Eaton's Bussmann series
UL Low voltage fuse links and fuse holders

BUSSMANN SERIES



Powering Business Worldwide

Eaton is the leading source of fusible circuit protection solutions in the global market-place. Eaton's Bussmann series products are approved for use around the world and meet agency requirements and international standards: IEC, VDE, DIN,UL, CSA, BS and others.

The headquarters for Eaton's Bussmann series product line is located in Burton-on-the-Wolds, Leicestershire (UK) and is part of Eaton's Industrial Control and Protection EMEA division.

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

Eaton has been a leading exponent in the design, development and manufacture of fuse links and their associated accessories for more than 100 years and has supplied fuse links to more than 90 countries worldwide.

Eaton's team of specialist Engineers and Field Applications Engineers plays a leading role in international standardisation of fuse links offering comprehensive advice on selection and applications.

With a continual commitment to meet our customers' needs with innovative high quality ~products with ISO 9001 'approval systems', Eaton is the supplier of choice for circuit protection solutions.

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Range overview



	Class CC			Class CF			Class G	Class J	
Protection level	Ultimate	Advanced	Advanced	Ultimate	Ultimate	Ultimate	Basic	Ultimate	Advanced
Product name	Low Peak™	Limitron™	Limitron™	CUBEFuse™	CUBEFuse™	CUBEFuse™	N/A	Low Peak™	Limitron™
Catalogue symbol	LP-CC	FNQ-R	KTK-R	TCF	FCF	WCF	SC	LPJ-SP	JKS
Product type	Rejection	Rejection	Rejection	Low-peak	N/A	Wind power	N/A	Dual-element	N/A
Operating class	Time-delay	Time-delay	Fast-acting	Time-delay	Fast-acting	Fast-acting	General purpose	Time-delay	Fast-acting
Rated voltage - V a.c.	600	600	600	600	600	690	Up to 600	600	600
Rated voltage V d.c.	Up to 300	Up to 300 V d.c. 32 V d.c.	N/A	300	600	N/A	Up to 300	300	
Rated current	0.5 A to 30 A	0.25 A to 30 A	0.1 A to 30 A	1 A to 400 A	1 A to 100 A	1 A to 100 A	0.5 A to 60 A	1 A to 600 A	1 A to 600 A
Blocks	BCM			N/A			BG G	JM60_ JP60030 BH-0111 BH-3144 BH-3145	
DIN-Rail holders	CHCC			TCFH TCFHNW (Panel and DIN-Rail mount)	N/A	N/A	N/A	CH_J JT(N)	
CCP2	CCP2-CC†††			CCP2-CF†††			N/A	N/A	
Panel mount holders	HPS-RR			N/A			HPS-EE (15 A) HPS-FF (30 A) HPS-JJ (20 A)	N/A	
In-line holders	HEZ			N/A			HEG (15 A) HEH (20 A)	N/A	



	Class L				Class T	
Protection level	Ultimate	N/A	Advanced	Advanced	Advanced	Advanced
Product name	Low Peak™	N/A	Limitron™	Limitron™	Limitron™	Limitron™
Catalogue symbol	KRP-C_SP	KRP-CL	KTU	KLU	JJN	JJS
Product type	N/A	Current limiting	N/A	N/A	N/A	N/A
Operating class	Time-delay	Time-delay	Fast-acting	Time-delay	Fast-acting	Fast-acting
Rated voltage - V a.c.	600	600	600	600	300	600
Rated voltage V d.c.	300	N/A	N/A	N/A	Up to 170	N/A
Rated current	601 A to 6000 A	225 A to - 600 A	601 A to 6000 A	601 A to 4000 A	1 A to 1200 A	1 A to 800 A
Fuse blocks	N/A				T300, TM300 BH-0_, BH-1_, BH-3_†	T600, TM600 BH-0_, BH-1_, BH-3_†

† Various blade bolt-on up to 700 A, see data sheets for limitations.
†† WCF (wind CUBEFuse) is rated to 690 V and is not a UL Listed Class CF fuse and can only be applied in the TCFHNW holder.
††† UL 98 Listed disconnect switch, available in 1-, 2- and 3-pole versions.

