

Mini product guide, New Zealand

- Residential and commercial switchgear
- Industrial automation
- Industrial motor control
- Industrial lighting
- Solutions for harsh and hazardous areas
- Signalling and alarm devices
- Ex lighting
- Coupling systems for mining

Eaton & Cooper united.

More resources.

More solutions.



EATON

Powering Business Worldwide



Eaton and Cooper united. Energising a world that demands more.



We deliver:

- **Electrical solutions** that use less energy, improve power reliability and make the places we live and work safer and more comfortable
- **Hydraulic and electrical solutions** that enable machines to deliver more productivity without wasting power
- **Aerospace solutions** that make aircraft lighter, safer and less costly to operate, and help airports operate more efficiently
- **Vehicle drivetrain and powertrain solutions** that deliver more power to cars, trucks and buses, while reducing fuel consumption and emissions

We provide integrated solutions that help make energy, in all its forms, more practical and accessible.

With 2013 sales of \$22 billion, Eaton has approximately 100,000 employees around the world and sells products in more than 175 countries.

Discover today's Eaton.



Powering business worldwide

As a global power management company, we help customers worldwide manage the power needed for buildings, aircraft, trucks, cars, machinery and businesses.

Eaton's innovative technologies help customers manage electrical, hydraulic and mechanical power more reliably, efficiently, safely and sustainably.

Eaton's electrical business

Eaton is a global leader with expertise in:

- Power distribution and circuit protection
- Backup power protection
- Solutions for harsh and hazardous environments
- Lighting and security
- Structural solutions and wiring devices
- Control and automation
- Engineering services

Eaton is positioned through its global solutions to answer today's most critical electrical power management challenges. With 100 years of electrical experience behind us, we're energized by the challenge of powering up a world that demands twice as much energy as today. We're anticipating needs, engineering products and creating solutions to energize our markets today and in the future.

We are dedicated to ensuring that reliable, efficient and safe power is available when it's needed most.

Eaton.com



Residential & commercial switchgear

Eaton's complete line up of low and medium voltage circuit breakers and fuses are used to provide circuit protection in alternative energy, commercial, industrial, mining, and military applications, where they protect against overloads and short circuits in conductors. These circuit breakers are applied in panelboards, switchboards, motor control centers, control panels, combination starters, individual enclosures, and busduct plug-in units.

Regardless of the requirement, of either an individual electrical application or an integrated system, Eaton provide the best solution to increase your electricity-related performance, to cut your operating costs and to maximise the operational availability, safety and integrative capacity of your system.



Residential & commercial switchgear



NZM breaker range

- 15 to 1600A in just four frame sizes
- Fully rated at ambient temperature of 50 °C under full load conditions without need to reduce the rated current
- Choice of trip unit options for general power, motor loads or generator protection
- Large range of easy to install internal and external accessories



PFIM RCD's

- Type A
- 2 and 4 pole configuration
- 30mA to 500mA types available
- 25 to 100 Amp ratings
- Complies to AS/NZ 910091



PKNM and PKDM RCBO's

- Type A
- 10kA rated breaking capacity
- 2 pole types only
- PKDM electronic type
- 10mA to 300mA
- 6 to 40 Amp ratings
- Complies to AS/NZ 910091



FAZ 10kA MCB range

- 1, 2, 3, 4 pole options available
- High quality European manufacture
- 10kA to IEC/EN 60898-1
- Rated current up to 63A
- Tripping curves B, C and D
- DC version available



PLHT 27mm MCB range

- 1,2,3,4 Pole options available
- High quality European manufacture
- Contact position indication
- Rated current to 125A
- Tripping curves B, C and D
- Up to 25kA to IEC EN 60947-2



Z Series DIN contactors and relays

- 20, 25, 40 and 63 Amp ratings available
- Different contact configuration versions available
- Inductive AC3 ratings available on 25, 40 and 63A versions
- DIN rail mount
- IP40 protection on terminals
- Suited to switching lighting, heating, hot water & storage heating

Industrial automation

Eaton manufactures a full basket of industrial automation products. Included in this offering are a range of competitively priced limit switches and sensors, control and monitoring relays, multifunction timers, DC power supplies and wiring accessories.

