

Ancillary products.

Eaton has access in Australia to an extensive range of high quality and world class test and measurement tools to provide reliability and accuracy when it comes to verification and troubleshooting in electrical installations. Also with a broad array of wiring accessories, enclosures, proximity sensors and monitoring relays, Eaton is the ideal choice to depend on.

Eaton is a world leader in energy management and power quality solutions from metering devices to monitor energy consumption to industry leading backup power (UPS) and surge protection products to solve the most challenging power related problems today.

EATON
Powering Business Worldwide



Test and measurement

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Kyoritsu.

over **75** years
of Japanese
reliability and quality.



Eaton is pleased to represent the Kyoritsu brand throughout Australia. Kyoritsu is a world leading brand when it comes to electrical test and measurement. Kyoritsu offers an extensive range of high quality instruments from analogue/digital multimeters to high-end power quality analysers that are widely used and trusted by electricians, maintenance technicians and engineers.

EATON

Powering Business Worldwide



Quality and reliability is our tradition

KYORITSU

Analogue multimeters

Model 1109S

- Mirrored scale for easy & accurate reading
- Safety designed input terminals & test leads
- Output terminal to cut off DC component

| Description | Item no. |
|--|--------------|
| Kyoritsu analogue multimeter with dB & hFE | 1109S |
| Kyoritsu analogue multimeter with temperature & continuity buzzer. | 1110 |



1109S

Digital multimeters

Model 2012R

- Capable of measuring AC & DC current to 120 A
- True RMS measurements
- Pocket sized heavy duty design
- Sleep function to conserve battery life
- Designed to international safety standard IEC 61010-1, CAT III 300V

| Description | Item no. |
|--|--------------------|
| Kyoritsu Pen Type Digital Multimeter-AC/DC V, ohm, Hz, uF, diode & continuity tests. | 1030 |
| Kyoritsu digital multimeter-AC/DC V, AC/DC A, ohm, Hz, uF, diode & continuity tests. | 1009 |
| Kyoritsu digital multimeter-AC/DC V, AC/DC A, ohm, Hz, uF, Temp, diode & continuity tests. | 691011 |
| Kyoritsu digital multimeter with True RMS-AC/DC V, AC/DC A, ohm, Hz, uF, diode & continuity tests. | 691012 |
| Kyoritsu digital multimeter (Soft Case)-AC/DC V, ohm, Hz, uF, diode & continuity tests. | 1018S |
| Kyoritsu digital multimeter (Hard Case)-AC/DC V, ohm, Hz, uF, diode & continuity tests. | 1018H |
| Kyoritsu high performance CAT IV digital multimeter with low pass filter | 691051 |
| Kyoritsu high performance CAT IV digital multimeter with low pass filter & data capture capability | 691052 |
| Kyoritsu professional digital multimeter with 1,000 data capture capability | 691061 |
| Kyoritsu professional digital multimeter with 10,000 data capture capability | 691062 |
| Kyoritsu digital multimeter / 6mm Dia. clamp meter-AC/DC V, ohm, Hz. | KEWMATE2000 |
| Kyoritsu digital multimeter / 10mm Dia. clamp meter-AC/DC V, ohm, Hz. | KEWMATE2001 |
| Kyoritsu digital multimeter true RMS/12mm dia open clamp sensor | 2012R |



2012R

Voltage testers

Model KT170-AU

- AC/DC voltage tests up to 690V
- Clear oversize luminous LED & audible indication
- Continuity test
- Self-diagnostic test
- Single pole phase test
- Phase rotation test
- Polarity indication
- Auto power on/off
- Penlight (white LED)
- IP65 rating
- IEC61010-1CAT.IV 600V/ CAT.III 690V

| Description | Item no. |
|--|-----------------|
| Kewtech KT170-AU voltage tester with phase checking & continuity | KT170-AU |



KT170-AU



2200

Clamp meters AC

Model 2200

- Maximum AC current measurement 1000A
- Maximum AC voltage measurement 600V
- 33 mm diameter conductor size
- Ultra slim and light weight

| Description | Item no. |
|--|---------------|
| Kyoritsu digital clamp meter AC-600A AC, CAT. IV 600V | 2040 |
| Kyoritsu digital clamp meter AC-2000A AC, 55mm Dia. | 2002PA |
| Kyoritsu digital clamp meter AC-2000A AC, 55mm Dia. TRMS | 2002R |
| Kyoritsu digital clamp meter AC-600A AC, 33mm Dia. | 2007A |
| Kyoritsu digital clamp meter AC miniature-200A AC, 24mm Dia. | 2031 |
| Kyoritsu ultra slim digital clamp meter AC-1000A AC, 33mm Dia. | 2200 |
| Kyoritsu analogue clamp meter AC-300A AC, 33mm Dia. | 2608A |
| Kyoritsu analogue clamp meter AC-600A AC, 35mm Dia. | 2805 |
| Kewtech digital clamp meter AC-400A AC, 30mm Dia. | KT200 |



2046R

Clamp meters AC/DC

Model 2046R

- CAT. IV 600V rating
- Current up to 600A AC/DC and voltage up to 600V AC/DC
- Continuity buzzer
- 33mm jaw size
- Frequency, capacitance and temperature measurement
- LED Non-contact voltage detection
- Display: 6039 counts with bar graph
- Lowest resolution 0.1A

| Description | Item no. |
|--|--------------|
| Kyoritsu digital clamp meter AC/DC, True RMS, 600A AC, 33mm Dia., CAT. IV 600V. | 2046R |
| Kyoritsu digital clamp meter AC/DC, 1000A AC, CAT. IV 600V. | 2055 |
| Kyoritsu digital clamp meter AC/DC, True RMS, 1000A AC, 40mm Dia., CAT. IV 600V. | 2056R |
| Kewtech digital clamp meter AC/DC-400A AC, 30mm Dia. | KT203 |
| Kyoritsu digital clamp meter AC/DC-2000A AC, 55mm Dia. | 2003A |
| Kyoritsu digital clamp meter AC/DC True RMS, 2000A AC, 55mm Dia. | 2009R |
| Kyoritsu digital clamp meter AC/DC miniature-300A AC, 24mm Dia. | 2033 |
| Kyoritsu digital clamp meter AC/DC open slot-100A AC, 10mm Dia. | 2300R |



2500

Clamp meters DC milliamp

Model 2500

- Measures DC 4-20mA signals without breaking the loop
- Top class measurement 0.2% accuracy
- 6mm clamp jaw easy to use in tight places
- Measurement from 0.01mA to 120.0mA
- Dual display with backlight shows both mA measurement and percentage of 4-20 mA span
- Analog output terminal for recorder connection

| Description | Item no. |
|---|-------------|
| Kyoritsu 2500 DC milliamp process clamp meter | 2500 |

Clamp meters leakage

Model 2434

- Least affected by external stray magnetic fields
- Frequency selector switch eliminates harmonic effects
- Data hold function
- Designed to international safety standard IEC 61010-1 CAT III 300V



2434

| Description | Item no. |
|--|----------------|
| Kyoritsu digital clamp meter AC leakage, 40mm Dia., AC 100Amp., Filter, Peak10ms. | 2432 |
| Kyoritsu digital clamp meter AC leakage, 28mm Dia., AC 100Amp., Filter. | 2434 |
| Kyoritsu digital clamp meter AC leakage, 24mm Dia., AC 200Amp., Filter. | 2431 |
| Kyoritsu digital clamp meter AC leakage, 40mm Dia., AC 400Amp., Filter, Peak 10ms. | 2433 |
| Kyoritsu digital clamp meter AC leakage, 40mm Dia., AC 500Amp., Filter, Output. | 2412 |
| Kyoritsu digital clamp meter AC leakage, 68mm Dia., AC 1000Amp., Filter, Output, Peak 10ms. | 2413F |
| Kyoritsu digital clamp meter AC leakage, True RMS, 40mm Dia., AC 400Amp., Filter, Peak 10ms. | 2433R |
| Kyoritsu digital clamp meter AC leakage, 68mm Dia., AC 1000Amp., True RMS | 692413R |

Insulation testers

Model 3132A

- 3 insulation test ranges - 250V/500V/1000V
- Easy-to-read multi colour scales eliminates reading errors
- Compact and easy to use

- Live circuit warning buzzer and neon lamp for added safety
- Automatic discharge of circuit capacitance
- Dust and drip proof construction

| Description | Item no. |
|--|----------------|
| Analogue Insulation Testers | |
| Kyoritsu analogue insulation/continuity tester (250V/500V/1000V) | 3132A |
| Kyoritsu analogue insulation/continuity tester with backlight (250V/500V/1000V) | 693131A |
| Kyoritsu analogue insulation tester (500V) | 3165 |
| Kyoritsu analogue insulation tester (1000V) | 3166 |
| Kyoritsu mining insulation tester (250V/500V/1000V) with hard case & fixed leads | 3131M |
| Digital Insulation Testers | |
| Kyoritsu digital Insulation/continuity tester (250V/500V/1000V) | 3005A |
| Kyoritsu digital Insulation/continuity tester with backlight (250V/500V/1000V) | 3007A |
| Kyoritsu digital Insulation/continuity tester with memory (125V/250V/500V/1000V) | 3021 |
| Kyoritsu digital Insulation/continuity tester with memory (50V/100V/250V/500V) | 3022 |
| Kyoritsu digital Insulation/continuity tester with memory (100V/250V/500V/1000V) | 3023 |



3132A



3007A

High voltage insulation testers

Model 3128

- Test voltage 12kV, Resistance 35TΩ, Short-circuit Current 5mA
- CAT IV 600V rating
- Robust design for field use with IP64 rating (with lid closed)

- Internal memory, print screen & USB adaptor plus software
- Automatic discharge after test and display of discharge voltage
- Polarization index (PI), Dielectric Absorption Ratio (DAR), Dielectric discharge index (DDI), Step Voltage (SV), leakage current

| Description | Item no. |
|--|---------------|
| Kyoritsu analogue HV insulation tester 2.5kV | 3121A |
| Kyoritsu analogue HV insulation tester 5kV | 3122A |
| Kyoritsu analogue HV insulation tester 5/10kV | 3123A |
| Kyoritsu analogue HV insulation tester 1 - 10kV | 3124 |
| Kyoritsu digital HV insulation tester 5kV | 3125 |
| Kyoritsu digital HV insulation tester 5kV with DAR & filter function | 3126 |
| Kyoritsu digital HV insulation tester 12kV | 693128 |



693128

Earth testers

Model 4105A

- Dust & drip proof construction (Designed to IEC 529 IP54)
- Capable of measuring earth voltage
- 2mA measuring current of circuit under test

- Automatic warning in excess of resistance tolerance
- 2mA measuring current permits earth resistance tests without tripping earth leakage current breakers in the circuit under test

| Description | Item no. |
|---|----------------|
| Kyoritsu analogue earth tester | 4102A |
| Kyoritsu analogue earth resistance tester (Hard Case) | 4102A-H |
| Kyoritsu digital earth tester | 4105A |
| Kyoritsu digital earth resistance tester (Hard Case) | 4105A-H |
| Kyoritsu analogue earth resistance tester 4 wire | 4106 |
| Kyoritsu digital earth tester clamp | 4200 |



4105A

Ancillary products

Test and measurement



695020-00

Current/leakage loggers

Model 5020

- The leakage current value of 1 to 3 channels can be recorded with the leakage clamp sensors, & 60,000 data points can be recorded (when using 1 ch)
- The recorded data can be transmitted to the personal computer directly by USB connection, & the data can be edited for analysis & the graphical display, etc.
- LED blinks when the current setting value is exceeded
- Data limits can be set & variations can be displayed
- Voltage, Current & Leakage Current clamps can be connected

| Description | Item no. |
|---|------------------|
| Kyoritsu current/voltage logger (no clamps) | 695020-00 |
| Kyoritsu current/voltage logger with voltage sensor (no clamps) | 695020-01 |



6305-00

Power meters & power quality analysers

Model 6305

- Comprehensive real-time monitoring, recording and analysis of single and 3-phase systems
- Voltage, Current, Power Factor and Frequency measurements
- Power analysis (Active, Apparent and Reactive power)
- Energy analysis (Active, Apparent and Reactive power)
- Active power accuracy: $\pm 0.3\% \text{rdg} \pm 0.2\% \text{f.s.}$
- Automatic wiring check function to prevent incorrect connections
- Large memory capability (2GB) using built-in SD card interface
- Real time & remote measurements using Android application
- Synchronous measurements between two units of KEW 6305
- Wide selection of clamp sensors allow measurements from 0.1A to 3000A
- The instrument automatically recognizes what kind of clamp sensor is connected to it
- Windows software for data analysis and setting via USB port or Bluetooth

Model 6315

- Simultaneous power & power quality measurements are recorded at all channels.
- Measurement with high accuracy - $\pm 0.3\% \text{rdg}$ (energy) and $\pm 0.2\% \text{rdg}$ (voltage/ current)
- Complies with IEC61000-4-30 Class S
- Remote monitoring on PC and Android device via BlueTooth
- Trend and demand graphs for easy recognition
- Various types of clamp and flexible sensors: from 1000mA up to 3000A and earth leakage measurements



6315-00

| Description | Item no. |
|---|----------------|
| Kyoritsu 6305 power meter kit WITHOUT clamp sensors | 6305-00 |
| Kyoritsu 6305 power meter kit with 3 x 500A clamps (8125) | 6305-01 |
| Kyoritsu 6315 power quality analyser kit WITHOUT clamp sensors | 6315-00 |
| Kyoritsu 6315 power quality analyser kit with 3 x 500A clamps (8125) | 6315-01 |
| Kyoritsu 6315 power quality analyser kit with 3 x 1000A flexi-clamps (8130) | 6315-03 |

*Other clamp sensor ratings available

Test kits

Model 6141

Electrical test kit includes:
3132A insulation tester

1009 digital multimeter
KT200 AC clamp meter



6141

| Description | Item no. |
|--|---------------|
| Kyoritsu contractor kit containing models 3132A/1009/KT200 | 6141 |
| Kyoritsu contractor kit containing models 6010A/1009/KT200 | 696140 |
| Eaton young apprentice kit containing models 2046R/1009/KT170-AU | 614YAK |

Loop impedance testers

Model 4118A

- Custom micro processor controlled
- Direct reading of prospective short circuit current
- Measures low loop resistance resolution 0.01 ohm
- Large custom digital display readout

| Description | Item no. |
|---|---------------|
| Kyoritsu digital loop impedance tester with PSC | 4118A |
| Kyoritsu Loop/PSC/PFC tester with ATT, phase rotation, V & Hz | 4140 |
| Kewtech KT45 Loop/PSC with ATT | 69KT45 |
| Kewtech KT60 Loop/PSC/RCD with ATT | 69KT60 |



4118A

Multi function testers

Model 6010B

- Continuity 20/200 ohm 200mA Test Current
- Insulation 500/1000V, 20/200M ohm 1mA Rated Test Current
- Loop Impedance 20/2000 ohm 15mA Test Current at 2000 ohm (No RCD Trip)
- RCD 10/30/100/300/500mA x1/2, x1, Fast Trip (40ms), DC, Auto Ramp
- Uc (Contact Voltage) 100V
- Designed to IEC 61010-1, IEC 61557
- Data Memory : 300 measured results
- PC Download Using 8212 Data Communication Adapter

| Description | Item no. |
|---|----------------|
| Kyoritsu digital multi function tester (4 in 1) continuity, loop, insulation and RCD | 6010A |
| Kyoritsu digital multi function tester (5 in 1) with memory/communication function | 696010B |
| Kyoritsu digital multi function tester (5 in 1) continuity, loop, insulation, RCD and PSC | 6011A |
| Kyoritsu digital multi function 10 in 1 tester with anti-trip | 696016 |



696010B

RCD/ELCB testers

Model 5406A

- Custom Microprocessor controlled
- 0-180 degree phase angle switch
- Digital readout of tripping time
- Test DC sensitive breakers
- Constant current source circuitry

| Description | Item no. |
|---|---------------|
| Kyoritsu digital RCD/ELCB tester with Auto Ramp. | 5406A |
| Kyoritsu digital RCD/ELCB tester 100 – 400V operating voltage. Battery operated | 695410 |



5406A

Portable appliance testers

Model 6201A

- Suitable for performing tests required by AS/NZS3760
- LED indicator for pass/fail result
- Insulation resistance test
- AC voltmeter for measuring mains voltage

| Description | Item no. |
|---|----------------|
| Kyoritsu Model 6201A with Leakage current test + Earth bond test at 10A | 696201A |



696201A

Ancillary products

Test and measurement



8035

Phase rotation meters

Model 8035

- Non contact phase rotation testing
- The insulated crocodile clips for cables from $\varnothing 2.4$ to 30mm.
- Wide measuring range for 3 phase installations from 70V to 1000V AC
- CAT. IV 600V and CAT. III 1000V rated

| Description | Item no. |
|--|--------------|
| Kyoritsu phase indicator with open phase checker | 8031 |
| Kyoritsu phase indicator with open phase checker with alligator fused test leads | 8031F |
| Kyoritsu non contact phase indicator | 8035 |



5202

Lux meters

Model 5202

- 3 ranges changeable from low to high illuminance
- 200/2000/20000 lux
- Data hold function
- Separate light receiving sensor

| Description | Item no. |
|----------------------------|-------------|
| Kyoritsu lux meter digital | 5202 |



5510

Temperature indicators infrared

Model 5510

- Wide temperature range - 40 to 300 C
- Dust proof & waterproof construction to IP67
- Shock proof construction drop test to 1 metre
- Auto power off for battery preservation

| Description | Item no. |
|---|-------------|
| Kyoritsu digital Infrared thermometer (-40 deg C --- 300 deg C) | 5510 |



698212USB

Clamps & accessories

Software/communication adaptors

| Description | Item no. |
|--|------------------|
| RS232C Adaptor with KEW Report software | 8212 |
| USB Adaptor with KEW Report software | 698212USB |
| USB Adaptor with KEW Windows software for 3128 | 8212USB-W |



8115

Clamp adaptors

| Description | Item no. |
|---|-------------|
| Kyoritsu AC clamp adaptor for DMM (Max. AC120A) | 8112 |
| Kyoritsu AC/DC clamp adaptor for DMM (max. AC 130A DC 180A) | 8115 |

Clamps & accessories

Clamp sensors

| Description | Type | 5020 | 6305/ 6300 | 6315/ 6310 | Item no. |
|---|-----------------|------|---------------|---------------|-----------|
| Clamp sensor AC 100A Ø 24mm | | ✓ | | | 698121 |
| Clamp sensor AC 500A Ø 40mm | | ✓ | | | 698122 |
| Clamp sensor AC 1000A Ø 55mm | | ✓ | | | 698123 |
| Clamp sensor AC 1000A Ø 68mm | | | ✓ | ✓ | 8124 |
| Clamp sensor AC 500A Ø 40mm | | | ✓ | ✓ | 8125 |
| Clamp sensor AC 200A Ø 40mm | Load current | | ✓ | ✓ | 8126 |
| Clamp sensor AC 100A Ø 24mm | | | ✓ | ✓ | 8127 |
| Clamp sensor AC 5-50A Ø 24mm | | | ✓ | ✓ | 8128 |
| Flexible clamp sensor 1CH 3000A Ø 150mm | | ✓ | ✓ | ✓ | 698129-01 |
| Flexible clamp sensor 3CH 3000A Ø 150mm | | ✓ | ✓ | ✓ | 698129-03 |
| Flexible clamp sensor 1CH 1000A Ø 110mm | | ✓ | ✓ | ✓ | 8130-01 |
| Flexible clamp sensor 3CH 1000A Ø 110mm | | ✓ | ✓ | ✓ | 8130-03 |
| Leakage clamp sensor 1000mA max. Ø 24mm | Leakage current | ✓ | | ✓ | 8141 |
| Leakage clamp sensor 1000mA max. Ø 40mm | | ✓ | | ✓ | 8142 |
| Leakage clamp sensor 1000mA max. Ø 68mm | | ✓ | | ✓ | 8143 |
| Voltage sensor | | ✓ | | | 698309 |
| Carrying case with magnet | | | ✓ | ✓ | 699132 |
| Source power supply adaptor | | | ✓ | ✓ | 8312 |



8130



8125

Fuses & test leads

| Description | Item no. |
|--|-------------|
| KYORITSU Fuse (0.8A/600V) for 1011/1012 | 8918 |
| KYORITSU Fuse (10A/600V) for 1009/1011/1012 | 8919 |
| KYORITSU Fuse (500mA/600V) for 1009/3132A | 8923 |
| KYORITSU Fuse (440mA/1000V) for 1051/1052/1061/1062 | 8926 |
| KYORITSU Fuse (10A/1000V) for 1051/1052/1061/1062 | 8927 |
| FUSE S505/6.3A to suit 6010A | 696010AFUSE |
| 10A 600V Ceramic Fuse for 6201A | 69AA6201004 |
| Battery Holder to suit 6010A | 6010A001 |
| Test Leads 7019 to suit 5402D | 7019 |
| Test Leads 7066 to suit 1009/1011/1012/2007A/2040/2046R/2055/2056R | 7066 |
| Test Leads 7121 to suit 4118A/5406A/6050 | 7121 |
| Test Leads 7122 to suit 3132A/6010A/6010B/6011A | 7122 |
| Power Cord AU 7123 | 7123 |
| Test Lead to suit 6201A | 7129 |
| Test Leads 7133 to suit 6010A/6010B/6011A | 7133 |
| Test Leads 7154B (Non-Fused) w/ Crocodile Clip & Probes | 7154B |
| Flat Test Bar (BLACK) to suit 6201A | 7161A |
| Test Leads KAMP10 to suit 6010A/6010B/6011A | KAMP10 |
| Adaptor for Extension Cord for 6201A | 697140 |
| Kyoritsu power pack 12V DC 5A to suit 3124 | 3124PPACK |



8923



7154B

Ancillary products

Metering

Metering devices

Power Xpert meters



The Power Xpert Meter 4000

"This meter provides all the core functions for monitoring power consumption and power quality along with 2 GB of data storage. It captures fast voltage changes, low frequency transients and reviews individual harmonic levels directly on the meter"

The Power Xpert Meter 6000

This meter provides all the functionality of the Power Xpert 4000 plus enhanced power quality monitoring with automatic industry standard trigger settings. It also offers a larger 4 GB of data storage.

The Power Xpert Meter 8000

This meter provides all the functionality of the Power Xpert 6000 and adds the ability to capture very fast transients by sampling at 6 MHz—100,000 samples per cycle. That's a sample every 166 nanoseconds, across three input channels as well as neutral-to-ground. In addition, it has a capacity of 8 GB for data storage.

| Type | Item no. |
|--|--------------------|
| PXM 4000 Meter, 2 GB, AC, no options | PXM4051A1AA |
| PXM 4000 Meter, 2 GB, AC, w/ Com. Exp. Card | PXM4051A1BA |
| PXM 4000 Meter, 2 GB, AC, w/ Com. Exp. & I/O Cards | PXM4051A1BB |
| PXM 6000 Meter, 4 GB, AC, no options | PXM6051A1AA |
| PXM 6000 Meter, 4 GB, AC, w/ Com. Exp. Card | PXM6051A1BA |
| PXM 6000 Meter, 4 GB, AC, w/ Com. Exp. & I/O Cards | PXM6051A1BB |
| PXM 8000 Meter, 8 GB, AC, no options | PXM8051A1AA |
| PXM 8000 Meter, 8 GB, AC, w/ Com. Exp. Card | PXM8051A1BA |
| PXM 8000 Meter, 8 GB, AC, w/ Com. Exp. & I/O Cards | PXM8051A1BB |

| Accessory | Item no. |
|--|----------------|
| PXM meter graphic display module | PXD-MMG |
| PXM bracket for back-to-back meter to display mounting | PX-PMBA |
| PXM I/O card | PXMIO-B |
| PXM Com Exp. Card: Ethernet 100FX, 10/100T, RS-485, RS-232 | PXMCE-B |

Power Xpert meter 2000 range



Power Xpert Meter 2250

"This meter provides all the core functions for monitoring power consumption and power quality along with 256 MB for data logging, Ethernet connectivity and onboard Gateway Card limits. This unit uses D/A technology to sample circuits at 400 samples per cycle for accurate measurement of power factor and energy consumption.

Power Xpert Meter 2260

This meter adds the ability to monitor total harmonic distortion and the ability to set onboard meter limits. The meter also will illuminate LEDs on the faceplate, indicating that a limit has been exceeded. This meter comes standard with 512 MB for data logging.

Power Xpert Meter 2270

This meter adds the ability to monitor individual harmonics and to visualize waveforms on your desktop using the embedded Web server. This meter comes with 768 MB for data logging.

| Type | Item no. |
|---|-----------------------|
| PXM2250 Meter/Display 50Hz 5A 90-265V AC/DC | PXM2250MA55105 |
| PXM2260 Meter/Display 50Hz 5A 90-265V AC/DC | PXM2260MA55105 |
| PXM2270 Meter/Display 50Hz 5A 90-265V AC/DC | PXM2270MA55105 |
| PXM2250 Meter/Display 50Hz 1A 90-265V AC/DC | PXM2250MA51105 |
| PXM2260 Meter/Display 50Hz 1A 90-265V AC/DC | PXM2260MA51105 |
| PXM2270 Meter/Display 50Hz 1A 90-265V AC/DC | PXM2270MA51105 |

| Accessory | Item no. |
|--|----------------------|
| PXM 2000 I/O Card—two relay outputs/two status inputs | IQ250/260-I01 |
| PXM 2000 I/O Card—four KYZ pulses/four status inputs | IQ250/260-I02 |
| PXM 2000 I/O Card—four analog outputs—0–1 mA | IQ250/260-I03 |
| PXM 2000 I/O Card—four analog outputs—4–20 mA | IQ250/260-I04 |
| Mounting assy for retrofitting a PXM2000 to an IQ Analyzer/DP-4000/data cutout | IQ250-PMAK |

Metering devices

IQ 250/260 range

The IQ 250 & IQ 260 electronic meters provide capabilities you wouldn't normally expect in an affordable, compact meter—such as fast sampling rate & accurate metering for a full range of power attributes. The meter can be configured either from the easy-to-read display or remotely (accessible via a Power Xpert Gateway) for upgrades to input/output option cards.

Eaton's IQ 250 & IQ 260 meters provide direct-reading metered values for the most critical power aspects, such as watts, watt demand, watt-hours, voltage-amperes (VA), VA-hours, vars, var-hours & power factor. They have high sampling speed & accuracy. The IQ 260 meter also measures power quality, such as total harmonic distortion (THD) up to the 40th order. The IQ 260 also provides configurable limit alarming/control

capability of up to eight measured parameters for more sophisticated power management.

Features

- Comprehensive metering
- High-end accuracy
- Self-test capability to validate accuracy
- Large, easy-to-read display
- Local or remote configuration
- Industry-standard communication protocols (Modbus)
- Mix-and-match input/output options
- Integration with Eaton's Power Xpert Architecture
- Field-upgradeable



IQ 100 range

Providing the first line of defense against costly power problems, Eaton's IQ 100 electronic power meters can perform the work of an entire wall of legacy metering equipment utilizing today's technology. Eaton's IQ 100 meters use 24-bit AD converters that sample at more than 400 samples per cycle & meet ANSI C12.20 standards for accuracy of 0.5 percent. With such high-performance measurement capability, these meters can be confidently used for primary revenue metering & sub-metering applications.

Eaton's IQ 100 meters provide direct-reading metered values for the most critical power

aspects, such as watts, watt demand, watt hours, voltage-amperes (VA), VA-hours, vars, var hours & power factor. They have high sampling speed & accuracy.

Applications

- Utility & commercial metering
- Substations, industrial facilities, power generation sites & campuses
- Sub-metering
- Load studies & voltage recording
- Analogue meter replacement



Power meters CVM-MINI range

The CVM-MINI is an instrument which measures, calculates & displays the main electrical parameters for three-phase industrial systems (balanced or unbalanced). Measurements are in true effective value, via three AC voltage inputs & three AC current inputs.