Don't miss a sale or an opportunity to upgrade your fuse protection

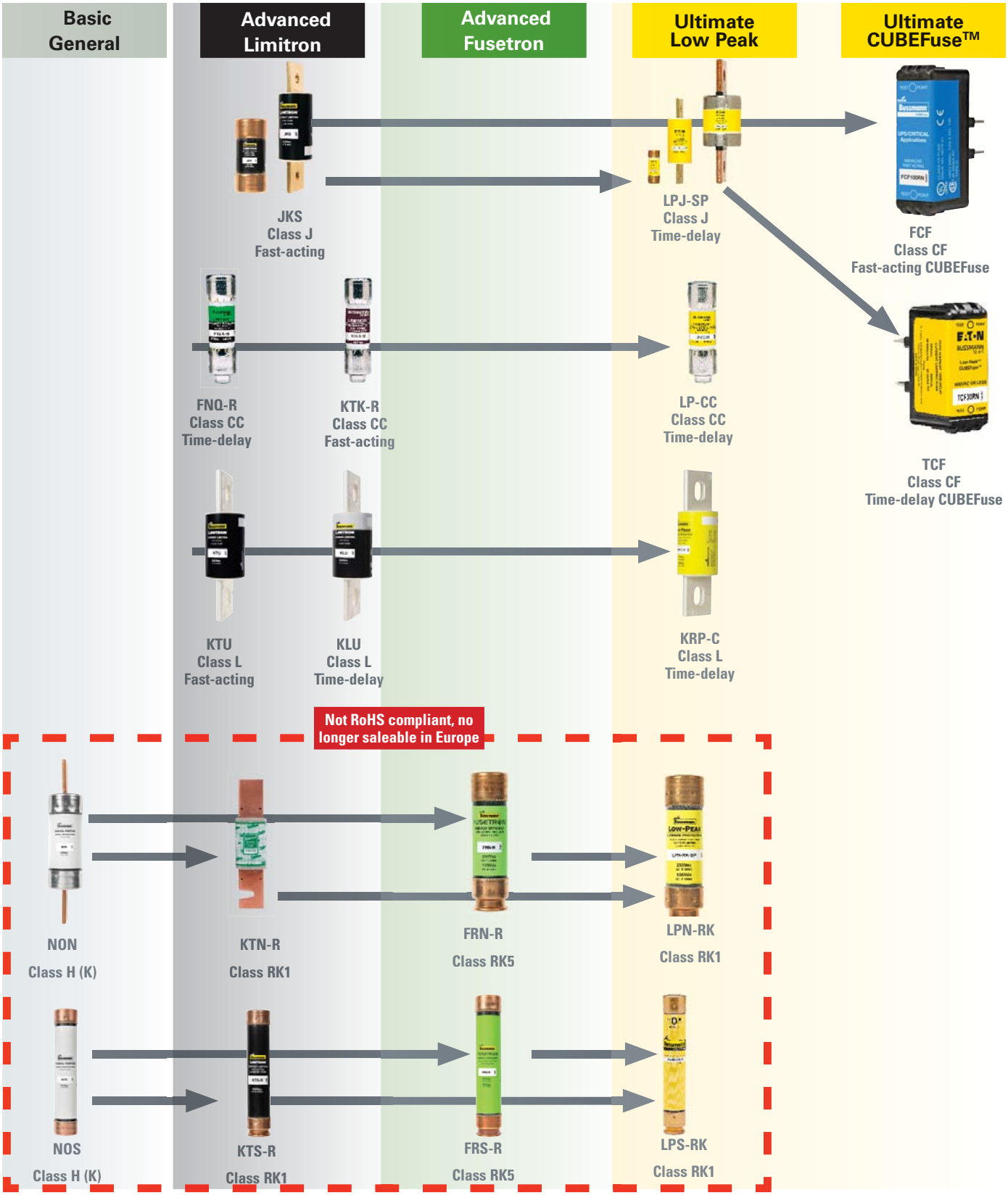
Three tiers offer distinct levels of circuit protection

Basic - Basic single-element protection for service, feeder and branch circuit applications with up to 100 kA interrupting rating

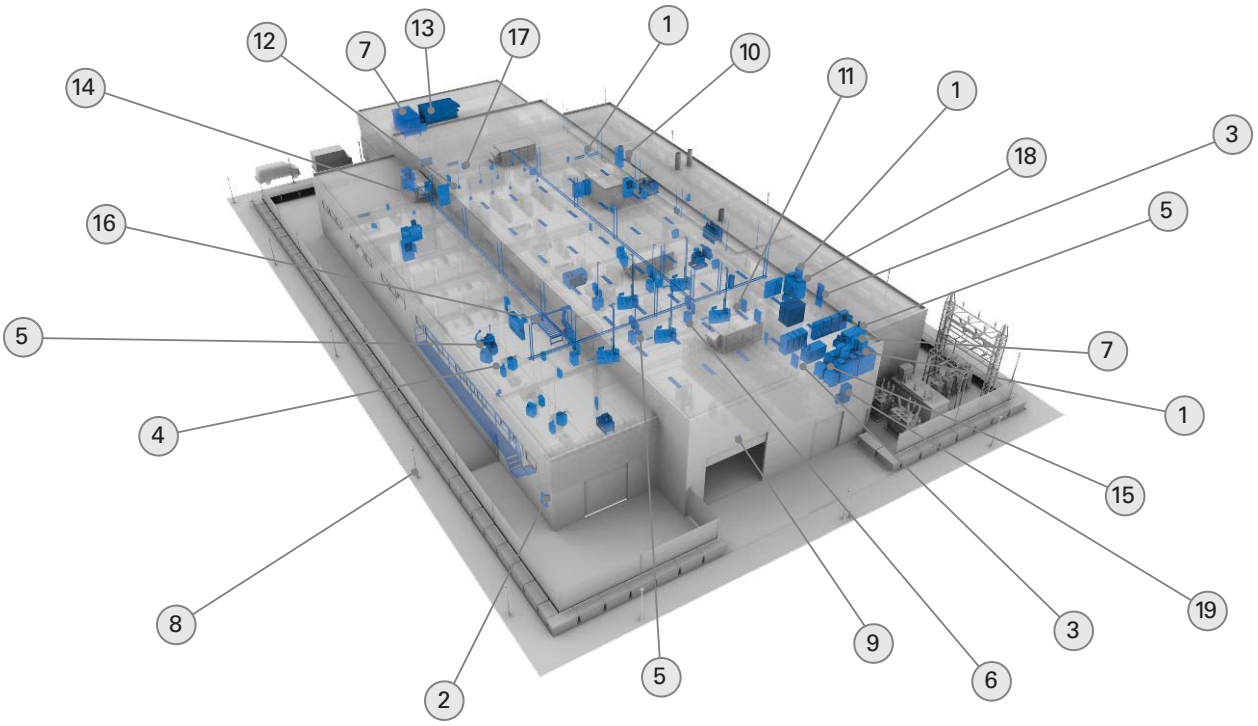
Advanced - Choose between fast acting, short-circuit, current limiting protection or time-delay energy efficient, current limiting protection based on the application with 200 kA interrupting ratings.

