

# A major step forward for protection relays

## Easergy P5 protection relay



The Easergy P5 is a protection relay for demanding medium-voltage applications. It offers users dedicated features for industry-leading protection relay functionality to reduce risks, improve reliability, all with advanced connectivity.

Industry-leading protection functions

Best-in-class reliability

Maximized everyday simplicity

### Product at a glance:

The Easergy P5 is part of the PowerLogic range of power monitoring and control solutions.

It has been built on more than 100 years of experience in protection relays.

Additionally, it can be used with a range of digital tools that make everyday operations simpler for users.

# Enjoy a package of sought-after features in one device



The Easergy P5 presents a major step forward for protection relays, bringing a number of best-in-class features together in one device.

## Built-in arc-flash protection functions

Arc-flashes will always exist when switching or during unexpected conditions. Arc-flash protection functions detect if an arc-flash exists, and take action within milliseconds to isolate the connected circuit breaker, meaning that arc-flash energy should not grow and cause unexpected outages or risks.

## Advanced cybersecurity

IEC 62443 compliant, the P5 has been designed with an optional cybersecurity package. This means reduced exposure to cyber threats and improved operational security. By default, the Easergy P5 includes important features such as password management, port hardening, and secured communication compliant to the latest international standards.

## Intuitive withdrawable design

With a handle built in as part of the design, the P5 can be quickly disconnected or exchanged to speed up maintenance. Wiring, data, communication, and settings (including backup) can be stored with the panel and will be there when the relay is reconnected.

## Improved recovery time

When maintenance or testing is required, Easergy P5 helps dramatically decrease your outage recovery time. The backup memory can automatically restore settings, you can continue your operations in as little as 10 minutes.\*

\*Result of mean time to repair (MTTR) calculation conducted by Schneider Electric

## Greater connectivity

The protection relay features seven communication protocols. This includes compliance with IEC 61850 ed. 1 and ed. 2, Modbus (serial/TCP), IEC 60870-5-103, IEC 60870-5-101, Ethernet/IP, and DNP3 (serial/TCP). Additionally, thanks to the P5's modular design, communication ports can be added at any time to enable you to upgrade your device in line with future network evolutions.



# Make everyday operations easier with digital tools

The Easergy P5's industry leading protection features are complemented by a comprehensive set of tools available on mobile devices such as smartphones or tablets, and desktop computers. This means you get simpler installation, configuration, and maintenance, enabling you to save time and money. Nearby control and monitoring allows users to fully operate the device via wireless communication, from a safer distance.



## Digital tools for the Easergy P5 include:

- The EcoStruxure Power Build – Medium Voltage online ordering tool for quicker and easier ordering
- The eSetup Easergy Pro software with virtual injection testing
- An embedded web server, allowing easy and fast settings changes
- The EcoStruxure™ Power Device app for simpler and safer operation and maintenance
- The mySchneider app, a simple way to access support and product data just by flashing the QR code on the device

As an EcoStruxure-ready solution, the Easergy P5's digital benefits can be taken even further with best-in-class monitoring of substation equipment health. For example, when paired with EcoStruxure Asset Advisor software, users get data for predictive maintenance, which helps them reduce OpEx, speed up processes, and boost efficiency.

# Easergy P5 protection relay at a glance

Easergy P5 contains two main devices, each with specific functions to address your needs in a one-box design, regardless of application.

## Voltage

## Feeder

## Transformer

## Motor

## Characteristics

Measuring inputs	Phase current
	Residual current
	Voltage
Arc-flash sensor inputs	
Digital	Inputs
	Outputs
Analog	Inputs
	Outputs
Temperature sensor input	
Front ports	USB device and USB host
Nominal Power Supply	24-250 VDC ; 100-230 VAC
Ambient temperature, in service	-40 to 70°C (-40 to 158°F)

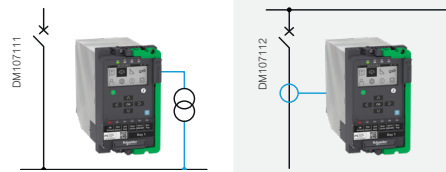
## Communication

Protocols	Extension + Backup memory
	Serial
	Ethernet
	2 <sup>nd</sup> Ethernet
	IEC 61850 Ed.1 & Ed.2
	IEC 60870-5-103 & 101
	DNP3 Ethernet
	DNP3 serial
	Modbus Ethernet
	Modbus serial
EtherNet IP	
Redundancy protocols	RSTP
	PRP / HSR

## Others

Control	
Logic (Matrix + Logic Equations)	
Cyber security	
Draw-out device	
Hardware dimensions (H/W/D)	

## Easergy P5x20



P5V20

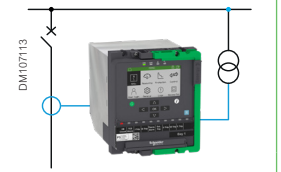
P5U20

-	1/5A CT (x3)
-	1/5A CT & 1A CT or CSH
VT (x4)	-
	4 to 10
	3 to 7 + WD
	-
	-
-	0 to 16 (external module)
	USB device and USB host
	24-250 VDC ; 100-230 VAC
	-40 to 70°C (-40 to 158°F)

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6 controlled + 2 monitored objects Mimic
●
●
●
102/176/219 mm 4.01/6.93/8.62 in

## Easergy P5x30



P5F30 with directional

P5M30

1/5A CT (x3) (*) or LPCT (x3) (*)
1/5A CT & 1A CT or CSH
VT (x4) (*) or LPVT (x4) (*)
0 to 6 point sensors
4 to 22
3 to 15 + WD
-
-
0 to 16 (external modules)
USB device and USB host
48-250 VDC ; 100-230 VAC
-40 to 70°C (-40 to 158°F)

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6 controlled + 2 monitored objects Mimic
●
●
●
152/176/219 mm 6.0/6.93/8.62 in

(\*) Contact us for availability

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[schneider-electric.com/easergy-p5](https://schneider-electric.com/easergy-p5)

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