Other features include:

- Current measuring .../5 or .../1A
- DIN rail format with only 3 modules
- Assembly on the 72 x 72mm panel with frontal adaptor (M5ZZF1)
- RS-485 Communications (Modbus-RTU)
- Two transistor outputs
- Sealable

| Description | Type | Item no. |
|---|----------------------------|---------------|
| 3PH DIN Power Analyser | CVM-MINI | M52000 |
| 3PH DIN Power Analyser with isolated inputs | CVM-MINI-ITF-C2 | M52010 |
| 3PH DIN Power Analyser with RS485 comms | CVM-MINI-ITF-RS485-C2 | M52021 |
| 3PH DIN Power Analyser with Harmonics & RS485 comms | CVM-MINI-ITF-HAR-RS-485-C2 | M52031 |
| 3PH DIN Power Analyser with Ethernet | CVM-MINI-ITF-ETHERNET-C2 | M520J1 |
| 3PH DIN Power Analyser with BACnet | CVM-MINI-ITF-BACnet-C2 | M520F1 |
| 3PH DIN Power Analyser with LonWorks | CVM-MINI-ITFLonWorks-C2 | M52091 |
| 72mm x 72mm Panel Adaptor | CVM-MINI Panel Adaptor | M5ZZF1 |



CVM-MINI Series

Single phase power analyser CVM-1D

CVM-1D is a power analyser for single phase circuits upto 32A. It has an LCD display with a rotation screen system, showing a total of 24 instantaneous, maximum and minimum electrical variables.

| Description | Type | Item no. |
|---|----------------|---------------|
| Single Phase 32A Direct DIN Rail Power Meter | CVM-1D-C | M55510 |
| Single Phase 32A Direct DIN Rail Power Meter with RS485 | CVM-1D-C-RS485 | M55511 |



CVM-1D

Ancillary products

Metering



CVMk2

Power analyser - Circutor

CVMk2 modular power analyzer

The CVMk2 Series is a modular programmable power meter that measures more than 300 electrical parameters of balanced or unbalanced three-phase electrical networks. All measurements are true RMS values & 4C, that are sourced by means of three A.C. voltage inputs & three A.C. Current inputs via.../5Amp current transformers. Unit is composed of measuring module & display module. It can be panel mounted: 144 x 144, 96 x 96 & round profile.

| Description | Model no. | Item no. |
|---|-----------------|---------------|
| CVMk2 modular power analyzer 3 phase Modbus RTU RS485 Class 0.5 | CVMk2-ITF-405 | M54400 |
| CVMk2 modular power analyser 3 phase Modbus RTU RS485 Class 0.2 | CVMk2-ITF-402 | M54402 |
| CVMk2 3 phase class 0.5 measurement module only | M-CVMk2-ITF-405 | M54410 |
| CVMk2 3 phase class 0.2 measurement module only | M-CVMk2-ITF-402 | M54412 |
| CVMk2 display only | D-CVM-K2 | M54420 |

Expansion modules

| Type | Outputs | 2 GB Memory | Digital I/O | Analogue I/O | Com | Item no. |
|--|----------|-------------|-------------|--------------|---------------------|---------------|
| k2-EXP-8I / 8O-Digital-TR Card | Static | - | 8/8 | - | - | M54501 |
| k2-EXP-8I / 4O-Analogue Card | Analogue | - | - | 8/4 | - | M54502 |
| k2-EXP-8I / 4O-Digital-RL Card | Relay | - | 8/4 | - | - | M54503 |
| k2-EXP-SD-MODBUS/TCP Card | - | I | - | - | Ethernet Modbus/TCP | M54504 |
| k2-EXP-SD Card | - | I | - | - | - | M54506 |
| Exp. Card 4 S analogue + 4 S static. ±5 mA | Static | - | 4 | 4 | - | M54507 |
| PROFIBUS Card | - | - | - | - | Profibus | M5450A |



CVM - 96 series
Size: 96mm x 96mm

Power meters

CVM96 range

The CVM96 Series is a programmable power meter that measures the electrical parameters of balanced or unbalanced three-phase electrical networks. All measurements are true RMS values that are sourced by means of three A.C. voltage inputs & three A.C. Current inputs via .../5Amp current transformers. The CVM Series can display up to 43 different parameters depending requirements & selection of device.

| CVM - 96 Meter Type | Three-phase 50...60 Hz | True RMS value | LED Display | Isolated Current Inputs ITF | 2 Quadrants | Physical interface | Communication protocol | Relay Outputs | Energy | Measuring THD (V/A) | Harmonic Measuring up to 31 | Maximum demand | Neutral Current | Item no. |
|-------------------------------|------------------------|----------------|-------------|-----------------------------|-------------|--------------------|------------------------|---------------|--------|---------------------|-----------------------------|----------------|-----------------|---------------|
| CVM 96 | • | • | • | - | • | - | - | - | • | • | - | • | - | M51100 |
| CVM 96-ITF | • | • | • | • | • | - | - | - | • | • | - | • | - | M51200 |
| CVM 96-ITF, RS485 C2 | • | • | • | • | • | R | MR | 2 | • | • | - | • | - | M51211 |
| CVM96-ITF, Ethernet C2 TCP | • | • | • | • | • | E | MT | 2 | • | • | - | • | - | M51231 |
| CVM 96-ITF, JC-C2 | • | • | • | • | • | R | JC | 2 | • | • | - | • | - | M51711 |
| CVM 96-F-ITF, RS485-C2-HAR-IN | • | • | • | • | • | R | MR | 2 | • | • | • | • | • | M51513 |

R=RS485
E=Ethernet
MR=Modbus / RTU
MT=Modbus / TCP
JC=Johnson Contro

Power analyser - Circutor

Power meters

CVM NRG Series

The CVM Series is a programmable power meter that measures the electrical parameters of balanced or unbalanced three-phase electrical networks. All measurements are true RMS values that are sourced by means of three A.C. voltage inputs & three A.C. Current inputs via .../5Amp current transformers. The CVM Series can display up to 43 different parameters depending requirements & selection of device.

| Description | Item no. |
|----------------------------|---------------|
| CVM-NRG 96 | M51800 |
| CVM-NRG 96-ITF | M51900 |
| CVM-NRG 96-ITF-RS485C | M51911 |
| CVM-NRG 96-ITF-HAR-RS485-C | M51B11 |



CVM NRG 96 series
Size: 96mm x 96mm

CVM144 range

The CVM Series is a programmable power meter that measures the electrical parameters of balanced or unbalanced three-phase electrical networks. All measurements are true RMS values that are sourced by means of three A.C. voltage inputs & three A.C. Current inputs via .../5Amp current transformers. The CVM Series can display up to 43 different parameters depending requirements & selection of device.



CVM - 144 series
Size: 144mm x 144mm

| CVM-144 Meter Type | Quadrants | Class (V, A) | Communications | Protocol | Harmonics | Item no. |
|------------------------------|-----------|--------------|----------------|------------------|-----------|---------------|
| CVM 144 | 2 | 0.5 | - | - | - | M50600 |
| CVM 144-ITF | 2 | 0.5 | - | - | - | M50700 |
| CVM 144-ITF-HAR | 2 | 0.5 | - | - | U/I (31°) | M50A60 |
| CVM 144-Ethernet-TCP | 2 | 0.5 | Ethernet | Modbus/TCP | - | M50790 |
| CVM 144-ITF-Profibus | 2 | 0.5 | RS485 | Profibus DP | - | M50730 |
| CVM 144-ITF-Johnson Controls | 2 | 0.5 | RS485 | Johnson Controls | - | M50C10 |

RS=RS485
E=Ethernet
P=Profibus
M=Modbus/RTU

Expansion Modules for CVM 144

| Module Type | Digital outputs | Digital inputs | Communications | Protocol | Current leakages / neutral | Item no. |
|-----------------------------------|-----------------|----------------|----------------|------------|----------------------------|---------------|
| CVM 144-C2-Currents Module | 2 | - | - | - | Yes | M51001 |
| CVM 144-RS-485-C2 Module | 2 | - | RS-485 | Modbus/RTU | - | M51010 |
| CVM 144-RS-485-C2-Currents Module | 2 | - | RS-485 | Modbus/RTU | Yes | M51011 |
| CVM 144-RS-485-C2-Digital Module | 2 | 4 | RS-485 | Modbus/RTU | - | M51016 |
| CVM 144-RS-232-C2 Module | 2 | - | RS-232 | Modbus/RTU | - | M51020 |

Ancillary products

Metering



Energy meters - Circutor

Electrical energy meters

The consumption of energy can become difficult to measure in situations of multiple loads & different tariffs. Circutor is able to offer a complete solution.

The product range includes single phase digital & mechanical meters that can measure consumption at pre-determined locations to control each sector of the project. Three phase active & reactive electronic meters are also available for monitoring the different electrical services, or machines that may be installed within the facility.



EDMk-ITF-C2



EMS30C



MK60-LCD



CEP-96



TCP2RS-TCP



Single phase energy meters, direction connection, DIN rail mounting

| Description | Model no. | Item no. |
|--|----------------|---------------|
| EMS30C 1-Phase kW.h 5A (max. 30A) Mechanical 1 Module | EMS30C | M31611 |
| EM 30-C 1-Phase kW.h 5A (max. 30A) Mechanical 2 Module | EM30C | M30811 |
| MK30 M 1-Phase kW.h 30A (max. 60A) Mechanical 4 Module | MK30M | M30110 |
| MK60 M 1-Phase kW.h 60A (max. 120A) Mechanical 4 Module | MK60M | M30210 |
| MK30-LCD 1-Phase kW.h 30A (max. 60A) Digital | MK30-LCD | M30120 |
| MK30-LCD-RS485 1-Phase kW.h 30A (max. 60A) Digital w/ RS485 | MK30-LCD-RS485 | M30121 |
| MK60-LCD 1-Phase kW.h 60 A (max. 120A) Digital | MK60-LCD | M30220 |
| MK60-LCD-RS485 1-Phase kW.h 60A (max. 120A) Digital w/ RS485 | MK60-LCD-RS485 | M30221 |

Three phase energy meters, direction connection, DIN rail mounting

| Description | Tariff | Model no. | Item no. |
|--|--------|---------------------|---------------|
| MKB 363M-400V phase-phase kW.h 63A, Mechanical | 1 | MKB363M | M30310 |
| MKD-ITF-C2 three-ph meter 4 quadrant 40A(mx.120A) Digital | 1 | MKD-ITF-C2 | M33000 |
| MKD-ITF-RS485-I2-C2 three-ph 4 quadrant 40A(mx.120A) Digital + RS485 | 3 | MKD-ITF-RS485-I2-C2 | M33011 |

Three phase energy meters, external current transformers

| Description | Tariff | Model no. | Item no. |
|---|--------|----------------|---------------|
| CEP96 3-ph kW.h Digital Energy Meter.../5A Panel Mount | - | CEP-96 | M30701 |
| EDMk-ITF-C2 3-ph Digital Energy KWh/KVAR DIN Rail | 1 | EDMk-ITF-C2 | M31741 |
| EDM3k-ITF-C2 3-ph Digital Energy Meter KWh/KVARh | 3 | EDM3k-ITF-C2 | M31743 |
| EDMk-ITF-C2 3-ph Digital Energy Meter KWh/KVARh + RS485 | 1 | EDMk-ITF-RS485 | M31751 |
| EDMk Panel Adapter | - | - | M5ZZF1 |

Impulse centralisation units

| Description | Inputs | Model no. | Item no. |
|---|--------|-----------|---------------|
| LM25-M Pulse Concentrator (RS485, Modbus/RTU) | 25 | LM25-M | M31567 |
| LM50-TCP 19200 bps (Ethernet, Modbus/TCP) | 50 | LM50-TCP | M31531 |
| LM50-TCP+ 4800-115200 bps (Ethernet, Modbus/TCP) | 50 | LM50-TCP+ | M31566 |
| LM4I/4O Centralisation Unit 4 inputs/4 outputs + RS485 (Modbus/RTU) | 4I/4O | LM4I/4O-M | M31563 |

Convertors

| Description | Model no. | Item no. |
|---|-----------|---------------|
| TCP2RS Converter RS-232/RS-485 to Ethernet | TCP2RS | M54032 |
| TCP2RS+ Converter RS-232/RS-485 to Ethernet with web server | TCP2RS+ | M54033 |
| USB to RS-485 Converter | USB-TCP | M54040 |

Software

| Description | Model no. | Item no. |
|--|--------------------|---------------|
| Power Studio Energy Monitoring & Control Software (Basic Package) | POWERSTUDIO | M90211 |
| Power Studio Energy Monitoring & Control Software (Full Package) | POWERSTUDIO SCADA | M90231 |
| Power Studio Energy Monitoring & Control Software (Deluxe Version) | POWERSTUDIO DELUXE | M90241 |

Current transformers - Circutor

TC range - Berg range - Classes: 0.5, 1 or 3

The TC range (Berg Range) is specifically designed for use in those places with a limited space, such as situations where there is minimum separation between busbars or circuit breakers.

| A | Burden (VA) | | | Primary window | Size (mm) | Model no. | Item no. |
|-------|-------------|---------|---------|----------------|-----------|-----------|---------------|
| | Class 0,5 | Class 1 | Class 3 | | | | |
| 50/5 | - | - | 1 | | 70 x 46 | TC 4 | M703D5 |
| 60/5 | - | - | 1.25 | PASSING BAR | 70 x 46 | TC 4 | M703D6 |
| 75/5 | - | - | 1.25 | Busbar: | 70 x 46 | TC 4 | M703D7 |
| 100/5 | - | 2 | 3 | 30 x 10 mm | 70 x 46 | TC 4 | M703D8 |
| 125/5 | - | 2.5 | 2.75 | 20 x 10 mm | 70 x 46 | TC 4 | M703D9 |
| 150/5 | 1.5 | 2.5 | 4 | 25 x 5 mm | 70 x 46 | TC 4 | M703DA |
| 200/5 | 2.5 | 5 | 6 | cable: Ø 21 mm | 70 x 46 | TC 4 | M703DB |
| 40/5 | - | - | 1.50 | | 70 x 58 | TC 5 | M70311 |
| 50/5 | - | - | 3.00 | | 70 x 58 | TC 5 | M70312 |
| 60/5 | - | 1.25 | 3.50 | | 70 x 58 | TC 5 | M70313 |
| 75/5 | - | 2 | 3.50 | PASSING BAR | 70 x 58 | TC 5 | M70314 |
| 100/5 | 1.5 | 2.5 | 3.75 | Busbar: | 70 x 58 | TC 5 | M70315 |
| 125/5 | 1.75 | 3.5 | 5.00 | 25 x 5 mm | 70 x 58 | TC 5 | M70316 |
| 150/5 | 2.5 | 3.5 | 5.00 | cable: Ø 20 mm | 70 x 58 | TC 5 | M70317 |
| 200/5 | 3.75 | 5 | 5.00 | | 70 x 58 | TC 5 | M70318 |
| 250/5 | 5 | 7.5 | 7.50 | | 70 x 58 | TC 5 | M70319 |
| 100/5 | - | 1 | 1.5 | | 70 x 58 | TC 5.2 | M70321 |
| 125/5 | - | 1.5 | 2 | | 70 x 58 | TC 5.2 | M70322 |
| 150/5 | 1 | 2 | 2.5 | PASSING BAR | 70 x 58 | TC 5.2 | M70323 |
| 200/5 | 2.5 | 3 | 3.5 | Busbar: | 70 x 58 | TC 5.2 | M70324 |
| 250/5 | 3.5 | 3.75 | 5 | 20 x 12mm, | 70 x 58 | TC 5.2 | M70325 |
| 300/5 | 3.5 | 3.75 | 5 | 25 x 10mm, | 70 x 58 | TC 5.2 | M70326 |
| 400/5 | 3.5 | 5 | 7.5 | 30 x 10mm | 70 x 58 | TC 5.2 | M70327 |
| 500/5 | 5 | 7.5 | 10 | Cable: Ø 22mm | 70 x 58 | TC 5.2 | M70328 |
| 600/5 | 5 | 7.5 | 10 | | 70 x 58 | TC 5.2 | M70329 |
| 100/5 | 1.75 | 3.75 | 7.5 | | 80.5 x 64 | TC 6.2 | M70341 |
| 125/5 | 3.75 | 7.5 | 10.00 | | 80.5 x 64 | TC 6.2 | M70342 |
| 150/5 | 5 | 7.5 | 10.00 | | 80.5 x 64 | TC 6.2 | M70343 |
| 200/5 | 7.5 | 10 | 10.00 | PASSING BAR | 80.5 x 64 | TC 6.2 | M70344 |
| 250/5 | 7.5 | 10 | 15.00 | Busbar: | 80.5 x 64 | TC 6.2 | M70345 |
| 300/5 | 10 | 10 | 15.00 | 30 x 10 mm | 80.5 x 64 | TC 6.2 | M70346 |
| 400/5 | 10 | 10 | 15.00 | cable: Ø 26 mm | 80.5 x 64 | TC 6.2 | M70347 |
| 500/5 | 15 | 15 | 20.00 | | 80.5 x 64 | TC 6.2 | M70348 |
| 600/5 | 15 | 20 | 25.00 | | 80.5 x 64 | TC 6.2 | M70349 |
| 150/5 | 1 | 3.5 | 5.00 | | 80.5 x 64 | TC 6 | M70331 |
| 200/5 | 3.5 | 5 | 7.5 | | 80.5 x 64 | TC 6 | M70332 |
| 250/5 | 5 | 7.5 | 10 | | 80.5 x 64 | TC 6 | M70333 |
| 300/5 | 5 | 7.5 | 10.00 | PASSING BAR | 80.5 x 64 | TC 6 | M70334 |
| 400/5 | 5 | 7.5 | 10.00 | Busbar: | 80.5 x 64 | TC 6 | M70335 |
| 500/5 | 7.5 | 10 | 15.00 | 40 x 10 mm | 80.5 x 64 | TC 6 | M70336 |
| 600/5 | 7.5 | 10 | 15.00 | cable: Ø 28 mm | 80.5 x 64 | TC 6 | M70337 |
| 750/5 | 10 | 15 | 20.00 | | 80.5 x 64 | TC 6 | M70338 |
| 800/5 | 10 | 15 | 20.00 | | 80.5 x 64 | TC 6 | M70339 |



TC 4



TC 5



TC 5.2



TC 6.2



TC 6

Current transformers - Circutor

TC range - Berg range - Classes: 0.5, 1 or 3

The TC range (Berg Range) is specifically designed for use in those places with a limited space, such as situations where there is minimum separation between busbars or circuit breakers.



TC 8



TC 10



TC 12



P19921



M79951

| A | Burden (VA) | | | Primary Window | Size (mm) | Model no. | Item no. | |
|--------|-------------|---------|---------|--|--|-----------|---------------|---------------|
| | Class 0,5 | Class 1 | Class 3 | | | | | |
| 200/5 | 1 | 2.5 | 5 | PASSING BAR Busbar: 60 x 12 mm cable: Ø 44 mm | 102 x 84.5 | TC 8 | M7036C | |
| 300/5 | 2.5 | 5 | 7.5 | | 102 x 84.5 | TC 8 | M7036B | |
| 400/5 | 5 | 7.5 | 10.00 | | 102 x 84.5 | TC 8 | M70361 | |
| 500/5 | 7.5 | 10 | 15.00 | | 102 x 84.5 | TC 8 | M70362 | |
| 600/5 | 10 | 15 | 20.00 | | 102 x 84.5 | TC 8 | M70363 | |
| 750/5 | 15 | 20 | 25.00 | | 102 x 84.5 | TC 8 | M70364 | |
| 800/5 | 15 | 20 | 30.00 | | 102 x 84.5 | TC 8 | M70365 | |
| 1000/5 | 15 | 20 | 30.00 | | 102 x 84.5 | TC 8 | M70366 | |
| 1200/5 | 15 | 20 | 30.00 | | 102 x 84.5 | TC 8 | M70367 | |
| 1500/5 | 15 | 20 | 30.00 | | 102 x 84.5 | TC 8 | M70368 | |
| 1600/5 | 15 | 20 | 30.00 | | 102 x 84.5 | TC 8 | M70369 | |
| 200/5 | 1 | 2.5 | 5 | | PASSING BAR Busbar: 80 x 30mm cable: Ø 63mm | 130 x 108 | TC 10 | M7037F |
| 300/5 | 2.5 | 5 | 7.5 | | | 131 x 108 | TC 10 | M7037D |
| 400/5 | 2.5 | 5 | 7.5 | 132 x 108 | | TC 10 | M7037G | |
| 500/5 | 5 | 7.5 | 10 | 133 x 108 | | TC 10 | M7037B | |
| 600/5 | 7.5 | 10 | 15 | 134 x 108 | | TC 10 | M7037C | |
| 800/5 | 7.5 | 10 | 15 | 135 x 108 | | TC 10 | M70372 | |
| 1000/5 | 10 | | | 130 x 108 | | TC 10 | M70373 | |
| 1200/5 | 10 | | | 130 x 108 | | TC 10 | M70374 | |
| 1600/5 | 15 | | | 130 x 108 | | TC 10 | M70376 | |
| 2000/5 | 15 | | | 130 x 108 | | TC 10 | M70377 | |
| 2500/5 | 15 | | | 130 x 108 | | TC 10 | M70378 | |
| 3000/5 | 15 | | | 130 x 108 | | TC 10 | M70379 | |
| 800/5 | 10 | 15 | 20 | PASSING BAR Busbar: 3x100x10mm | | 150 x 129 | TC 12 | M7038B |
| 1000/5 | 10 | 15 | 20 | | 151 x 129 | TC 12 | M70381 | |
| 1200/5 | 10 | 15 | 20 | | 152 x 129 | TC 12 | M70382 | |
| 1250/5 | 10 | 15 | 20 | | 153 x 129 | TC 12 | M7038D | |
| 1500/5 | 10 | 20 | 30 | | 154 x 129 | TC 12 | M70383 | |
| 1600/5 | 15 | | | | 150 x 129 | TC 12 | M70384 | |
| 2000/5 | 15 | | | | 150 x 129 | TC 12 | M70385 | |
| 2500/5 | 20 | | | | 150 x 129 | TC 12 | M70386 | |
| 3000/5 | 30 | | | | 150 x 129 | TC 12 | M70387 | |
| 4000/5 | 35 | | | | 150 x 129 | TC 12 | M70388 | |

Current transformer - accessories

| Description | Item no. |
|---|---------------|
| Accessory to mount the TC5, TC5.2, TC6, TC6.2 transformers on a DIN rail | P19921 |
| Accessory to seal the secondary side terminal on the TC type transformers | M79951 |

Current transformers - Circutor

TP range- current transformers - split core

Circutor offer the most comprehensive range of Split C.T.s in providing flexibility for upgrading or retrofitting into existing switchboard assemblies.

| A | Burden & accuracy | Primary window | Size (mm) | Model No. | Item no. |
|--------|-------------------|---|-----------|-----------|---------------|
| 100/5 | 1.5 VA class 3 | PASSING BAR Busbar: 20 x 30mm | 110 x 89 | TP - 23 | M70111 |
| 150/5 | 2 VA class 3 | | 110 x 89 | TP - 23 | M70112 |
| 200/5 | 1.5 VA class 1 | | 110 x 89 | TP - 23 | M70113 |
| 250/5 | 2 VA class 1 | | 110 x 89 | TP - 23 | M70114 |
| 300/5 | 1.5 VA class 0.5 | | 110 x 89 | TP - 23 | M70115 |
| 400/5 | 2.5 VA class 0.5 | | 110 x 89 | TP - 23 | M70116 |
| 250/5 | 1 VA class 0.5 | PASSING BAR Busbar: 50 x 80mm | 145 x 114 | TP - 58 | M70121 |
| 300/5 | 1.5 VA class 0.5 | | 145 x 114 | TP - 58 | M70122 |
| 400/5 | 1.5 VA class 0.5 | | 145 x 114 | TP - 58 | M70123 |
| 500/5 | 2.5 VA class 0.5 | | 145 x 114 | TP - 58 | M70124 |
| 600/5 | 2.5 VA class 0.5 | | 145 x 114 | TP - 58 | M70125 |
| 750/5 | 3 VA class 0.5 | | 145 x 114 | TP - 58 | M70126 |
| 800/5 | 3 VA class 0.5 | | 145 x 114 | TP - 58 | M70127 |
| 1000/5 | 5 VA class 0.5 | | 145 x 114 | TP - 58 | M70128 |
| 250/5 | 1 VA class 0.5 | PASSING BAR Busbar: 80 x 80mm | 145 x 144 | TP - 88 | M70131 |
| 300/5 | 1.5 VA class 0.5 | | 145 x 144 | TP - 88 | M70132 |
| 400/5 | 1.5 VA class 0.5 | | 145 x 144 | TP - 88 | M70133 |
| 500/5 | 2.5 VA class 0.5 | | 145 x 144 | TP - 88 | M70134 |
| 600/5 | 2.5 VA class 0.5 | | 145 x 144 | TP - 88 | M70135 |
| 750/5 | 3 VA class 0.5 | | 145 x 144 | TP - 88 | M70136 |
| 800/5 | 3 VA class 0.5 | | 145 x 144 | TP - 88 | M70137 |
| 1000/5 | 5 VA class 0.5 | | 145 x 144 | TP - 88 | M70138 |
| 500/5 | 4 VA class 1 | PASSING BAR Busbar: 80 x 120mm | 185 x 144 | TP - 812 | M70141 |
| 600/5 | 5 VA class 1 | | 185 x 144 | TP - 812 | M70142 |
| 750/5 | 2.5 VA class 0.5 | | 185 x 144 | TP - 812 | M70143 |
| 800/5 | 3 VA class 0.5 | | 185 x 144 | TP - 812 | M70144 |
| 1000/5 | 5 VA class 0.5 | | 185 x 144 | TP - 812 | M70145 |
| 1200/5 | 6 VA class 0.5 | | 185 x 144 | TP - 812 | M70146 |
| 1250/5 | 7 VA class 0.5 | | 185 x 144 | TP - 812 | M70147 |
| 1500/5 | 8 VA class 0.5 | | 185 x 144 | TP - 812 | M70148 |
| 1000/5 | 10 VA class 0.5 | PASSING BAR Busbar: 80 x 160mm | 245 x 184 | TP - 816 | M70151 |
| 1500/5 | 15 VA class 0.5 | | 245 x 184 | TP - 816 | M70152 |
| 2000/5 | 15 VA class 0.5 | | 245 x 184 | TP - 816 | M70153 |
| 2500/5 | 15 VA class 0.5 | | 245 x 184 | TP - 816 | M70154 |
| 3000/5 | 20 VA class 0.5 | | 245 x 184 | TP - 816 | M70155 |
| 4000/5 | 20 VA class 0.5 | | 245 x 184 | TP - 816 | M70156 |
| 5000/5 | 20 VA class 0.5 | | 245 x 184 | TP - 816 | M70157 |



TP-23



TP-58



TP-88



TP-812



TP-816

Industrial earth leakage protection

Multi function LCD electronic industrial earth leakage protection relays

Multifunction electronic industrial earth leakage protection relay that can offer protection, prevention & continuity. It utilises WG transformers, can be Din rail or panel mounted & comes with LCD display & programmable sensitivity/delay.



RGU - 10

MiS = micro second

| Type | True RMS value | Din Rail/Panel | Class A Super immunised | Disconnection Between 80-100% of leakage current | High Frequency Filtering | 8/20 MiS at 5KA 1.2/50 MiS at 5KV | Programmable Sensitivity/Delay | RS485 Communication | Manual Reset Power Failure | Item no. |
|---------|----------------|----------------|-------------------------|--|--------------------------|-----------------------------------|--------------------------------|---------------------|----------------------------|----------|
| RGU-10 | • | • | • | • | - | • | • | - | • | 3 P11941 |
| RGU-10C | • | • | • | • | • | • | • | • | • | 3 P11944 |

Accessory for panel mounting M5ZZF1.

WG earth leakage transformers (supports RGU-10 Relay)

WG series can cover diameter range of 20mm up to 210mm protected against harmonics & disturbances. They support the RGU-10 relays.



WG Series

| Type | Description | Item no. |
|---------|----------------|----------|
| WGS-20 | 20mm Diameter | P10131 |
| WGS-30 | 30mm Diameter | P10132 |
| WGS-35 | 35mm Diameter | P10111 |
| WGS-70 | 70mm Diameter | P10112 |
| WGS-105 | 105mm Diameter | P10113 |
| WGS-140 | 140mm Diameter | P10114 |
| WGS-210 | 210mm Diameter | P10115 |

Electronic earth leakage relays with external transformer WN Series

An electronic industrial earth leakage protection relay that can offer protection & prevention. It is DIN Rail mounted & utilises external transformers WN Series.



RN Relay

| Type | True RMS value | Sensitivity F=Fixed A=Adjustable | Delay F=Fixed A=Adjustable | Class A Super Immunised | High Frequency Filtering | Leakage Indication (LED) | Manual Reset Power Failure | External Test | 2 Modules Din Rail | Leakage Indication via LED | Multi Range Power Supply | Item no. |
|-------|----------------|----------------------------------|----------------------------|-------------------------|--------------------------|--------------------------|----------------------------|---------------|--------------------|----------------------------|--------------------------|----------|
| RN-10 | • | A | A | • | • | • | • | • | • | • | • | P12140 |

WN earth leakage transformers (supports RN Relay)

WN series Leakage Transformers support the RN Relays covering diameters from 20mm up to 210mm.