Ultimate - Low-Peak - Unique element designs deliver a powerful combination of operating characteristics in one fuse - fast short-circuit protection, current limitation and time delay with up to 300 kA interrupting ratings.

Ultimate - CUBEFuse™ - For finger-safe protection in a small footprint up to 600 V and 100 A, upgrade to the time-delay or fast-acting CUBEFuse. Amp rating rejection feature helps prevent overfusing in the CUBEFuse holder



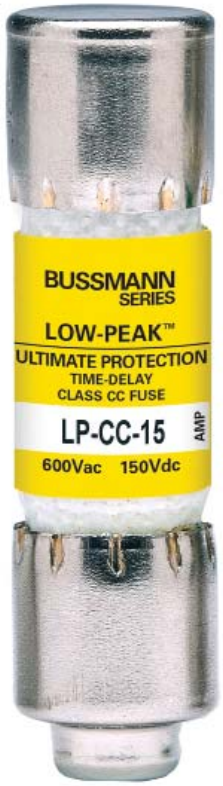
Applications



	Industrial and commercial applications	Ultimate - Low peak	Advanced - Limitron	General
1	Service, feeder and branch circuit	✓	✓	✓
2	Interior lighting	✓	✓	
3	Distribution panels	✓	✓	
4	Disconnect switches	✓	✓	
5	Motor/motor control center	✓		
6	Capacitors	✓		
7	Transformers	✓		
8	Outdoor lighting	✓		
9	Emergency lighting	✓		
10	Electric heat	✓		
11	Welding circuits	✓		
12	Plant lighting	✓	✓	
13	HVAC Chillers/blowes	✓	✓	
14	Forklift battery charging station	✓	✓	
15	Emergency generator	✓	✓	
16	Conveyor system	✓	✓	
17	UPS Backup power supplies	✓		
18	Switchboards	✓		
19	Elevator control centers	✓		

Class CC - UL Fuse links, fuse holders and compact circuit protectors

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LP-CC Class CC Low-Peak™ time-delay rejection type fuses

Specifications



Description

Time-delay, current-limiting, rejection-type fuse — 12 seconds (minimum) at 200% rated Rated current.

Technical data

- Rated voltage:
  - 600 V a.c. (or less)
  - 300 V d.c. (1/2 to 2-8/10 A and 20-30 A)
  - 150 V d.c. (3-15 A)
- Rated current: 1/2 A to 30 A
- Breaking capacity:
  - 200 kA RMS Sym.
  - 20 kA DC

Standards / Agency information

- UL Listed Std 248-4, Class CC, Guide JDDZ, File E4273
- CSA Certified, Class 1422-02, File 53787,
- RoHS compliant (20-30 A)*
- CE

* Contact buletechnical@eaton.com for RoHS compliance for other ratings

Features

- Class CC rejection feature, with appropriate fuse block, prevents inserting the incorrect supplementary fuses
- Time-delay coupled with Class CC current-limiting response provides close sizing on small motor and relay circuits, and maximum component short-circuit current rating protection
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit

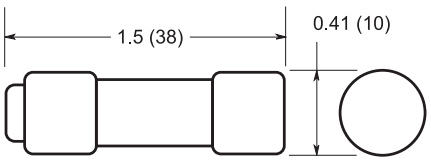
Typical applications

- Branch circuit protection
- Specialized circuits
- Industrial controls and panels
- Isolated, in-line fuse holder

Packaging

- 10 per carton

Dimensions in (mm)