Products such as smart relays, compact PLCs, touchscreens and communication gateways to suit the industrial factory automation machine builder requirements, complement the range.

Industrial automation



E50 limit switches

- Industry standard, heavy duty and reliable
- Modular design (head, body and receptacle), can be ordered separately or assembled
- The E50 resists ingress of common coolants, cleaning agents and hydraulic fluids in harsh environments
- 1NO-1NC and 2NO-2NC auxiliary contact configurations
- Wide range of operating levers available for use with rotary and wobble head type E50 limit switches



E57 global proximity sensors

- Cost effective sensing for high volume OEMs
- Solid performance, reliable and cost effective sensing
- Available in a variety of sizes to fit in all your applications: 8mm, 12mm, 18mm and 30mm diameters
- Shielded and unshielded versions available
- Bright output LED indicator to show output status
- Optimum solution for high volume OEM customers



PKZM IEC manual motor protectors

- Motor applications from 1A to 63A
- Built-in overload & magnetic trip elements to protect the motor
- Adjustment dial for setting motor current
- Full range of accessories
- Phase failure sensitivity to IEC/EN 60947-4-1
- IEC60947-4-1; CE marking



EASY intelligent relays

- Quick to connect, simple to control and display
- EASY500 series is ideal for controlling small applications with up to 12 I/O signals
- EASY700 series controls medium sized applications with 20 I/O points (expandable to 40)
- EASY800 series controls large-scale applications with 20 points up to 320 points using EASY-NET network
- Lighting, energy management, industrial control and HVAC



30.5mm pushbuttons series

- Includes momentary, illuminated, and mushroom head pushbuttons, selector switches, indicating lights, push pull units and joysticks
- Chrome plated housing and corrosive resistant E34 option available
- Heavy Duty Zinc die cast construction
- Enclosed silver contacts with reliability nibs
- CE EN60947-5-1 Compliant



TR universal voltage, compact timers

- Low cost and high flexibility
- Compact, DIN rail mountable case reduces panel size
- 0.05 sec to 100 hrs time range and 4 or 7 timing functions
- Direct-wire design eliminates the need for additional sockets and accessories
- Universal input voltage of either 12 or 24 V to 240 VAC or DC depending on model

Industrial motor control

With a broad portfolio of industrial motor control products and a 100 year heritage, Eaton offers the protection your system needs against equipment failure and danger caused by voltage faults, current conditions or excessive load requirements.

In addition to pure switching, Eaton provide soft starting and variable speed control solutions.

A long tradition in the motor protection field has helped establish Eaton as an industry leader. Eaton's PKe motor circuit breakers and motor insight relays not just the embodiment of quality, but also the generally used synonym by experts for motor-protective circuit-breakers.

Industrial motor control



DILM contactor range

- Type 2 coordination, dual power terminals to 400A
- AC-3 contactor ratings to 1600A
- AC-1 contactor ratings to 2600A
- Panel or DIN-Rail mounting to 65A
- IP20 finger and back of hand proof
- Built in NO or NC auxiliary contacts to 38A
- AC or DC coil operation



22.5mm pushbuttons M22 series

- IP66 operators, ideal for washdown applications
- Ergonomic design ensuring ease of operation and bright illumination
- IP66 degree of protection as standard (many devices IP67, IP69)
- Vibration resistant LED's offer 100,000 hours life
- Emergency stops, foot switches, LEDs and double actuators available



EDOL starters range

- Separate overload relays offer flexibility
- DOL starters up to 11kW
- IP65 plastic enclosures
- Fully compliant with IEC60947-4-1
- 240V or 415 AC coils standard
- Contactors include 1NO auxiliary contact as standard



M-Max variable speed drives

- Conformal coated boards & in built EMC filter
- Plug and play, start up wizard, advanced diagnostic capability, copy / paste parameters without powering drive
- RoHS compliance
- Internal EMC filter complying with IEC61800-3
- RS485 / Modbus and PI controller in-built as standard
- 1-ph 240V input to 2.2kW, 3-ph 415V input to 18.5kW