WNS/WN

| Type | Description | Item no. |
|--------|----------------|----------|
| WN-140 | 140mm Diameter | P10214 |
| WN-210 | 210mm Diameter | P10215 |

Feed-through terminals

Feed-through connection terminals (suitable for 35mm DIN rail & 32mm G rail)

| Type | 2.5mm | 4mm |
|---------------------------------|---|--|
| Current | 26 amps - 750V / 24 amps - 800V | 34 amps - 750V / 32 amps - 800V |
| Width / Strip Length / Screw | 5mm / 7mm / M2.5 | 6mm / 12mm / M3 |
| Cable | 0.2mm-2.5mm stranded / 0.2mm -4mm solid | 0.2mm-4mm stranded / 0.2mm-6mm solid |



M 2.5



M 2.5

| Description | Reference | 2.5mm Item no. | Description | Reference | 4mm Item no. |
|-------------------------------|-----------|--------------------|-------------------------------|-----------|--------------------|
| 2.5mm terminal beige | 1296.0 | RK2.5PA | 4mm terminal beige | 1001.2 | RK2.5-4PA |
| 2.5mm terminal beige 10P | 1297.2 | KBL2.5PA | 4mm terminal beige 10P | 1002.2 | KBL2.5-4PA |
| End plate beige | 2001.2 | AP2.5-10PA | End section beige | 2001.2 | AP2.5-10PA |
| Partition beige | 2002.2 | TW2.5-10PA | Partition beige | 2002.2 | TW2.5-10PA |
| 2.5mm terminal red | 1296.9 | RK2.5PAR | 4mm terminal red | 1001.9 | RK2.5-4PAR |
| End plate red | 2001.9 | AP2.5-10PAR | End plate red | 2001.9 | AP2.5-10PAR |
| 2.5mm terminal white | 1296.7 | RK2.5PAW | 4mm terminal white | 1001.7 | RK2.5-4PAW |
| End plate white | 2001.7 | AP2.5-10PAW | End plate white | 2001.7 | AP2.5-10PAW |
| 2.5mm terminal blue | 1296.5 | RK2.5PAB | 4mm terminal blue | 1001.5 | RK2.5-4PAB |
| End plate Blue | 2001.5 | AP2.5-10PAB | End plate Blue | 2001.5 | AP2.5-10PAB |
| Partition blue | 2002.5 | TW2.5-10PAB | Partition blue | 2002.5 | TW2.5-10PAB |
| Cross Connection 2P bare | 2567.0 | Q.22.5 | Cross Connection 2P insul. | 2740.2 | QI24 |
| Cross Connection 3P bare | 2568.0 | Q.32.5 | Cross Connection 3P insul. | 2741.2 | QI34 |
| Cross Connection 10P bare | 2570.0 | Q.102.5 | Cross Connection 10P insul. | 2743.2 | QI104 |
| Cross Connection 100P bare | 2152.0 | Q.0.5m | Cross Connection 83P bare | 2153.0 | Q.0.5m4 |
| Cover (60mm) | 2499.0 | ADQ | Cover (60mm) | 2499.0 | ADQ |
| External jumper insulated 10P | 2029.0 | AQI10/5/15 | External jumper insulated 10P | 2143.0 | AQI10/6/17 |
| - | - | - | External jumper insulated 75P | 2480.0 | AQI75/6/17 |
| Separator | 2566.2 | TRS3PA | Separator | 2003.2 | TRS |
| Test socket | 2075.0 | STB8.5/2.3 | Test socket | 2006.0 | STB14/2.3 |
| Test plug | 2007.0 | PS2.3 | Test plug | 2007.0 | PS2.3 |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

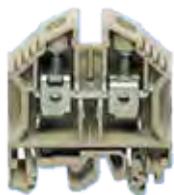
For marking systems, refer to 346

Ancillary products

Wiring accessories



M 4



M 5

Feed-through terminals

Feed-through connection terminals
(suitable for 35mm DIN rail & 32mm G rail)

| Type | 10mm | 16mm |
|------------------------------|---|--|
| Current | 61 amps - 750V / 57 amps - 800V | 82 amps - 750V / 76 amps - 800V |
| Width / Strip Length / Screw | 8mm / 12mm / M4 | 12mm / 15mm / M5 |
| Cable | 0.2mm-10mm stranded / 0.2mm -10mm solid | 2.5mm-16mm stranded / 2.5mm-25mm solid |

| Description | Reference | 10mm Item no. | Description | Reference | 16mm Item no. |
|------------------------------|-----------|--------------------|-----------------------------|-----------|----------------|
| 10mm terminal beige * | 1005.2 | RK6-10PA | 16mm terminal beige * | 1050.2 | RK16PA |
| 10mm terminal beige 10P * | 1006.2 | KBL6-10PA | - | - | - |
| End plate beige * | 2001.2 | AP2.5-10PA | End plate beige * | 2104.2 | AP16PA |
| Partition beige * | 2002.2 | TW2.5-10PA | Partition beige * | 2105.2 | TW16PA |
| 10mm terminal red * | 1005.9 | RK6-10PAR | | | |
| End plate red * | 2001.9 | AP2.5-10PAW | | | |
| 10mm terminal white * | 1005.7 | RK6-10PAW | | | |
| End plate white * | 2001.7 | AP2.5-10PAR | | | |
| 6mm terminal blue * | 1005.5 | RK6-10PAB | 16mm terminal blue * | 1050.5 | RK16PAB |
| End plate Blue * | 2001.5 | AP2.5-10PAB | End plate Blue * | 2104.5 | AP16PAB |
| Partition blue * | 2002.5 | TW2.5-10PAB | Partition blue * | 2105.5 | TW16PAB |
| Cross Connection 2P insul. | 2750.2 | QI210 | Cross Connection 2P bare | 2112.0 | Q.216 |
| Cross Connection 3P insul. | 2751.2 | QI310 | Cross Connection 3P bare | 2113.0 | Q.316 |
| Cross Connection 10P insul. | 2753.2 | QI1010 | Cross Connection 10P bare | 2115.0 | Q.1016 |
| Cover s (60mm) | 2499.0 | ADQ | Cover 1P | 2819.0 | AD1/12 |
| External jumper insulated 2P | 2067.0 | AQI2/8/11 | | | |
| External jumper insulated 3P | 2068.0 | AQI3/8/11 | | | |
| Separator | 2003.2 | TRS | | | |
| Test Socket | 2050.0 | STB14/4 | | | |
| Test Plug | 2051.0 | PS4 | | | |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35KST | End clamp TS35 (9.5mm) | 2828.0 | ES35KST |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346

* Other colours available on request.

Feed-through terminals

Feed-through connection terminals
(suitable for 35mm DIN rail & 32mm G rail)

| Type | 35mm | 50mm |
|-------------------------------------|---|--|
| Current | 135 amps - 750V / 125 amps - 800V | 168 amps - 1000V |
| Width / Strip Length / Screw | 16mm / 20mm / M5 all. | 20mm / 27mm / M8 all. |
| Cable | 2.5mm-35mm stranded / 2.5mm -50mm solid | 25mm-50mm stranded / 16mm-50mm solid |



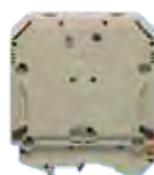
M 6



M 6

| Description | Reference | 35mm Item no. | Description | Reference | 50mm Item no. |
|-----------------------------|-----------|----------------|-----------------------------|-----------|---------------------|
| 35mm terminal beige | 1494.2 | RK35PA | 50mm terminal beige | 1120.2 | RK50PA |
| End plate beige | 2116.2 | AP35PA | End plate beige | - | Not Required |
| Partition beige | 2117.2 | TW35PA | Partition grey | - | Not Required |
| 35mm terminal blue | 1494.5 | RK35PAB | 35mm terminal blue | 1120.5 | RK50PAB |
| End plate Blue | 2116.5 | AP35PAB | End section Blue | - | Not Required |
| Partition blue | 2117.5 | TW35PAB | - | - | - |
| Cross Connection 2P bare | 2164.0 | Q.235 | Cross Connection 2P insul. | 2763.2 | AQI250 |
| Cross Connection 3P bare | 2165.0 | Q.335 | Cross Connection 3P bare | 2764.2 | AQI350 |
| Cross Connection 10P bare | 2167.0 | Q.1035 | | | |
| Cover 1P | 2820.0 | AD1/16 | | | |
| Test Socket | 2127.0 | STB16/4 | | | |
| Test Plug | 2051.0 | PS4 | | | |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35KST | End clamp TS35 (9.5mm) | 2828.0 | ES35KST |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

| Type | 95mm | 150mm |
|-------------------------------------|---|--|
| Current | 250 amps - 1000V | 355 amps - 1000V |
| Width / Strip Length / Screw | 25mm / 30mm / M8 all | 31mm / 38mm / M10 all. |
| Cable | 35mm-95mm stranded / 25mm -95mm solid | 35mm-150mm stranded / 35mm-185mm solid |



M 8



M 10

| Description | Reference | 95mm Item no. | Description | Reference | 150mm Item no. |
|-----------------------------|-----------|---------------------|-----------------------------|-----------|---------------------|
| 95mm terminal beige | 1122.2 | RK95PA | 150mm terminal beige | 1124.2 | RK150PA |
| End plate | - | Not Required | End plate | - | Not Required |
| Partition | - | Not Required | Partion | - | Not Required |
| 95mm terminal blue | 1122.5 | RK95PAB | 150mm terminal blue | 1124.5 | RK150PAB |
| End plate | - | Not Required | End Plate | - | Not Required |
| Partition | - | Not Required | - | - | - |
| Cross Connection 2P insul. | 2765.2 | AQI295 | Cross Connection 2P insul. | 2767.2 | AQI2150 |
| Cross Connection 3P bare | 2766.2 | AQI395 | Cross Connection 3P bare | 2768.2 | AQI3150 |
| - | - | - | Warning Tag | 2806.0 | AD1/150 |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

Ancillary products

Wiring accessories

Feed-through terminals

Feed-through connection terminals
(suitable for 35mm DIN rail & 32mm G rail)



M 10

| | | |
|-------------------------------------|---|--|
| Type | 240mm | |
| Current | 453 amps - 1000V | HSK High Current Terminals (available on request). |
| Width / Strip Length / Screw | 36mm / 38mm / M10 all. | |
| Cable | 70mm-240mm stranded / 70mm -240mm solid | |

| Description | Reference | 240mm Item no. |
|-----------------------------|-----------|---------------------|
| 240mm terminal beige | 1126.2 | RK240PA |
| End plate | - | Not Required |
| Partition | - | Not Required |
| 240mm terminal blue | 1126.5 | RK240PAB |
| End Plate | - | Not Required |
| Cross Connection 2P insul. | 2769.2 | AQI2240 |
| Cross Connection 3P bare | 2770.2 | AQI3240 |
| Warning Tag | 2808.0 | AD1/240 |
| End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

Earth terminals

Through-type earth terminals (yellow/green)
(suitable for 35mm DIN rail)



M 2.5



M 3

| | | |
|-------------------------------------|---|--------------------------------------|
| Type | 2.5mm | 4mm |
| Width / Strip Length / Screw | 6mm / 10mm / M2.5 | 8mm / 12mm / M3 |
| Cable | 0.2mm-2.5mm stranded / 0.2mm -4mm solid | 0.2mm-4mm stranded / 0.2mm-6mm solid |

| Description | Reference | 2.5mm Item no. | Description | Reference | 4mm Item no. |
|----------------------|-----------|----------------|--------------------|-----------|--------------|
| 2.5mm Earth terminal | 1056.2 | SL2535 | 4mm Earth terminal | 1212.2 | SL435 |



M 4



M 5

| | | |
|-------------------------------------|--|--|
| Type | 10mm | 16mm |
| Width / Strip Length / Screw | 10mm / 12mm / M4 | 12mm / 12mm / M5 |
| Cable | 0.2mm-10mm stranded / 0.2mm-10mm solid | 2.5mm-16mm stranded / 2.5mm-25mm solid |

| Description | Reference | 10mm Item no. | Description | Reference | 16mm Item no. |
|---------------------|-----------|---------------|---------------------|-----------|---------------|
| 10mm Earth terminal | 1213.2 | SL1035 | 16mm Earth terminal | 1197.2 | SL1635 |

Earth terminals

Through-type earth terminals (yellow/green)
(suitable for 35mm DIN rail)

| | |
|-------------------------------------|--|
| Type | 35mm |
| Width / Strip Length / Screw | 16mm / 20mm / M6 |
| Cable | 2.5mm-35mm stranded / 2.5mm-50mm solid |



M 6

| Description | Reference | 35mm Item no. |
|---------------------|-----------|---------------|
| 35mm Earth terminal | 1199.2 | SL3535 |

For mounting rails, refer to page 347.

| | |
|-----------------------------|---|
| Type | 2.5mm, Duo Earth Double |
| Width / Strip Length | 6mm / 10mm |
| Cable | 0.2mm-2.5mm stranded / 0.2mm-0.4mm solid |



M 3



M 3

| Description | Reference | 2.5mm Item no. | Description | Reference | 2.5mm Item no. |
|----------------|-----------|------------------|----------------|-----------|------------------|
| 2.5mm terminal | 1060.2 | SL2.535ZR | 2.5mm terminal | 1062.2 | SL2.535ZR |
| | | | End section | 2575.1 | AP2.5RLPA |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

Double deck/duo terminals

Double deck through-type terminals
(suitable for 35mm DIN rail & 32mm G rail)

| | | |
|-------------------------------------|---|---|
| Type | 4mm without Bridge | 4mm with Bridge |
| Current | 34 amps - 500V | 34 amps |
| Width / Strip Length / Screw | 6mm / 9mm / M3 | 6mm / 9mm / M3 |
| Cable | 0.2mm-4mm stranded / 0.2mm-4mm solid | 0.2mm-4mm stranded / 0.2mm-4mm solid |



M 3



M 3

| Description | Reference | 4mm Item no. | Description | Reference | 4mm Item no. |
|-----------------------------|-----------|----------------|-----------------------------|-----------|-----------------|
| 4mm terminal beige | 1020.2 | RKD4PA | 4mm terminal beige | 1027.2 | RKD4SVPA |
| End section beige | 2101.2 | AP4PA | End section beige | 2101.2 | AP4PA |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

Ancillary products

Wiring accessories

Double deck/duo terminals

Duo through-type connection terminals
(suitable for 35mm DIN rail & 32mm G rail)



| Type | 4mm 1in/2out Connection | 4mm 2in/2out Connection |
|----------------------|---------------------------------------|---------------------------------------|
| Current | 26 amps - 500V | 26 amps - 500V |
| Width / Strip Length | 6mm / 12mm | 6mm / 9mm |
| Cable | 0.2mm-4mm stranded / 0.2mm -6mm solid | 0.2mm-4mm stranded / 0.2mm -6mm solid |

| Description | Reference | 4mm Item no. | Description | Reference | 4mm Item no. |
|-------------------------------|-----------|--------------------|-------------------------------|-----------|---------------------|
| 4mm terminal beige * | 1210.2 | RK2.5-4ZRPA | 4mm terminal beige * | 1211.2 | RK2.5-4ZRLPA |
| End section beige * | 2574.2 | AP2.5RPA | End section beige * | 2575.2 | AP2.5RLPA |
| Cross Connection 2P insul. | 2740.2 | QI24 | Cross Connection 2P insul. | 2740.2 | QI24 |
| Cross Connection 3P insul. | 2741.2 | QI34 | Cross Connection 3P insul. | 2741.2 | QI34 |
| Cross Connection 10P insul. | 2743.2 | QI104 | Cross Connection 10P insul. | 2743.2 | QI104 |
| Cross Connection 83P bare | 2153.0 | Q.0.5m | Cross Connection 83P bare | 2153.0 | Q.0.5m |
| Cover s (60mm) | 2499.0 | ADQ | Cover s (60mm) | 2499.0 | ADQ |
| External jumper insulated 10P | 2029.0 | AQI10/5/15 | External jumper insulated 10P | 2143.0 | AQI10/6/17 |
| - | - | - | External jumper insulated 75P | 2480.0 | AQI75/6/17 |
| Separator | 2566.2 | TRS3PA | Separator | 2003.2 | TRS |
| Test Socket | 2075.0 | STB8.5/2.3 | Test Socket | 2006.0 | STB14/2.3 |
| Test Plug | 2007.0 | PS2.3 | Test Plug | 2007.0 | PS2.3 |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

*Blue on Request.

Disconnect terminals

Disconnect terminals
(suitable for 35mm DIN rail & 32mm G rail)



| Type | 4mm without test socket | 4mm with LH & RH test sockets |
|----------------------|---------------------------------------|--------------------------------------|
| Current | 10 amps | 35 amps |
| Width / Strip Length | 6mm / 8mm | 6mm |
| Cable | 0.2mm-4mm stranded / 0.2mm -6mm solid | 0.5mm-4mm stranded / 0.5mm-6mm solid |

| Description | Reference | 4mm Item no. | Description | Reference | 4mm Item no. |
|-----------------------------|-----------|-----------------|-----------------------------|-----------|--------------------|
| 4mm terminal beige | 1390.2 | TRK1.5PA | 4mm terminal beige | 1391.2 | TRK1.5STBPA |
| External Jumper 2p | 2064.0 | AQ2 | | | |
| External Jumper 3p | 2065.0 | AQ3 | | | |
| External Jumper 4p | 2066.0 | AQ4 | | | |
| Test Plug | 2007.0 | PS2.3 | | | |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

Disconnect terminals

Disconnect terminals
(suitable for 35mm DIN rail & 32mm G rail)

| Type | 4mm without test sockets | 4mm |
|----------------------|---|--|
| Current | 10 / 15 amps - 300 / 600V | 34 / 15 amps - 300 / 600V |
| Width / Strip Length | 6mm / 8mm | 8mm / 9mm |
| Cable | 0.2mm-4mm stranded / 0.2mm-4mm solid | 0.2mm-4mm stranded / 0.2mm -4mm solid |



| Description | Reference | 4mm Item no. | Description | Reference | 4mm Item no. |
|-----------------------------|-----------|--------------------|-----------------------------|-----------|----------------|
| 4mm terminal beige | 1394.2 | TRK1.5DSPA | 4mm terminal beige | 2193.2 | TRK2KPA |
| Plug (spare) | 1403.2 | DS1TRK1.5 | End plate beige | 2046.2 | APSI1PA |
| Diode Plug 1A | 1401.2 | DS1TRK1.51A | | | |
| Diode Plug with Bridge | 1400.2 | DS1TRK1.5B | | | |
| External Jumper 2p | 2064.0 | AQ2 | End clamp Economy TS35 | 2005.2 | ES35PA |
| External Jumper 3p | 2065.0 | AQ3 | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| External Jumper 4p | 2066.0 | AQ4 | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |
| Test Plug | 2007.0 | PS2.3 | | | |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.

| Type | 4mm with RH & LH test sockets |
|----------------------|--------------------------------------|
| Current | 10 / 15 amps - 300 / 600V |
| Width / Strip Length | 6mm / 8mm |
| Cable | 0.2mm-4mm stranded / 0.2mm-4mm solid |

| Description | Reference | 4mm Item no. |
|--------------------|-----------|----------------------|
| 4mm terminal beige | 1395.2 | TRK1.5STBDSPA |



Ancillary products

Wiring accessories



M 4



M 4

Fuse terminals

Fuse terminals (suitable for 35mm DIN Rail & 32mm G Rail)

| Type | 10mm 5 x 20mm / 5 X 25mm | 10mm 6.3mm x 32mm |
|-------------------------|---|---|
| Width / Strip Length | 8mm / 9mm | 6mm / 9mm |
| Cable | 0.2mm-10mm stranded / 0.2mm-10mm solid | 0.2mm-10mm stranded / 0.2mm-10mm solid |

| Description | Reference | 10mm Item no. | Description | Reference | 10mm Item no. |
|-----------------------------|-----------|---------------------|----------------|-----------|------------------|
| Terminal beige | 1101.2 | SIK10PA | Terminal beige | 1102.2 | SIK10ZPA |
| LED - 12VDC / 24VAC | 1113.2 | SSTSIKLED12 | | | |
| LED - 30VDC / 60VAC | 1114.2 | SSTSIKLED30 | | | |
| LED - 60VDC / 120VAC | 1115.2 | SSTSIKLED60 | | | |
| LED - 115VDC / 230VAC | 1116.2 | SSTSIKLED115 | | | |
| End clamp Economy TS35 | 2005.2 | ES35PA | | | |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | | | |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | | | |
| Fuses to suit: | | | | | |
| 5 x 25mm: | | | | | |
| 1A | 2096.0 | SIK251A | | | |
| 2A | 2097.0 | SIK252A | | | |
| 4A | 2098.0 | SIK254A | | | |
| 6.3A | 2099.0 | SIK256.3A | | | |
| 5 x 20mm: | | | | | |
| 1A | 2406.0 | SIK201A | | | |
| 2A | 2407.0 | SIK202A | | | |
| 4A | 2408.0 | SIK204A | | | |
| 6.3A | 2409.0 | SIK206.3A | | | |



M 3



M 4

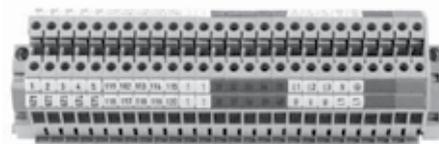
Fuse terminals (suitable for 35mm DIN Rail)

| Type | 4mm 5mm X 20mm/25mm | 10mm 5mm X 20mm/25mm |
|-------------------------|---|---|
| Width / Strip Length | 8mm / 9mm | 12mm / 12mm |
| Cable | 0.2mm-4mm stranded / 0.2mm-4mm solid | 0.2mm-10mm stranded / 0.2mm-10mm solid |

| Description | Reference | 4mm Item no. | Description | Reference | 10mm Item no. |
|-----------------------------|-----------|-----------------|-----------------------------|-----------|------------------|
| 4mm terminal | 2190.2 | STK1PA | 10mm terminal | 1092.6 | SK135 |
| End section | 2046.2 | APS11PA | End section | 2047.6 | APSK1KRG |
| End clamp Economy TS35 | 2005.2 | ES35PA | End clamp Economy TS35 | 2005.2 | ES35PA |
| End clamp TS35 (9.5mm) | 2828.0 | ES35SKT | End clamp TS35 (9.5mm) | 2828.0 | ES35SKT |
| End clamp metal TS35 (11mm) | 2761.9 | HES35ST | End clamp metal TS35 (11mm) | 2761.9 | HES35ST |

For marking systems, refer to page 346. For mounting rails, refer to page 347.
For fuses see above.

Marking tags



Terminal SB marking tag branches (each branch with 10 tags)

| Nos. | Reference | 5mm width, Item no. * | Reference | 6mm width, Item no. | Reference | 8mm width, Item no. |
|----------|---------------|--------------------------|---------------|------------------------|---------------|------------------------|
| 1 - 10 | 2433.0/1-10 | SB510FS1-10 | 2037.0/1-10 | SB610FS1-10 | 2942.0/1-10 | SB810FS1-10 |
| 11 - 20 | 2433.0/11-20 | SB510FS11-20 | 2037.0/11-20 | SB610FS11-20 | 2942.0/11-20 | SB810FS11-20 |
| 21 - 30 | 2433.0/21-30 | SB510FS21-30 | 2037.0/21-30 | SB610FS21-30 | 2942.0/21-30 | SB810FS21-30 |
| 31 - 40 | 2433.0/31-40 | SB510FS31-40 | 2037.0/31-40 | SB610FS31-40 | 2942.0/31-40 | SB810FS31-40 |
| 41 - 50 | 2433.0/41-50 | SB510FS41-50 | 2037.0/41-50 | SB610FS41-50 | 2942.0/41-50 | SB810FS41-50 |
| 51 - 60 | 2433.0/51-60 | SB510FS51-60 | 2037.0/51-60 | SB610FS51-60 | 2942.0/51-60 | SB810FS51-60 |
| 61 - 70 | 2433.0/61-70 | SB510FS61-70 | 2037.0/61-70 | SB610FS61-70 | 2942.0/61-70 | SB810FS61-70 |
| 71 - 80 | 2433.0/71-80 | SB510FS71-80 | 2037.0/71-80 | SB610FS71-80 | 2942.0/71-80 | SB810FS71-80 |
| 81 - 90 | 2433.0/81-90 | SB510FS81-90 | 2037.0/81-90 | SB610FS81-90 | 2942.0/81-90 | SB810FS81-90 |
| 91 - 100 | 2433.0/91-100 | SB510FS91-100 | 2037.0/91-100 | SB610FS91-100 | 2942.0/91-100 | SB810FS91-100 |
| Blank | 2430.0 | SB510 | 2035.0 | SB610 | 2940.0 | SB810 |

* Tag quantity - price is for one strip of 10 tags.



AS310 Marking branches white polyamide with Black print (colours available on request).

Terminal AS marking tag branches (each strip with 10 tags)

| Description | Reference | Item no. * | Description | Reference | Item no. |
|-------------|-----------|-----------------|-------------|--------------|---------------------|
| Letter A | 2573.0-A | AS310G-A | Letter O | 2573.0-O | AS310G-O |
| Letter B | 2573.0-B | AS310G-B | Letter P | 2573.0-P | AS310G-P |
| Letter C | 2573.0-C | AS310G-C | Letter Q | 2573.0-Q | AS310G-Q |
| Letter D | 2573.0-D | AS310G-D | Letter R | 2573.0-R | AS310G-R |
| Letter E | 2573.0-E | AS310G-E | Letter S | 2573.0-S | AS310G-S |
| Letter F | 2573.0-F | AS310G-F | Letter T | 2573.0-T | AS310G-T |
| Letter G | 2573.0-G | AS310G-G | Letter U | 2573.0-U | AS310G-U |
| Letter H | 2573.0-H | AS310G-H | Letter V | 2573.0-V | AS310G-V |
| Letter I | 2573.0-I | AS310G-I | Letter W | 2573.0-W | AS310G-W |
| Letter J | 2573.0-J | AS310G-J | Letter X | 2573.0-X | AS310G-X |
| Letter K | 2573.0-K | AS310G-K | Letter Y | 2573.0-Y | AS310G-Y |
| Letter L | 2573.0-L | AS310G-L | Letter Z | 2573.0-Z | AS310G-Z |
| Letter M | 2573.0-M | AS310G-M | Letter + | 2573.0-PLUS | AS310G-PLUS |
| Letter N | 2573.0-N | AS310G-N | Letter - | 2573.0-MINUS | AS310G-MINUS |

| Description | Reference | Item no. * | Description | Reference | Item no. |
|-----------------------|-----------|-----------------|-------------------|-----------|--------------|
| Nos. Sequence 0.....9 | 2572.0 | | Tag Mounting Clip | | |
| No .1 | 2573.0-1 | AS310G-1 | 3 way 9.5mm | 2616.0 | SCHT3 |
| No .2 | 2573.0-2 | AS310G-2 | 4 way 12.5mm | 2617.0 | SCHT4 |
| No. 3 | 2573.0-3 | AS310G-3 | 5 way 15.8mm | 2618.0 | SCHT5 |
| No. 4 | 2573.0-4 | AS310G-4 | 6 way 19mm | 2619.0 | SCHT6 |
| No. 5 | 2573.0-5 | AS310G-5 | | | |
| No. 6 | 2573.0-6 | AS310G-6 | | | |
| No. 7 | 2573.0-7 | AS310G-7 | | | |
| No. 8 | 2573.0-8 | AS310G-8 | | | |
| No. 9 | 2573.0-9 | AS310G-9 | | | |
| No. 0 | 2573.0-0 | AS310G-0 | | | |
| Blank | 2571.0 | AS310 | | | |

* Tag quantity - price is for one strip of 10 tags.

Ancillary products

Wiring accessories



TS3575



ES35PA



HES35ST

DIN rail & ducting

Terminal accessories

| Description | Reference | Item no. |
|---------------------------------|-----------|------------------|
| Mounting Rails (2 Metre length) | | |
| 35mm DIN 7.5mm high | 2026.00 | TS357.5US |
| 35mm DIN 7.5mm high slotted | 2094.00 | TS357.5S |
| End Clamps | | |
| End clamp Economy | 2005.20 | ES35PA |
| Type TS35 (35mm) | 2828.0 | ES35SKT |
| End clamp metal (11mm) | 2761.9 | HES35ST |



Wiring duct, surface mounting

Wiring duct available in slotted closed & open or solid wall variations.