Data sheet: 1023

LP-CC Class CC Low-Peak™ time-delay rejection type fuses

Catalogue number

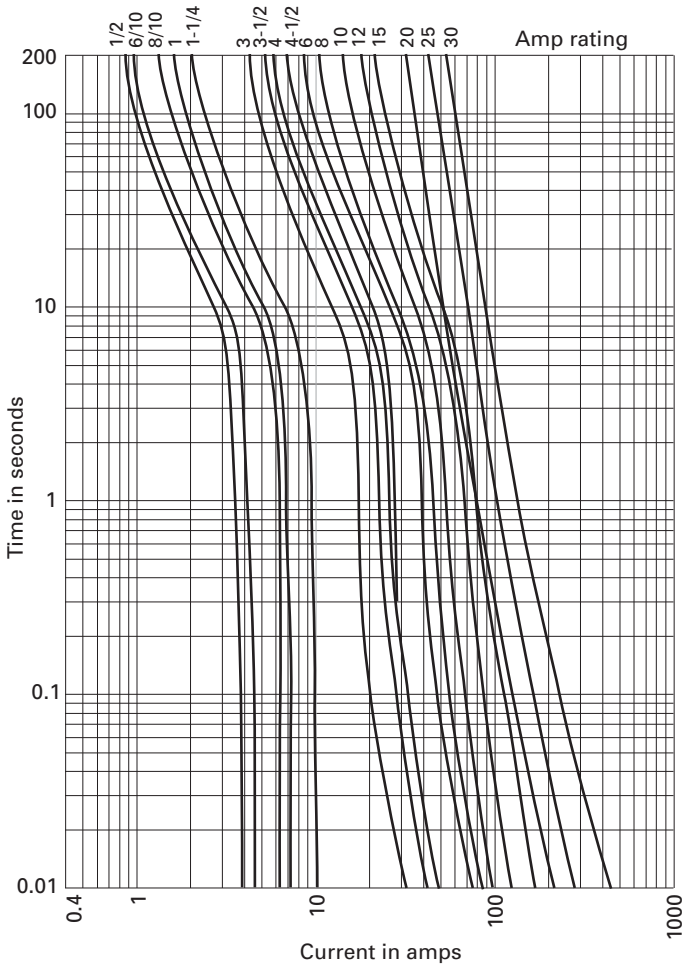
Catalogue numbers	Rated voltage	Rated current (Amps)	BCM Modular fuse holders	CHCC DIN-Rail holders	CCP2 Compact circuit protector	Panel mount holders	In-line holders
							1-pole
LP-CC-1/2	600 V a.c. / 300 V d.c.	0.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-6/10	600 V a.c. / 300 V d.c	0.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-8/10	600 V a.c. / 300 V d.c	0.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1	600 V a.c. / 300 V d.c	1	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-1/8	600 V a.c. / 300 V d.c	1.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-1/4	600 V a.c. / 300 V d.c	1.125	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-4/10	600 V a.c. / 300 V d.c	1.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-1/2	600 V a.c. / 300 V d.c	1.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-6/10	600 V a.c. / 300 V d.c	1.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-1-8 /10	600 V a.c. / 300 V d.c	1.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-2	600 V a.c. / 300 V d.c	2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-2-1/4	600 V a.c. / 300 V d.c	2.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-2-1/2	600 V a.c. / 300 V d.c	2.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-2-8/10	600 V a.c. / 300 V d.c	2.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-3	600 V a.c. / 300 V d.c	3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-3-2/10	600 V a.c. / 150 V d.c.	3.2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-3-1/2	600 V a.c. / 150 V d.c.	3.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-4	600 V a.c. / 150 V d.c.	4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-4-1/2	600 V a.c. / 150 V d.c.	4.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-5	600 V a.c. / 150 V d.c.	5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-5-6/10	600 V a.c. / 150 V d.c.	5.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-6	600 V a.c. / 150 V d.c.	6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-6-1/4	600 V a.c. / 150 V d.c.	6.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-7	600 V a.c. / 150 V d.c.	7	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-7-1/2	600 V a.c. / 150 V d.c.	7.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-8	600 V a.c. / 150 V d.c.	8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-9	600 V a.c. / 150 V d.c.	9	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-10	600 V a.c. / 150 V d.c.	10	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-12	600 V a.c. / 150 V d.c.	12	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-15	600 V a.c. / 150 V d.c.	15	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-20	600 V a.c. / 300 V d.c.	20	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-25	600 V a.c. / 150 V d.c.	25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
LP-CC-30	600 V a.c. / 300 V d.c.	30	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ

Notes:

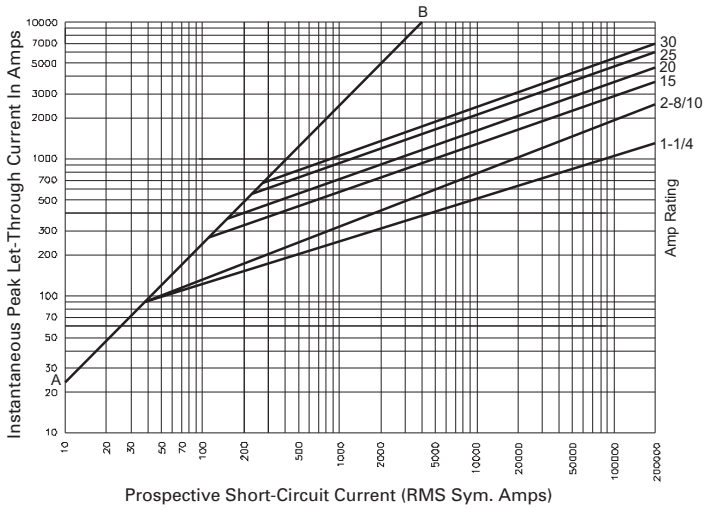
The **BCM** and **CHCC** fuse holders are available in 1-, 2- and 3-pole versions
The **HPF-RR** is a panel mount screw-type knob holder
The **HPS-RR** is a panel mount bayonet type knob holder
The **HEZ** is a waterproof single-pole breakaway and non-breakaway in-line holder