PKe electronic motor circuit breakers

- 3 base units & 5 trip blocks cover entire range to 65A
- Control and protection for motor currents up to 65A
- Minimum heat losses
- Large electronically controlled setting range
- Tripping classes greater than CLASS 10
- Exchangeable control units



DS7 soft starters

- Economical replacement for star-delta starters
- Available in ratings from 1.1kW to 110kW
- LED displays device status and provides fault indication
- Less heat minimises enclosure size and cooling requirements
- 24 Vdc control module enhances personnel and equipment safety
- Tool-less connection, 240 VAC control, communications capable via Smartwire DT interface



Industrial lighting for demanding locations

Eaton's Crouse-Hinds' industrial lighting delivers advanced technology, expert support, global certifications and an unmatched selection of proven solutions deliver superior illumination, flexibility, and safety in the most demanding locations.

Compared to traditional light sources, LED luminaires can deliver longer life, enhanced energy efficiency, greater eco-friendliness, lowered maintenance demands and equal or better quality of light.

Eaton's Crouse-Hinds business utilise more than 100 years of lighting expertise to maximise the benefits of LED technology and provide the safest, most reliable LED luminaires on the market today.

Crouse-Hinds
by **EAT•N**

Industrial lighting for demanding locations



FMV® Pro PFM series LED luminaires

- 4 models
- Equivalent to 100W-400W MH
- Floodlight illumination
- Provides up to 60,000 hours rated life
- Instant illumination and restrike
- Operating temperature -30°C to +55°C



Champ® Pro PVM Series LED luminaires

- 5 models
- Equivalent to 70W-400W
- Highbay illumination - mounting heights up to 60 feet
- Three optical options to maximize light distribution and intensity Type I, III and V distribution
- Provides up to 60,000 hours rated life
- Operating temperature -40°C to +55°C



IHB Industrial highbay luminaires

- 1 model
- Areas requiring frequent on-and-off of lights
- Areas that are difficult to relamp or that cause production to be stopped during the lamp maintenance process
- Ordinary clean, light industrial production facilities, packaging facilities, and warehouses
- Indoor and dry locations only
- Operating temperature -30°C to +40°C



Navion™ LED luminaires

- 4 models
- Site and roadway luminaire
- Available with a wide array of optics and specification performance features
- Provides up to 60,000 hours rated life
- 3G vibration rated
- Operating temperature -40°C to +40°C



ENDURE™ Bulkhead LED luminaires

- 2 models
- Equivalent to 70W HPS
- Emergency luminaires available (please consult factory)
- Provides up to 50,000 hours rated life
- White light provides superior colour rendering
- High efficiency AccuLED optics
- Operating temperature -30°C to +50°C



Vaporgard™ Pro P2L Series LED Luminaires

- 1 model
- Pendant equivalent to 100W-200W incandescent 50W HID
- Targeted illumination in low mounting height areas
- Ideal for use in confined spaces, tunnels, or utility rooms
- Provides up to 60,000 hours rated life
- Instant illumination and restrike
- Operating temperature -30°C to +55°C



Solutions for harsh & hazardous areas

Eaton's Crouse-Hinds Business is the world's leading provider of electrical and instrumentation products for harsh and hazardous environments.

Crouse-Hinds products perform to the highest standard of safety and reliability, keeping people safe and plants running. The more demanding the environment, the likelier you are to find Crouse-Hinds products at the very centre of operations.

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Solutions for harsh & hazardous areas



Fittings and cable glands

- IECEx approved for flameproof and increased safety applications
- Thread converting adaptors, reducers & unions
- Stopping plugs & breather drains
- Conduit seals
- Full range of accessories including locknuts, earth tags, IP washers and serrated locking washers



Control stations

- IECEx approved for flameproof and increased safety applications
- Suitable for motor control, distribution and heat tracing
- Available in FRP, cast aluminum and stainless steel



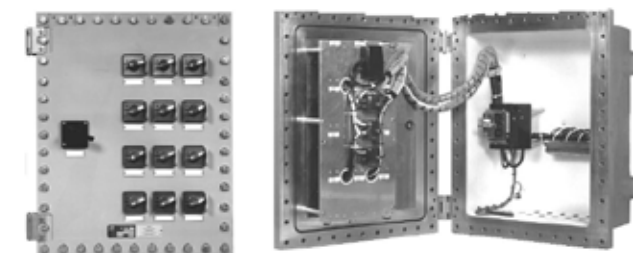
Connectivity

- IECEx approved for flameproof and increased safety applications
- Switched socket outlets and plugs
- Ex Link for instrumentation applications
- Available in both aluminium and high impact FRP



