



Main

Range of product	Easergy P3
Product or component type	Protection relay
Relay application	Universal
Product reference	P3U20-5AAA2ACAA
Power supply	48...230 V AC/DC
Measuring inputs	Phase current : 1/5 A CT (x3) Residual current : 1/5 A CT (x1) Voltage : 100 V/110 V VT (x1)
Number of sensors	0 temperature sensor(s) 0 arc sensor(s)
Number of Digital Inputs (DI)	10
Number of Digital Outputs (DO)	1 watchdog 5
Number of analogue inputs	0
Number of analogue outputs	0
Communication ports	1 x USB port (front) 2 x RJ45 (rear)
Communication protocols	IEC 61850 ed. 2 Modbus TCP IEC 61850 ed. 1 IEC 60870-5-101 Ethernet/IP DNP3 TCP
Redundancy communication port protocol	RSTP PRP
Cybersecurity	Password protection Port hardening
Protection functions	Cold load pick-up Switch ON to fault (SOTF) Phase overcurrent ANSI:50/51 Earth fault overcurrent ANSI:50N/51N Directional earth fault ANSI:67N Transient earth fault ANSI: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

	Broken conductor ANSI:46 I2/I1 Breaker failure ANSI:50BF Recloser ANSI:79 Phase undercurrent ANSI:37 Excessive starting time, locked rotor ANSI:48/51LR Motor restart inhibition ANSI:66 Capacitor overvoltage ANSI:59C Negative sequence overcurrent ANSI:46 Earth fault overvoltage ANSI:59N Rate of change of frequency ANSI:81R Lockout relay ANSI:86 Programmable stages ANSI:99 Programmable curve Capacitor bank unbalance ANSI:51C H2 detection ANSI:68H2 H5 detection ANSI:68H5
Arc flash protection	No
Measurement functions	Earth fault reactance Current 3-phase Current zero sequence Current positive sequence Current negative sequence Current ratio of negative and positive Voltage zero sequence Current 2nd, 15th harmonics with THD Condition monitoring CB wear Current phasor diagram view Frequency
Control functions	Local control on single-line diagram Local control with I/O keys Local/remote control 2 function keys Web-server Programmable switchgear interlocking Switchgear control and monitoring Mobile application with Easergy SmartApp Programmable logic
Controllable switchgear devices	2 controlled + 4 displayed
Number of setting groups	4
Monitoring functions	Trip circuit supervision ANSI:74 Circuit breaker monitoring Relay self-monitoring
Logs and records	Disturbance recording Tripping context Event recording
Switchgear diagnosis type	Trip circuit supervision ANSI:TCS CT supervision ANSI:60
Connections - terminals	Screw removable digital input/output Pin removable current transformer Pin removable voltage transformer

Complementary

Digital inputs nominal operation voltage	110...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	8 LEDs programmable 4 LEDs
Height	169.5 mm
Width	170 mm
Depth	205 mm
Product weight	2.5 kg maximum

Environment

Standards	IEC
Electromagnetic compatibility	Emission tests class A conforming to CISPR 11 Emission tests class A conforming to CISPR 22 Emission tests conforming to IEC/EN 60255-26 ed. 3 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 class II conforming to IEC 60255-21-1 Vibrations Fc conforming to IEC 60068-2-6 Shocks class II conforming to IEC 60255-21-2 Shocks Ea conforming to IEC 60068-2-27 Seismic tests method A class II conforming to IEC 60255-21-3 Bumps class II conforming to IEC 60255-21-2 Bumps Ea conforming to IEC 60068-2-27
Climatic withstand	Exposure to dry heat Bb conforming to EN/IEC 60068-2-2 Exposure to cold Ad conforming to EN/IEC 60068-2-1 Exposure to damp heat in service Db conforming to EN/IEC 60068-2-30 Exposure to damp heat in service Cab 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

