CITCUIT SUBERVISION 74
Monitoring functions	Trip circuit supervision 74 Circuit breaker monitoring

Logs and records	Event recording Disturbance recording Tripping context
Switchgear diagnosis type	CT/VT supervision Trip circuit supervision TCS
Connections - terminals	Screw Ring lugs Pin

Complementary

I	
Operating threshold	24 V AC/DC
Time synchronisation protocol	SNTP
Web server	Embedded HTTP server
Display type	LCD LCD
Number of key	2 customizable
Local signalling	2 LEDs 16 LEDs programmable
Height	6.93 in (176 mm)
Width	10.63 in (270 mm)
Depth	9.06 in (230 mm)
Net weight	9.26 lb(US) (4.2 kg) maximum

Environment

Electromagnetic compatibility	Emission tests IEC/EN 60255-26 ed. 3	
	Emission tests class A CISPR 11	
	Emission tests class A CISPR 22	
	EMC immunity IEC/EN 60255-26 ed. 3	
	EMC immunity EN/IEC 61000-4-18	
	EMC immunity IEC 60255-22-1	
	EMC immunity level 4 EN/IEC 61000-4-2 EMC immunity IEC 60255-22-2	
	EMC immunity level 3 EN/IEC 61000-4-3	
	EMC immunity IEC 60255-22-3	
	EMC immunity level 4 EN/IEC 61000-4-4	
	EMC immunity IEC 60255-22-4	
	EMC immunity level 3 EN/IEC 61000-4-5	
	EMC immunity IEC 60255-22-5	
	EMC immunity level 3 EN/IEC 61000-4-6	
	EMC immunity IEC 60255-22-6	
	EMC immunity EN/IEC 61000-4-8	
	EMC immunity level 5 EN/IEC 61000-4-9	
	EMC immunity EN/IEC 61000-4-29 EMC immunity EN/IEC 61000-4-11	
	EMC immunity EN/IEC 61000-4-17	
	EMC immunity IEC 60255-27	
	EMC immunity class III IEC 60255-5	
	EMC immunity EN/IEC 60255-1	
Mechanical robustness	Vibrations class II) IEC 60255-21-1	
	VibrationsFc IEC 60068-2-6	
	Shocks class II) IEC 60255-21-2	
	ShocksEa IEC 60068-2-27	
	Seismic tests method A class II) IEC 60255-21-3	
Climatic withstand	Exposure to dry heat Bd EN/IEC 60068-2-2	
	Exposure to cold Ad EN/IEC 60068-2-1	
	Exposure to damp heat in service Db EN/IEC 60068-2-30	
	Exposure to damp heat in service Cab EN/IEC 60068-2-78	
Ambient air temperature for operation	-40149 °F (-4065 °C)	
Ambient air temperature for storage	-40158 °F (-4070 °C)	
P degree of protection	IP54 IEC 60529	
Relative humidity	095 %, without condensation	
Maximum operating altitude	6561.68 ft (2000 m)	
Protective treatment	Conformal coating	

Ordering and shipping details

Category	11405 - EASERGY P3 PROTECTIVE RELAYS
Discount Schedule	PL1S
GTIN	03606481465597
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	Yes
Country of origin	US