- High impact strength
- Self extinguishing 94V - 0 PVC
- Service temperature 850C
- Ducting comes with lids

Slotted - open (2m lengths)

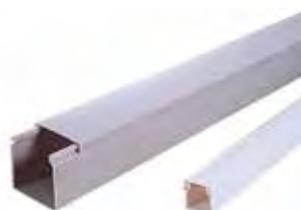
| Dimensions (W x H mm) | Colour | Item no. |
|-----------------------|--------|-------------------|
| 25 x 30 | Grey | FBO2530G |
| 25 x 40 | Grey | FBO2540G |
| 25 x 60 | Grey | FBO2560G |
| 40 x 40 | Grey | FBO4040G |
| 40 x 60 | Grey | FBO4060G |
| 40 x 80 | Grey | FBO4080G |
| 60 x 40 | Grey | FBO6040G |
| 60 x 60 | Grey | FBO6060G |
| 60 x 80 | Grey | FBO6080G |
| 80 x 60 | Grey | FBO8060G |
| 80 x 80 | Grey | FBO8080G |
| 100 x 100 | Grey | FBO100100G |
| 25 x 30 | Black | FBO2530B |
| 25 x 60 | Black | FBO2560B |
| 40 x 40 | Black | FBO4040B |
| 40 x 60 | Black | FBO4060B |
| 40 x 80 | Black | FBO4080B |
| 60 x 60 | Black | FBO6060B |
| 60 x 80 | Black | FBO6080B |
| 80 x 80 | Black | FBO8080B |
| 100 x 100 | Black | FBO100100B |

Slotted - closed (2m lengths)

| Dimensions (W x H mm) | Colour | Item no. |
|-----------------------|--------|-------------------|
| 25 x 60 | Grey | FBC2560G |
| 40 x 40 | Grey | FBC4040G |
| 40 x 60 | Grey | FBC4060G |
| 40 x 80 | Grey | FBC4080G |
| 60 x 60 | Grey | FBC6060G |
| 60 x 80 | Grey | FBC6080G |
| 80 x 80 | Grey | FBC8080G |
| 100 x 100 | Grey | FBC100100G |
| 25 x 30 | Black | FBC2530B |
| 25 x 60 | Black | FBC2560B |
| 40 x 40 | Black | FBC4040B |
| 40 x 60 | Black | FBC4060B |
| 40 x 80 | Black | FBC4080B |
| 60 x 60 | Black | FBC6060B |
| 60 x 80 | Black | FBC6080B |
| 80 x 80 | Black | FBC8080B |
| 100 x 100 | Black | FBC100100B |

Spare duct lids

| Dimensions (mm) | Colour | Item no. |
|-----------------|--------|----------------|
| 25 | Grey | FBL25G |
| 40 | Grey | FBL40G |
| 60 | Grey | FBL60G |
| 80 | Grey | FBL80G |
| 100 | Grey | FBL100G |
| 25 | Black | FBL25B |
| 40 | Black | FBL40B |
| 60 | Black | FBL60B |
| 80 | Black | FBL80B |
| 100 | Black | FBL100B |



Cable accessories

Cable ties

- UL approved nylon 66, 94V-2
- One piece design ensures strong locking
- Service temperature -400C to +1050C
- High temperature 1850C, 94V-0 available on request
- Packed quantity 100

| Dimensions (mm) | Colour | Tensile strength | Bundle Diameter | Item no. |
|-----------------|--------|------------------|-----------------|-------------------|
| 100 x 2.5 | Clear | 8 kg | 25 mm | FBCT1002C |
| 190 x 4.8 | Clear | 22 kg | 52 mm | FBCT1904C |
| 280 x 4.8 | Clear | 22 kg | 81 mm | FBCT2804C |
| 370 x 4.8 | Clear | 22 kg | 102 mm | FBCT3704C |
| 280 x 7.6 | Clear | 55 kg | 81 mm | FBCT2807C |
| 380 x 7.6 | Clear | 55 kg | 110 mm | FBCT3807C |
| 450 x 7.6 | Clear | 55 kg | 120 mm | FBCT4507C |
| 450 x 8.0 | Clear | 80 kg | 133 mm | FBCT4508C |
| 550 x 8.0 | Clear | 80 kg | 168 mm | FBCT5508C |
| 812 x 9.0 | Clear | 80 kg | 246 mm | FBCT8129C |
| 1168 x 9.0 | Clear | 80 kg | 360 mm | FBCT11689C |
| 100 x 2.5 | Black | 8 kg | 25 mm | FBCT1002B |
| 150 x 3.6 | Black | 18 kg | 39 mm | FBCT1503B |
| 190 x 4.8 | Black | 22 kg | 52 mm | FBCT1904B |
| 280 x 4.8 | Black | 22 kg | 81 mm | FBCT2804B |
| 370 x 4.8 | Black | 22 kg | 102 mm | FBCT3704B |
| 280 x 7.6 | Black | 55 kg | 81 mm | FBCT2807B |
| 380 x 7.6 | Black | 55 kg | 110 mm | FBCT3807B |
| 450 x 7.6 | Black | 55 kg | 120 mm | FBCT4507B |
| 450 x 8.0 | Black | 80 kg | 133 mm | FBCT4508B |
| 550 x 8.0 | Black | 80 kg | 168 mm | FBCT5508B |
| 1168 x 9.0 | Black | 80 kg | 360 mm | FBCT11689B |

Flexible bushing

- Cut to suit any shape hole
- Protects cables from sharp edges
- Manufactured P.E. Natural

| Thickness | Max. Thickness | Item no. |
|-----------|----------------|---------------|
| 1.0 | 1.0 | FBMB10 |
| 1.6 | 1.0 - 1.6 | FBMB16 |
| 2.4 | 1.6 - 2.4 | FBMB24 |
| 3.2 | 2.4 - 3.2 | FBMB32 |
| 4.5 | 3.2 - 4.5 | FBMB45 |

Spiral banding

- Manufactured from P.E.
- Binds cables & protects them from damage

| Wrapping range (mm) | Band width | Dia. (inner) | Dia. (outer) | Item no. |
|---------------------|------------|--------------|--------------|---------------|
| 4 - 50 | 7.0 | 4.0 | 6.0 | FBSW06 |
| 6 - 60 | 10.8 | 6.0 | 8.0 | FBSW08 |
| 7.5 - 60 | 11.4 | 7.5 | 10 | FBSW10 |
| 9 - 65 | 13.9 | 9.0 | 12 | FBSW12 |
| 12 - 75 | 15 | 12 | 15 | FBSW15 |
| 15 - 100 | 18.2 | 15 | 19 | FBSW19 |

Cable tie saddles

- Available in screw-in or stick-on
- Colour - white

| Dimensions (mm) | Mounting | Item no. |
|-----------------|---------------------|------------------|
| 19 x 9.5 | Screw-on | FBTM0 |
| 15 x 10 | Screw-on | FBTM1 |
| 23 x 16 | Screw-on | FBTM2 |
| 21 x 21 | Stick-on | FBTM21214 |
| 28 x 28 | Stick-on + screw-on | FBTM28284 |



Cable Tie Saddles



Cable Ties, Surface Mounting

Cable glands

- Manufactured from UL approved nylon 66 94V-2 black
- Temperature -400C to +1050C
- "Cable grab claw" stays on gland body to reduce installation time
- IP68 rating

| Thread size, metric, (mm) | Suits cable outside dia. | Item no. |
|---------------------------|--------------------------|---------------|
| 16 | 5 - 10 | FBAG16 |
| 20 | 6 - 13 | FBAG20 |
| 25 | 10-18 | FBAG25 |
| 32 | 16 - 22 | FBAG32 |
| 40 | 20 - 27 | FBAG40 |
| 50 | 30 - 41 | FBAG50 |
| 63 | 40 - 53 | FBAG63 |



Flexible bushing



Cable glands



Spiral banding

Ancillary products

Enclosures



Eaton halyster polyester/non metallic enclosures

Polyester enclosures, halyster - polyester enclosures

Durability & quality you can trust. Halyster has been proving its reliability in the harshest climates, from the sweltering heats to the coldest temperatures for over 30 years.

- IP66 - dust & jet water tight
- Built for outdoor & indoor usage
- Covers IK10 impact rating
- UV resistant- tested
- Corrosion free & chemical resistant GRP

Empty boxes with TRANSPARENT cover & insulated base-plate

| Type | Description (W x H x D mm) | Item no. |
|------|----------------------------------|----------------|
| K432 | IP66 Enclosure 180 x 270 x 171mm | 1860808 |
| K433 | IP66 Enclosure 270 x 270 x 171mm | 1860809 |
| K434 | IP66 Enclosure 270 x 360 x 171mm | 1860810 |
| K442 | IP66 Enclosure 180 x 360 x 171mm | 1860090 |
| K444 | IP66 Enclosure 360 x 360 x 171mm | 1860091 |
| K463 | IP66 Enclosure 270 x 540 x 171mm | 1860811 |
| K464 | IP66 Enclosure 360 x 540 x 171mm | 1860812 |
| K466 | IP66 Enclosure 540 x 540 x 171mm | 1860092 |
| K484 | IP66 Enclosure 360 x 720 x 201mm | 1860093 |
| K486 | IP66 Enclosure 540 x 720 x 201mm | 1860094 |

Empty boxes with OPAQUE cover with insulated base-plate

| Type | Description (W x H x D mm) | Item no. |
|--------|----------------------------------|----------------|
| K432GS | IP66 Enclosure 180 x 270 x 171mm | 1860101 |
| K433GS | IP66 Enclosure 270 x 270 x 171mm | 1860102 |
| K434GS | IP66 Enclosure 270 x 360 x 171mm | 1860103 |
| K442GS | IP66 Enclosure 180 x 360 x 171mm | 1860095 |
| K444GS | IP66 Enclosure 360 x 360 x 171mm | 1860096 |
| K463GS | IP66 Enclosure 270 x 540 x 171mm | 1860104 |
| K464GS | IP66 Enclosure 360 x 540 x 171mm | 1860105 |
| K466GS | IP66 Enclosure 540 x 540 x 171mm | 1860097 |
| K484GS | IP66 Enclosure 360 x 720 x 201mm | 1860098 |
| K486GS | IP66 Enclosure 540 x 720 x 201mm | 1860099 |

Flanges for increasing depth

| Type | Description | Item no. |
|-------|---------------|----------------|
| KR434 | Depth 62,5 mm | 1860547 |
| KR444 | Depth 62,5 mm | 1860414 |
| KR463 | Depth 62,5 mm | 1860762 |
| KR464 | Depth 62,5 mm | 1860761 |
| KR466 | Depth 125 mm | 1860532 |

Boxes with DIN rails - TRANSPARENT cover

| Type | Description | Item no. |
|---------|-----------------------------------|----------------|
| K433/1h | Box with 1 top hat mounting rail | 1860886 |
| K434/2h | Box with 2 top hat mounting rails | 1860548 |
| K444/2h | Box with 2 top hat mounting rails | 1860549 |
| K464/2h | Box with 2 top hat mounting rails | 1860559 |

Spare fixing screws for lids

| Description | Item no. |
|--|----------------|
| Lid screws, standard, tool operated | 1037917 |
| Lid screws, hand operated | 1037922 |
| Lid screws, tool operated, captive cover | 1037919 |
| Lid screws, hand operated, captive cover | 1037923 |

Spare covers, TRANSPARENT

| Type | Description (W x H mm) | Item no. |
|-------|------------------------|----------------|
| KD432 | Cover only 180 x 270 | 1860755 |
| KD433 | Cover only 270 x 270 | 1860751 |
| KD434 | Cover only 270 x 360 | 1860752 |
| KD442 | Cover only 180 x 360 | 1860059 |
| KD444 | Cover only 360 x 360 | 1860060 |
| KD463 | Cover only 270 x 540 | 1860753 |
| KD464 | Cover only 360 x 540 | 1860754 |
| KD466 | Cover only 540 x 540 | 1860061 |
| KD484 | Cover only 360 x 720 | 1860062 |
| KD486 | Cover only 540 x 720 | 1860063 |

Spare Covers, OPAQUE

| Type | Description (W x H mm) | Item no. |
|---------|------------------------|----------------|
| KD432GS | Cover only 180 x 270 | 1360006 |
| KD433GS | Cover only 270 x 270 | 1360007 |
| KD434GS | Cover only 270 x 360 | 1360008 |
| KD442GS | Cover only 180 x 360 | 1360084 |
| KD444GS | Cover only 360 x 360 | 1360085 |
| KD463GS | Cover only 270 x 540 | 1360009 |
| KD464GS | Cover only 360 x 540 | 1360010 |
| KD466GS | Cover only 540 x 540 | 1360086 |
| KD484GS | Cover only 360 x 720 | 1360087 |
| KD486GS | Cover only 540 x 720 | 1360088 |

Spare base plates

| Type | Description | Item no. |
|------|-------------------------------|----------------|
| K432 | Phenolic base plate suit K432 | 1028926 |
| K433 | Phenolic base plate suit K433 | 1028915 |
| K434 | Phenolic base plate suit K434 | 1028916 |
| K442 | Phenolic base plate suit K442 | 1026377 |
| K444 | Phenolic base plate suit K444 | 1026375 |
| K463 | Phenolic base plate suit K463 | 1028917 |
| K464 | Phenolic base plate suit K464 | 1028922 |
| K466 | Phenolic base plate suit K466 | 1029600 |
| K484 | Phenolic base plate suit K484 | 1026376 |
| K486 | Phenolic base plate suit K486 | 1026378 |

Locking accessories & valves

| Type | Description | Item no. |
|------|---------------------------------|----------------|
| All | External Hinge Kit (pair) | 1064108 |
| All | Seal Plate for Padlocking Cover | 6009946 |
| All | Vent Valve | 1049019 |
| All | Drain Valve | 1024949 |

Small insulated enclosures CI-K range

Suitable for housing a wide range of protection and control devices, the robust CI-K enclosures are rated to IP65 degree of protection. Metric cable entry knockouts in the top, bottom and rear of the enclosure make installation easy.

A choice of the unique push-through membrane or hard knockout versions provide added flexibility.

The units are ideal for housing Moeller products including: T rotary switches, P switch-disconnectors, RMQ-Titan command and signalling devices, xStart contactors, Xpole miniature circuit-breakers, easy control relays, ETR4 timing relays, and PKZ motor-protective circuit-breakers. They also make excellent terminal boxes and can be used to house pneumatic or hydraulic components.



Features and benefits

- Fully insulated with no need to earth, resistant to flaking or rusting which is particularly important for the food industry
- Choice of mounting rails and plates, with fixing holes for vertical or horizontal positioning, simplifies mounting
- Captive screws, fixing centres printed on the base, rubber feet to compensate for wall unevenness and optional external fixing brackets all simplify installation
- Shallow base depth eases connection to devices mounted in the enclosure
- Eyelets on the base and cover mean tie wraps can be used as a simple hinge when accessing the contents of the enclosure

CI-K enclosures

| Dimensions (W x H x D mm) | Mounting Depth mm | Item no. |
|---|-------------------|--------------------|
| Degree of protection IP65, material: polycarbonate, with metal mounting plate, enclosure base RAL 9005, black, top RAL 7035, light grey, metric cable entry knockouts at top, bottom and in back plate, cable membrane with CI-K1 and CI-K2, control cable entry to CI-K2, enclosure CI-K3 to CI-K5 include metric cable grommets | | |
| 100 x 160 x 100 | 73 | CI-K2-100-M |
| 100 x 160 x 145 | 118 | CI-K2-145-M |
| 120 x 200 x 125 | 98 | CI-K3-125-M |
| 120 x 200 x 160 | 133 | CI-K3-160-M |
| 160 x 240 x 125 | 93 | CI-K4-125-M |
| 160 x 240 x 160 | 128 | CI-K4-160-M |
| 200 x 280 x 125 | 93 | CI-K5-125-M |
| 200 x 280 x 160 | 128 | CI-K5-160-M |



CI-K2-100-M



TS-CI-K2



K-CI-K3

CI-K accessories

| Description | For use with | Item no. |
|--------------------------------|--|-----------------|
| Mounting rails | CI-K2 crosswise, useful length 82 mm | TS-CI-K2 |
| | CI-K3 lengthwise and crosswise, useful length 98 mm | TS-CI-K3 |
| | CI-K4 crosswise, useful length 133 mm | TS-CI-K4 |
| | CI-K5 lengthwise and crosswise, and for CI-K4 lengthwise, useful length 173 mm | TS-CI-K5 |
| N terminals, PE terminals | CI-K3 | K-CI-K3 |
| | CI-K4 | K-CI-K4 |
| Insulated individual terminals | 32 A, flexible 1.5 – 6 mm ² | K10/1 |
| | 63 A, flexible 6 – 16 mm ² | K25/1 |
| | 100 A, flexible 10 – 35 mm ² | K50/1 |
| Metric cable glands | 20.5 mm drilled hole diameter | V-M20 |
| | 25.5 mm drilled hole diameter | V-M25 |
| | 32.5 mm drilled hole diameter | V-M32 |
| | 50.5 mm drilled hole diameter | V-M50 |



K10/1



V-M20



Totally insulated enclosures CI range

CI Series enclosures

| Dimensions (W x H x D mm) | Mounting depth mm | Item no. |
|---------------------------|-------------------|----------|
|---------------------------|-------------------|----------|

E type individual enclosures

Metric cable entry knockouts on all sides, degree of protection IP65, full-area knockouts possible on all sides, transparent cover (included in depth), fixing straps for wall mounting, cover fasteners can be sealed

| | | |
|-------------------|-----|------------------|
| 187.5 x 250 x 150 | 125 | CI23E-125 |
| 187.5 x 250 x 175 | 150 | CI23E-150 |
| 375 x 250 x 150 | 125 | CI43E-125 |
| 375 x 250 x 175 | 150 | CI43E-150 |
| 375 x 250 x 225 | 200 | CI43E-200 |
| 375 x 375 x 150 | 125 | CI44E-125 |
| 375 x 375 x 175 | 150 | CI44E-150 |
| 375 x 375 x 225 | 200 | CI44E-200 |
| 375 x 375 x 275 | 250 | CI44E-250 |
| 375 x 500 x 225 | 200 | CI45E-200 |

X type individual enclosures

Smooth plain sides for easy cleaning, Degree of protection IP65, Transparent cover (included in depth), Fixing straps for wall mounting, Cover fasteners can be sealed

| | | |
|-------------------|-----|------------------|
| 187.5 x 250 x 150 | 125 | CI23X-125 |
| 187.5 x 250 x 175 | 150 | CI23X-150 |
| 375 x 250 x 150 | 125 | CI43X-125 |
| 375 x 250 x 175 | 150 | CI43X-150 |
| 375 x 250 x 225 | 200 | CI43X-200 |
| 375 x 375 x 150 | 125 | CI44X-125 |
| 375 x 375 x 175 | 150 | CI44X-150 |
| 375 x 375 x 225 | 200 | CI44X-200 |
| 375 x 375 x 275 | 250 | CI44X-250 |
| 375 x 500 x 225 | 200 | CI45X-200 |

Panel enclosures

Sides with full-area knockouts, open top and bottom, Degree of protection IP65, Transparent cover (included in depth), cover fasteners can be sealed

| | | |
|-----------------|-----|-----------------|
| 375 x 750 x 225 | 200 | CI48-200 |
| 375 x 750 x 275 | 250 | CI48-250 |

CI Series bases

| Description | Dimensions (W x H mm) | Item no. |
|-------------|-----------------------|----------|
|-------------|-----------------------|----------|

Bases for E type individual enclosures

Metric cable entry knockouts on all sides, full-area knockouts possible on all sides, support bosses in the base to fit mounting plates or mounting rails

| | |
|-------------|----------------|
| 187.5 x 250 | U-CI23E |
| 375 x 250 | U-CI43E |
| 375 x 375 | U-CI44E |
| 375 x 500 | U-CI45E |

Bases for X type individual enclosures

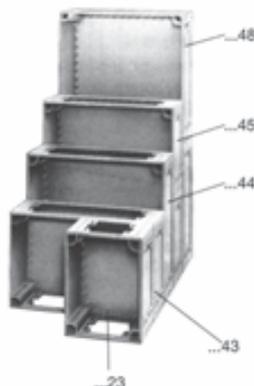
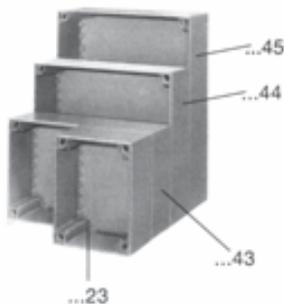
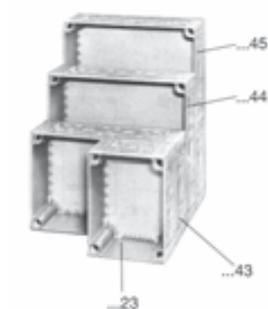
Smooth plain sides for easy cleaning, cable entry drill as required, support bosses in the base to fit mounting plates or mounting rails

| | |
|-------------|----------------|
| 187.5 x 250 | U-CI23X |
| 375 x 250 | U-CI43X |
| 375 x 375 | U-CI44X |
| 375 x 500 | U-CI45X |

Bases for panel enclosures

Sides with full area knockouts, Open top and bottom, Support bosses in the base to fit mounting plates or mounting rails

| | |
|-------------|---------------|
| 187.5 x 250 | U-CI23 |
| 375 x 250 | U-CI43 |
| 375 x 375 | U-CI44 |
| 375 x 500 | U-CI45 |
| 375 x 750 | U-CI48 |



Totally insulated enclosures CI range

CI covers - Transparent covers only

| Mounting depth mm | For use with enclosure base | Item no. |
|-------------------|-----------------------------|------------------|
| 125 | U-CI23 | D125-CI23 |
| 150 | | D150-CI23 |
| 125 | U-CI43 | D125-CI43 |
| 150 | | D150-CI43 |
| 200 | | D200-CI43 |
| 125 | U-CI44 | D125-CI44 |
| 150 | | D150-CI44 |
| 200 | | D200-CI44 |
| 250 | | D250-CI44 |
| 200 | U-CI45 | D200-CI45 |
| 200 | U-CI48 | D200-CI48 |
| 250 | | D250-CI48 |



CI accessories

| Description | For use with | Item no. |
|--|---|-------------------|
| Steel mounting plates 3 mm galvanised steel, including fixing screws | CI 23 | M3-CI23 |
| | CI 43 | M3-CI43 |
| | CI 44 | M3-CI44 |
| | CI 45 | M3-CI45 |
| | CI 48 | M3-CI48 |
| Module mounting rails Useful length 330 mm for enclosure dimension 375 mm, 3 mm galvanised steel, including fixing screws, pack of 10 rails | Horizontal CI43, CI44, CI45, CI48, Vertical CI44 | ML4 |
| Mounting rails Galvanised steel, including fixing screws, 7.5 mm high, Pack of 20 rails | Useful length 145 mm for enclosure dimension 187.5 mm | 145 CL2 |
| | Useful length 207 mm for enclosure dimension 250 mm | 207 CL3 |
| | Useful length 332 mm for enclosure dimension 375 mm | 332 CL4 |
| Mounting rails 15 mm high, pack of 10 rails | Useful length 145 mm for enclosure dimension 187.5 mm | 145 CL2-15 |
| | Useful length 207 mm for enclosure dimension 250 mm | 207 CL3-15 |
| | Useful length 332 mm for enclosure dimension 375 mm | 332 CL4-15 |
| Spacers | To raise by 25 mm, pack of 25 by 25 | HS25-CI |
| | To raise by 50 mm, pack of 25 by 50 | HS50-CI |



| Description | Rated current | For use with | Item no. |
|--|---------------|--------------|------------------|
| Insulated individual terminals Connections on both sides for round conductors | 32 A | - | K10/1 |
| | 63 A | - | K25/1 |
| | 100 A | - | K50/1 |
| | 160 A | - | K95/1N/BR |
| | 250 A | - | K150/1/BR |
| | 400 A | - | K240/1/BR |



Ancillary products

Enclosures



BL-CI



HG-CI



KD4-CI



K-CI



BS-2-CI



FT-CI



VS-CI



FL4-X



KS3-CI



DSCH-CI

Totally insulated enclosures CI range

CI accessories

| Description | Enclosure width mm | Standard pack | Item no. |
|---|----------------------|---------------|-----------------|
| Fixing strap with screw | | | |
| For wall mounting of CI enclosures. Each kit contains four straps. | – | 5 | BL-CI |
| Thumb-grip | | | |
| For fitting to cover fasteners on CI enclosures. Set of four | – | 20 | HG-CI |
| Clip | | | |
| For enclosure assembly | – | 25 | KD4-CI |
| Wedge lock | | | |
| For enclosure assembly and flange fitting | – | 100 | K-CI |
| Assembly kits | | | |
| | 187.5 | 10 | BS-2-CI |
| To connect enclosures to one another, wedge-lock fasteners included | 250 (500: use 2 off) | 10 | BS-3-CI |
| | 375 (750: use 2 off) | 10 | BS-4-CI |
| Flange adapter | | | |
| For connecting enclosures with sides of different lengths | – | 10 | FT-CI |
| Gaskets | | | |
| | 187.5 | 20 | D2-CI |
| To seal faces between enclosures | 250 | 20 | D3-CI |
| | 375 | 20 | D4-CI |
| Connecting pieces | | | |
| | – | 100 | VS-CI |
| Wedge lock K-CI required for enclosure assembly and flange fitting for attaching gland plates | – | 25 | VS-KS-CI |
| | – | 25 | VS-TR-CI |
| Flange plates | | | |
| | 375 | 10 | FL4-X |
| Captive, sponge-rubber gasket. Cable entry drill as required | 250 | 10 | FL3-X |
| | 187.5 | 10 | FL2-X |
| | 125 | 10 | FL1-X |
| Gland plates (including cable grommets) | | | |
| For two cables 14 – 54 mm | 250 | 1 | KS3-CI |
| For three cables 14 – 68 mm | 375 | 1 | KS4-CI |
| Cover hinge | | | |
| For CI...E and CI...X individual enclosures. One set consists of 2 hinges. | – | 5 | DSCH-CI |

ETA Mild steel enclosures

ETA ST wall mount enclosures

ETA metal enclosures are the ideal housing for all electrical control circuits & switchboard construction, ST enclosures feature:

- Enclosure & door RAL 7035 textured polyester powder coat
- Enclosure & door made from 1.5mm sheet steel
- Mounting plate made of 2.5mm galvanised sheet steel
- Removable gland plate
- Two part polyurethane continuous sealing gasket
- Reversible door including mounting rails
- Degree of protection IP66 to EN60529, EN50298
- Impact Resistance - IK10 to EN50298, EN 50102



ETA ST wall mount enclosures IP66 (Single door)

| External dimensions (W x H x D mm) | Colour | No. of locks | Weight Kgs | Item no. |
|------------------------------------|---------|--------------|------------|-----------------|
| 200 x 300 x 150 | RAL7035 | 1 | 6 | ST2-315 |
| 300 x 300 x 150 | RAL7035 | 1 | 7.5 | ST3-315 |
| 300 x 400 x 150 | RAL7035 | 1 | 9.5 | ST3-415 |
| 300 x 500 x 150 | RAL7035 | 1 | 11.5 | ST3-515 |
| 400 x 300 x 150 | RAL7035 | 1 | 9.5 | ST4-315 |
| 400 x 500 x 150 | RAL7035 | 1 | 13 | ST4-515 |
| 300 x 300 x 200 | RAL7035 | 1 | 8 | ST3-320 |
| 300 x 400 x 200 | RAL7035 | 1 | 11 | ST3-420 |
| 300 x 500 x 200 | RAL7035 | 1 | 13 | ST3-520 |
| 400 x 300 x 200 | RAL7035 | 1 | 11 | ST4-320 |
| 400 x 400 x 200 | RAL7035 | 1 | 13.5 | ST4-420 |
| 400 x 500 x 200 | RAL7035 | 1 | 15.5 | ST4-520 |
| 400 x 600 x 200 | RAL7035 | 2 | 18 | ST4-620 |
| 500 x 500 x 200 | RAL7035 | 1 | 18.5 | ST5-520 |
| 500 x 700 x 200 | RAL7035 | 2 | 24.5 | ST5-720 |
| 600 x 400 x 200 | RAL7035 | 1 | 18 | ST6-420 |
| 600 x 600 x 200 | RAL7035 | 2 | 24.5 | ST6-620 |
| 400 x 500 x 250 | RAL7035 | 1 | 18 | ST4-525 |
| 400 x 600 x 250 | RAL7035 | 2 | 20.5 | ST4-625 |
| 500 x 700 x 250 | RAL7035 | 2 | 27 | ST5-725 |
| 600 x 800 x 250 | RAL7035 | 2 | 34 | ST6-825 |
| 600 x 1000 x 250 | RAL7035 | 2 | 43.5 | ST6-1025 |
| 600 x 400 x 300 | RAL7035 | 1 | 23 | ST6-430 |
| 600 x 600 x 300 | RAL7035 | 2 | 30 | ST6-630 |
| 600 x 800 x 300 | RAL7035 | 2 | 37 | ST6-830 |
| 600 x 1000 x 300 | RAL7035 | 2 | 47 | ST6-1030 |
| 600 x 1200 x 300 | RAL7035 | 1 | 54 | ST6-1230 |
| 800 x 600 x 300 | RAL7035 | 2 | 37 | ST8-630 |
| 800 x 800 x 300 | RAL7035 | 2 | 48 | ST8-830 |
| 800 x 1000 x 300 | RAL7035 | 2 | 58 | ST8-1030 |
| 800 x 1200 x 300 | RAL7035 | 1 | 67 | ST8-1230 |
| 400 x 600 x 400 | RAL7035 | 2 | 25 | ST4-640 |
| 600 x 600 x 400 | RAL7035 | 2 | 32 | ST6-640 |
| 600 x 800 x 400 | RAL7035 | 2 | 46 | ST6-840 |
| 600 x 1000 x 400 | RAL7035 | 2 | 56 | ST6-1040 |
| 800 x 800 x 400 | RAL7035 | 2 | 52 | ST8-840 |
| 800 x 1000 x 400 | RAL7035 | 2 | 62 | ST8-1040 |

Please call Eaton for sizes not listed.