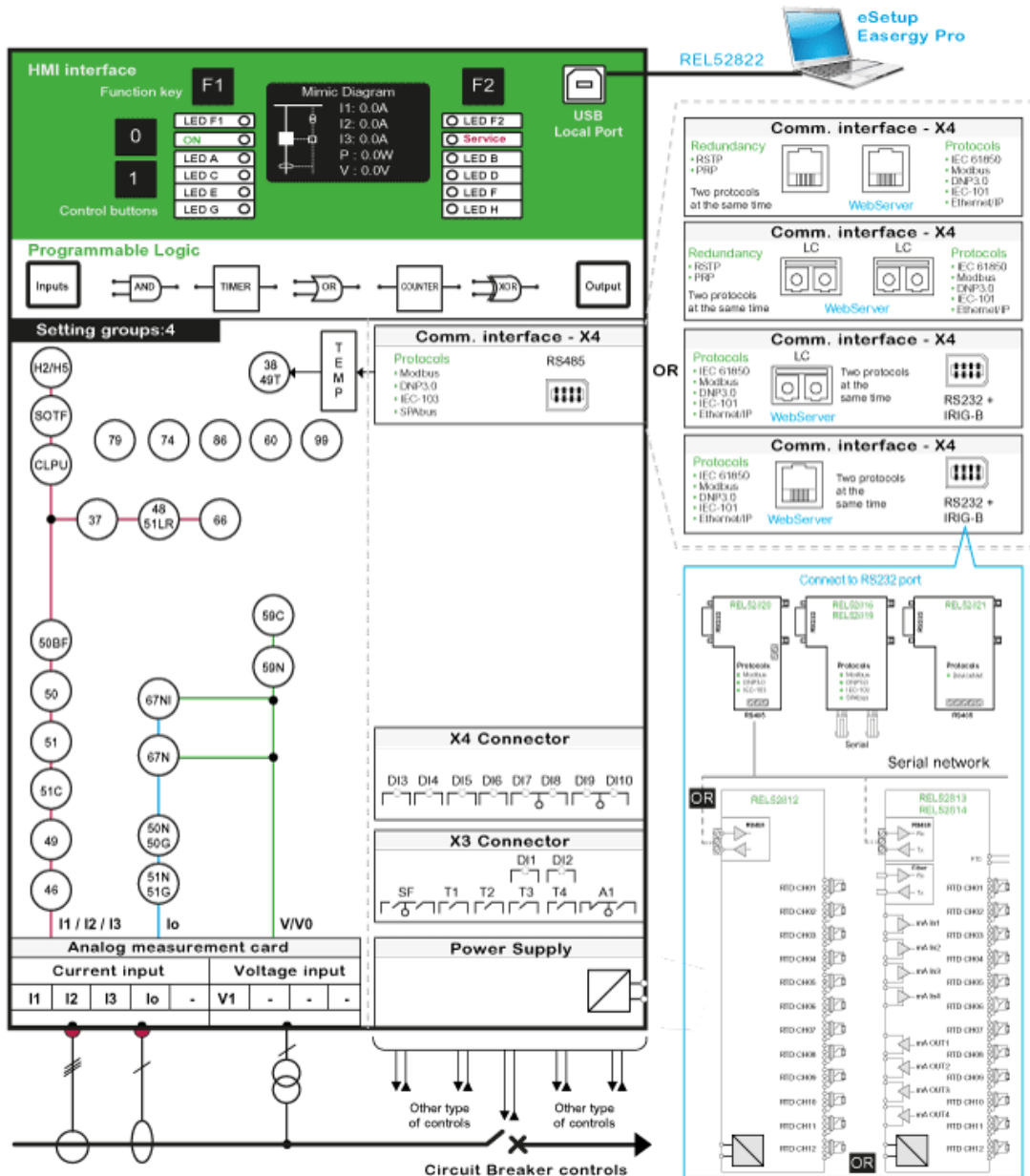
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1741 - Schneider Electric declaration of conformity Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available Product Environmental Profile
Product end of life instructions	Available End of Life Information

Contractual warranty

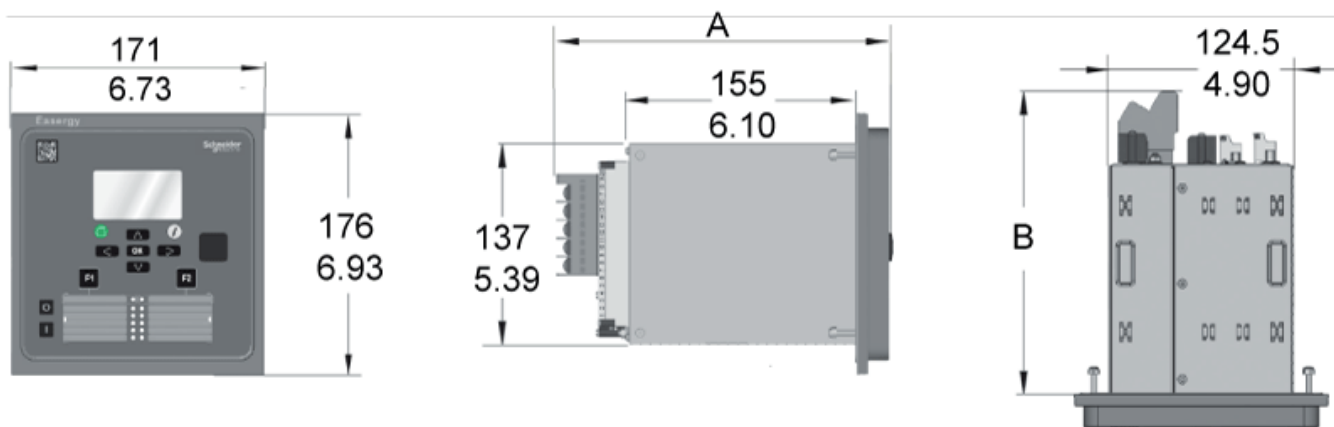
Warranty period	Up to 10 years extended warranty (Standard warranty 2 years. Please check with your local SE representative for extended warranty availability and conditions)
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Functional View



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"