

REL52102 discontinued. To order it, click on blue Product Selector button, configure P3U30, and use its output xml file

REL52102

① Discontinued

- ! Discontinued on: Feb 28, 2024
- ! End-of-service on: Mar 22, 2024

# Main

Range Of Product	PowerLogic P3
Product Or Component Type	Protection relay
Relay Application	Feeder
Product Reference	P3F30-CGGGI-AAENA-BBAAA
Mounting Case Size	30TE
Power Supply	48230 V AC/DC
Measuring Inputs	: 1/5 A CT phase current 3 : 5/1 A CT residual current 1 : 1/0.2 A CT residual current 1 : 100 V/110 V VT voltage 4
Number Of Sensors	0 temperature sensor(s) 0 arc sensor(s)
Number Of Digital Inputs (Di)	28
Number Of Digital Outputs (Do)	1 watchdog 17
Number Of Analogue Inputs	0
Number Of Analogue Outputs	0
Communication Ports	USB port 1 front RJ45 2 rear
Communication Protocols	IEC 61850 ed. 1 IEC 61850 ed. 2 IEC 60870-5-101 DNP3 TCP Modbus TCP EtherNet/IP
Redundancy Communication Port Protocol	RSTP PRP
Cybersecurity	Port hardening Password protection

### **Protection Functions**

Phase overcurrent 50/51

Directional phase overcurrent 67

Earth fault overcurrent 50N/51N Directional earth fault 67N

Transient earth fault 67NI

Capacitor bank unbalance 51C

Broken conductor 46 I2/I1

Cold load pick-up

Switch ON to fault (SOTF)

Breaker failure 50BF

Directional active underpower 37P

Fault locator 21FL

Recloser 79

Phase undercurrent 37

Excessive starting time, locked rotor 48/51LR

Motor restart inhibition 66

Capacitor overvoltage 59C

Negative sequence overcurrent 46

Overvoltage 59

Undervoltage 27

Positive sequence undervoltage 27P

Earth fault overvoltage 59N

Underfrequency 81/81N

Rate of change of frequency 81R

Synchro-check 25

Lockout relay 86

CT supervision 60

VT supervision 60

H2 detection 68H2

H2 detection

H5 detection 68H5

H5 detection

Programmable stages 99

Programmable curve

### **Arc Flash Protection**

#### No

#### **Measurement Functions**

Current 3-phase

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  $Cos \ \phi$ 

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 Voltage interruption

Condition monitoring CB wear

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 Programmable logic
Controllable Switchgear Devices	6 controlled + 8 displayed
Number Of Setting Groups	4
Monitoring Functions	Trip circuit supervision 74 Circuit breaker monitoring Relay self-monitoring
Logs And Records	Event recording Disturbance recording Tripping context
Switchgear Diagnosis Type	CT/VT supervision ANSI code: 60 CT supervision Trip circuit supervision ANSI code: TCS
Connections - Terminals	Screw removable (digital input/output) Pin fixed (current transformer) Pin removable (voltage transformer)

# Complementary

Operating Threshold	110230 V AC/DC
Time Synchronisation Protocol	SNTP
Software Name	EcoStruxure Power Device ESetup Easergy Pro
Web Server	Embedded HTTP server
Display Type	LCD 128 x 128 pixels with single line diagram
Number Of Key	2 customizable
Local Signalling	2 LEDs 16 LEDs programmable
Standards	IEC
Height	176 mm
Width	270 mm
Depth	230 mm
Net Weight	4.2 kg maximum

Environment	
Electromagnetic Compatibility	Emission tests conforming to IEC/EN 60255-26 ed. 3 Emission tests class A conforming to CISPR 11 Emission tests class A conforming to CISPR 22 EMC immunity conforming to IEC/EN 60255-26 ed. 3 EMC immunity conforming to EN/IEC 61000-4-18 EMC immunity level 4 conforming to EN/IEC 61000-4-2 EMC immunity level 3 conforming to EN/IEC 61000-4-3
	EMC immunity level 4 conforming to EN/IEC 61000-4-4 EMC immunity level 3 conforming to EN/IEC 61000-4-5 EMC immunity level 3 conforming to EN/IEC 61000-4-6 EMC immunity conforming to EN/IEC 61000-4-8 EMC immunity level 5 conforming to EN/IEC 61000-4-9 EMC immunity conforming to EN/IEC 61000-4-29 EMC immunity conforming to EN/IEC 61000-4-11 EMC immunity conforming to EN/IEC 61000-4-17

Mechanical Robustness	Vibrations (level: class II) conforming to IEC 60255-21-1 Vibrations: Fc conforming to IEC 60068-2-6 Shocks (level: class II) conforming to IEC 60255-21-2 Shocks: Ea conforming to IEC 60068-2-27 Seismic tests method A (level: class II) conforming to IEC 60255-21-3 Bumps (level: class II) conforming to IEC 60255-21-2 Bumps: Ea conforming to IEC 60068-2-27
Climatic Withstand	Exposure to dry heat Bb tests conforming to EN/IEC 60068-2-2 Exposure to cold Ad tests conforming to EN/IEC 60068-2-1 Exposure to damp heat in service Db tests conforming to EN/IEC 60068-2-30 Exposure to damp heat in service Cab tests conforming to EN/IEC 60068-2-78
Ambient Air Temperature For Operation	-4065 °C
Ambient Air Temperature For Storage	-4070 °C
Ip Degree Of Protection	IP54 conforming to IEC 60529
Relative Humidity	095 %, without condensation
Maximum Operating Altitude	2000 m
Protective Treatment	Conformal coating

# **Packing Units**

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1
Package 1 Height	21 cm
Package 1 Width	26 cm
Package 1 Length	31.5 cm
Package 1 Weight	5.5 kg

# **Contractual warranty**

Warranty

Up to 10 years extended warranty (Standard warranty 2 years. Please check with your local SE representative for extended warranty availability and conditions)

# Sustainability

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

# Well-being performance



Mercury Free



Rohs Exemption Information

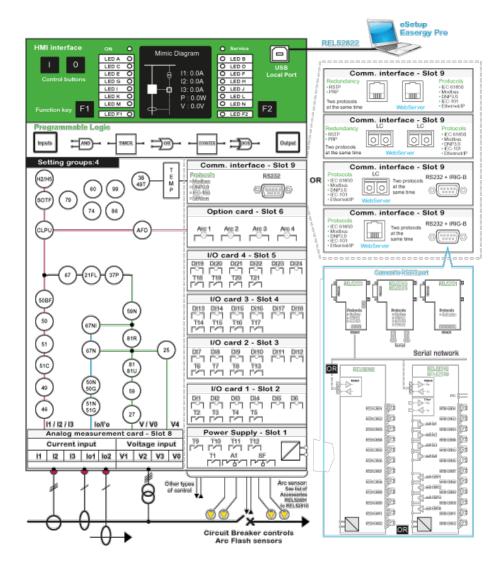
Yes

## **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Connections and Schema

## **Functional View**



# **Dimensions Drawings**

# **Base Unit Dimensions**

