

# Product datasheet

Specifications



## Easergy P5V20 24-250V 4VT 10DI-8DO

REL50306

### Main

Range of product	Easergy P5
Product or component type	Protection relay
Relay application	Voltage
Product reference	P5V20-AABB-DAAAA-AAAA
Mounting case size	20TE
Device mounting	Flush
Mounting mode	Withdrawable
Power supply	24...240 V DC 100...230 V AC
Measuring inputs	: VT voltage 4
Number of sensors	0 temperature sensor(s) 0 arc sensor(s)
Number of Digital Inputs (DI)	10
Number of Digital Outputs (DO)	7 DO 1 watchdog
Number of analogue inputs	0
Number of analogue outputs	0
Communication ports	USB port 2 front
Communication protocols	-
Cybersecurity	Password protection Port hardening Firmware signature Client IP address filter Secured communication with associated tools
Protection functions	Overvoltage Undervoltage Positive sequence undervoltage 27P Earth fault overvoltage 59N Underfrequency 81/81N Rate of change of frequency 81R Synchro-check Breaker failure 50BF Lockout relay VT supervision Programmable stages Programmable curve
Measurement functions	Voltage 3-phase Voltage residual Voltage zero sequence Voltage positive sequence Voltage negative sequence Frequency

Phasor diagram of currents or voltages

<b>Control functions</b>	Switchgear control and monitoring Programmable switchgear interlocking Local/remote control
<b>Controllable switchgear devices</b>	6 controlled + 2 monitored objects
<b>Number of setting groups</b>	4
<b>Monitoring functions</b>	Trip circuit supervision 74 Circuit breaker monitoring Relay self-monitoring
<b>Logs and records</b>	Event recording Disturbance recording Tripping context Relay maintenance
<b>Switchgear diagnosis type</b>	VT supervision ANSI code: 60 Trip circuit supervision ANSI code: 74
<b>Connections - terminals</b>	Screw (digital input/output) Ring lugs (analog inputs and outputs)

## Complementary

<b>Software name</b>	ESetup Easergy Pro: virtual simulation test
<b>Display type</b>	and LCD 192 x 96 pixels
<b>Number of key</b>	1 customizable
<b>Local signalling</b>	4 x LED 6 x LED tri-colour programmable
<b>Height</b>	176 mm
<b>Width</b>	102 mm
<b>Depth</b>	219 mm
<b>Net weight</b>	2.5 kg

## Environment

<b>Electromagnetic compatibility</b>	Emission tests class A conforming to CISPR 11 Emission tests class A conforming to CISPR 22 Emission tests conforming to IACS E10 EMC immunity class 4 conforming to IEC 61000-4-2 EMC immunity class 4 conforming to ANSI C37.90.3 EMC immunity level 3 conforming to IEC 61000-4-3 EMC immunity conforming to ANSI C37.90.2 EMC immunity conforming to GOST 32137 EMC immunity conforming to GOST 30804.4.3 EMC immunity conforming to IACS E10 EMC immunity level 5 conforming to IEC 61000-4-8 EMC immunity level 5 conforming to IEC 61000-4-9 EMC immunity level 5 conforming to IEC 61000-4-10 EMC immunity level 3 conforming to IEC 61000-4-6 EMC immunity level 3 conforming to IEC 61000-4-18 EMC immunity conforming to ANSI C37.90.1 EMC immunity conforming to IEC 61000-4-12 EMC immunity conforming to GOST 30804.4.12 EMC immunity level 4 conforming to IEC 61000-4-16 EMC immunity level 4 conforming to IEC 61000-4-4 EMC immunity level 4 conforming to IEC 61000-4-5
<b>Mechanical robustness</b>	Vibrations (level: class 2) conforming to IEC 60255-21-1 Vibrations conforming to GOST 17516.1 Vibrations conforming to IACS E10 Shocks (level: class 2) conforming to IEC 60255-21-2 Earthquakes (level: class 2) conforming to IEC 60255-21-3
<b>Climatic withstand</b>	Exposure to cold conforming to IEC 60068-2-1 Exposure to dry heat conforming to IEC 60068-2-2 Exposure to damp heat in service conforming to IEC 60068-2-78 Exposure to damp heat in service conforming to IEC 60068-2-30 Temperature variation conforming to IEC 60068-2-14 Salt mist conforming to IEC 60068-2-52 Influence of corrosion/gas test 2 conforming to IEC 60068-2-60 Influence of corrosion/gas test 4 conforming to IEC 60068-2-60 Influence of corrosion/gas test 2 conforming to IEC 60721-3-3 Influence of corrosion/gas test 4 conforming to IEC 60721-3-3
<b>Ambient air temperature for operation</b>	-40...85 °C ( 16 h ) -40...70 °C ( 96 h )

<b>Ambient air temperature for storage</b>	-40...85 °C
<b>IP degree of protection</b>	IP54 conforming to IEC 60529
<b>Relative humidity</b>	0...93 % at 40 °C, without condensation, 56 days 93...95 % at 25...55 °C, 6 cycles, 12 + 12 hours
<b>Maximum operating altitude</b>	2000 m
<b>Protective treatment</b>	Conformal coating conforming to IEC 60068-2-52:Kb/1 Conformal coating conforming to IEC 60068-2-60:Ke Conformal coating conforming to IEC 60721-3-3:3C2

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Weight</b>	3 kg
<b>Package 1 Height</b>	30 cm
<b>Package 1 width</b>	30 cm
<b>Package 1 Length</b>	40 cm

## Offer Sustainability

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

## Contractual warranty

<b>Warranty</b>	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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