Marshalling and small junction boxes

- IECEx approved for flameproof and increased safety applications
- Small FRP junction boxes to large stainless steel marshalling boxes
- Factory standard or custom built to customer requirements



Exd enclosures

- ANZEx and IECEx approved for Exd applications
- Safe and effective control of power and protection of circuits in explosive, wet and corrosive environments
- Push buttons indicating lights and switches, and viewing window options



Panel boards

- IECEx approved for flameproof and increased safety applications
- Safe and effective control of power and protection of circuits in explosive, wet and corrosive environments
- Custom designed to suit local applications

Signal and alarm solutions

Part of Eaton's Crouse-hinds division, MEDC have been designers and manufacturers of signalling, communication and alarm equipment since 1975.

The extensive range of manual alarm call points, loudspeakers, visual & audible alarms are part of a comprehensive portfolio including custom made solutions which has been developed in close collaboration with customers to deliver the best combination of performance and safety in order to meet the demands of exacting international standards.

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Signals and alarms



Manual alarm call points

- ATEX and IECEx certified
- UL listed for hazardous and non hazardous locations
- Variety of colours available
- Up to 9 terminals available
- Optional LED – indicates that the unit has been operated



Camera stations

- ATEX and IECEx certified
- -40°C to +60°C
- 316L or 304 Stainless Steel
- 360° continuous pan rotation, and +90° to -90° tilt rotation
- Multiple scanning mode



Loudspeakers

- -55°C to +70°C*
- 127dB at 25W, 1m*
- 8W, 15W & 25W versions
- Power tapings, via integral transformer
- Frequency response 350Hz - 8kHz



Beacons

- Corrosion-free GRP
- Optional stainless steel backstrap
- Various lens colours
- Optional cast aluminium or wire stainless steel guard
- Up to 3 x M20 or 3 x M25 entries



Sounders

- Up to 125dB output @ 1m
- Integral volume control
- 28 tones, user selectable and 3 stage unit remotely switchable
- Ex enclosure - Glass reinforced polyester
- Stainless Steel mounting bracket and cover screws



Telephones

- IP 66 protection class as per IEC60529
- Ambient temperature range -40°C to +60°C (heated display)
- Ring signal 95 dB(A) at a distance of 1 m
- Pixel-based illuminated heated LCD display
- V4A alphanumeric keypad



Ex lighting for hazardous areas

Dramatic advances in technology for LED luminaires, broadened the applicability of this type of illumination, creating an exciting new option for hazardous, industrial and other highly demanding locations.

Compared to traditional light sources, LED luminaires can deliver longer life, enhanced energy efficiency, greater eco-friendliness, lowered maintenance demands and equal or better quality of light.

Innovative applications for this technology are a natural fit for Eaton's Crouse-Hinds, and LED lighting solutions have rapidly become an integral part of our vision.

Crouse-Hinds
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Ex lighting for hazardous areas



eLLK Luminaires

- Certified for Zone 1, 2, 21 and 22 hazardous areas
- Available in 18", 36", 58W and LED* with battery back-up and a micro-processor monitored intelligent battery system
- Ceiling or pole mount
- Central locking along both sides of luminaires
- Built-in switch for ease of re-lamping



NFMV LED Luminaires

- Certified for use in Zone 2, 21 and 22 hazardous areas
- 7 x 6 Floodlight beam pattern for wider and even spread
- High efficiency in light distribution through unique optics control with 62% energy savings and a 60K hour operating life
- Equivalent to 70W to 400W MH
- Heat sink and separate compartments for LED and Drivers ensuring optimum performance
- Colour temperature: 3000K (CRI 82) or 5600K (CRI 65) available with international approvals



LL48 Luminaires

- Certified for Zone 2, 21 and 22 hazardous areas
- Equivalent to 2 x 58W fluorescent
- Up to 50% energy savings
- Compact design suitable for low head room areas
- Available in cool white 6500K color temperature with frosted glass for low mounting height for effective glare control



