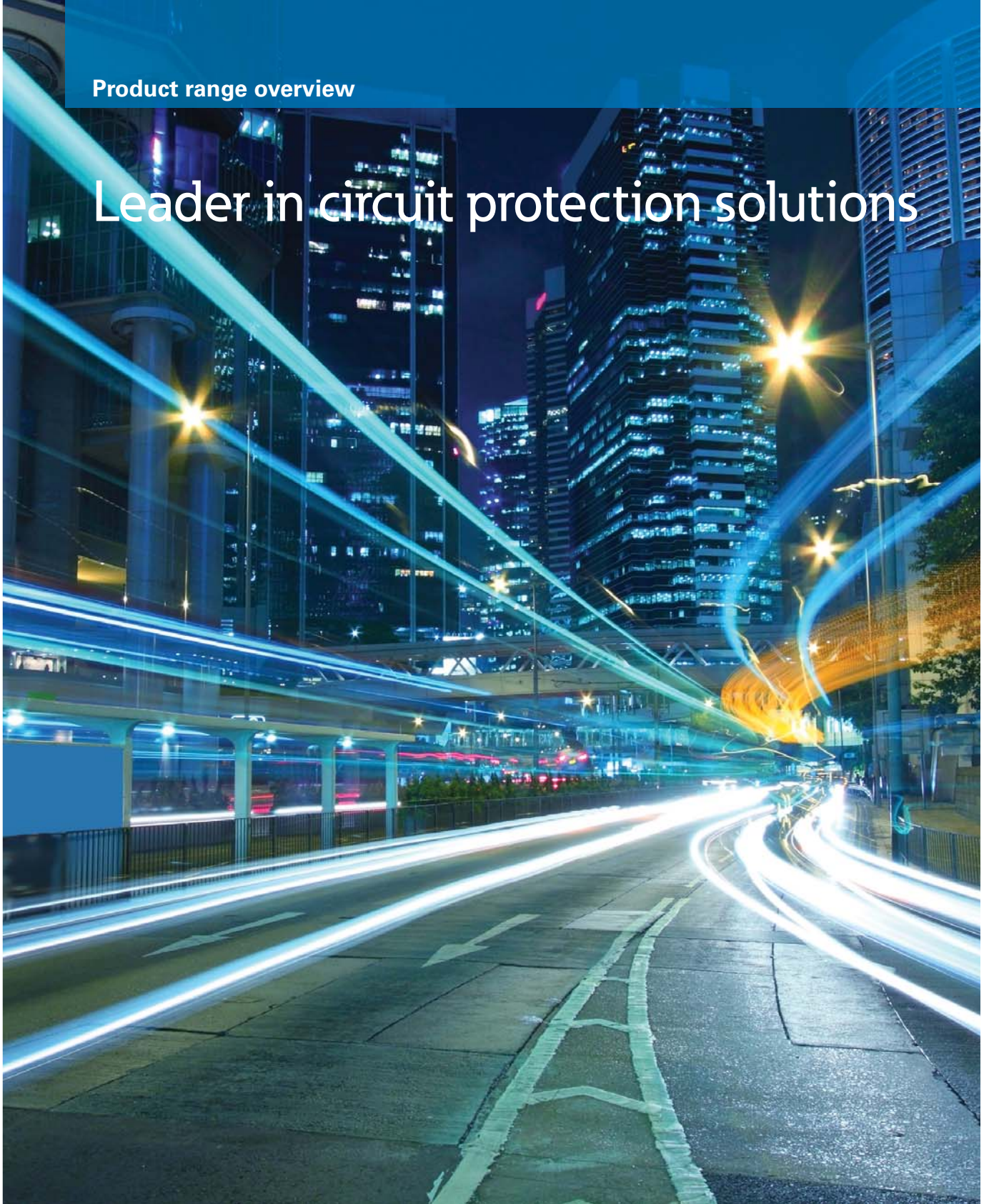
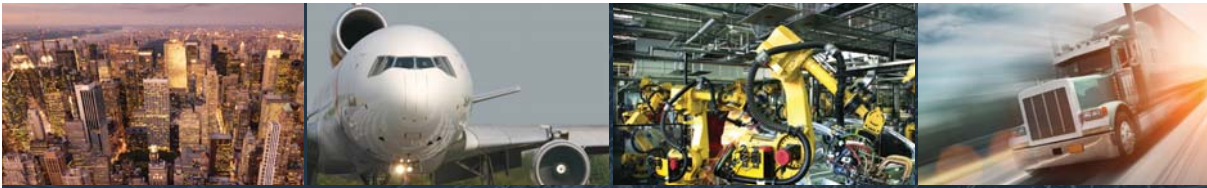


Product range overview

Leader in circuit protection solutions



**Bussmann**  
by **EAT•N**



# Eaton and Cooper united. Energizing 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

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.

