



Main

Range of product	Easergy P3
Product or component type	Protection relay
Relay application	Universal
Product reference	P3U30-6AAA1BCAA
Power supply	48...230 V AC/DC
Measuring inputs	: 1/5 A CT phase current 3 : 1/5 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)	16
Number of Digital Outputs (DO)	1 watchdog 8
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	Password protection Port hardening
Protection functions	Phase overcurrent 50/51 Directional phase overcurrent 67 Earth fault overcurrent 50N/51N Directional earth fault 67N Transient earth fault 67NI

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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
 H5 detection
 H5 detection 68H5
 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 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
 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

4 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) Ring lugs removable (current transformer) Pin removable (voltage transformer)

Complementary

Operating threshold	24...230 V AC/DC
Time synchronisation protocol	SNTP
Web server	Embedded HTTP server
Software name	EcoStruxure Power Device ESetup Easergy Pro
Number of key	2 customizable
Local signalling	4 LEDs 8 LEDs programmable
Standards	IEC
Height	169.5 mm
Width	170 mm
Depth	205 mm
Net weight	2.5 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	-40...65 °C
Ambient air temperature for storage	-40...70 °C
IP degree of protection	IP54 conforming to IEC 60529
Relative humidity	0...95 %, without condensation
Maximum operating altitude	2000 m
Protective treatment	Conformal coating

Packing Units

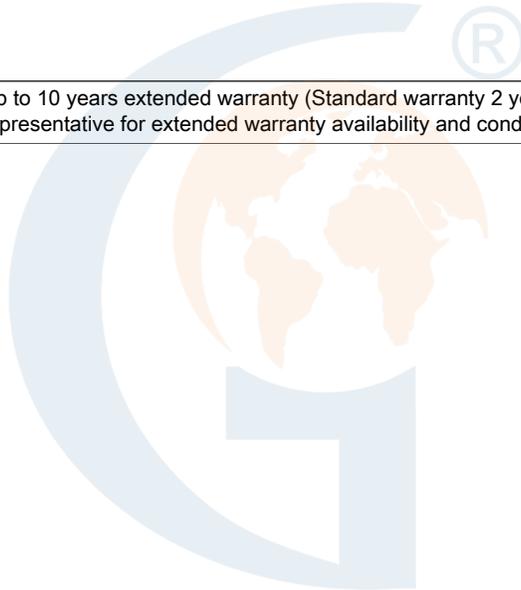
Package 1 Weight	3.429 kg
Package 1 Height	26.000 cm
Package 1 width	21.500 cm
Package 1 Length	31.500 cm