LPL Luminaires

- Certified for use in Zone 1, 2, 21 and 22 hazardous areas
- Ideal in process areas, off-shore platforms and other arduous areas
- Equivalent to MH 70W to 250W
- Efficient air cooling fins ensures optimum 60K hours LED performance
- Available in colour temperature 6000K (cool light) and 3300K (warm light)



NVMV HID and LED Luminaires

- Certified for use in Zone 2, 21 and 22 environments
- For process, storage and grain handling areas
- Available in various mounting top-hats to suit all applications
- Retrofit ready to VMV LED due to common top-hats
- Equivalent to 70W to 400W in HPS, MV and MH
- LED operating temperature -40°C to +55°C



NV2L Luminaires

- Certified for Zone 2, 21 and 22 hazardous areas
- Ideal as task lighting replacing 200W incandescent fixtures
- 85% energy savings, 50K hours rated
- Safe and reliable heat transfer optimising performance of LED and driver
- Available in ceiling, wall and pendant mount

Coupling systems for mining applications

Macey bolted coupling systems from Eaton's Crouse-Hinds business are designed to Australian and New Zealand Standard AS/NZS1300. The bolted product range is used to supply main power to a pit or to a section isolator, transformers and other fixed installations in underground coal mines such as lighting, pumps and lasers.

Macey restrained coupling systems from Eaton's Crouse-Hinds business are designed to Australian and New Zealand Standard AS/NZS1299. These products are used to supply and monitor power to portable equipment such as shuttle cars, continuous miners, drill rigs (jumbo's) etc in underground, open cut coal and metalliferous mines.

Crouse-Hinds
by **EATON**

Macey bolted & restrained series



55A & 150A bolted series

- IECEx and ANZEx certification
- IP66
- 660/1100V bolted coupler
- 660/1100V bolted adaptor



300A & 425A bolted series

- IECEx and ANZEx certification
- IP66
- 660/1100V bolted coupler
- 660/1100V bolted adaptor



800A bolted series

- IP66
- 1000V bolted coupler
- 1000V bolted adaptor



700A bolted series

- 25000V bolted coupler
- 25000V bolted adaptor

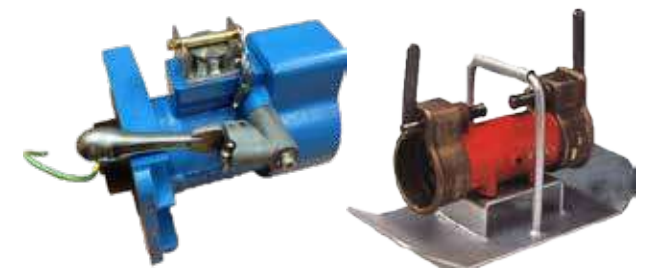


60A & 150A restrained series

- IECEx and ANZEx certification
- IP66
- 660/1100V plug, monitor plug, dummy plug
- 660/1100V receptacle, back to back

150A only:

- 660/1100V quick-loc receptacle, back to back
- 1100V RTU dummy plug



60A & 150A restrained series

- IECEx and ANZEx certification
- IP66
- 660/1100V plug, monitor plug, dummy plug, receptacle, Quick-Loc receptacle, back to back, Quick-Loc back to back
- 1100V 6 Pin dummy plug, receptacle, back to back coupler, Quick-Loc receptacle, Quick-Loc back to back
- 3300V Plug, Dummy Plug, receptacle, Quick-Loc receptacle, back to back, Quick-Loc back to back
- 3300V 6 Pin dummy plug, receptacle, back to back coupler, Quick-Loc receptacle, Quick-Loc back to back

Eaton is dedicated to ensuring that reliable, efficient and safe power is available when it's needed most. With unparalleled knowledge of electrical power management across industries, experts at Eaton deliver customised, integrated solutions to solve our customers' most critical challenges.

Our focus is on delivering the right solution for the application. But, decision makers demand more than just innovative products. They turn to Eaton for an unwavering commitment to personal support that makes customer success a top priority. For more information, visit www.eatoncorp.com.au

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