

Auditor 6M+3SW

Real-time enterprise-grade electricity monitoring and control

A variant of our enterprise-grade Auditor 6M with added switching control capability for up to 3 contactors via the MyEnergy mobile app or 3rd party apps via the Wattwatchers API.

The Auditor 6M+3SW is a specialised variant of our highly acclaimed Auditor 6M model. Retaining the same form factor, the Auditor 6M+3SW comes with an additional switching control feature, enabling the management of up to 3 contactors (which can comprise a combination of single-phase or three-phase circuits) through our in-house apps or 3rd party apps via the Wattwatchers API.

How it works

The Auditor 6M+3SW is installed in the electrical switchboard and paired with one or more contactors. Once installed and configured, the energy consumption can be remotely monitored and switching can be controlled at individual circuit level in real time. The monitoring data and the switching functionality are accessible on computers, tablets and smartphones via our REST API, the Wattwatchers Software Toolkit (including the MyEnergy mobile app), or third-party interfaces.

Highlights

- Switching control of up to 3 contactors (1-phase or 3-phase or a combination of both) via in-house apps or 3rd party apps via the Wattwatchers API
- Monitoring of up to six single-phase circuits (AC-only) per device. Also works in 2- and 3-phase applications.
- Cellular communications – real-time monitoring and switching control, no communications cabling required
- Compact form factor of 2 poles wide (36mm) excluding contactors
- Device and switching status indicators (LEDs) on the front of the unit

Use cases

- Hot water control
- Electric vehicle charging
- Home energy management
- Solar inverter control
- Peak load or maximum demand management

Contactors

The Auditor 6M+3SW works with contactors driven by 230V AC (50Hz) control coil voltage. Wattwatchers supplies 25A to 63A contactors for single-phase and three-phase applications. The single-phase contactor is 1-pole wide (18mm) and the three-phase contactor is 2-pole wide (36mm). The contactors are rated for 1,000,000 cycles of manual switch operating life and 100,000 cycles of electrical coil operating life.



Datasheet

POWER SUPPLY CHARACTERISTICS

Input-voltage	80-265 V AC
	1.15 of Vn for 1 minute
Power consumption	2W
Power tails	1 metre single-phase or three-phase

ENERGY MEASUREMENT SPECIFICATIONS

Energy measurements	Short energy	Configurable from 5 seconds to 295 seconds (default is 30 seconds) Push to server – best effort delivery (QOS0) Real energy, reactive energy, voltage, current, frequency, power factor
	Long energy	5 minute intervals; servers request logged data Real energy, reactive energy, min/max voltage, min/max current, power factor
	Voltage	1P2W, 2P3W, 3P4W 80-265V, 0.1V resolution
	Current	Split core CTs – 60A(10mm), 120A(16mm), 200A(25mm), 400A(25mm), 600A(36mm)
	Frequency	45Hz to 60Hz 0.01Hz resolution
Measurement accuracy	No. of channels	6
	Active energy	Class 1 based on IEC 62053-21
	Reactive energy	Class 2 based on IEC 62053-23
On-device storage		25 days of long energy logging capacity to ensure complete data

MECHANICAL CHARACTERISTICS

Weight	0.3kg
IP degree of protection	IP50 (front display) when installed inside switchboard
Dimensions	89x77x36 mm (2 DIN poles)
Mounting	Certified for Level III environment – meter and distribution boards
Voltage connections	3 voltage references plus neutral 6 positions/4 connection 5.08mm pitch FCI part 20020007-H061B01LF
Current sensors connections	6 channel inputs 8-way 3.81mm pitch FCI part 20020004-D081B01LF

ENVIRONMENTAL AND SAFETY CONDITIONS

Ambient operating temperature	-10°C to +55°C
Installation/pollution category	III / 2
Electromagnetic immunity	Level III (IEC 61000-4-2) Level III (IEC 61000-4-3) Level III (IEC 61000-4-4) Level III (IEC 61000-4-5)
Safety	Certified for Level III environment – meter and distribution boards

CERTIFICATIONS

Responsible Supplier Number	E5258
Safety	AS/NZ 60950.1:2015 EN 60950-1:2006 UL 6101.1 (2003)
Emissions	AS/NZ CISPR 22 (2009+Amt1 2010) FCC Part 15B
Immunity	CISPR24:2010, CISPR 3:2015
FCC ID	QIPELS61
Related spurious emissions	AS/NZS 4268:2008 +A1:2010 C 8.2 and 9.1 EN 300 328 with reports FCC sDoC 47 CFR Part15, Subpart B
ARPANSA RP3	AS/NZS 2772

COMMUNICATIONS

Cellular	Type	Multi-network 3G/4G LTE Pentaband with regional variants available covering Australia/Asia, Europe/Middle East and US/North America
	SIM	Factory-fitted internal micro-SIM
Hardware	Antenna	SMA connector Supplied with a multi-band stubby antenna Optional external or high gain antenna options available to boost reception if required

SWITCHING

Switching channels	Channels	3 independent switching channels controlled via MyEnergy app or API
	Electrical rating	240V AC nominal 100mA per switching output
	Type	Voltage-free zero-crossing control to minimise inductive stress on contactors
	External connection	240V AC connected to switching common terminal



CONTACTORS

Standards	IEC/EN61095
Control coil voltage	240V AC 50 Hz
Rated current, poles, and size (width)	1-phase 25A 2P: 1x NO and 1x NC (18mm) 3-phase 25A 3P: 3x NC (36mm)
	Other ratings are available upon request
Insulation voltage (Ui)	500V
Rated impulse withstand voltage (Uimp)	2.5 kV (4 kV at 12/24/48V AC)
Pollution degree	2
Manual switch operating life	1,000,000 cycles
Electrical coil operating life	100,000 cycles
Cable terminal size (CSA)	Up to 12mm2
Mounting type	DIN Rail 35mm

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