Offer Sustainability

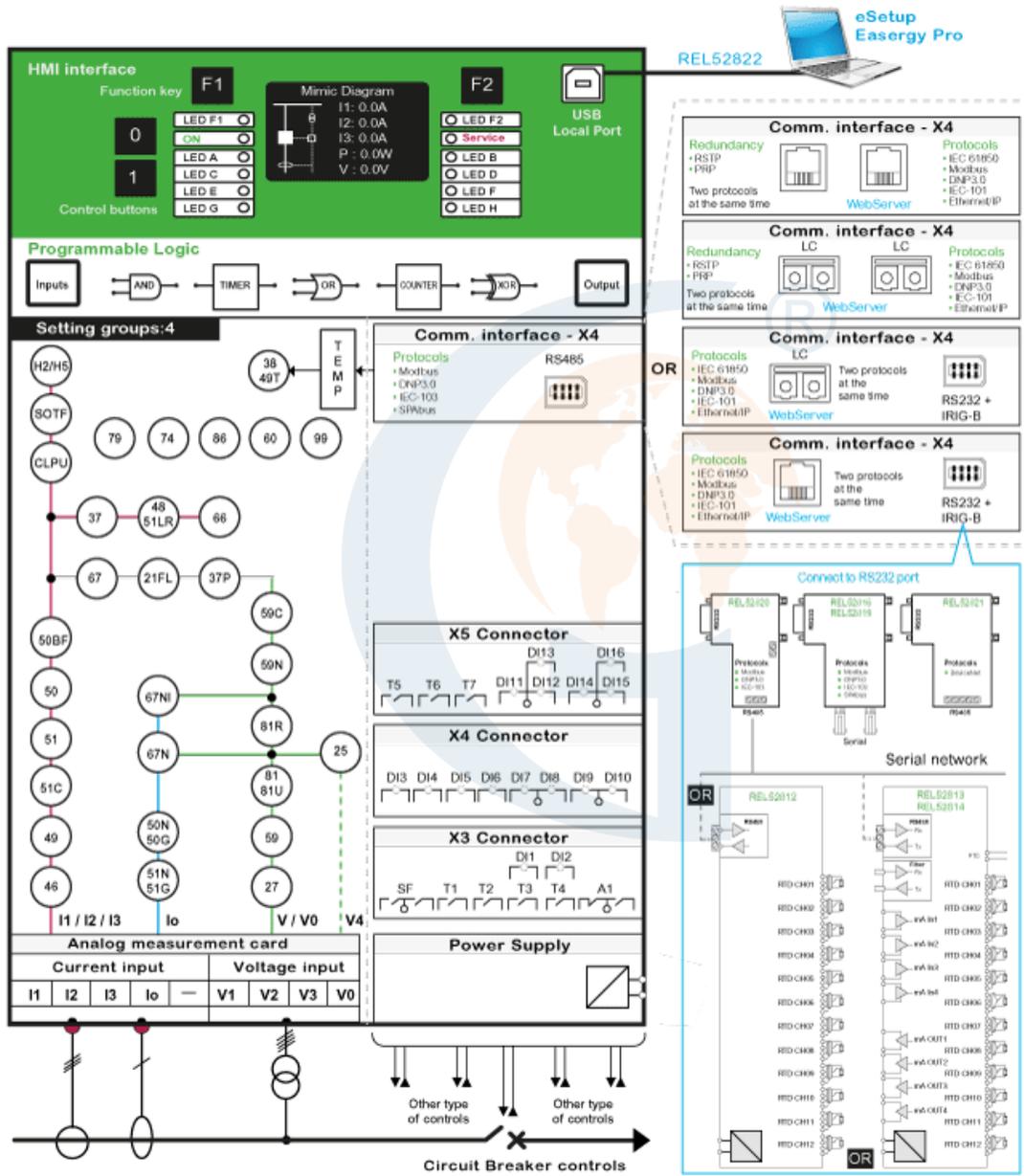
Sustainable offer status	Green Premium product
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

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)
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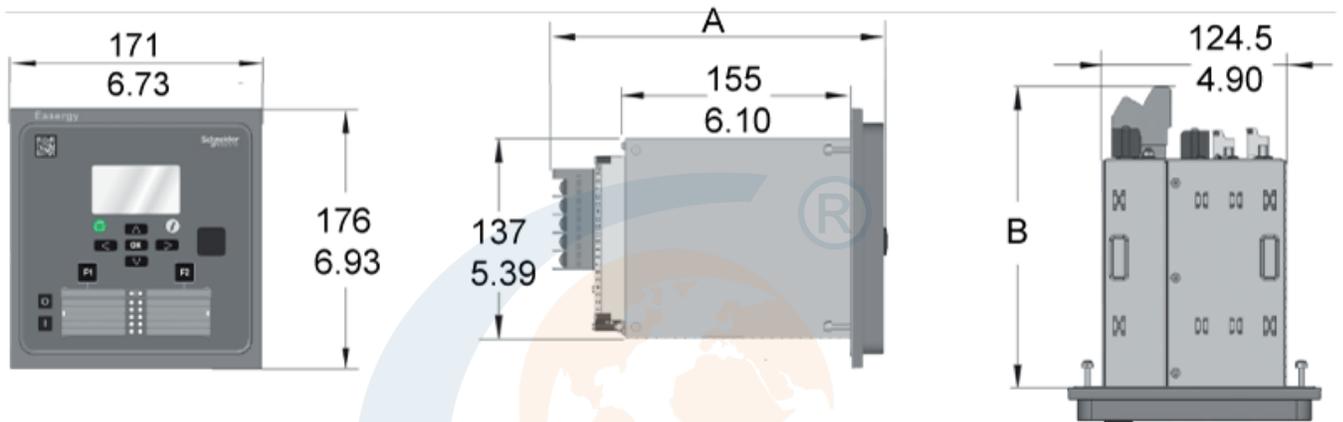


Functional View



Base Unit Dimensions

mm
in.



	A	B
With screw connector	214 mm/8.43"	192 mm/7.6"
With ring-lug connector	226 mm/8.90"	204 mm/8.0"