LP-CC Class CC Low-Peak™ time-delay rejection type fuses

Time-current curve



Current limitation curves



Data sheet: 1023

FNQ-R Class CC Limitron™ time-delay rejection type fuses

Specifications



Description

Time-delay, branch circuit, rejection-type fuse. For superior electrical protection, Eaton recommends upgrading FNQ-R fuse applications to Eaton's Bussmann series Low-Peak LP-CC fuses.

Technical data

- Rated voltage:
  - 600 V a.c.
  - 300 V d.c. (15 to 20 A).
  - 32 V d.c. (self certified)
- Rated current: 0.25 A to 30 A
- Breaking capacity:
  - 200 kA RMS Sym.
  - 20 kA dc (15 and 20 A only)

Standards / Agency information

- UL Listed, Std 248-4, Class CC, Guide JDDZ, File E4273,
- CSA Certified, Class 1422-01, File 53787
- RoHS compliant
- CE

Features

- Class CC rejection feature, with appropriate fuse block, prevents inserting the incorrect supplementary fuses
- Time-delay compatible with inrush characteristic of small control transformers
- Current limitation at Class CC levels provides maximum component short-circuit current rating protection

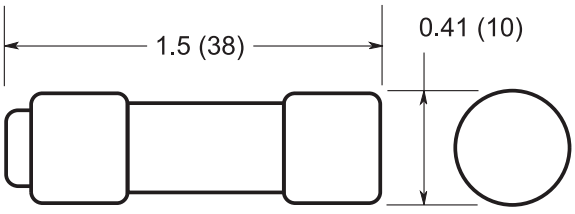
Typical applications

- Line protection, small control transformers
- Industrial controls and panels
- Isolated, in-line fuse holders

Packaging

- 10 per carton

Dimensions in (mm)



Data sheet: 1014

Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

FNQ-R Class CC Limitron™ time-delay rejection type fuses

Catalogue number

Catalogue numbers	Rated voltage	Rated current (Amps)	BCM Modular fuse holders	CHCC DIN-Rail holders	CCP2 Compact circuit protector	Panel mount holders	In-line holders
							1-pole
FNQ-R-1/4	600 V a.c. / 32 V d.c.	0.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-3/10	600 V a.c. / 32 V d.c.	0.3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-4/10	600 V a.c. / 32 V d.c.	0.4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1/12	600 V a.c. / 32 V d.c.	0.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-6/10	600 V a.c. / 32 V d.c.	0.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-3/4	600 V a.c. / 32 V d.c.	0.75	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-8/10	600 V a.c. / 32 V d.c.	0.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1	600 V a.c. / 32 V d.c.	1	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-1/8	600 V a.c. / 32 V d.c.	1.125	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-1/4	600 V a.c. / 32 V d.c.	1.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-3/10	600 V a.c. / 32 V d.c.	1.3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-4/10	600 V a.c. / 32 V d.c.	1.4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-1/2	600 V a.c. / 32 V d.c.	1.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-6/10	600 V a.c. / 32 V d.c.	1.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-1-8/10	600 V a.c. / 32 V d.c.	1.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-2	600 V a.c. / 32 V d.c.	2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-2-1/4	600 V a.c. / 32 V d.c.	2.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-2-1/2	600 V a.c. / 32 V d.c.	2.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-2-8/10	600 V a.c. / 32 V d.c.	2.8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-3	600 V a.c. / 32 V d.c.	3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-3-2/10	600 V a.c. / 32 V d.c.	3.2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-3-1/2	600 V a.c. / 32 V d.c.	3.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-4	600 V a.c. / 32 V d.c.	4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-4-1/2	600 V a.c. / 32 V d.c.	4.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-5	600 V a.c. / 32 V d.c.	5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-5-6/10	600 V a.c. / 32 V d.c.	5.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-6	600 V a.c. / 32 V d.c.	6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-6-1/4	600 V a.c. / 32 V d.c.	6.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-7	600 V a.c. / 32 V d.c.	7	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-7-1/2	600 V a.c. / 32 V d.c.	7.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-8	600 V a.c. / 32 V d.c.	8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-9	600 V a.c. / 32 V d.c.	9	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-10	600 V a.c. / 32 V d.c.	10	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-12	600 V a.c. / 32 V d.c.	12	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-15	600 V a.c. / 300 V d.c. / 32 V d.c.	15	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-17-1/2		17.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-20		20	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-25		25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
FNQ-R-30		30	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ

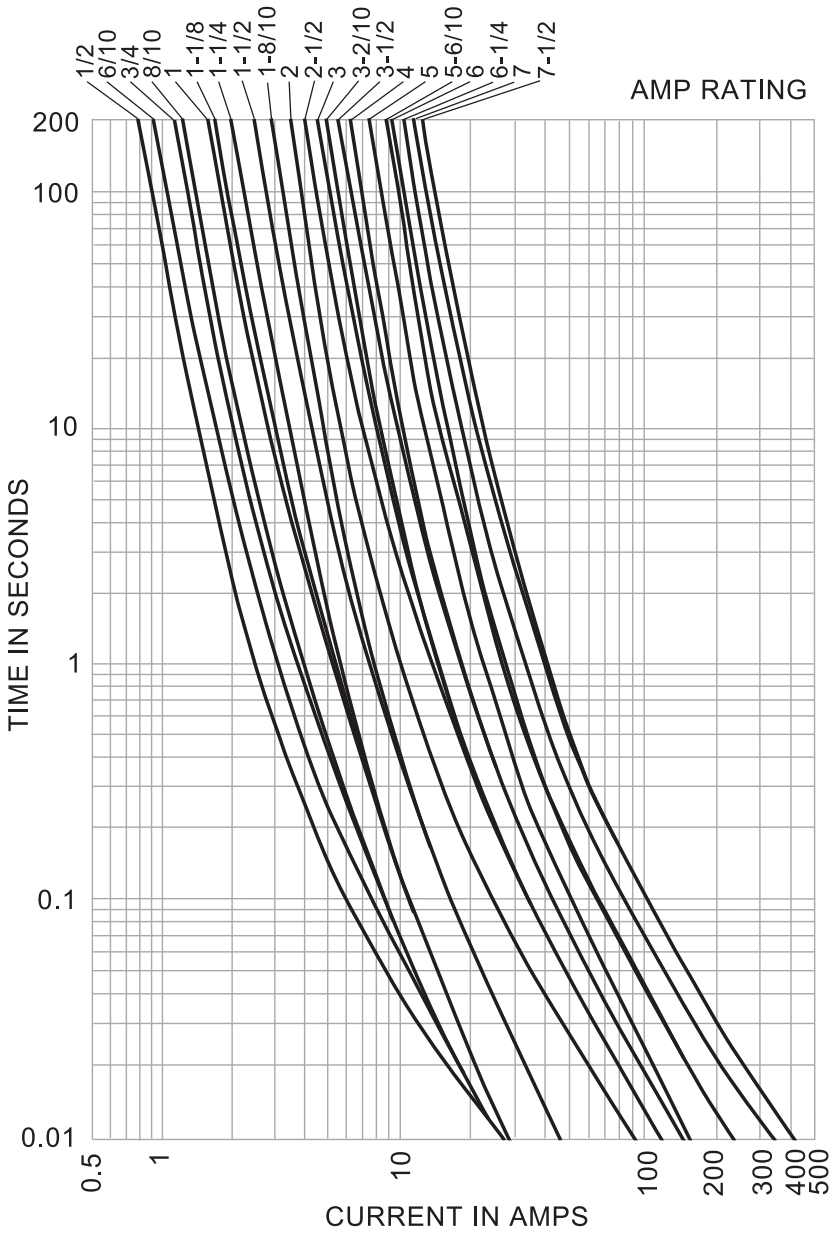
Notes:

The **BCM** and **CHCC** fuse holders are available in 1-, 2- and 3-pole versions
The **HPS-RR** is a panel mount bayonet type knob holder
The **HEZ** is a waterproof single-pole breakaway and non-breakaway in-line holder