ETA ST wall boxes IP55 (2 Door)

| External dimensions (W x H x D mm) | Colour | No. of locks | Weight Kgs | Item no. |
|------------------------------------|---------|--------------|------------|------------------|
| 800 x 600 x 300 | RAL7035 | 1 | 37 | ST8-630 |
| 1000 x 800 x 200 | RAL7035 | 1 | 51 | ST10-820 |
| 1000 x 800 x 300 | RAL7035 | 1 | 58 | ST10-830 |
| 1000 x 1000 x 300 | RAL7035 | 1 | 69 | ST10-1030 |
| 1000 x 1200 x 300 | RAL7035 | 1 | 80 | ST10-1230 |

Orange RAL2000 ETA ST wall mount enclosures IP66 (Single door)

| External dimensions (W x H x D mm) | Colour | No. of locks | Weight Kgs | Item no. |
|------------------------------------|---------|--------------|------------|------------------|
| 400 x 400 x 200 | RAL2000 | 1 | 13.5 | STO4-420 |
| 400 x 600 x 200 | RAL2000 | 2 | 18 | STO4-620 |
| 600 x 600 x 200 | RAL2000 | 2 | 24.5 | STO6-620 |
| 500 x 700 x 250 | RAL2000 | 2 | 27 | STO5-725 |
| 600 x 800 x 250 | RAL2000 | 2 | 34 | STO6-825 |
| 600 x 1000 x 250 | RAL2000 | 2 | 43.5 | STO6-1025 |
| 600 x 1200 x 300 | RAL2000 | 1 | 54 | STO6-1230 |
| 800 x 1000 x 300 | RAL2000 | 2 | 58 | STO8-1030 |
| 800 x 1200 x 300 | RAL2000 | 1 | 67 | STO8-1230 |

Ancillary products

Enclosures



ETA Mild steel enclosures

ETA STP wall mount enclosures IP66 with plexiglass window

ETA metal enclosures are the ideal housing for all electrical control circuits & switch board construction, STP enclosures feature:

- Full Plexiglass viewing window
- Enclosure & door RAL 7035 textured polyester powder coat
- Enclosure & door made from 1.5mm sheet steel
- Mounting plate made of 2.5mm galvanised sheet steel
- Removable gland plate & gasket
- Two part polyurethane continuous sealing gasket
- Reversible door including mounting rails
- Degree of protection to IEC 529 IP66

ETA STP wall mount enclosures IP66 with plexiglass window

| External dimensions (W x H x D mm) | Colour | No. of locks | Weight Kgs | Item no. |
|------------------------------------|---------|--------------|------------|------------------|
| 400 x 300 x 200 | RAL7035 | 1 | 11 | STP4-320 |
| 400 x 400 x 200 | RAL7035 | 1 | 13.5 | STP4-420 |
| 400 x 500 x 200 | RAL7035 | 1 | 15.5 | STP4-520 |
| 400 x 600 x 200 | RAL7035 | 2 | 18 | STP4-620 |
| 500 x 700 x 200 | RAL7035 | 2 | 24.5 | STP5-720 |
| 600 x 400 x 200 | RAL7035 | 1 | 18 | STP6-420 |
| 600 x 600 x 200 | RAL7035 | 2 | 24.5 | STP6-620 |
| 400 x 500 x 250 | RAL7035 | 1 | 18 | STP4-525 |
| 400 x 600 x 250 | RAL7035 | 2 | 20.5 | STP4-625 |
| 500 x 700 x 250 | RAL7035 | 2 | 27 | STP5-725 |
| 600 x 800 x 250 | RAL7035 | 2 | 34 | STP6-825 |
| 600 x 1000 x 250 | RAL7035 | 2 | 43.5 | STP6-1025 |
| 600 x 400 x 300 | RAL7035 | 1 | 23 | STP6-430 |
| 600 x 600 x 300 | RAL7035 | 2 | 30 | STP6-630 |
| 600 x 800 x 300 | RAL7035 | 2 | 37 | STP6-830 |
| 600 x 1000 x 300 | RAL7035 | 2 | 47 | STP6-1030 |
| 600 x 1200 x 300 | RAL7035 | 1 | 54 | STP6-1230 |
| 800 x 1000 x 300 | RAL7035 | 2 | 58 | STP8-1030 |
| 800 x 1200 x 300 | RAL7035 | 1 | 67 | STP8-1230 |

ETA ST enclosures accessories

ETA ST inner door kits

| Description (W x H mm) | Colour | Item no. |
|----------------------------|---------|------------------|
| Inner Door Kit, 400 x 400 | RAL7035 | STP01-44 |
| Inner Door Kit, 400 x 500 | RAL7035 | STP01-45 |
| Inner Door Kit, 400 x 600 | RAL7035 | STP01-46 |
| Inner Door Kit, 500 x 700 | RAL7035 | STP01-57 |
| Inner Door Kit, 600 x 400 | RAL7035 | STP01-64 |
| Inner Door Kit, 600 x 600 | RAL7035 | STP01-66 |
| Inner Door Kit, 600 x 800 | RAL7035 | STP01-68 |
| Inner Door Kit, 600 x 1000 | RAL7035 | STP01-610 |
| Inner Door Kit, 600 x 1200 | RAL7035 | STP01-612 |
| Inner Door Kit, 800 x 1000 | RAL7035 | STP01-810 |
| Inner Door Kit, 800 x 1200 | RAL7035 | STP01-812 |

ETA ST enclosures accessories

ETA ST Modular Chassis Kits Includes:

- Frame
- Zinc plated DIN Rail
- Internal IP rating: IP1X
- Front panel with modular slot complete with mounting accessories & captive screws

ETA ST modular chassis kits

| Description | Colour | Item no. |
|-------------------------------------|---------|-------------------|
| Modular Chassis Kit, 1 x 16 Module | RAL7035 | MDST4-300 |
| Modular Chassis Kit, 2 x 16 Module | RAL7035 | MDST4-400 |
| Modular Chassis Kit, 3 x 16 Module | RAL7035 | MDST4-500 |
| Modular Chassis Kit, 3 x 16 Module* | RAL7035 | MDST4-600 |
| Modular Chassis Kit, 3 x 26 Module* | RAL7035 | MDST6-600 |
| Modular Chassis Kit, 4 x 26 Module* | RAL7035 | MDST6-800 |
| Modular Chassis Kit, 5 x 26 Module* | RAL7035 | MDST6-1000 |
| Modular Chassis Kit, 6 x 26 Module* | RAL7035 | MDST6-1200 |

* These units have individual module frames, example MDST4-600 has 3 x 16 module lift off panels.

ETA ST canopies

B22

| Description (W x D mm) | Colour | Item no. |
|------------------------------|---------|---------------|
| Mild Steel, Canopy 400 x 200 | RAL7035 | TT1-04 |
| Mild Steel, Canopy 500 x 200 | RAL7035 | TT1-05 |
| Mild Steel, Canopy 600 x 250 | RAL7035 | TT1-06 |
| Mild Steel, Canopy 400 x 250 | RAL7035 | TT2-04 |
| Mild Steel, Canopy 500 x 250 | RAL7035 | TT2-05 |
| Mild Steel, Canopy 600 x 300 | RAL7035 | TT2-06 |
| Mild Steel, Canopy 800 x 300 | RAL7035 | TT2-08 |

Inner door kits, Modular chassis kits & canopies are also suitable for relevant sized STP type ETA enclosures.

ETA ST horizontal door rails

B22

| Description | Colour | Item no. |
|--------------------------------|--------|--------------|
| Crosspiece for 300mm wide door | GAL | WC001 |
| Crosspiece for 400mm wide door | GAL | WC002 |
| Crosspiece for 500mm wide door | GAL | WC003 |
| Crosspiece for 600mm wide door | GAL | WC004 |
| Crosspiece for 800mm wide door | GAL | WC005 |

ETA enclosures include vertical door rails as standard.

ETA ST mounting plate adjustment kit

| Description | Colour | Item no. |
|---------------------------------|--------|--------------|
| Plate adjustment for 200mm deep | GAL | WA980 |
| Plate adjustment for 200mm deep | GAL | WA981 |
| Plate adjustment for 200mm deep | GAL | WA982 |

Supply includes 2 pieces. 4 pieces required for enclosure 800mm high or less, 6 pieces required for enclosures greater than 800mm high.

ETA Mild steel enclosures

ETA ST enclosures accessories

ETA ST general accessories

| Description | Item no. |
|--|--------------------|
| Wall Mounting Bracket kit, 4 pieces | SDWC-010 |
| ST Door Stop, holds door at 90 degrees to prevent accidental closing | WA060* |
| ST Metal Box Hinge | OCDST140051 |
| ST Metal Hinge Pin | METALPIN |
| Document Door Pocket A4 Sized, Thermoplastic | WA050 |
| RAL7035, touch up paint | XAFS7035 |

*To hold the door open at 90 degrees & avoid accidental closing. Used on ST or STP boxes.

ETA ST gland plates

| Description | Colour | Item no. |
|--|---------|--------------|
| Gland Plate 78 x 158mm, suit 200mm wide | RAL7035 | WC016 |
| Gland Plate 78 x 258mm, suit 300mm wide | RAL7035 | WC018 |
| Gland Plate 128 x 358mm, suit 500mm wide | RAL7035 | WC020 |
| Gland Plate 128 x 558mm, suit 600mm wide | RAL7035 | WC022 |

Includes one gland plate, sealing gasket, mounting accessories.

ETA ST locking systems

| ID | Description | Item no. |
|-----|---|----------------------------|
| 1 | Standard ETA Lock, Key Only | WE096 |
| 2+3 | Lock & cam, with standard ETA Locking Insert | WE250EAT Ⓞ |
| 4 | 7mm Square Locking Insert | WE265 |
| 5 | 7mm Square Lock, Key Only | WE268 |
| 6 | 8mm Triangle Locking Insert | WE275 |
| 7 | 8mm Triangle Lock, Key Only | WE278 |
| 8 | Screwdriver Locking Insert | WE280 |
| 9 | Keylock insert with E333 key (includes cam & locking cover) | WE235 |
| 10 | T Handle with Key Lock | WE285 |
| 11 | Wing Handle with Key Lock | WE288 |
| N/A | T Handle with Key Lock - For Double Door Enclosures plus 1200mm high ST, STO & STP enclosures | WE230 |
| N/A | CL001 Lock, Complete with 2 Keys | STCL001 |
| N/A | CL003 Lock, Complete with 2 Keys | STCL003 |
| N/A | Lock Tongue to Suit CL Locks | STCL00-LOCKTONGUE Ⓞ |
| N/A | CL Nylon sealing Gasket | STCL00-GASKET Ⓞ |

Ⓞ These items are supplied as one combined item.

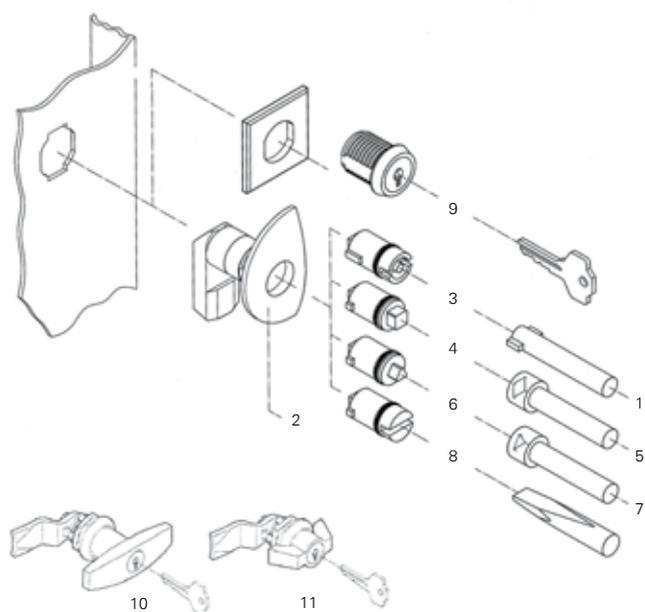
Ⓞ One of each of these items is required when ordering items STCL001 + STCL003.

ETA ST mounting plates

| Description (W x H mm) | Colour | Item no. |
|------------------------|--------|-------------------|
| suit 200W x 300H | GAL | WPAST23Z |
| suit 300W x 300H | GAL | WPAST33Z |
| suit 400W x 400H | GAL | WPAST44Z |
| suit 400W x 500H | GAL | WPAST45Z |
| suit 400W x 600H | GAL | WPAST46Z |
| suit 500W x 500H | GAL | WPAST55Z |
| suit 600W x 800H | GAL | WPAST68Z |
| suit 600W x 1000H | GAL | WPAST610Z |
| suit 800W x 800H | GAL | WPAST88Z |
| suit 1000W x 1000H | GAL | WPAST1010Z |



CL001 & CL003 Lock Kit



Ancillary products

Enclosures



Terminal boxes accessories

Mounting plates

| Description (W x H mm) | Colour | Item no. |
|----------------------------------|--------|---------------|
| Mounting Plate, suit 150W x 150H | GAL | SDPA11 |
| Mounting Plate, suit 200W x 150H | GAL | SDPA21 |
| Mounting Plate, suit 200W x 200H | GAL | SDPA22 |
| Mounting Plate, suit 300W x 150H | GAL | SDPA31 |
| Mounting Plate, suit 300W x 200H | GAL | SDPA32 |
| Mounting Plate, suit 300W x 300H | GAL | SDPA33 |
| Mounting Plate, suit 400W x 200H | GAL | SDPA42 |
| Mounting Plate, suit 400W x 300H | GAL | SDPA43 |
| Mounting Plate, suit 400W x 400H | GAL | SDPA44 |
| Mounting Plate, suit 500W x 200H | GAL | SDPA52 |
| Mounting Plate, suit 500W x 300H | GAL | SDPA53 |
| Mounting Plate, suit 600W x 200H | GAL | SDPA62 |
| Mounting Plate, suit 600W x 300H | GAL | SDPA63 |
| Mounting Plate, suit 600W x 400H | GAL | SDPA64 |
| Mounting Plate, suit 800W x 200H | GAL | SDPA82 |
| Mounting Plate, suit 800W x 400H | GAL | SDPA84 |

DIN Rails

| Description | Colour | Item no. |
|---------------------------------------|--------|----------------|
| DIN Rail, suit 150mm Wide, Pack of 10 | GAL | SDWA013 |
| DIN Rail, suit 200mm Wide, Pack of 10 | GAL | SDWA015 |
| DIN Rail, suit 300mm Wide, Pack of 10 | GAL | SDWA020 |
| DIN Rail, suit 400mm Wide, Pack of 10 | GAL | SDWA025 |
| DIN Rail, suit 500mm Wide, Pack of 10 | GAL | SDWA030 |
| DIN Rail, suit 600mm Wide, Pack of 10 | GAL | SDWA035 |
| DIN Rail, suit 800mm Wide, Pack of 10 | GAL | SDWA040 |

SDV & SDP

| Description | Colour | Item no. |
|-------------------------------------|--------|-----------------|
| Wall Mounting Bracket kit, 4 pieces | GAL | SDWC-010 |
| Hinge kit for SDV type, 6 pieces | GAL | SDWA-005 |

ETA Mild steel terminal boxes

Sheet steel terminal boxes

Ideal for termination of marshalling cables. ETA SDV Terminal Boxes features

- Enclosure & door made from 1.2mm sheet steel in RAL 7035
- Lid fixed with captive screws, hinges can be fitted as an option
- Holes for fixing mounting plates/DIN rail included
- Two part polyurethane continuous sealing gasket
- IP66 rating

Ideal for termination of marshalling cables. ETA SDP Terminal boxes features:

- Enclosure & door made from 1.2mm sheet steel in RAL7035
- Hinged door with standard 3 lock included
- Holes to fix mounting plates or din rail included
- Two part polyurethane continuous sealing gasket
- IP55 Rating

ETA SDV terminal boxes IP66 (Lift off door)

| External Dimensions (W x H x D mm) | Colour | Weight Kgs | Item no. |
|------------------------------------|---------|------------|-----------------|
| 150 x 150 x 80 | RAL7035 | 1.1 | SDV1-108 |
| 200 x 200 x 80 | RAL7035 | 1.7 | SDV2-208 |
| 300 x 200 x 80 | RAL7035 | 2.2 | SDV3-208 |
| 400 x 200 x 80 | RAL7035 | 2.8 | SDV4-208 |
| 500 x 200 x 80 | RAL7035 | 3.3 | SDV5-208 |
| 600 x 200 x 80 | RAL7035 | 3.9 | SDV6-208 |
| 800 x 200 x 80 | RAL7035 | 5 | SDV8-208 |
| 150 x 150 x 120 | RAL7035 | 1.6 | SDV1-112 |
| 200 x 200 x 120 | RAL7035 | 2.3 | SDV2-212 |
| 300 x 150 x 120 | RAL7035 | 2 | SDV3-112 |
| 300 x 200 x 120 | RAL7035 | 2.6 | SDV3-212 |
| 300 x 300 x 120 | RAL7035 | 3.5 | SDV3-312 |
| 400 x 200 x 120 | RAL7035 | 3.3 | SDV4-212 |
| 400 x 300 x 120 | RAL7035 | 4.3 | SDV4-312 |
| 400 x 400 x 120 | RAL7035 | 5.4 | SDV4-412 |
| 500 x 200 x 120 | RAL7035 | 3.8 | SDV5-212 |
| 500 x 300 x 120 | RAL7035 | 5.1 | SDV5-312 |
| 600 x 200 x 120 | RAL7035 | 4.5 | SDV6-212 |
| 600 x 300 x 120 | RAL7035 | 5.9 | SDV6-312 |
| 600 x 400 x 120 | RAL7035 | 7.4 | SDV6-412 |
| 800 x 200 x 120 | RAL7035 | 5.8 | SDV8-212 |
| 800 x 400 x 120 | RAL7035 | 9.7 | SDV8-412 |

Terminal Boxes with gland plates (120mm depth boxes only) & boxes with transparent lids can be offered. Contact Eaton for details.

ETA SDP terminal boxes IP55 (Hinged door)

| External Dimensions (W x H x D mm) | Colour | Weight Kgs | Item no. |
|------------------------------------|---------|------------|-----------------|
| 200 x 200 x 80 | RAL7035 | 1.8 | SDP2-208 |
| 200 x 300 x 80 | RAL7035 | 2.4 | SDP2-308 |
| 200 x 400 x 80 | RAL7035 | 3 | SDP2-408 |
| 200 x 200 x 120 | RAL7035 | 2.5 | SDP2-212 |
| 200 x 300 x 120 | RAL7035 | 2.8 | SDP2-312 |
| 200 x 400 x 120 | RAL7035 | 3.5 | SDP2-412 |
| 200 x 500 x 120 | RAL7035 | 4.1 | SDP2-512 |
| 300 x 300 x 120 | RAL7035 | 3.8 | SDP3-312 |
| 300 x 400 x 120 | RAL7035 | 4.5 | SDP3-412 |

ETA CS Enclosures

- Enclosure & door RAL 7035 textured polyester powder coat
- Enclosure & door made from 1.5mm sheet steel
- Mounting plate, 2.5mm galvanised steel
- Degree of protection IP55 to EN62208
- CS enclosures can be wall mounted using SDWC - 010 mounting brackets as per ST Enclosure range
- CS Enclosures can also be floor mounted with plinths available in 100mm or 200mm heights
- Door mounting rails fitted as standard
- 3 point locking system
- Studs welded on the internal sides enable the fixing of both the vertical & horizontal profiles (WTPR-CS & fast fixing brackets WTPR-R)



ETA CS Enclosures

| External Dimensions (W x H x D mm) | Colour | Door Type | Item no. |
|------------------------------------|---------|-----------|------------------|
| 600 x 1200 x 400 | RAL7035 | Single | CS6-1240 |
| 600 x 1400 x 300 | RAL7035 | Single | CS6-1430 |
| 600 x 1400 x 400 | RAL7035 | Single | CS6-1440 |
| 800 x 1200 x 400 | RAL7035 | Single | CS8-1240 |
| 800 x 1400 x 300 | RAL7035 | Single | CS8-1430 |
| 800 x 1400 x 400 | RAL7035 | Single | CS8-1440 |
| 1000 x 1200 x 400 | RAL7035 | Double | CS10-1240 |
| 1000 x 1400 x 300 | RAL7035 | Double | CS10-1430 |
| 1000 x 1400 x 400 | RAL7035 | Double | CS10-1440 |
| 1200 x 1200 x 400 | RAL7035 | Double | CS12-1240 |
| 1200 x 1400 x 300 | RAL7035 | Double | CS12-1430 |
| 1200 x 1400 x 400 | RAL7035 | Double | CS12-1440 |

ETA CS Enclosure range - modular plinth

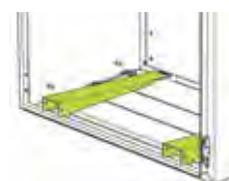
| Description | Pack Size | Item no. |
|--|-----------|--------------------|
| Universal Cover Pieces - 100mm (H), with mounting hardware | 4 pieces | ATZE-A100 |
| Front / Rear crosspiece pack - 600mm (W) enclosures | 2 pieces | ATZE-T0600 |
| Front / Rear crosspiece pack - 800mm (W) enclosures | 2 pieces | ATZE-T0800 |
| Front / Rear crosspiece pack - 1000mm (W) enclosures | 2 pieces | ATZE-T1000 |
| Front / Rear crosspiece pack - 1200mm (W) enclosures | 2 pieces | ATZE-T1200 |
| Side crosspiece pack - 300mm (D) Enclosures | 2 pieces | ATZE-T0300S |
| Side crosspiece pack - 400mm (D) Enclosures | 2 pieces | ATZE-T0400A |



Modular plinth: available in 100mm and 200mm heights in RAL7025 textured finish.

ETA CS Enclosure range - accessories

| Description | Pack Size | Item no. |
|--|-----------|----------------------|
| Vertical rails to suit 1200mm (H) CS enclosures | 4 pieces | WTPR-050120CS |
| Vertical rails to suit 1400mm (H) CS enclosures | 4 pieces | WTPR-050140CS |
| Fast fixing horizontal rails to suit 300mm (D) CS enclosures | 4 pieces | WTPR-050022R |
| Fast fixing horizontal rails to suit 400mm (D) CS enclosures | 4 pieces | WTPR-050032R |
| 180 Degree door opening hinge set | 3 pieces | WTCE-18008 |
| Eyebolts - M12 Zinc alloy, with hardware | 2 pieces | WTGS-003 |
| Wall mounting brackets | 4 pieces | SDWC-010 |
| Reusable mounting plate sliding rails - 300mm (D) enclosures | 2 pieces | CSPP-00300 |
| Reusable mounting plate sliding rails - 400mm (D) enclosures | 2 pieces | CSPP-00400 |



Sliding rails: allow easy installation of the mounting plate, rails can be removed after installation and kept for future use



ETA Thermal management products

ETA - Grids, fans & filters

The Grids are manufactured from thermoplastic material.

- Heat resistance (-35°C +80°C)
- IEC/DIN 53480 KA 3 sliding currents resistance
- Colour similar to RAL7035 textured finish/RAL7025
- Sealing gasket to guarantee IP 54
- The filtering panel is manufactured from mixed polyester-modacrylic fibres
- High filtering capacity
- Max working temperature 130°C
- Easily removed
- Good reutilization

Fans with filter - "click & fit" type

| Air flow with Filter | Power Supply V-Hz | Cut out Dimensions (mm) | External Dimensions (mm) | Item no. |
|----------------------|-------------------|-------------------------|--------------------------|--------------|
| 44 m3/H | 230 / 50-60 | 127 x 127 | 163 x 163 | WT300 |
| 97 m3/H | 230 / 50-60 | 181 x 181 | 214 x 214 | WT305 |
| 205 m3/H | 230 / 50-60 | 181 x 181 | 214 x 214 | WT308 |
| 295 m3/H | 230 / 50-60 | 250 x 250 | 286 x 286 | WT310 |
| 485 m3/H | 230 / 50-60 | 250 x 250 | 286 x 286 | WT315 |

All fans can be used as suction or blower type (except WT315).

Filter grids - Complete with filters

| Cut out Dimensions (mm) | External Dimensions (mm) | Item no. |
|-------------------------|--------------------------|--------------|
| 127 x 127 | 163 x 163 | WT330 |
| 181 x 181 | 214 x 214 | WT335 |
| 250 x 250 | 286 x 286 | WT340 |

Spare filters

| Description | Item no. |
|---|--------------|
| 120mm x 120mm filter, to suit WT300, WI200 & WT330 - Pack 10 pieces | WT333 |
| 170mm x 170mm filter, to suit WT305/308, WI205 & WT335 - Pack 10 pieces | WT338 |
| 235mm x 235mm filter, to suit WT310/315, WI210 & WT340 - Pack 10 pieces | WT343 |



ETA Roof mounting fans

Steel sheet front cover powder painted RAL 7035 textured finish. The units can be delivered with IP54 protection degree.

- Ball bearing radial fans, with internal amperometric protection (only for roof mounting fans)
- High dynamic pressure
- Operating temperature range -20/+55°C
- Power supply chord 3m long according to applicable CE regulation
- IP44 as standard on IP54 on request

ETA Roof Mounting Fans

| Air Flow with Filter | Power Supply V-ph-Hz | Cut out Dimensions (L x W mm) | External Dimensions (L x W x H mm) | Item no. |
|----------------------|----------------------|-------------------------------|------------------------------------|----------------|
| 575 m3/H | 230-1-50/60 | 350x270 | 460x380x108 | WT200CW |
| 860 m3/H | 230-1-50/60 | 350x270 | 460x380x108 | WT205CW |
| 1450 m3/H | 230-1-50/60 | 405x275 | 540x400x160 | WT210CW |
| 2365 m3/H | 230-1-50/60 | 420x400 | 600x550x300 | WT215CW |

Roof Mounting - Structure Only

| Description | Cut out Dimensions (L x W mm) | External Dimensions (L x W x H mm) | Item no. |
|---------------------------|-------------------------------|------------------------------------|----------------|
| Roof Mount Structure only | 350x270 | 460 x 380 x 108 | WT220CW |
| Roof Mount Structure only | 405x275 | 540 x 400 x 160 | WT225CW |
| Roof Mount Structure only | 420x400 | 600 x 550 x 300 | WT230CW |

ETA Thermal management products

Heating & anti-condensation units

Heating Units

| Power Watt | V. AC/DC | Height (mm) | IP Rating | Item no. |
|------------|-----------|-------------|-----------|---------------|
| 10 | 110-250 | 50 | IP54 | WI271 |
| 20 | 110-250 | 60 | IP54 | WI273 |
| 30 | 110-250 | 70 | IP54 | WI274 |
| 15 | 110-250 | 65 | IP20 | WI250 |
| 30 | 110-250 | 65 | IP20 | WI255 |
| 45 | 110-250 | 65 | IP20 | WI260 |
| 75 | 110-250 | 140 | IP20 | WI265 |
| 150 | 110-250 | 220 | IP20 | WI270 |
| 250 | 230/50-60 | 182 | IP20 | WI277* |
| 400 | 230/50-60 | 222 | IP20 | WI279* |

*35 m3/h, 45 m3/h (50 Hz) &/or 54 m3/h (60 Hz). Surface temperature of about 75°C.



Heater with fan & thermostat

WIRV-005
PTC (semiconductor).
AC 230V 50-60 Hz/600W.
108 m3/h.
Time capacity: 50,000 hours
to 25°C
0-60 adjustable, contacts NC.

| Power Watt | V. AC | Height (mm) | Fan Capacity | IP Rating | Item no. |
|------------|-------|-------------|--------------|-----------|----------------|
| 600 | 230 | - | 108 m3/h | IP20 | WIRV005 |
| 350 | 230 | 75 | 35 m3/h | IP20 | WIRV010 |
| 550 | 230 | 85 | 35 m3/h | IP20 | WIRV020 |



WIRV 010 & 020
PTC (semiconductor).
0-60 adjustable

Temperature regulators

WI280

Adjustment range: +10 +60°C
Contact capacity:

- Close 5A/250 V AC
- Open 10A/250 V AC

2,5 mm2 - 4 poles
35 mm CLIP fixing on DIN rails
UL 94 VO thermoplastic material
Dimensions - 67 x 50 x 37 mm
IP 20.

WI290 : electronic temperature/humidity controller

Temperature regulation: 0° ÷ 60°C
Intervention Sensitivity: ±2°C
Respective Humidity Regulation : 50% ÷ 90%
230 V/50-60 Hz
Exchange contact: AC 8A (4) / 250 V,
DC 0,5A / 100 V, DC 8A / 12 V, DC 5A / 35 V
CLIP fixing on 35 mm DIN rail
Dimensions - 50 x 67 x 43 mm
UL 94 VO thermoplastic material
IP 20.

WI297 - Air flow monitor

IP 20.

Small thermostat with NO or NC contact

Small mechanical thermostat (NC) for temperature regulation in, for example, cooling equipment, filter fans & heat exchangers or for switching signal devices when temperature limit been exceeded. To be used to control air temperature inside cabinets.