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.

[Eaton.com](http://Eaton.com)

**EATON**

*Powering Business Worldwide*

# Company overview

## Company

### Leading source of circuit protection

Bussmann, a division of Eaton, is the leading source of circuit protection solutions in the global marketplace. Bussmann products are approved for use around the world and meet agency requirements and international standards: IEC, VDE, DIN, UL, CSA, BS and others.

Bussmann global headquarters are in St Louis, Missouri (US) and the European headquarters are in Burton-on-the-Wolds, Leicestershire (UK).

Bussmann manufactures over 50,000 part numbers covering extensive circuit protection solutions for a wide range of applications: residential, industrial, motor protection, power conversion, distribution, telecommunications and automotive.

## Quality

### Driving continuous improvement

From design conception to the end product, quality is paramount to the performance and reliability of Bussmann products. Rigorous testing helps to ensure global standards are met to the highest levels of quality throughout the entire product range.

## Customer service

### Ease of doing business, quality and delivery

Customer service representatives and field applications engineers are on hand to help with specific customer needs, offering custom technical solutions. Along with our technical support, C3, is the online solution designed to provide real time product availability, net pricing, order status and tracking. It's simple, fast and accurate.

## Innovation

### Leveraging technology to drive customer value

Bussmann recognises the need to continually innovate and develop new technology to meet the changing needs of the market.

Utilising nearly 100 years of circuit protection experience, Bussmann produces technical products that deliver technical solutions to meet today's demanding circuit protection needs.

# Low voltage

## NH DIN Industrial fuse links and bases

Standard	IEC 60269 and VDE 0636
Voltage	400, 500 and 690 VAC
Current	2 to 1250 A
Breaking capacity	120 kA
Operating class	gG and aM
Sizes	000 to 4 (size 4 bolted only version)
Fuse holders	Available for all fuse links sizes
Applications	Industrial and commercial
Other	Available with Dual indication and IMGL. Fuse gear range available



## D & DO Fuse links and fuse bases

Standard	IEC 60269 and VDE 0636
Voltage	400 and 500 VAC
Current	2 to 100 A
Breaking capacity	50 kA
Operating class	Time delay and ultra rapid
Sizes	DI to DIV, D01 to D03
Fuse holders	Available for all fuse link sizes
Applications	Industrial and commercial
Other	DIN-Rail mounting with accessories available: screw caps, gauge rings, etc



## British standard (BS) fuse links and fuse holders

Standard	BS88 part 1 to 6, IEC 60269 part 1 and 2
Voltage	415, 550 and 690 VAC
Current	2 to 1250 A
Breaking capacity	80 kA
Operating class	gG and aM
Sizes	A1 to A4, B1 to B4, C1 to C3, D2, E1, F1, F2 and non standard sizes
Fuse holders	Full range of fuse holders available (Red Spot, CAMaster and Safeloc)
Applications	Residential commercial and industrial



## IEC Cylindrical fuse links and fuse holders

Standard	IEC 60269
Voltage	400, 500 and 690 VAC
Current	0.5 to 125 A
Breaking capacity	20 to 120 kA
Operating class	gG and aM
Sizes	8 x 31, 10 x 38, 14 x 51 and 22 x 58 mm
Fuse holders	Full range of fuse holders available (CH Series)
Applications	Industrial and commercial



# Low voltage

## House service cut-out fuse links and fuse holders

Standard	ASTA certified and tested in accordance to BS1361 and BS88
Voltage	415 VAC
Current	20 to 100 A
Breaking capacity	33 kA
Operating class	gG
Sizes	22.2 and 30.2 mm diameter
Fuse holders	60/80SP for KR85 series or 100SP for LR85 series
Applications	Protection of incoming cables into residential and commercial properties
Other	Full range of accessories available



## Type J Feeder pillar fuse links

Standard	BS88 part 5
Voltage	415 VAC
Current	20 to 800 A
Breaking capacity	80 kA
Operating class	gG
Sizes	76, 82 and 92 mm centres
Fuse holders	Designed to be used with wedge type fuse carriers
Applications	Utilities
Other	Available in cylindrical slotted and non slotted tag versions



## North American fuse links and fuse holders

Standard	UL Listed and CSA Certified
Voltage	Up to 600 VAC
Current	1/10 to 6000 A
Breaking capacity	Up to 300 kA
Operating class	Time-delay, fast acting as per UL requirements
Sizes	Midget, class CC, G, H, J, K5, H, L, RK5, RK1 and T
Fuse holders	Modular fuse holder (finger protection) for midget and class CC fuse links. Finger safe protected fuse base for class J fuse links
Applications	Suitable for applications or equipments to be exported to the USA or other UL markets