- Heating
- Ventilation
- Signal transmissions

Adjustment range : 0° ÷ 60°C
Bimetallic
Intervention Sensitivity : ±2°C
250V AC
2,5 mm2 - 2 poles
35 mm CLIP fixing on DIN rails
60 x 33 x 35 mm
UL 94 VO thermoplastic material
IP 20.

| Thermostat | Item no. |
|-----------------|--------------|
| With NC contact | WI282 |
| With NO contact | WI284 |



WI286 - Universal thermostat

Two thermostats in one casing:
Thermostat (contact breaker, normally closed) for regulation heaters
Thermostat (contact breaker, normally open) for regulation filter fans & heat exchangers or switching signal devices when temperature limit has been exceeded (IP 20).



General purpose inductive proximity sensors

Rhomberg proximity switches - inductive

- Inductive (metal) sensing
- Black cap, cables & LED colour coded for type
- Moulded 2m colour coded cable with fishtail - rated to IP67
- Normally open (NO) has red LED, Normally closed (NC) has green LED
- Interchangeable with other makes

Rhomberg inductive prox 2 wire AC

- 20-250Vac, 50/60Hz
- Series & parallel connection compatible
- 400mA max. load current



| Description | Item no. |
|---|-------------------|
| M12 Dia. 2mm sensing distance shielded AC 2 Wire | RI11202F** |
| M12 Dia. 4mm sensing distance unshielded AC 2 Wire | RI11204S** |
| M18 Dia. 5mm sensing distance shielded AC 2 Wire | RI11805F** |
| M18 Dia. 8mm sensing distance unshielded AC 2 Wire | RI11808S** |
| M30 Dia. 10mm sensing distance shielded AC 2 Wire | RI13010F** |
| M30 Dia. 15mm sensing distance unshielded AC 2 Wire | RI13015S** |
| M40 Dia. 20mm sensing distance shielded AC 2 Wire | RI14020F** |
| M40 Dia. 25mm sensing distance unshielded AC 2 Wire | RI14025S** |

Add "MTP" for sensors with plug instead of 2m standard cable & request pricing.

** Specify NO or NC.



Rhomberg inductive prox 3 or 4 wire PNP & NPN DC

- PNP - 3 or 4 wire yellow cable, NPN - 3 or 4 wire green cable
- 10-60Vdc
- Reverse polarity & short circuit protected
- 400mA max load current

| Description | Item no. |
|--|-------------------|
| M12 Dia.. 2mm sensing distance shielded 3 Wire | RI*1202F** |
| M12 Dia.. 4mm sensing distance unshielded 3 Wire | RI*1204S** |
| M18 Dia. 5mmsensing distance shielded 3 Wire | RI*1805F** |
| M18 Dia. 5mm sensing distance shielded 4 Wire | RI*1805FNX |
| M18 Dia. 8mm sensing distance unshielded 3 Wire | RI*1808S** |
| M18 Dia. 8mm sensing distance unshielded 4 Wire | RI*1808SNX |
| M30 Dia. 10mm sensing distance shielded 3 Wire | RI*3010F** |
| M30 Dia. 10mm sensing distance shielded 4 Wire | RI*3010FNX |
| M30 Dia. 15mm sensing distance unshielded 3 Wire | RI*3015S** |
| M30 Dia. 15mm sensing distance unshielded 4 Wire | RI*3015SNX |
| M40 Dia. 20mm sensing distance shielded3 Wire | RI*4020F** |
| M40 Dia. 20mm sensing distance shielded 4 Wire | RI*4020FNX |
| M40 Dia. 25mm sensing distance unshielded 3 Wire | RI*4025S** |
| M40 Dia. 25mm sensing distance unshielded 4 Wire | RI*4025SNX |

Add "MTP" for sensors with plug instead of 2m standard cable & request pricing.

* Specify 4 for PNP or 5 for NPN

** Specify NO or NC

NX = 4 wire NO & NC



General purpose inductive proximity sensors

Rhomberg inductive prox NAMUR 2 wire

- 2 Wire (Blue Cable)
- Designed to DIN 19234
- Interfaces with Rhomberg SC320 or SC300 relay

| Description | Item no. |
|---|------------|
| M12 Dia. 2mm sensing distance shielded | RI01202FNC |
| M12 Dia. 4mm sensing distance unshielded | RI01204SNC |
| M18 Dia. 5mm sensing distance shielded | RI01805FNC |
| M18 Dia. 8mm sensing distance unshielded | RI01808SNC |
| M30 Dia. 10mm sensing distance shielded | RI03010FNC |
| M30 Dia. 15mm sensing distance unshielded | RI03015SNC |
| M40 Dia. 20mm sensing distance shielded | RI04020FNC |
| M40 Dia. 25mm sensing distance unshielded | RI04025SNC |
| Switching amplifier/relay for NAMUR sensors plug in | SC300/*-SP |
| Control relay for rhomberg photo electric sensors plug in | SC410/*-SP |
| 11 Pin DIN rail base | S3B |

Add "-MTP" for sensors with plug instead of cable & request pricing.

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.



General purpose capacitive proximity sensors

Rhomberg proximity switches - capacitive

- Capacitive (most materials) densing
- Adjustable densitivity
- White cap, cables & LED colour coded for type
- Moulded 2m colour coded cable with fishtail - rated to IP67
- Normally open (NO) has red LED, normally closed (Nc) has green LED
- Interchangeable with other makes

Rhomberg capacitive prox 2 wire AC

- 20-250Vac, 50/60Hz
- Series & parallel connection compatible
- 400mA max load current



| Description | Item no. |
|---|------------|
| M18 Dia. 5mm sensing distance shielded AC 2 wire | RC11805F** |
| M18 Dia. 10mm sensing distance unshielded AC 2 wire | RC11810S** |
| M30 Dia. 10mm sensing distance shielded AC 2 wire | RC13010F** |
| M30 Dia. 20mm sensing distance unshielded AC 2 wire | RC13020S** |

Add "MTP" for sensors with plug instead of 2m standard cable & request pricing.

** Specify NO or NC.

General purpose capacitive proximity sensors

Rhomberg capacitive prox 3 wire PNP & NPN DC

- PNP - 3 wire yellow cable, NPN - 3 Wire green cable
- 10-60Vdc
- reverse polarity & short circuit protected
- 400mA max load current



| Description | Item no. |
|---|-------------------|
| M18 Dia. 5mm sensing distance shielded | RC*1805F** |
| M18 Dia. 10mm sensing distance unshielded | RC*1810S** |
| M30 Dia. 10mm sensing distance shielded | RC*3010F** |
| M30 Dia. 20mm sensing distance unshielded | RC*3020S** |

Add "MTP" for sensors with plug instead of 2m standard cable & request pricing.

* Specify 4 for PNP or 5 for NPN.

** Specify NO or NC.



Rhomberg capacitive prox NAMUR 2 wire

- 2 Wire (blue cable)
- Designed to DIN 19234
- Interfaces with SC320 or SC300 relay



| Description | Item no. |
|---|-------------------|
| M30 Dia. 10mm sensing distance shielded | RC03010FNC |
| M30 Dia. 20mm sensing distance unshielded | RC03020SNC |
| Switching Amplifier/Relay For NAMUR sensors plug in | SC300/*-SP |
| Control relay for rhomberg photo electric sensors plug in | SC410/*-SP |
| 11 Pin DIN rail base | S3B |

Add "-MTP" for sensors with plug instead of 2m standard cable & request pricing.

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.

Rhomberg capacitive prox plastic body 1.5" BSP



| Description | Item no. |
|--|----------------------|
| 1.5" BSP20mm sensing distance NAMUR Type | RC04020SNCPBT |
| 1.5" BSP20mm sensing distance DC Type NO | RC44020SNOPBT |
| 1.5" BSP20mm sensing distance DC Type NC | RC44020SNCPBT |
| 1.5" BSP20mm sensing distance DC Type NO | RC54020SNOPBT |
| 1.5" BSP20mm sensing distance DC Type NC | RC54020SNCPBT |

Monitoring relays

Rhomberg 3-phase sequence/failure/asymmetry relays

- Protects against phase imbalance or asymmetry, phase loss or phase reversal
- Sensitivity (Nps) adjustment
- Insensitive to regenerated EMF
- Loss of neutral detection in SP431



| Description | Item no. |
|---|------------|
| Ph Fail, Ph Seq, Ph Asy detection with 1 C/O & LEDs | AP430/*S |
| Ph Fail, Ph Seq, Ph Asy detection with 2 C/O & LEDs | AP430/*D |
| Ph Fail, Ph Seq, Ph Asy detection Plug In 1 C/O & LEDs | SP430/*-SP |
| Ph Fail, Ph Seq, Ph Asy detection Plug In 2 C/O & LEDs | SP430/*-DP |
| Ph Fail, Ph Seq, Ph Asy loss of neutral detection plug in | SP431/*-SP |
| Ph Fail, Ph Seq detection plug in with LEDs | SP433/*-SP |
| 11 Pin DIN rail base | S3B |

* Specify voltage: 110, 115, 220, 380, 400, 415 & 525Vac.

Rhomberg current relays/monitors (AC & DC) single phase

- 11 Pin plug in or DIN rail mount relay (with plug in terminals)
- 250Vac/10A relay
- Single pole & 2 pole configuration
- Slimline & Slimline-D series



| Description | Item no. |
|---|-------------|
| Current monitor 5 Amp AC/DC selectable with time delay plug in | SP103/*-SP |
| Current monitor for DC shunt selectable with time delay plug in | SP104/*-SP |
| Current window comparator AC adjustable with time delay plug in | SP123/*-SP |
| single phase reverse power monitor for ac current | SP510/**-SP |
| 11 Pin DIN rail base | S3B |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.

** Specify voltage: 24, 110, 240, 415Vac.

Rhomberg voltage monitors (AC & DC) & frequency relays

- 11 Pin plug in or DIN rail mount relay (with plug in terminals)
- 250Vac/10A relay
- Slimline & Slimline-D series

| Description | Item no. |
|---|---------------|
| Voltage Comparator adj delay DPDT 415VAC | AP231/400AD |
| Overvoltage & undervoltage monitoring relay, 24VDC | AP224/24VDCS |
| Overvoltage & undervoltage monitoring relay, 240VAC | AP224/240VACS |
| Voltage Monitor 1-Ph Selectable with Time Delay Plug In | SP201/*-SP |
| Voltage Window Comparator 1-Ph selectable with time delay plug in | SP221/*-SP |
| Voltage Window Comparator 3-Ph selectable with time delay plug in | SP231/**-SP |
| Voltage Window Comparator 3-Ph + N over & under | SP232/**-SP |
| Frequency Monitor Over & Under 50Hz | SP320/**-SP |
| 11 Pin DIN rail base | S3B |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac

** Specify voltage: 24, 110, 240, 415Vac.

Monitoring relays

Rhomberg bases for monitoring relays

- Shrouded terminals



| Description | Item no. |
|-------------------------------|------------|
| 11 Pin DIN rail socket / base | S3B |

Rhomberg motor/pump protection relays

- Borehole pump protection
- Auto-calibrating
- Overload (blocking/closed valve) protection
- Underload (running dry) protection with auto restart timer
- Max 4kw without external CT
- Over & under voltage protection
- Phase sequence/failure monitoring
- Liquid level control



| Description | Item no. |
|--|--------------------|
| Motor/pump protection relay 240Vac single phase | MP820/240AS |
| Motor/pump protection relay 400-415Vac three phase | MP830/415AS |

Control relays

- Switching amplifiers, tacho relays, thermistor relays, flip flop relays
- Power supply modules



| Description | Item no. |
|--|----------------------|
| Switching amplifier/relay for NAMUR sensors plug in | SC300/*-SP |
| Switching amplifier/relay for three wire DC sensors plug in | SC314/*-SP |
| Tacho relay for NAMUR Sensors Pulse In 0-1mA re-transmit plug in | SC320/*-SP |
| Control relay for Rhomberg photo electric sensors plug in | SC410/*-SP |
| Temperature control relay for PT-100/Rtd sensors plug in | SC501/*-SP |
| Thermistor motor protection relay auto reset plug in | SC510/*-SP |
| Thermistor motor protection relay auto reset plug in | SC510/*-DP |
| Thermistor motor protection relay test & reset buttons plug in | SC511/*-SP |
| Flip flop relay no memory contact input plug in | SC610/*-SP |
| Flip flop relay with memory contact input or sensor plug in | SC611/*-SP |
| Multi function preselect counter plug in | SC700/*-SP |
| Preset counter panel mount 48x48 | CC701/*DSP |
| Power Supply 250Vac / 24Vac 150mA unregulated plug in | SC900/240/24A |
| Power Supply 250Vac / 24Vdc 120mA unregulated plug in | SC900/240/24D |
| Power Supply 250Vac / 24Vdc 100mA regulated plug in | SC900/240/24R |
| Power Supply 240Vac / 12Vdc 150mA regulated plug in | SC900/240/12R |
| 11 Pin DIN rail base | S3B |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.

Timers

Rhombert multi-function DIN rail & plug in

- Delayed-on, interval, recycling functions 22.5Mm size
- 0.2 Sec. To 100 hours
- DPDT Relay (5A per contact)

| Description | Item no. |
|---|-------------------|
| 0.2 Sec - 100 Hrs 2 Timed Contacts DIN Rail | AT100/**D |
| 0.2 Sec - 120 Sec 2 Timed Contacts 11 Pin | ST100/**DP |
| 22 Sec - 240 Min 2 Timed Contacts 11 Pin | ST101/**DP |
| 0.2 Sec - 100 Hrs 1 Timed Contact DIN Rail | AT110/*S |
| 0.2 Sec - 120 Sec 2 Timed Contacts 11 Pin (Hold or Pulse Reset NPN) | ST110/**DP |
| 22 Sec - 240 Min 2 Timed Contacts 11 Pin (Hold or Pulse Reset NPN) | ST111/**DP |
| 11 Pin DIN Rail Base (Accepts Retainer Clip with Plug in Timers) | S3B |

* Specify voltage: 12, 24Vdc, 24, 110, 240, 415Vac.

** Specify voltage: 30Vdc, 250, 415Vac.



Rhombert asymmetrical recycling din rail & plug in

- Asymmetrical recycling - on or off cycle first
- DPDT Relay (5A per contact)
- DIN Rail & plug in 22.5mm size

| Description | Item no. |
|--|-------------------|
| 0.2 Sec - 240 Min 2 Timed Contacts DIN Rail | AT200/**D |
| T1 = 0 - 120s, T2 = 0 - 120s 2 Timed Contacts 11 Pin | ST200/**DP |
| T1 = 0 - 120s, T2 = 22s - 240m 2 Timed Contacts 11 Pin | ST201/**DP |
| T1 = 22s - 240m, T2 = 22s - 240m 2 Timed Contacts 11 Pin | ST202/**DP |
| T1 = 22s - 240m, T2 = 0 - 120s 2 Timed Contacts 11 Pin | ST203/**DP |
| Multi Function Type 0.2 Sec - 120 Sec 1 Timed Contact 11 Pin | ST210/*SP |
| 11 Pin DIN Rail Base (Accepts Retainer Clip with Plug in Timers) | S3B |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac

** Specify voltage: 30Vdc & 250, 415Vac



Rhombert special function timers

- No power delayed off functions - 'true off delay'
- Multi start attempt timer for repeated starting attempts of standby generator sets with start failure alarm output
- Slim housing (22.5Mm)

| Description | Item no. |
|---|------------------|
| 0.2 Sec - 120 Sec No Power Delay OFF Timer 1 Timed Contact 11 Pin | ST300/*SP |
| 22 Sec - 240 Min No Power Delay OFF Timer 1 Timed Contact 11 Pin | ST301/*SP |
| Multi Start Attempt Timer 1 C/O | AT500/*S |
| 11 Pin DIN Rail Base (Accepts Retainer Clip with Timer) | S3B |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.



Rhombert star delta timers

- Star time adjustable up to 60 sec. (30 Sec. Max adjustment available on request)
- Pause time 75msec (50msec available on request)
- Relay rests in "centre-off" position during pause & power off state
- 5A Relay output

| Description | Item no. |
|---|-------------------|
| Star Time Adjustable Pause Time 75msec Fixed 1 C/O DIN Rail | AT130/*AS |
| Star Time Adjustable Pause Time 75msec Fixed 1 C/O Plug in | ST130/*-SP |
| 11 Pin DIN Rail Base (Accepts Retainer Clip with St310) | S3B |

* Specify voltage: 110, 240, 415Vac





Liquid level controllers

- Level control of conductive liquids - relay & probes
- Level control of non-conductive liquids or granular materials
- Relay for use with capacitive proximity switches

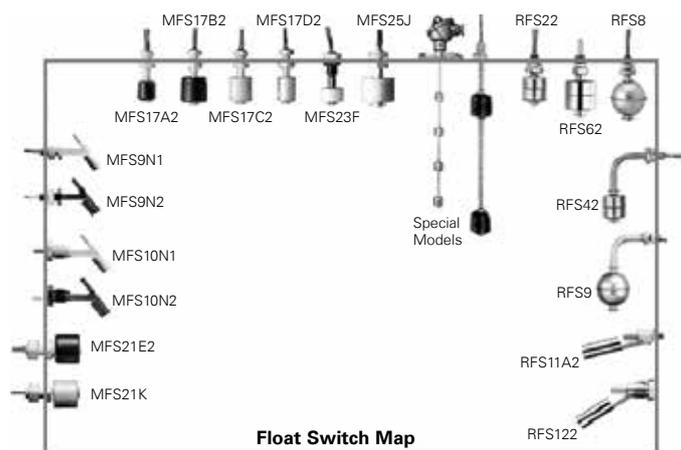
| Description | Item no. |
|--|---------------------|
| Level relay for resistive sensors single point control plug in | SC100/***ACS |
| Level relay single pt high / low C/W drain function 1 C/O | AC130/***S |
| Level relay single pt high / low C/W drain function 2 C/O | AC130/***D |
| Level relay single pt high / low C/W drain function 1 C/O plug in | SC130/***S |
| Level relay single pt high / low C/W drain function 2 C/O plug in | SC130/***D |
| Level relay non conductive type single pt high / low 1 C/O plug in | SC230/*SP |
| 11 Pin DIN Rail Base | S3B |
| Accessories | |
| Probe holder with screw cap incl 3 X 1 MTR coated SS316 rods | CP3C |
| Probe holder with screw cap incl 2 X 1 MTR coated SS316 rods | CP2C |
| Probe holder with screw cap incl 1 X 1 MTR coated SS316 rods | CP1C |
| Extension rods 1 MTR male / female | EP1/CEXT |

* Specify voltage: 12, 24Vdc & 24, 110, 240, 415Vac.

*** Specify voltage: 24, 110, 240, 415Vac.

Riko float switches

- Stainless & plastic type floats
- Horizontal & vertical types
- Multiple level switches
- Suitable For 240Vac



| Description | Item no. |
|--|---------------------|
| 1/2" NPT polypropylene horizontal float switch, 90mm x 15mm Dia. 0.5 Amp | MFS10N1 |
| 1/2" NPT nylon-6 horizontal float switch, 90mm long x 15mm Dia. 0.5 Amp | MFS10N2 |
| PA/rubber upright float switch, 44mm long x 20mm Dia. 0.5 Amp | MFS17A2 |
| PA/rubber upright float switch, 44mm long x 20mm Dia. 0.5 Amp, PP clip | MFS17A2PPC |
| PA/rubber upright float switch, 44mm long x 26.5mm Dia. 0.5 Amp | MFS17B2 |
| Polypropylene upright float switch, 44mm long x 25mm Dia. 0.5 Amp | MFS17C2 |
| Polypropylene upright float switch, 44mm long x 18mm Dia. 0.5 Amp | MFS17D2 |
| 1/4" PF PA/rubber horizontal float switch, 38mm x 31mm Dia. 0.5 Amp | MFS21E2 |
| Polypropylene horizontal float switch, 73mm x 15mm Dia. 0.5 Amp | MFS9N1 |
| Nylon-6 horizontal float switch, 73mm long x 15mm Dia. 0.5 Amp | MFS9N2 |
| S/S Horizontal float switch, 73mm long x 28mm Dia. 0.5 Amp | RFS11A2 |
| 1/2" NPT S/S horizontal float switch, 94mm Long x 17mm Dia. 0.5 Amp | RFS122 |
| S/S upright float switch, 42mm long x 28mm Dia. 0.5 Amp | RFS22 |
| S/S elbow float switch, 83.5mm long x 28mm Dia. 0.5 Amp | RFS42 |
| S/S upright float switch, 75 long x 50mm Dia. 0.5 Amp | RFS62 |
| S/S upright float switch, 59mm long x 43mm Dia. 0.5 Amp | RFS8 |
| S/S elbow float switch, 99mm long x 28mm Dia. 0.5 Amp | RFS9 |
| 316S/S float only, RFS22 | FLOAT316SS |
| 316S/S float only, RFS62 | FLOAT50MM316 |

Ancillary products

Power quality



Rugged, commercial surge filter

PSFI key features:

- Surge suppression rating of 25kA (L-N)
- 2 Mode, 3 Element Series Filter
- 3 Mode, 2 Stage Surge Diverter
- Rugged steel IP24 enclosure
- Protection Fail Indicators
- 12 Month Warranty

The PSFI is a 1-Phase 25kA portable surge filter, designed to provide secondary protection against power surges caused by external sources such as lightning strikes & substation switching, as well as providing a measure of protection from surge events generated on the secondary side of the filter.

| Model/Description | In (x20 hits) | I _{max} | Joules | Dimensions (mm) WxDxH, kg | Item no. |
|---|---------------|------------------|--------|---------------------------|---------------|
| 1 Ph, 10A IEC input/output surge filter | 10kA | 25kA | 1555J | 90 x 205 x 55, 1kg | PSF10I |
| 1 Ph, 16A IEC input/output surge filter | 10kA | 25kA | 1555J | 90 x 205 x 55, 1kg | PSF16I |



Class I - diverters

SPDI surge protection, spark gap surge arresters

Features:

- 1 mode direct strike protection
- 25kA, 50kA & 100kA surge suppression ratings
- DIN43880 case, 35 mm wide

Designed to protect single phase power systems against damage from surges & spikes caused by lightning & other electrical sources. The unit is intended for high risk point of entry protection & is connected in parallel with the system via HRC fuses.

Applications

- Direct strike Class I high risk point of entry

Technical specifications

| Description | SPDSG50-300 | SPDSG50-255NPE |
|---|---------------------------------|---------------------------------|
| Nominal voltage U _n | 230vac | 230vac |
| Max continuous voltage U _c AC/DC | 300vac | 255vac |
| Nominal discharge current (10/350us, kA) per line. I _{imp} | 50 | 50 |
| Max discharge current (8/20us, kA) Per line. I _{max} . | 140 | 140 |
| Voltage protection level (10/350us) I _{imp} | <2.5kV | <2.5kV |
| Follow current | None | None |
| Leakage current | None | None |
| Dimensions | 35mm (W) x 100mm (H) x 77mm (D) | 35mm (W) x 100mm (H) x 77mm (D) |
| Applicable standards | IEC61643-1:2001 | IEC61643-1:2001 |

| Description | Class | Item no. |
|---|-------|-----------------------|
| 2 Pole, 255v, 50kA, 1 mode surge diverter | I | SPDSG50-255NPE |
| 2 Pole, 300v, 50kA, 1 mode surge diverter | I | SPDSG50-300 |



Class II - diverters

SPDI Series diverters, DIN rail mounted surge diverters

SPDI key features:

- 1 or 2 Mode, 1 Stage Surge Diverter
- Surge rating from 40kA - 120kA
- Din 43880 profile IP20 enclosure
- Versatile mounting clips for DIN or Surface Mount
- 12 Month Warranty

The SPDI range of DIN surge diverters provide the ultimate solution for surge protection in single & multi-phase systems. The units are housed in a genuine DIN43880 profile enclosure, enabling them to be easily included in new designs or retrofitted into existing switchboards. SPDI surge diverters can be installed as point-of-entry or sub-board protection & are connected in parallel with the power circuit via separate protection HRC fuses. The SPDI utilises state-of-the-art MOV technology featuring embedded thermal fusing.

Class II - diverters

DIN rail mounted surge diverters

| Specifications | SPDT60-255 | SPDV60-300 | SPD150I | SPD360NI | SPD360GI |
|--|---|--|--|--------------------------------|--------------------------------|
| Input voltage | 220-250VAC, 1 Phase | 220-250VAC, 1 Phase | 220-277VAC, 1 Phase | 220-277VAC (380-480V), 3 Phase | 220-300VAC (380-520V), 3 Phase |
| Maximum continuous operating voltage (MCOV) | 255VAC | 300VAC | 320VAC | 320VAC | 350VAC |
| Temporary over-voltage (TOV) | 300VAC | 320VAC, 15 mins | 350VAC, 15 mins | 350VAC, 15 mins | 420VAC, 15 mins |
| Initial clamp voltage | N/A | 470V | 560V | 560V | 680V |
| Maximum rated surge current – Ismax 8/20us | 60kA | 60kA | 120kA | 60kA / Phase | 60kA / Phase |
| Nominal surge current – In 8/20us | 30kA | 30kA | 60kA | 30kA / Phase | 30kA / Phase |
| Residual voltage (Vpl) @ 3kA, 8/20us | N/A | 1.0kV | 1.0kV | ≤ 1.2kV L-N, 900V N-E | ≤ 1.2kV L-E, ≤ 1.4kV N-E |
| Residual voltage (Vpl) @ Ismax, 8/20us | 1.8kV | 1.4kV | 1.65kV | ≤ 2.1kV L-N, 1.46kV N-E | ≤ 2.1kV L-E, < 2.45kV N-E |
| Energy absorption (2ms) | N/A | 2,130 Joules | 2,130 Joules | 2,130 Joules | 3,640 Joules |
| Modes of Protection | N-E | L-N | L-N or L-E | L-N & N-E | L-E & N-E |
| Recommended maximum over-current protection | NIL | gG/gL HRC fuse, 160A maximum | gG/gL HRC fuses, 1 per phase, 125A maximum | | |
| Terminations | Power: 25mm ² , Alarm: 1.5mm ² | Power: 25mm ² , Alarm: 1.5mm ² | Power: 16mm ² , Alarm: 1.5mm ² | | |
| Alarms / indicators | Flag indicator, dry contact – 250VA/32VDC, 2A | Flag indicator, dry contact – 250VA/32VDC, 2A | 5 indicators, dry contact alarm relay – 250VAC/32VDC, 5A | | |
| Design standards | IEC61643-1, IEC610006, ANSI/IEEE C62.41, AS1768-2003, AS3100, CE mark | | | | |

SPDI - Shunt diverters - single & three phase - DIN rail mount (hardwired)

| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|--|-------|-------------------------------|-------------------|
| 1P 60kA 1 Mode DIN surge diverter N-E | II | 18 x 65 x 97, 0.1kg | SPDT60-255 |
| 1P 60kA 1 Mode DIN surge diverter L-E, L-N | II | 18 x 65 x 97, 0.1kg | SPDV60-300 |
| 1 Phase 120kA 1 Mode DIN surge diverter | II | 70 x 68 x 90, 0.2kg | SPD150I |
| 3 Phase 60kA 2 Mode DIN surge diverter (M.E.N) | II | 70 x 68 x 90, 0.2kg | SPD360NI |
| 3 Phase 60kA 2 Mode DIN surge diverter (non-M.E.N) | II | 70 x 68 x 90, 0.2kg | SPD360GI |

Note: For installations remote from the M.E.N link using SPDV60-300 or SPD150I, use with an SPD50NGi for N-E protection. The SPDV60-300 is also available as a Gas-Arrestor (SPDT60-255).

Class II, Quickmov™ surge diverter

Quickmov™ key features:

- 1 Mode, 1 Stage Surge Diverter
- Mounts directly in any Quicklag™ panelboard
- Surge suppression MOV rating 30kA Inom, 60kA Imax
- Ideal for main board or sub-board protection
- Includes built-in HRC fuse for safe disconnect
- Compatible with most Quicklag™ accessories

Eaton's Quickmov™ is a fully integrated surge diverter, designed to provide point-of-entry or sub-board protection against surge transients & voltage spikes. The unit is intended for installation at the main switchboard or to be used in conjunction with an SPD50NGi Neutral-Earth Arrestor for Non-M.E.N locations. One Quickmov™ per phase is required for multi-phase installations.



| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|---------------------------------|-------|-------------------------------|---------------|
| 1P 60kA Quickmov surge diverter | II | 25 x 71 x 93, 0.3kg | SPDQM1 |

Note: For installations remote from the M.E.N link, use with an SPD50NGi for N-E protection. For compatible accessories refer to Quicklag accessories

Ancillary products

Power quality



Class II, Neutral – Earth surge protector

SPDNGI Key features:

- Compact neutral-earth protection solution
- Surge current rating from 25kA Inom, 50kA Imax
- Compatible with most switchboards
- Quick and simple installation

The SPDNGI is designed to protect against Neutral to Earth surge transients and can also be applied as an Equipotential Coupler in applications where separate earth systems are used.

Commercial and Industrial Environments at point of building entry protection, three phase, c/w Common & Normal Mode Protection

| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|----------------------------|-------|---|-----------------|
| 50kA Equipotential Coupler | II | 60 x 15 x 15 (not incl cables), 0.15kg | SPD50NGI |

Single & three phase 50-80A surge filter

ESF key features:

- 1 Mode, 2 element series filter
- 3 Mode, 2 stage surge diverter
- Available in 50, 63 & 80 Amp ratings
- Surge suppression rating of 100kA
- Protection fail alarm relay
- IP42 Steel Enclosure

The ESF surge filter is designed to provide point-of-entry protection against power surges caused by external sources as well as providing a measure of protection from surge events generated on the secondary side of the filter. The ESF is a 3-stage protection unit utilising primary & secondary MOV protection in conjunction with a Low-Q LC filter.

ESF - Single phase (hardwired in/out) - series filter c/w enclosure & remote alarm

For use in industrial and commercial applications where there are severe power problems such as electrical noise

| Model/description | Amps | In (x20 hits) | I _{max} | Class | Dimensions (mm) W x D x H, kg | Item no. |
|--------------------------------|------|---------------|------------------|----------|----------------------------------|--------------------|
| 1 Ph, 50A, 100kA, Surge Filter | 50A | 50kA | 100kA | II & III | 240 x 220 x 520, 6kg | ESF501-TN-E |
| 1 Ph, 63A, 100kA, Surge Filter | 63A | 50kA | 100kA | II & III | 240 x 220 x 520, 6kg | ESF631-TN-E |
| 1 Ph, 80A, 100kA, Surge Filter | 80A | 50kA | 100kA | II & III | 240 x 220 x 520, 6kg | ESF801-TN-E |

ESF - Three Phase (hardwired in/out) - series filter c/w enclosure & remote alarm

For use in industrial and commercial applications where there are severe power problems such as electrical noise

| Model/description | Amps | In (x20 hits) | I _{max} | Class | Dimensions (mm) W x D x H, kg | Item no. |
|--------------------------------|------|---------------|------------------|----------|----------------------------------|--------------------|
| 3 Ph, 50A, 100kA, Surge Filter | 50A | 50kA/Ph | 100kA/Ph | II & III | 400 x 220 x 520, 10kg | ESF503-TN-E |
| 3 Ph, 63A, 100kA, Surge Filter | 63A | 50kA/Ph | 100kA/Ph | II & III | 400 x 220 x 520, 10kg | ESF633-TN-E |
| 3 Ph, 80A, 100kA, Surge Filter | 80A | 50kA/Ph | 100kA/Ph | II & III | 400 x 220 x 520, 10kg | ESF803-TN-E |

Single phase high performance surge filter

DSFI Key features:

- Surge suppression & filtering in a single package
- 2 Mode, 5 element series filter
- 3 Mode, 2 stage surge diverter
- Enclosed in IP20 painted steel housing
- Protection Fail Alarm Relay
- 5 Year Warranty



| Input voltage | Amps | In (x20 hits) | I _{max} | Joules | Protection Mode | Recommended maximum over-current protection |
|---------------------|---------|---------------|------------------|--------|-----------------|---|
| 200-250VAC, 1 Phase | 5 - 32A | 15kA | 40kA | 2225J | L-N, L-E, N-E | gG/gL HRC fuse 32A or MCB 32A |

DSFI - series filter - single phase (hardwired) - panel mount

For use in industrial and commercial applications where there are severe power problems such as electrical noise

| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|---|-------|----------------------------------|-------------|
| 1 Ph, 32 Amp, Hardwired series Surge Filter | II | 140 x 50 x 270, 1.5kg | DSFI |

Single phase DIN rail compact surge filter

CSFI Key features:

- Surge suppression & filtering
- 2 Mode, 3 element series filter
- 3 Mode, 2 stage surge diverter
- DIN rail mountable 35mm wide
- Protection Fail Alarm Relay
- 12 Month Warranty

| Input voltage | Amps | In (x20 hits) | I _{max} | Joules | Protection mode | Recommended maximum over-current protection |
|---------------------|---------|---------------|------------------|--------|-----------------|---|
| 200-250VAC, 1 Phase | 5 - 25A | 10kA | 25kA | 1555J | L-N, L-E, N-E | gG/gL HRC fuse 25A or MCB 25A |



CSFI - Series filter - single phase (hardwired) - DIN rail

For use in industrial and commercial applications where there are severe power problems such as electrical noise

| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|--|-------|-------------------------------|----------|
| 1 Ph, 25 A, DIN rail, series Surge Filter 240V | II | 70 x 68 x 90, 0.2kg | CSFI |

Three phase surge diverter

SPD3200 Key features:

- Protection rating 200kA per phase
 - LE & N-E protection
 - LED indicators and in-built surge counter
 - Includes 3 Ph MCB safety disconnect within enclosure
 - Surge suppression rating of 200kA
 - IP50 Steel Enclosure
 - Protection Fail Alarm Relay
 - 5 Year Warranty
- The SPD3200-TN-E is designed to protect three phase power systems against damage from surges and spikes caused by lightning and other electrical sources. The unit is intended for point of entry or main board protection and is connected in parallel with the power system via its own safety disconnect MCB.



| Input voltage | In (x20 hits) | I _{max} | Protection mode | Recommended maximum over-current protection |
|-------------------------------|---------------|------------------|-----------------|---|
| 200-250VAC (380-440V) 3 Phase | 100kA/ph | 200kA/ph | L-E, N-E | 63A gG HRC fuse, 1 per phase |

SPD3200 - Shunt diverter - three phase - wall mount (hardwired in/out)

commercial and Industrial Environments at point of building entry protection, three phase, c/w Common & Normal Mode Protection

| Model/description | Class | Dimensions (mm) W x D x H, kg | Item no. |
|---------------------------------|----------|-------------------------------|--------------|
| 3 Ph, 200kA/ph, Shunt Diverter, | II & III | 280 x 125 x 360, 7kg | SPD3200-TN-E |

Three phase premium power filter

PPFI Key features:

- 1 Mode, Multi-Element Series Filter
 - 2 Mode, 2 Stage Surge Diverter
 - Standard current ratings from 100A to 400 Amps
 - Surge suppression ratings from 80kA to 120kA
 - Incorporates EN certified EMI/RFI Filter
 - Provides extensive high frequency and RF filtering
 - Panel mounted mimic display
 - Protection Fail Alarm Relay
 - IP 24 Steel Enclosure
 - 5 Year Warranty
- The PPFI is designed to provide point-of-entry and sub-circuit protection against power surges caused by sources such as lightning strikes and substation switching, as well as providing a measure of protection from surge events generated on the secondary side of the filter. The PPFI is a 3-stage protection unit utilising primary and secondary MOV protection in conjunction with a Low-Q LC Filter. The unit provides filtering of line harmonics, noise and RF transmitters with a cut-off frequency of <10kHz and attenuation of >70dB above 1Mhz.

PPFI - Three phase (hardwired in/out) - surge power filter c/w enclosure & remote alarms

For use as point-of-entry or sub-board protection in industrial & commercial applications where there are severe power problems.

| Model/description | Amps per phase | In (x20 hits) | I _{max} | Joules | Category | Dimensions (mm) W x D x H, kg | Item no. |
|-------------------|----------------|---------------|------------------|--------|----------|-------------------------------|------------|
| 3 Ph, 100A, 80kA | 100A | 30kA/Ph | 80kA/Ph | 7530J | B/C/D/E | 600 x 200 x 800, 50kg | PPF1003CEI |
| 3 Ph, 100A, 120kA | 100A | 45kA/Ph | 120kA/Ph | 7910J | B/C/D/E | 600 x 200 x 800, 50kg | PPF1003DEI |
| 3 Ph, 160A, 80kA | 160A | 30kA/Ph | 80kA/Ph | 7530J | B/C/D/E | 600 x 200 x 800, 50kg | PPF1603CEI |
| 3 Ph, 160A, 120kA | 160A | 45kA/Ph | 120kA/Ph | 7910J | B/C/D/E | 600 x 200 x 800, 50kg | PPF1603DEI |
| 3 Ph, 200A, 80kA | 200A | 30kA/Ph | 80kA/Ph | 7530J | B/C/D/E | 600 x 200 x 800, 60kg | PPF2003CEI |
| 3 Ph, 200A, 120kA | 200A | 45kA/Ph | 120kA/Ph | 7910J | B/C/D/E | 600 x 200 x 800, 60kg | PPF2003DEI |
| 3 Ph, 250A, 80kA | 250A | 30kA/Ph | 80kA/Ph | 7530J | B/C/D/E | 600 x 250 x 1000, 75kg | PPF3003CEI |
| 3 Ph, 250A, 120kA | 250A | 45kA/Ph | 120kA/Ph | 7910J | B/C/D/E | 600 x 250 x 1000, 75kg | PPF3003DEI |
| 3 Ph, 400, 80kA | 400A | 30kA/Ph | 80kA/Ph | 7530J | B/C/D/E | 600 x 250 x 1000, 75kg | PPF4003CEI |
| 3 Ph, 400A, 120kA | 400A | 45kA/Ph | 120kA/Ph | 7910J | B/C/D/E | 600 x 250 x 1000, 75kg | PPF4003DEI |



Ancillary products

Power quality



Class III diverters & filters

I.T. Data & Telecommunication Protection

Eaton's line of data & telecommunication surge suppression products are available for nearly any configuration & offer complete protection for computers & small to large networks, communication devices, phone systems, printers, fax machines & much more.

Wherever uptime is essential, Eaton delivers a comprehensive, single-source power management solution to ensure maximum reliability through the life of your vital applications. Our unique surge protection systems represent a fundamental component of the complete facility solution.

Designed to safeguard against harmful & potentially disastrous surges & spikes, our data surge suppression solutions protect your equipment from the damage frequently caused

by lightning strikes, brownouts, electrical load switching, faulty wiring, downed power lines & more. For more information, please contact your local Eaton representative.

Low voltage DC surge diverters to suit data & extra low voltage power applications available in 5, 12, 24 & 48 Volt models.

Features:

- 1 mode plug-in protection
- 10kA surge suppression rating
- Compact solution for data & ELV systems protection
- DIN43880 case, 13 mm wide

Applications

- Data networks signalling protection

Technical specifications, DM series

| Description | SPD-DM05 | SPD-DM12 | SPD-DM24 | SPD-DM48 |
|---|---------------|----------------|----------------|----------------|
| Nominal voltage Un | 5 | 12 | 24 | 48 |
| Max continuous voltage Uc DC | 6 | 15 | 28 | 60 |
| Nominal discharge current (8/20us, kA) per line. Inom. | 5 | 5 | 5 | 5 |
| Max discharge current (8/20us, kA) Per line. Imax. | 10 | 10 | 10 | 10 |
| Nominal current (A) IL | 0.5 | 0.5 | 0.5 | 0.5 |
| Voltage protection level (8/20us, V) Up Line -Line, Line - Ground | <80v <350v | <150v <350v | <200v <500v | <250v <500v |
| Voltage protection level (1KV/us, V) Up Line - Line, Line - ground | <10v <600v | <18v <600v | <30v <600v | <70v <600v |
| Series impedance per line (Ohm) | 4 | 4 | 4 | 4 |
| Insertion loss at 100Mhz (dB) | <3.0 | <3.0 | <3.0 | <3.0 |

SPD-DM series

| Description | Item no. |
|--|-----------------|
| 1 Pole, 5vdc, 10kA, 1 mode Surge Diverter w/ removable module | SPD-DM05 |
| 1 Pole, 12vdc, 10kA, 1 mode Surge Diverter w/ removable module | SPD-DM12 |
| 1 Pole, 24vdc, 10kA, 1 mode Surge Diverter w/ removable module | SPD-DM24 |
| 1 Pole, 48vdc, 10kA, 1 mode Surge Diverter w/ removable module | SPD-DM48 |

Technical specifications, SF8RM

| Current rating | I _{max} L - N | V _{pl} (let through voltage) | MCOV | Filter type | Attenuation | Input connection | Output connections | Dimensions (mm) W x D x H | Weight (kg) |
|----------------|------------------------|--|--------|--|-------------------|------------------------------------|----------------------------------|---------------------------|-------------|
| 10A total | 22.5kA | < 700V @ 3kA | 300vac | Low Q / low C filter, differential & common mode | > 50dB above 1Mhz | Approved 3 Pin Australian 10A plug | Australian 3 pin 10A sockets x 8 | 441 x 120 x 44 | 1.2 |

SF8RU rack mount surge filter

| Description | Item no. |
|--|--------------|
| Surge filter, 19", 1 RU, 8 way, rack mount | SF8RM |

Class II solar cell surge diverters

Photo voltaic diverters

The PVD series diverters are designed to protect home & industrial solar panel arrays commonly used in grid interactive power solutions in the 1.5kW to 5kW range. These systems commonly use 500, 600 & 1000VDC solar panel arrays. The PVD series diverters are designed to protect the DC input side of grid interactive inverters from harmful transients that can appear on the output of solar arrays, especially where they are located on roof or other high infrastructure locations. IEC61643-1 & UL1449 ed3 compliant. Available in 3 models to suit 500, 600 & 1000VDC systems.

Features:

- 2 mode plug in protection
- 40kA surge suppression rating
- Compact modular solution
- 2 & 3 unit DIN43880 case, 36 & 54mm DIN-rail mount
- Floating contact alarm output

Applications

- Stand alone & Grid Interactive Solar arrays.



Technical specifications

| Description | PVD40-500-V-C | PVD40-600-V-C | PVD40-1000-V-CD |
|--|--|--|--|
| Nominal Voltage Un | 500VDC | 600VDC | 1000VDC |
| Max Continuous Voltage Uc | 530VDC | 620VDC | 1060VDC |
| Nominal Discharge Current (8/20us, kA) Inom. | 20 | 20 | 20 |
| Max Discharge Current (8/20us, kA) Imax. | 40 | 40 | 40 |
| Nominal current (ma) IL | 10 | 10 | 10 |
| Residual voltage (Vpl) @ Inom 20kA, 8/20us | 1.6kV | 2.0kV | 3.2kV |
| Test classification | Class II | Class II | Class II |
| Internal protection | MOV thermal disconnect | MOV thermal disconnect | MOV thermal disconnect |
| Alarm & indicators | Red flag indicator on module Alarm relay contact. 250vac/24vdc, 2A | Red flag indicator on module Alarm relay contact. 250vac/24vdc, 2A | Red flag indicator on module Alarm relay contact. 250vac/24vdc, 2A |
| Terminations | Main terminals 25mm Alarm terminals 1.5mm | Main terminals 25mm Alarm terminals 1.5mm | Main terminals 25mm Alarm terminals 1.5mm |

| Description | Item no. |
|---|------------------------|
| 2 Pole, 500vdc, 40kA, 2 mode (-ve - earth, +ve - earth) Surge Diverter w/ removable modules, floating contact alarm output | PVD40-500-V-C |
| 2 Pole, 600vdc, 40kA, 2 mode (-ve - earth, +ve - earth) Surge Diverter w/ removable modules, floating contact alarm output | PVD40-600-V-C |
| 3 Pole, 1000vdc, 40kA, 2 mode (-ve - earth, +ve - earth) Surge Diverter w/ removable modules, floating contact alarm output | PVD40-1000-V-CD |

Ancillary products

Power quality



Power conditioners

500VA to 2500VA portable power conditioners

Designed & manufactured in Australia, the Sola 200/210 portable power conditioner provides smooth stepless control of output voltage to your computer or electronic system, whilst attenuating harmful impulses, surges & other power line disturbances. The Sola 200/210 incorporates improved surge withstand capabilities, as specified by ANSI/IEEE C62.41-1980 & is covered by the SECV Certificate of Suitability Number CS84292V.

Technical specifications

| Description | |
|---------------------------|--|
| Input | |
| Voltage: | 220 or 240 Volt AC |
| Frequency: | 50 Hz |
| Input Voltage Range: | + 10%, -20% (±40%) |
| Protection: | ANSI/IEEE C62.41-1980 A & B waveforms suppressed to safe levels |
| Output | |
| Nominal Voltage: | 220 or 240 Volt AC |
| Frequency: | 50 Hz |
| Voltage Regulation: | ±3% for +10%, -20% input +5%, -8% for ±40% input |
| Control: | AC on/off switch |
| Power | |
| Efficiency: | 90% |
| Response/Correction Time: | Return to regulation envelope within 30 msec. |
| Dynamic Response: | Continuous & smooth correction for input voltage fluctuations |
| Overloads: | 200% of rated load for 10 seconds without damage. 500% of rated load for 10 msec. |
| Warranty: | 5 years |

| Description | |
|------------------------------|--|
| Electrical Noise Attenuation | |
| Transverse Mode: | 60 dB typical, (80 dB max.), 4kHz to 20 MHz |
| Common Mode: | 120 dB typical, (140 dB max.) 2kHz to 1 MHz |
| Output Harmonic Distortion: | Less than 3% THD on linear loads. No greater than 5% on typical computer loads |
| Environmental | |
| Operating Ambient: | -20°C to +50°C |
| Relative Humidity: | 0 to 95% non-condensing |
| Ventilation: | Natural Convection Cooled |
| Status Indication | |
| Power On: | Amber lamp |
| Overload Protection: | Output short circuit protection |
| Warranty: | 5 years |

| Rated output VA | Current AMPS (Cont.) | Output receptacles | Weight (kg) | Enclosure size ① | Item no. |
|-----------------|----------------------|--------------------|-------------|------------------|---------------------|
| 500 | 2.08 | 2 | 23 | 3 | 2102665000 |
| 1000 | 4.16 | 3 | 36 | 4 | 2102671000 |
| 2000 | 8.33 | 3 | 55 | 4 | 2102672000 |
| 2500 | 10.41 | 3 | 66 | 4 | 2102672500 ② |

240 Volt Hardwired options available to order. Special voltage configurations available to order. Specific input leads & output sockets can be fitted to order.

① Enclosure sizes (mm) Size 3: 195 (H) x 210 (W) x 328 (D), Size 4: 252 (H) x 280 (W) x 421 (D).

② Input lead fitted with 15 Amp plug top (all other units fitted with 10 Amp plug tops).



Power conditioners

3kVA to 22kVA power conditioners

The extension of Sola ferroresonant power conditioners continues through to 22kVA. These units are mostly suited to hardwired, fixed installation applications for providing smooth stepless control of the output voltage, attenuation of harmful impulses or surges & other power line disturbances. Sola 200 power conditioners are ideally suited to provide protection in computer rooms, regulation for scientific instrumentation, plus protection & regulated power to sophisticated computer based factory process equipment. To simplify installation, all units are free standing & fitted with castors (excluding 22kVA) & jacking feet. Connections are provided at the rear via a base plate cable entry to an isolation switch.

The flexibility of Sola 200 power conditioners is increased on units between 7.5kVA & 18kVA. These units can be field configured for single phase or three phase operation with 230 Volt taps provided as standard on 240 Volt In/Out models. Sola 200 power conditioners (3 to 22kVA) incorporate approved surge withstand capabilities, as required by ANSI/IEEE C62.41- 1980.

Technical specifications

| | Description |
|---------------------------|--|
| Input | |
| Voltage: | 220 or 240 Volt AC ① (Refer Ordering Details" for configuration options) |
| Frequency: | 50 Hz |
| Input Voltage Range: | + 10%, -20% (±40%) |
| Protection: | ANSI/IEEE C62.41-1980 A & B waveforms suppressed to safe levels. |
| Output | |
| Nominal Voltage: | 220 or 240 Volt AC |
| Frequency: | 50 Hz |
| Voltage Regulation: | ±3% for +10%, -20% input. +5%, -8% for ±40% input. |
| Control: | AC on/off switch |
| Power | |
| Efficiency: | 90% |
| Response/Correction Time: | Return to regulation envelope within 30 msec. |
| Dynamic Response: | Continuous & smooth correction for input voltage fluctuations. |
| Overloads | 200% of rated load for 10 seconds without damage. 500% of rated load for 10 msec. |

① For units with nominal input/output voltage of 220 specify -44-, as in 200-44-730.

| Description | |
|-------------------------------------|---|
| Electrical Noise Attenuation | |
| Transverse Mode: | 60 dB typical, (80 dB max.), 4kHz to 20 MHz |
| Common Mode: | 120 dB typical, (140 dB max.), 2kHz to 1 MHz |
| Output Harmonic Distortion | |
| | Less than 3% THD on linear loads. No greater than 5% on typical computer loads. |
| Environmental | |
| Operating Ambient: | -20°C to +50°C |
| Relative Humidity: | 0 to 95% non-condensing |
| Ventilation: | Natural Convection Cooled |
| Status Indication | |
| Power On: | Amber lamp |
| Overload Protection | Output short circuit protection |
| Warranty | 5 years |

| Rated output kVA | Configuration | Weight (kg) | Enclosure size ④ | Item no. |
|------------------|---------------|-------------|------------------|---------------------|
| 3 | 1 Phase only | 100 | 1 | 20026730 |
| 3 | 1 Phase only | 100 | 1 | 2002673000 ① |
| 5 | 1 Phase only | 155 | 2 | 20026750 |
| 5 | 1 Phase only | 155 | 2 | 20026750HO ② |
| 7.5 | 1 or 3 Phase | 215 | 2 | 20026775 ③ |
| 9 | 1 or 3 Phase | 270 | 2 | 20026790 ③ |
| 12 | 1 or 3 Phase | 360 | 3 | 20026812M ③ |
| 15 | 1 or 3 Phase | 420 | 3 | 20026815 ③ |
| 18 | 1 or 3 Phase | 520 | 3 | 20026818 ③ |
| 22.5 | 3 Phase only | 595 | 4 | 20046822 ③ |

To avoid nuisance tripping of input circuit breakers, we recommend the use of 'D' curve or motor start type circuit breakers. Current rating should be at least one size larger than input current stated on unit data plate.

See manual or consult your Sales Representative for further details.

① Units fitted with WIP 15 plug & 4 x 10/15 Amp screw sockets.

② Units fitted with input terminal block & 4 x 10/15 amp screw sockets.

③ 3 Phase loads to be star connected only. Power Conditioners NOT to be used for Delta loads.

④ Enclosure Sizes (mm): Size 1: 600 (H) x 400 (W) x 440 (D)

Size 2: 995 (H) x 525 (W) x 550 (D)

Size 3: 990 (H) x 800 (W) x 550 (D)

Size 4: 1236 (H) x 800 (W) x 550 (D)



Power conditioners

Multi-voltage, hardwired power conditioners for industrial applications

Frequently, power transformers are incorporated with process equipment to provide specific voltages for sensitive equipment. Unfortunately, outside interferences will vary the output from these transformers, causing the sensitive equipment to malfunction or fail. The Sola 26 range of power conditioners provide an immediate answer to this inconvenience, by suppressing & isolating power line interference & regulating the output voltage to $\pm 5\%$. These hardwired power conditioners provide the unique feature of selectable input tap for greater versatility & output voltage taps are also provided. These features make the Sola 26 power conditioner the ideal choice for a regulated power supply where a three phase source is provided without a neutral line.

The Sola 26 power conditioner provides superior noise rejection, exceeding 120 dB common mode & 60 dB transverse mode noise rejection. By nature of design, this product is a true, ultra isolation device. The Sola 26 is available from 120VA through to 15kVA as a panel mounting, hardwired unit.

Technical specifications

| Description | | Description | |
|----------------------------|--|----------------------------|---|
| Input | | Efficiency | 85% at full load. |
| Voltage: | 500-5000VA models: Field selectable 110/120V or 220/240 or 380/415V 7.5-15kVA Models: Field selectable 220/240V or 380/415V | Dropout | No loss of output for line loss of 30 msec. |
| Frequency: | 50 Hz (60Hz available) | Electrical Noise Rejection | Transverse Mode: > 60 dB Common Mode: > 120 dB |
| Output | | Operating Temperature | -20°C to +50°C |
| Voltage: | Field Selectable - 110/120/220/240 Volts AC | Warranty | 5 years |
| Voltage Regulation: | $\pm 5\%$ for an input line variation of $\pm 15\%$. + 5%, -8% for $\pm 40\%$ input. | | |
| Output Harmonic Distortion | Less than 3% THD on linear loads. No greater than 5% on typical computer loads. | | |

| Rated output VA | Height (mm) | Width (mm) | Length (mm) | Weight (kg) | Item no. |
|-----------------|-------------|------------|-------------|-------------|------------------|
| 500 | 162 | 200 | 362 | 18 | 26050500M |
| 1000 | 170 | 200 | 460 | 28 | 26051000M |
| 2000 | 244 | 288 | 467 | 51 | 26052000M |
| 3000 | 244 | 288 | 501 | 73 | 26053000M |
| 5000 | 244 | 288 | 736 | 110 | 26055000M |
| 10000 ① | 244 | 630 | 736 | 221 | 260510kM |
| 15000 ① | 244 | 987 | 736 | 350 | 260515kM |

① Multi-Module Units.

DC product range

Access power solutions

- 24V up to 18,000W, 48V up to 36,000W

Features:

- 19" 3U or 6U Sub-rack
- Pre-Configured Software
- High Power Density
- Optional Remote
- Compliance with International Standards

Typical applications

- Data Networks & IP Routers
- Customer Premises Equipment
- Local Loop Transmissions Systems
- Wireless
- Transmission Terminals



Network power solutions (24V up to 38.4kW, 48V up to 72kW)

Features:

- Flexible Modular Designs
- Pre-Configured Supervisory Module
- Fast On-Line Replacement of Rectifiers (Hot-Swap)
- High Efficiency & Unity Power Factor
- Downloadable Configuration Files
- Designed to Maximise Battery Performance
- Wide AC Input Voltage Tolerance
- Optional Parallel System Connection Kit
- Compliance with International Standards

Typical applications

- Data/Customer Premises Equipment
- Wireless/Cellular/CDMA
- Central Office



Large power solutions (24V up to 202kW, 48V up to 378kW)

Features:

- 45U Cabinet
- Pre-Configured Software
- High Power Density
- Fast On-Line Replacement of Rectifiers (Hot-Swap)
- High Efficiency & Unity Power Factor
- Surge Protection
- Parallel Systems Option up to 15,000A
- Compliance with International Standards

Typical applications

- Wireless
- Transmission Terminals
- Local & Central Office Switching



Ancillary products

Power quality



Industrial batteries DC power systems

Valve regulated sealed lead acid batteries

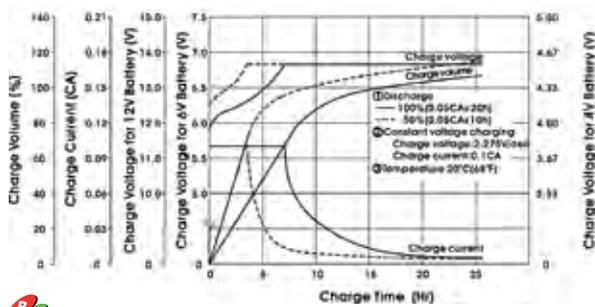
Features:

- Completely maintenance free, sealed construction eliminating the need for watering
- Fully tank formed plates
- Analytical grade electrolyte
- Spill & Leak proof
- Valve regulated - Max. Internal Pressure 2.5psi
- Multi-position usage
- Low self discharge
- ISO9001: 2000, ISO14001: 1996, CE, UL & SSL approved
- Non hazardous material

B.B. Battery produces highly specialised batteries utilizing the most recent high tech equipment & manufacturing methods from the US & Japan. B.B.'s battery factory is ISO 9001:2000 & ISO 14001 certified.

B.B.'s battery business goals closely follow the trend of a globally integrated economy & actualise the precise plans of developing high tech, high efficiency & quality products. Company goals are to provide high quality products & exceptional service at competitive prices to customers.

Battery charging characteristics



B.B. BATTERY

Technical specifications

| | Description |
|------------------------|---|
| Nominal Voltage: | 6 & 12 Volts |
| Design Life: | 6+ years @ 20 Degrees Celcius |
| Operating Temperature: | -20 to 50 Degrees Celcius |
| Grid Alloy: | Calcium / Tin Lead alloy |
| Plates: | Flat Pasted |
| Separator: | Absorbent Glass Mat |
| Active Material: | Very high purity lead 99.9999% |
| Case & Cover: | ABS (VO) |
| Charge Voltage: | Float 2.27 - 2.30VPC @ 20 Degrees |
| Electrolyte: | Sulphuric acid, analytical grade purity |
| Venting Valve: | 1.5 to 2 psi release |

| Voltage | Capacity (20hr) | Dimensions | | | Weight (l) | Item no. |
|---------|-----------------|-------------|------------|-------------|------------|------------------|
| | | Length (mm) | Width (mm) | Height (mm) | | |
| 6V | 5.Ah | 70 | 48 | 102 | 0.95 | 50BP56 |
| 6V | 10.Ah | 151 | 50 | 94 | 2.00 | 50BP106 |
| 6V | 12.Ah | 151 | 50 | 94 | 2.05 | 50BP126 |
| 12V | 1.2Ah | 97 | 45 | 53 | 0.59 | 50BP1.212 |
| 12V | 2.3Ah | 178 | 34 | 60 | 0.94 | 50BP2.312 |
| 12V | 4.5Ah | 90 | 70 | 102 | 1.84 | 50BP4.512 |
| 12V | 7.5Ah | 151 | 65 | 94 | 2.65 | 50BP7.512 |
| 12V | 12.Ah | 151 | 98 | 94 | 4.03 | 50BP1212 |
| 12V | 17.Ah | 181 | 76 | 166 | 6.15 | 50BP1712 |
| 12V | 20.Ah | 181 | 76 | 166 | 6.35 | 50BP2012 |
| 12V | 26.Ah | 175 | 166 | 125 | 9.40 | 50BP2612 |
| 12V | 40.Ah | 197 | 165 | 171 | 14.30 | 50BP4012 |
| 12V | 65.Ah | 350 | 166 | 174 | 24.50 | 50BP6512 |
| 12V | 90.Ah | 329 | 172 | 215 | 33.50 | 50BP9012 |
| 12V | 120.Ah | 407 | 173 | 210 | 39.50 | 50BP12012 |
| 12V | 160.Ah | 483 | 171 | 240 | 51.20 | 50BP16012 |
| 12V | 230.Ah | 522 | 240 | 216 | 72.30 | 50BP23012 |

UPS single phase

Our story

Comprised of legacy brands including Powerware®, MGE Office Protection Systems, Best Power, Pulizzi & Aphel, Eaton's power quality business is a global leader in power management products & services. Eaton has many products that provide customer-driven PowerChain Management solutions to serve the power system needs of the industrial, institutional, government, utility, commercial, residential, IT, mission-critical & OEM markets worldwide.