# Medium voltage

## Voltage and auxiliary transformer fuse links

Standard	BS 2692-1 and IEC 60282-1
Voltage	1.1 to 36 kV
Current	1.1 to 6.3 A
Breaking capacity	50 kA
Operating class	Back-up
Applications	Used in the primary side of voltage transformers
Other	Clips available



# Medium voltage

## DIN Fuse links

Standard	DIN 43625, IEC 60282-1 and VDE 0670-4
Voltage	3.6 to 36 kV
Current	6.3 to 400 A
Breaking capacity	20 to 63 kA
Operating class	Back-up, Full range and General purpose
Applications	Suitable for primary side transformer protection, fuse switch combination, unit fuse bases and fuse switches



## Oil fuse links

Standard	IEC 60282-1, BS 2692-1 and ESI Standard 12-8
Voltage	3.6 to 24 kV
Current	6.3 to 250 A
Breaking capacity	Up to 50 kA
Operating class	Back-up
Applications	Primary side transformer protection and oil filled switch combination unit
Other	Fitted with pyrotechnic striker for open fuse indication



## Motor start fuse links

Standard	IEC 60282-1, DIN 43625 and BS 2692
Voltage	2.75 to 7.2 kV
Current	6.3 to 400 A
Breaking capacity	Up to 63 kA
Operating class	Back-up
Applications	Provide short-circuit protection in motor circuits to both the motor starter and cables
Other	Fitted with pyrotechnic striker for open fuse indication



## Air fuse links

Standard	BS 2692-1
Voltage	3.6 to 72.5 kV
Current	3.15 to 160 A
Breaking capacity	Up to 40 kA
Operating class	Back-up
Applications	Suitable for primary side transformer protection, fuse switch combination, unit fuse bases and fuse switches



## Expulsion fuse links

Standard	ANSI
Voltage	15 to 72 kV
Current	1 to 100 A
Breaking capacity	20 to 63 kA
Operating class	Slow acting (T), fast acting (K) and extra rapid (XA) characteristics.
Applications	Suitable for primary side transformer protection, feeder protection and capacitor bank protection.



# Medium voltage

## Automatic Sectionalising Links (ASL)

Standard	IEEE C37-63
Voltage	Up to 33 kV lines
Current	16 to 320 A
Operating class	Resettable
Applications	Suitable for spur line isolation in place of existing expulsion fuse links



## Boric acid fuse links (BBU)

Standard	ANSI C.37 and Australian standard AS1033
Voltage	17 to 38 kV
Current	3 to 200 A
Breaking capacity	10 to 14 kA
Operating class	Standard, low and fast
Applications	Suitable for distribution transformer protection (indoors and outdoors)



# High speed

## Square body fuse links

Standard	IEC 60269-4, DIN 43653 and 43620, UL Recognition and CSA Component Acceptance
Voltage	690 to 1250 VAC, higher voltage ratings available
Current	10 to 7500 A
Breaking capacity	Up to 300 kA
Operating class	aR
Sizes	000, 00, 1 to 5
Fuse holders	Email <a href="mailto:bulehighspeedtechnical@eaton.com">bulehighspeedtechnical@eaton.com</a>
Applications	Used for the protection of DC Common bus, DC Drives, power converters/rectifiers and reduced voltage starters. Custom solutions also available



## British standard fuse links

Standard	BS88 part 4 and IEC 60269-4
Voltage	240 to 690 VAC
Current	6 to 710 A
Breaking capacity	200 kA
Operating class	aR
Sizes	All sizes as per IEC 60269-4
Fuse holders	Email <a href="mailto:bulehighspeedtechnical@eaton.com">bulehighspeedtechnical@eaton.com</a>
Applications	Used for the protection of DC Common bus, DC Drives, power converters/rectifiers, soft starters and inverters



# High speed

## Ferrule style fuse links

Standard	UL/CSA
Voltage	700 VAC. DC Ratings available
Current	1 to 100 A
Breaking capacity	20 kA
Operating class	aR
Sizes	6 x 32, 10 x 38, 14 x 51, 14 x 67, 22 x 58, 20 x 127 mm
Fuse holders	Email <a href="mailto:bulehighspeedtechnical@eaton.com">bulehighspeedtechnical@eaton.com</a>
Applications	Used for the protection of DC Common bus, DC Drives, power converters/rectifiers and soft starters and inverters



## North American fuse links

Standard	UL/CSA
Voltage	Up to 600 VAC
Current	1 to 6000 A
Breaking capacity	200 kA
Operating class	Fast acting
Sizes	Full range available
Fuse holders	Email <a href="mailto:bulehighspeedtechnical@eaton.com">bulehighspeedtechnical@eaton.com</a>
Applications	Suitable for medium power applications for UL markets