Our portfolio

Eaton's power quality portfolio encompasses a comprehensive offering of power management solutions from a single-source provider. This includes UPSs, power distribution units (PDUs), remote monitoring, software, connectivity, enclosures & services. Our power quality portfolio was designed to fulfill specific customer requirements, complement a new or pre-existing solution & to deliver a comprehensive solution. With all our products, Eaton strives for continued success in leveraging technical innovation to develop next-generation solutions.

Single phase UPS

With over 60 years experience in the Australian market, Eaton offers a range of single phase UPS products designed to suit local conditions & applications. Evolving from brands such as Powerware, Sola, Exide, Deltec & MGE Office Protection Systems, Eaton's range contains features such as Australian outlets, telephone line surge suppression & included accessories to ensure easy integration to any system.



Introducing the E-Series

Eaton's E-Series value UPS products offer cost effective, reliable power protection, ranging from 650VA to 20kVA. The new E Series uninterruptible power system (UPS) is Eaton's newest product line introduction featuring both line interactive & double-conversion technology UPSs. Ideal for the home office, small Point of Sale (POS) & desktop computing environment, the 5E UPS provides reliable power protection for personal computers & peripherals. Unique features including cold start on battery power allows this UPS to offer portable power where users need it most.



5E UPS, 1 phase

Power Rating: 650, 850, 1100, 1500, 2000 VA tower models
Voltage: 170 to 280Vac
Frequency: 50/60 Hz (auto-sensing)
Technology: Line Interactive with Automatic Voltage Regulation

The 5E range is designed to meet even the most cost-conscious customer's needs while providing a reliable & easy-to-set-up solution. The 5E line interactive uninterruptible power system (UPS) provides affordable power protection for your personal computers, home, office & other electronic devices. While packed with valuable features such as plentiful power receptacles & USB communications, the compact size is ideal for limited office & home working spaces.

Features

- Automatic Voltage Regulation (AVR) stabilises fluctuating power sources
- Microprocessor control design ensures high reliability
- Australian outlets, allowing easy equipment connection
- Start-on-battery provides portable power capability
- UPS Companion software monitors power conditions & gracefully shuts down computer applications prior to battery depletion



| Description | Item no. |
|-------------------------------------|----------------------|
| 5E 650VA / 360W, 2 x Aust sockets | 5E650IUSB-AU |
| 5E 850VA / 480W, 2 x Aust sockets | 5E850IUSB-AU |
| 5E 1100VA / 660W, 3 x Aust sockets | 5E1100IUSB-AU |
| 5E 1500VA / 900W, 3 x Aust sockets | 5E1500IUSB-AU |
| 5E 2000VA / 1200W, 3 x Aust sockets | 5E2000IUSB-AU |

Ancillary products

Power quality

E Series DX UPS, 1 phase

Power Rating: 1KVA-3KVA
 Voltage: 80 to 300 VAC
 Frequency: 50/60 Hz (auto-sensing)
 Technology: High-frequency double-conversion



The E Series DX UPS delivers affordable mission critical reliability for a wide range of applications including small grade medical equipment, the network closet or small data center. Whether your environment requires Automatic Voltage Regulation (AVR) to stabilise fluctuating power sources or you need the flexibility to purchase the UPS separate from the battery – the E Series UPS product line offers a variety of alternatives.

The E Series® DX UPS double-conversion UPS affordably protects mission critical applications from downtime, data loss & corruption. The double-conversion architecture incorporates rectifier & inverter stages to completely isolate the output power from all input anomalies. By adapting to a wide range of input voltages, the E Series DX avoids battery usage during minor power fluctuations, saving its capacity for times when utility power is completely lost.

Features

- Double conversion topology assures maximum reliability
- Wide input-voltage range appropriate for the harshest electrical environments
- Standard Models for fixed run time performance
- Tested for generator compatibility
- Automatic bypass for fault-tolerance
- Optional SNMP communications provides remote network- based monitoring
- XL Models for customised, long run-time applications, with fast recharging
- Cold start on battery power allows portable power
- WINPOWER software monitors power conditions
- Intuitive front-panel user interface for consistent status indication

E series DX

E Series DX 1000



DX 1000 VA FRONT

1. Output receptacles
2. AC Input
3. Standard RS232 Communication Port



DX 1000 VA REAR

4. Optional SNMP Communication Port
5. Extended Battery Connector (XL models only)

| Description | Item no. |
|--|------------------|
| E-Series DX 1kVA/700W, 4 x IEC sockets | EDX1000HA |
| E-Series DX 2kVA/1400W, 6 x IEC sockets | EDX2000HA |
| E-Series DX 3kVA/2.1kW, 4 x IEC sockets plus hard wired output | EDX3000HA |

9E UPS, 1 phase

Power Rating: 6KVA-20KVA
 Voltage: 176 to 276 VAC
 Frequency: 50/60 Hz (auto-sensing)
 Technology: High-frequency double-conversion



Advanced protection for:

- Infrastructure
- Industrial and Medical IT
- Networking
- Storage
- Telecom

The Eaton 9E constantly monitors power conditions and regulates voltage and frequency due to the online double conversion topology. Make your installation more flexible with a combo input (3:1 and 1:1) on the 10kVA, 15kVA, and 20kVA models. An internal bypass allows service continuity in case of an internal fault. A maintenance bypass is also available as standard for easy maintenance of the UPS without powering down critical systems.

The 9E provides clear information on the UPS' status and measurements (load level, battery level, input/output voltage and frequency) on a single screen with the new LCD interface, easily communicate with the UPS through USB, RS232 serial or over the network with the optional network card (Network-MS). Relay cards or ModBus cards are also available. Integrate 9E into all software environments. The Eaton 9E is delivered with Eaton's Intelligent Power™ Software and is compatible with all major operating systems.

Extend runtime as you like by adding up to 4 external battery modules (EBM). For extra-long runtime, XL models with internal supercharger are also available at 10kVA and 20kVA

| Description | Backup time qt 75%/50% load | Dimensions W x D x H (mm), kg | Item no. |
|------------------------------|-----------------------------|-------------------------------|---------------|
| 6kVA/4.8kW On Line Tower UPS | 12/20 | 263 x 613 x 709, 68kg | 9E6KI |
| 10kVA/8kW On Line Tower UPS | 9/15 | 263 x 613 x 709, 85kg | 9E10KI |
| 15kVA/12kW On Line Tower UPS | 9/16 | 350 x 706 x 816, 145kg | 9E15KI |
| 20kVA/16kW On Line Tower UPS | 9/15 | 350 x 706 x 816, 160kg | 9E20KI |

Premier series UPS's

Premier series UPS, available from 550VA to 1100kVA, offer technology leading power quality solutions for your critical applications. With features such as Advanced Battery Management, HotSync wireless paralleling technology & high efficiency ratings, Eaton's Powerware Series offer high performance power protection with a lower cost of ownership.

UPS Solution Overview

Series 3, Continuous power





Power Failure Power Sag Power Surge

The Series 3 UPS primarily protects against three of the nine power problems including power failures, power sags & power surges. This essential, cost-effective protection is necessary in order to prevent damage such as data loss, file corruption, hardware damage & equipment shutoff.

Series 5, Keeping it smooth







Power Failure Power Sag Power Surge Under-voltage Over-voltage

Series 5 UPS are most effective against five power problems (power failures, power sags, power surges, under-voltage & over-voltage) & offer a degree of protection against other power problems.

Series 9, Total protection











Power Failure Power Sag Power Surge Under-voltage Over-voltage Line Noise Frequency Variation Switching Transient Harmonic Distortion

Series 9 UPSs protect against all nine power problems: power failures, power sags, power surges, under-voltage, over-voltage, line noise, frequency variation, switching transients & harmonic distortion.

Series 3 single phase input/output UPS

Eaton 3S
Technology: Series 3 (standby)
Rating: 550-700 VA
Backup time: Typical 5 min
Model: Cabinet

Designed to offer cost effective basic power protection for single PCs & workstations, Eaton 3S protects your equipment against three of the nine most common power problems. 3S's sleek design is perfect for placement on or under a desk as well as for wall mounted use. Its typical back-up time of 5 minutes is more than enough to save your work & if you wish, you can install Eaton's shutdown software which will automatically save & shutdown your applications during longer power outages. The 700VA model saves up to 30% energy through its EcoControl function which automatically disables peripherals when the master device, such as a computer, is turned off.



| Description | Backup time full/half load | Dimensions W x D x H (mm), kg | Item no. |
|-------------------------------------|-------------------------------|----------------------------------|----------------|
| 550VA / 330W Standby Powerboard UPS | 6 / 10 | 140 x 335 x 86, 5kg | 3S550AU |
| 700VA / 420W Standby Powerboard UPS | 6 / 9 | 280 x 115 x 86, 6.5kg | 3S700AU |

Series 5 single phase input/output UPS

Technology: Series 5
(line interactive)
Rating: 550-1600 VA
Voltage: 220-240 Vac
Backup time: Typical 5 min
Models: Cabinet

The Eaton 5S UPS provides effective power protection, even in disturbed electrical environments. Voltage fluctuations are automatically corrected using an AVR device (booster/fader), without needing the batteries. The 5S not only provides a supply with battery backup to keep equipment operating during power cuts, but also provides effective protection against damaging surges.

The 5S protects networked equipment from back door power surges coming through Ethernet, internet or telephone lines. The 5S periodic automatic battery testing ensures early detection if a battery needs to be replaced. The easy-to-replace battery helps to extend the UPS service life. The 850-1600VA models feature an LCD display.



| Description | Backup time 70%/50% load | Dimensions W x D x H (mm), kg | Item no. |
|------------------------------------|--------------------------------|----------------------------------|-----------------|
| 550VA / 330W Line Interactive UPS | 6 / 0 | 87 x 260 x 250, 5kg | 5S550AU |
| 700VA / 420W Line Interactive UPS | 5 / 9 | 87 x 260 x 250, 6kg | 5S700AU |
| 850VA / 510W Line Interactive UPS | 5 / 9 | 87 x 260 x 250, 6.5kg | 5S850AU |
| 1200VA / 750W Line Interactive UPS | 5 / 9 | 87 x 260 x 362, 9.5kg | 5S1200AU |
| 1600VA/1000W Line Interactive UPS | 5 / 9 | 87 x 260 x 382, 11kg | 5S1600AU |



Series 5 single phase input/output UPS

Eaton 5SC

Technology: Series 5 (Line Interactive)

Rating: 500VA – 1500VA

Model: Tower

Designed to offer advanced power protection for office servers & other critical applications, the Eaton 5SC protects your equipment against five of the nine most common power problems that can harm your equipment or result in corrupted data.

In offices a crucial part of the work is stored on servers & reliable shutdown software is needed to ensure that no data is lost even during longer power outages. With Eaton 5SC & IPM software protecting the server, business goes on while the UPS invisibly & automatically takes care that no data is lost due to power problems. If a total outage threatens to exceed the system's backup time, the software automatically shuts down the entire network in a predefined order.

| Description | Backup time full load | Dimensions W x D x H (mm), kg | Item no. |
|---|-----------------------|-------------------------------|-----------------|
| 500VA/350W Line Interactive Sine Wave | 5 | 150 x 240 x 210, 6.6kg | 5SC500i |
| 750VA/525W Line Interactive Sine Wave | 5 | 150 x 340 x 185, 10.4kg | 5SC750i |
| 1000VA/670W Line Interactive Sine Wave | 5 | 150 x 340 x 185, 11.1kg | 5SC1000i |
| 1500VA/1050W Line Interactive Sine Wave | 5 | 150 x 410 x 185, 15.2kg | 5SC1500i |



Eaton 5130

Technology: Series 5 (Line Interactive)

Rating: 1250VA – 3000VA

Model: Rack/Tower

Designed to ensure clean power & reliable operation of all kinds of IT devices in the network system, Eaton 5130 protects your equipment against five of the nine most common power problems that can harm your equipment or result in corrupted data.

The Eaton 5130 offers the features needed for cost effective network protection & comes with the proven reliability users have come to expect from Eaton products. In addition to a reliable shutdown solution, Eaton 5130 offers extended runtime capability as well as enhanced connectivity options to manage & monitor the UPS remotely.

| Description | Backup time full/half load | Dimensions W x D x H (mm), kg | Item no. |
|-------------------------------------|----------------------------|-------------------------------|----------------------------|
| 1250VA / 1150W Line Interactive UPS | 5 / 5 | 441 x 509 x 87, 25kg | PW5130I1250-XL2U |
| 1750VA / 1600W Line Interactive UPS | 3.5 / 9.5 | 441 x 509 x 87, 27kg | PW5130I1750-XL2U |
| 2500VA / 2250W Line Interactive UPS | 3 / 11 | 441 x 634 x 87, 34kg | PW5130I2500-XL2UUAU |
| 3000VA / 2700W Line Interactive UPS | 3 / 10 | 441 x 634 x 87, 34kg | PW5130I3000-XL2UUAU |
| 1250/1750VA extended battery module | - | 441 x 509 x 87, 31kg | PW5130N1750-EBM2U |
| 2500/3000VA extended battery module | - | 441 x 634 x 87, 42kg | PW5130N3000-EBM2U |

Note: Input cord & comms. cable supplied.

Series 9 single phase input/output UPS

Eaton 9130 Tower

Technology: Series 9 (Online, Double Conversion)

Rating: 700VA – 6000VA

Model: Tower

The Eaton 9130 UPS, resolves utility power problems & delivers superior power protection for IT & networking equipment, medical systems, manufacturing process control or anywhere critical equipment & applications require clean, continuous power.

The Eaton 9130 is constantly monitoring power conditions regulating both voltage & frequency. Even when presented with the most severe power problems, this UPS's output remains within three percent of nominal voltage.

With a wide input voltage range, the Eaton 9130 does not depend on batteries to smooth out minor power fluctuations. Batteries are conserved for those times when utility power is highly unstable or completely out. If an outage occurs, the Eaton 9130 runs from the battery with zero interruption in power, making this an ideal UPS for sensitive & critical equipment.



| Description | Backup time full/half load | Dimensions W x D x H (mm), kg | Item no. |
|---|----------------------------|-------------------------------|--------------------------|
| Eaton 9130 700VA/630W On Line Tower UPS | 6 / 11 | 160 x 355 x 250, 12.2 kg | PW9130G700T-XLAU |
| Eaton 9130 1000VA/900W On Line Tower UPS | 7 / 14 | 160 x 383 x 250, 14.5 kg | PW9130G1000T-XLAU |
| Eaton 9130 1500VA/1350W On Line Tower UPS | 5 / 14 | 160 x 435 x 250, 19.0 kg | PW9130G1500T-XLAU |
| Eaton 9130 2000VA/1800W On Line Tower UPS | 10 / 24 | 214 x 410 x 345, 34.5 kg | PW9130G2000T-XLAU |
| Eaton 9130 3000VA/2700W On Line Tower UPS | 5 / 14 | 214 x 410 x 345, 34.5 kg | PW9130G3000T-XLAU |
| Eaton 9130 6000VA/5400W On Line Tower UPS | 8 / 23 | 280 x 580 x 570, 91 kg | PW9130G6000T-XLAU |

Note: Input cord & comms. cable supplied.

| Description | Dimensions W x D x H (mm), kg | Item no. |
|--|------------------------------------|---------------------|
| 700-2000VA Softwired interlocked external bypass | 210 x 100 x 130, 4kg | MBS2000SW1 |
| 3000VA Softwired interlocked external bypass | 210 x 100 x 225, 5kg | MBS3000SW1 |
| 1-6kVA Hardwired interlocked external bypass (max 6mm ² cable) | 190 x 130 x 190, 10kg | 6000MBS1 |
| 6kVA Hardwired interlocked external bypass w/sep byp input (max 6mm ²) | 190 x 130 x 190, 10kg | 6000MBS2 |
| Wraparound MBS, 1/1ph, w/o Sep Byp Input, 40A, 16mm ² , Bottom Entry | 275 x 138* x 487**, 10kg Size 1 | MBS11NSB40BW |
| Wraparound MBS, 1/1ph, Sep Byp Input, 40A, 16mm ² , Bottom Entry | 275 x 138* x 487**, 10kg Size 1 | MBS11SB40BW |

Add \$200 if key interlock is required instead of pushbutton interlock. Add KL suffix to part no.

*Depth does not include switch handle. **Height does not include mounting flanges.

Series 9 single phase input/output UPS

Hard wiring kits (9130 tower only)

| Description | Item no. |
|---|-------------------------|
| Hard wired field conversion Kit for 9130 700-1500VA | PW91301500HW-Kit |
| Hard wired field conversion Kit for 9130 2000VA | PW91302000HW-Kit |
| Hard wired field conversion Kit for 9130 3000VA | PW91303000HW-Kit |

Extended battery modules, Standard matching cabinets

| Description | Dimensions W x D x H (mm), kg | Item no. |
|--|----------------------------------|-------------------------|
| 9130 Tower Extended Battery Module, 1000VA | 155 x 410 x 245, 20 kg | PW9130N1000T-EBM |
| 9130 Tower Extended Battery Module, 1500VA | 170 x 445 x 275, 25 kg | PW9130N1500T-EBM |
| 9130 Tower Extended Battery Module, 2/3kVA | 215 x 470 x 365, 50 kg | PW9130N3000T-EBM |
| 9130 Tower Extended Battery Module, 6000VA | 280 x 580 x 570, 75 kg | PW9130N6000T-EBM |

Note: Long run time extended cabinets available on request.



Eaton 9130 rack mount

Technology: Series 9 (Online, Double Conversion)

Rating: 1000VA – 3000VA

Model: Rack Mount

The Eaton 9130 UPS, resolves utility power problems & delivers superior power protection for IT and networking equipment, medical systems, manufacturing process control— or anywhere critical equipment and applications require clean, continuous power.

The Eaton 9130 is constantly monitoring power conditions—regulating both voltage & frequency. Even when presented with the most severe power problems, this UPS's output remains within three percent of nominal voltage.

With a wide input voltage range, the Eaton 9130 does not depend on batteries to smooth out minor power fluctuations. Batteries are conserved for those times when utility power is highly unstable or completely out. If an outage occurs, the Eaton 9130 runs from the battery with zero interruption in power, making this an ideal UPS for sensitive & critical equipment.

9130 rack mount on line UPS

| Description | Backup Time full/half load | Dimensions W x D x H (mm), kg | Item no. |
|--------------------------------------|-------------------------------|----------------------------------|----------------------------|
| 9130 1000VA / 900W On Line Rack UPS | 7 / 14 | 438 x 438 x 86.5, 16.0kg | PW9130G1000R-XL2UAW |
| 9130 1500VA / 1350W On Line Rack UPS | 5 / 14 | 438 x 438 x 86.5, 19.5kg | PW9130G1500R-XL2UAW |
| 9130 2000VA / 1800W On Line Rack UPS | 6 / 16 | 438 x 600 x 86.5, 29.0kg | PW9130G2000R-XL2UAW |
| 9130 3000VA / 2700W On Line Rack UPS | 3 / 9 | 438 x 600 x 86.5, 29.5kg | PW9130G3000R-XL2UAW |

Note: Input cord is not included on 9125 1&2kVA models & must be ordered separately if required.

Extended battery modules

| Description | Dimensions W x D x H (mm), kg | Item no. |
|---|----------------------------------|---------------------------|
| 9130 1000VA Rack Extended Battery Module | 438 x 438 x 86.5, 22.1kg | PW9130N1000R-EBM2U |
| 9130 1500VA Rack Extended Battery Module | 438 x 438 x 86.5, 28.1kg | PW9130N1500R-EBM2U |
| 9130 2000/3000VA Rack Extended Battery Module | 438 x 600 x 86.5, 41.0kg | PW9130N3000R-EBM2U |

Maintenance bypass switches

| Description | Dimensions W x D x H (mm), kg | Item no. |
|---|----------------------------------|---------------|
| HotSwap Maintenance Bypass, 16A, Aust 3 pin outlets | 483 x 80 x 44, 3kg | M68443 |
| HotSwap Maintenance Bypass, 16A, IEC outlets | 483 x 80 x 44, 3kg | M68433 |
| HotSwap Maintenance Bypass, 16A, Hardwired | 483 x 80 x 44, 3kg | M68434 |

3 phase

Eaton has been developing its innovative technical solutions in the power protection field since receiving its first patent in 1962. As a technology leader Eaton meets the customers' fast growing needs with advanced patented technologies.

Eaton's three-phase UPS products are based on the same technical platform, including a similar internal topology, common control hardware & algorithms, standardised communications capabilities & a common user-interface.

The benefits of a single platform include:

- UPS units behave in a uniform way and carry similar features
- Product upgrades are easier as the process is identical
- Improved service capabilities due to usage of common spare parts & accessories across product families and standard service tools
- Similarity of service training & documentation guarantee that customers in all countries receive the same high level of service
- Lower total cost of ownership Single platform benefits



Transformer-free technology

The transformer-free technology used in Eaton UPSs with small & lightweight filter inductors, high performance IGBTs in both inverter & rectifier & advanced control algorithms brings improved performance & value. Compared to legacy UPS topology designs, a transformer-free UPS is typically only 50% the weight & occupies just 60% the footprint. Low input THD (<3% at full load) & high input power factor (>0.99) are supported down to nearly 10% load without the need for an additional input filter. In addition, full load efficiency can reach 96.57% & above.

Eaton Hot Sync® technology

Hot Sync technology is designed for parallel redundant N+1 systems to satisfy 24/7 applications. It can also be used in parallel capacity systems to benefit from scalability for customers' ever-increasing load demands.

Hot Sync eliminates single point of failure, with the ability to synchronise & support critical loads independently of other UPS modules in the system. UPS modules can share loads without any communication wiring to the outside world.

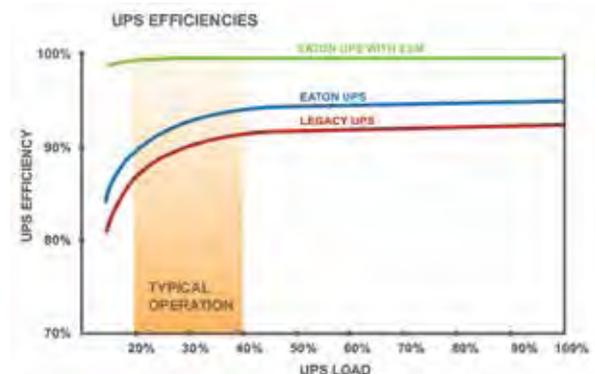


ABM® technology

Eaton has created ABM® Technology to extend the life of valve regulated lead-acid batteries by applying sophisticated logic to the charging regime. Using traditional trickle charge method, batteries become subject to electrode corrosion & electrolyte dry-out, especially in standby service use due to continuous float charging. ABM is essentially an addition of intelligence to the charging routine by preventing charging when it is not necessary, thus significantly retarding wear-out. ABM provides an additional feature for monitoring battery condition & advance warning about the end of battery life upon detection of a weak battery. Also, it optimises the recharge time, which is advantageous when there may be consecutive power outages within a short period. ABM has been used for over fifteen years in our UPSs ranging from 1 to 1100 kVA.

Highest efficiency ratings

To demonstrate the importance of total system efficiency in relation to load level, the UPS efficiencies graph shows how efficiency generally dips as load level decreases. In general, manufacturers list an optimal efficiency rating at full load. In reality, however, most three-phase UPSs operate well below full load. As a result, it is extremely important to evaluate the efficiency of a UPS at lighter loads as this graph depicts. Eaton data center & facility products operate efficiently even at lighter loads to reduce utility costs. Additionally, Eaton three phase UPSs with Energy Saver Mode operate at 99% efficiency saving thousands of dollars in energy costs while maintaining double conversion protection.



Ancillary products

Power quality

PowerChain™ Management keeps your data centre open for business



Greater reliability: Maintain vital operations with steady, high-quality power every minute of every day.



Operating cost efficiencies: Reduce operating costs with efficient energy management & maintenance strategies.



Effective use of capital: Put your capital to work faster, & keep it working longer, with electrical designs that require less equipment & space, services that extend equipment life & preassembled equipment that can be installed faster.



Risk mitigation: Reduce the risk of construction delays & cost overruns with a coordinated approach to power system design, procurement, installation & maintenance.



Enhanced safety: Reduce electrical hazards with safety-conscious design & installation, plus products & information that help people recognize & avoid dangers.

Software & connectivity

In order to get full benefit out of a UPS it needs to communicate with the outside world. Eaton UPSs have intelligent digital control with comprehensive fault detection & self test capability built into the internal microprocessor system of the device.

Power Xpert software

Eaton's Power Xpert® Architecture is the backbone of Eaton's PowerChain Management. Power Xpert Architecture can transform your power system into an integrated, agile system that you can monitor, control & manage effectively & efficiently.

Power Xpert Software enables you to manage the complexities of large system deployments, from one desktop, on one screen. Web-enabled hardware devices are fine in limited numbers. However, as the number of components grows or becomes more complex, Power Xpert Software is the logical choice for the trending, analysis & alarming systems that are required.

The Power Xpert Software is Web-enabled, open & time synchronised. Using only a browser, you can access the software from anywhere your network can reach, including remotely. Designed to communicate graphically with the broad range of Eaton & non - Eaton devices, Power Xpert Software uses industry standard protocols. The software is offered in the Server Core Class & the Foreseer Class.



Data centre & facility UPS overview

With a rich history of technical innovation & proven performance, the data center & facility UPS products continue to personify Eaton's pioneering spirit in the power quality industry. Whether you are designing or procuring a UPS, each model can be deployed around the world. Designed to meet global requirements, the same UPS can be installed anywhere—from Argentina to Russia, China to South Africa or the United States.

The following features differentiate Eaton's data center & facility UPS solutions:

Leading sustainability

- Highest efficiency ratings lower utility costs
- Lowest total cost of ownership & lifecycle carbon footprint
- Smallest footprint & weight

- Lowest transportation & installation costs
- Stronger power performance
- Lowest input total harmonic distortion (THD) enhances compatibility with upstream power systems
- Lowest output THD
- Optimum generator sizing
- PFC power supply compatibility
- Highest reliability & availability
- Hot Sync wireless paralleling
- Easy Capacity test
- Superior battery management
- Inherent redundancy
- Scalable architecture that adapts to increasing power requirements

Robust manageability

- Superior control & connectivity

Eaton ePDUs

Eaton offers the largest selection of enclosure power distribution units available on the market. This complete suite of power products is designed specifically to help data center IT managers meet their rapidly escalating power requirements.

ePDUs come in five levels of functionality with 24 to 45 receptacles & can distribute power levels in excess of 23 kW.

ePDU functionality

Basic - Economical power distribution to up to 24 receptacles in a rack or wiring closet

Metered - Distribution with power monitoring on any receptacle, branch circuit or the entire unit

Monitored - Power distribution with secure, remote monitoring & alerts over IP networks

Switched - Provides secure, network receptacle-level control & network monitoring, optional integrated environmental & inter-networking capabilities

Managed - Local & remote monitoring, plus advanced Revelation technology that provides receptacle-level monitoring & remote server boot-up or electronically lock designated receptacles to prevent unauthorized use

eATS - The enclosure automatic transfer switch (eATS) provides in-rack power distribution with redundant power sourcing for single-corded loads





Power through high energy costs.

Eaton leads the
UPS industry in
power efficiency.



Competitive UPSs can't deliver the efficiency inherent in Eaton's broad range of power protection solutions. That's because Eaton® offers industry-leading technologies such as Energy Saver System to deliver 99% efficiency across all load ranges. Plus, with the most efficient UPSs on the market, your customers can slash energy costs through reduced power consumption and heat output. Eaton's superior UPS technology enables your customers to carry on efficiently — uninterrupted.

EATON

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