## Photovoltaic fuse links and fuse holders

Standard	IEC 60947-1, 61643-11, 60269-2 and 60269-7, UL Listed and CCC Accredited
Voltage	1000 to 1500 VDC
Current	1 to 630 A
Breaking capacity	Up to 50 kA
Operating class	gPV
Sizes	10 x 38, 14 x 51, 14 x 65 mm, NH Style and XL Style
Fuse holders	CHPV series for 10 x 38 fuse links, SD-D-PV for NH Style, SD-XL-S for XL Style
Applications	PV panel, string, array protection



## Electric vehicle fuse links

Standard	JASO D622, TS 16949 (Quality)
Voltage	500 VDC
Current	5 to 400 A
Breaking capacity	20 kA
Operating class	aR (standard), gR
Sizes	10 x 38, 20, 25 and 30 mm. Range of mounting options on the 10 x 38 mm (Ferrule, bolt down, pluggable)
Applications	Hybrid Electric Vehicles: Batteries, Inverters, Cables, Auxiliaries. High cycling capability for sustained life in EV Applications. Custom options also available





# Combiner box

## Combiner box

Standard	IEC 61439-1 and -2 and IEC 60363-7-712
Voltage	Up to 1000 VDC
Current	1 to 32 A
Number of strings	3 - 24 strings (20 A fuse max), 3 - 16 strings (32 A fuse max)
Operating class	gPV
IP Rating	IP65
Enclosure types	Glass reinforced polyester (GRP), painted steel, stainless steel
Overcurrent protection configurations	Positive and negative, positive only, negative only
DC Load isolation	DC switch disconnect 25 Adc to 500 Adc or fixed output
Input connection types	Bottom or side entry MC4 connectors or glands
Overvoltage protection options (SPD)	Class I PV, Class II PV, Class II 240 VAC IEC, Type 1 Modbus data line
Monitoring options	8 or 16 Strings shunt based monitoring
Communications options	2-Wire modbus RTU, Zigbee wireless or industrial wireless
Power supply options	External 24 VDC, Internal 240 VAC to 24 VDC, Internal 1000 VDC to 24 VDC
Applications	Solar PV applications including: Large scale residential, small to large scale commercial, large scale utility



# Enbray contactors

## Enbray contactors

Standard	IEC 60947-4-1
Voltage	230 to 600 VAC / 500 VDC. Can be configured for higher voltage
Current	10 to 1250 A. Can be configured for higher current
Operating class	Up to AC23. Normally open or normally closed options available
Poles	1 to 18 Poles
Applications	High power switching for onerous circuit conditions and traction
Other	Wide range of accessories and control circuit voltages. Fully customised for individual applications, contact <a href="mailto:buletechnical@eaton.com">buletechnical@eaton.com</a> for full details





## Customer satisfaction team

Bussmann's Customer Satisfaction Team is available to answer questions regarding Bussmann products.

Europe calls can be made between:

Monday - Thursday 7.30 a.m. - 5.30 p.m. GMT

Friday 7.30 a.m. - 5.00 p.m. GMT

## The Customer Service Satisfaction Team can be reached via:

Phone: 00 44 (0) 1509 882 600

Fax: 00 44 (0) 1509 882 786

Email: [bulesales@eaton.com](mailto:bulesales@eaton.com)

## C3 customer center

The C3 portal supports the following Divisions: B-Line, Bussmann, Crouse-Hinds, Lighting, Cooper Power Systems, Safety, and Wiring Devices.

**Get started today at [www.my.eaton.com](http://www.my.eaton.com) by clicking 'Request User ID and Password'.**

- Easy to Navigate
- Simple to Use
- Real-Time Data.

## Online resources

Visit [www.bussmann.com](http://www.bussmann.com) for the following resources:

- Product cross reference
- Product profiles
- Online catalogues for the latest United States and European catalogues.

## Application engineering

Application Engineering assistance is available to all customers. The Application Engineering team is staffed by university-qualified electrical engineers who are available with technical and application support.

Europe calls can be made between:

Monday - Thursday 8.30 a.m. - 4.30 p.m. GMT

Friday 8.30 a.m. - 4.00 p.m. GMT

Application Engineering can be reached via:

Phone: 00 44 (0) 1509 882 699

Fax: 00 44 (0) 1509 882 794

Email: [buletechnical@eaton.com](mailto:buletechnical@eaton.com)

At Eaton, we're energized by the challenge of powering a world that demands more. With over 100 years experience in electrical power management, we have the expertise to see beyond today. From groundbreaking products to turnkey design and engineering services, critical industries around the globe count on Eaton.

We power businesses with reliable, efficient and safe electrical power management solutions. Combined with our personal service, support and bold thinking, we are answering tomorrow's needs today. Follow the charge with Eaton. Visit [eaton.com/electrical](http://eaton.com/electrical).

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