Data sheet: 1014

FNQ-R Class CC Limitron™ time-delay rejection type fuses

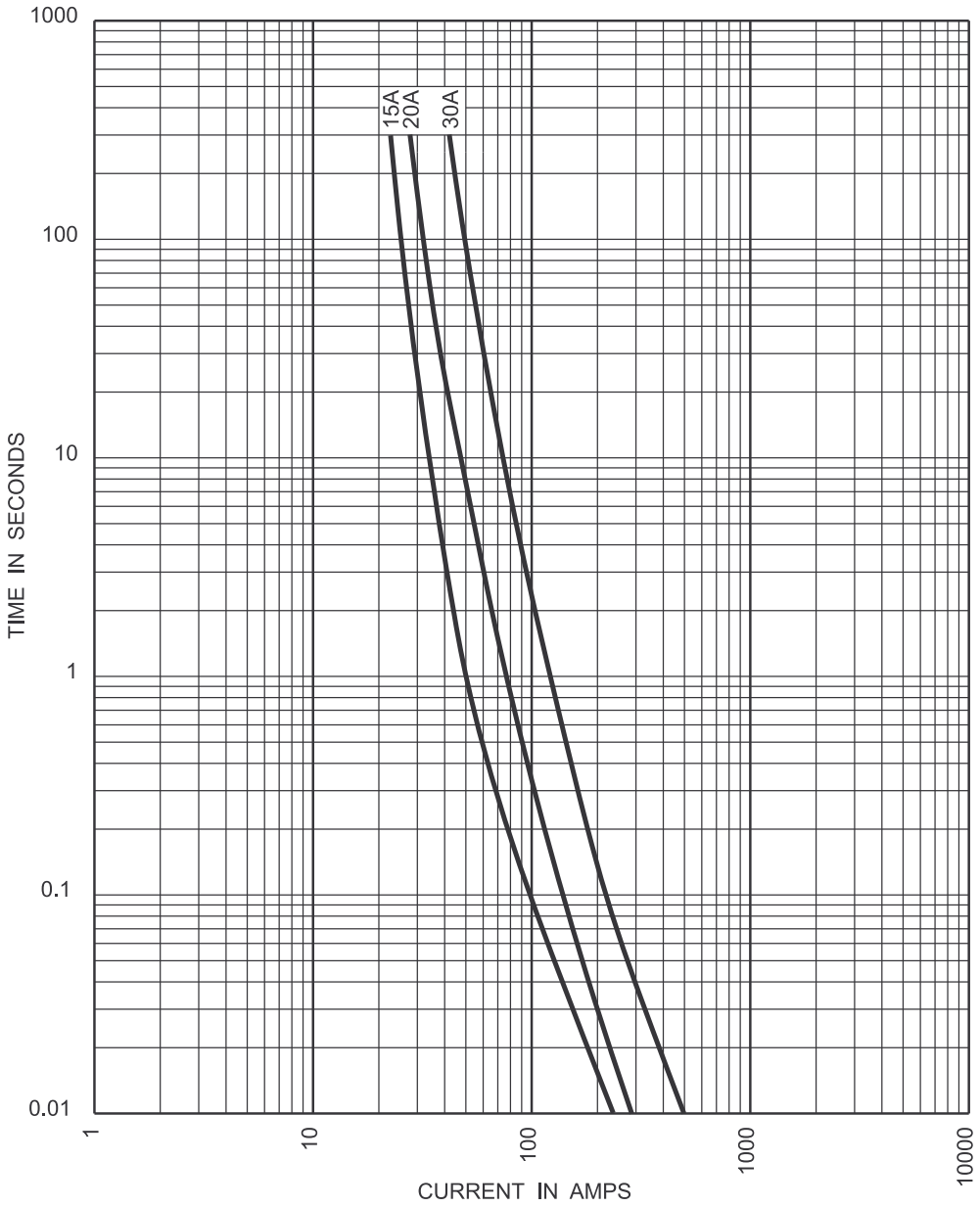
Time current curve - 0.5 A to 7.5 A



Data sheet: 1014

FNQ-R Class CC Limitron™ time-delay rejection type fuses

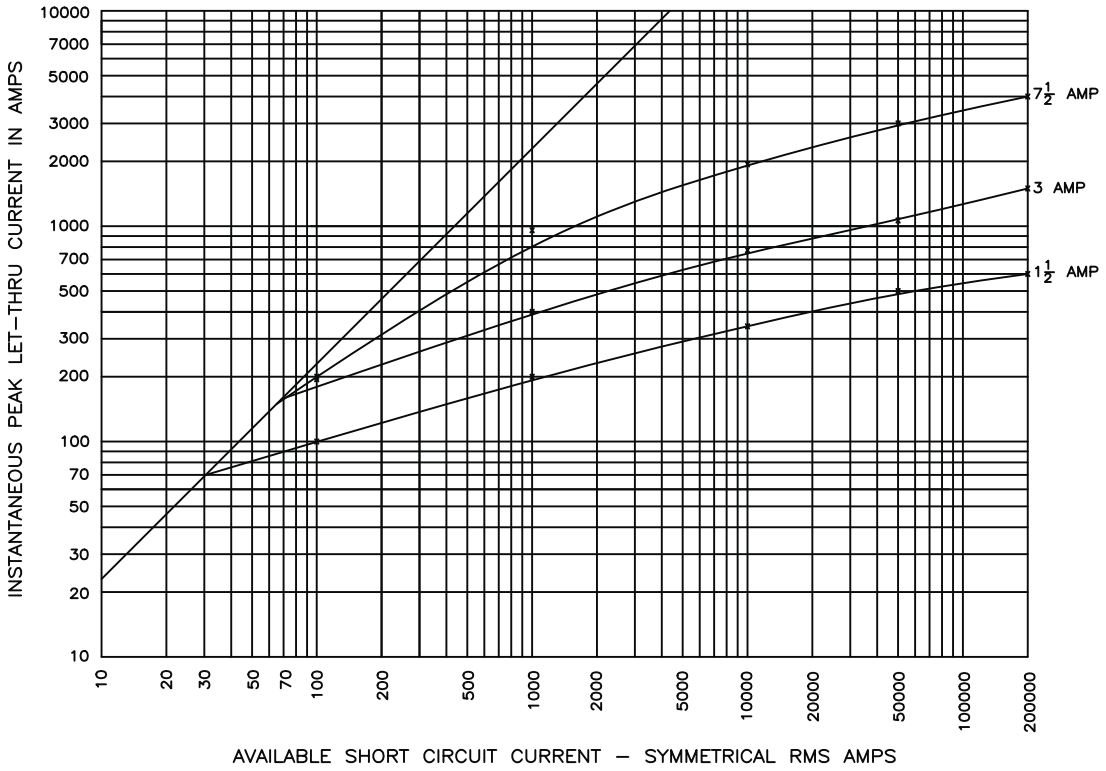
Time current curve - 15 A to 30 A



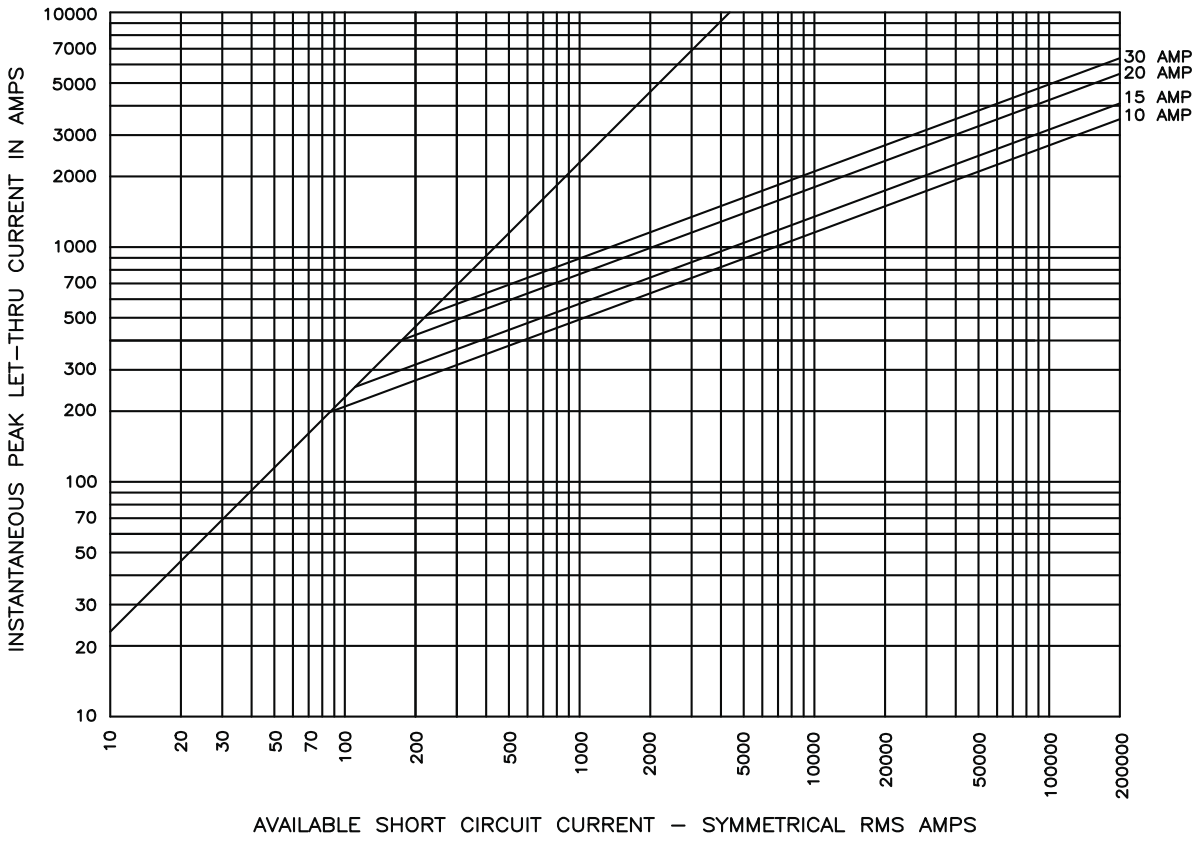
Data sheet: 1014

FNQ-R Class CC Limitron™ time-delay rejection type fuses

Cut off curve - 1.5 A, 3 A and 7.5 A



Cut off curve - 10 A to 30 A



Data sheet: 1014

KTK-R Class CC Limitron™ time-delay rejection type fuses

Specifications

Description

Fast-acting, branch circuit, rejection-type fuse. For superior electrical protection, Eaton recommends upgrading KTK-R fuse applications to Eaton's Bussmann series Low-Peak LP-CC fuses.



Technical data

- Rated voltage: 600 V a.c.
- Rated current: 0.1 A to 30 A
- Breaking capacity: 200 kA RMS Sym.

Standards / Agency information

- UL Listed, Std 248-4, Class CC, Guide JDDZ, File E4273
- CSA Certified, File 53787, Class 1422-02
- RoHS compliant
- CE Features

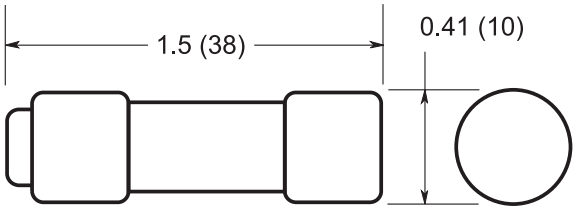
Features

- Class CC rejection feature, with appropriate fuse block, prevents inserting the incorrect supplementary fuses
- Current limitation at Class CC levels provides maximum component short-circuit current protection
- Typical applications
- Specialised circuits
- Industrial controls and panels
- Isolated, in-line fuse holders (street lighting)

Packaging

- 10 per carton

Dimensions in (mm)



Data sheet: 1015

KTK-R Class CC Limitron™ time-delay rejection type fuses

Catalogue numbers

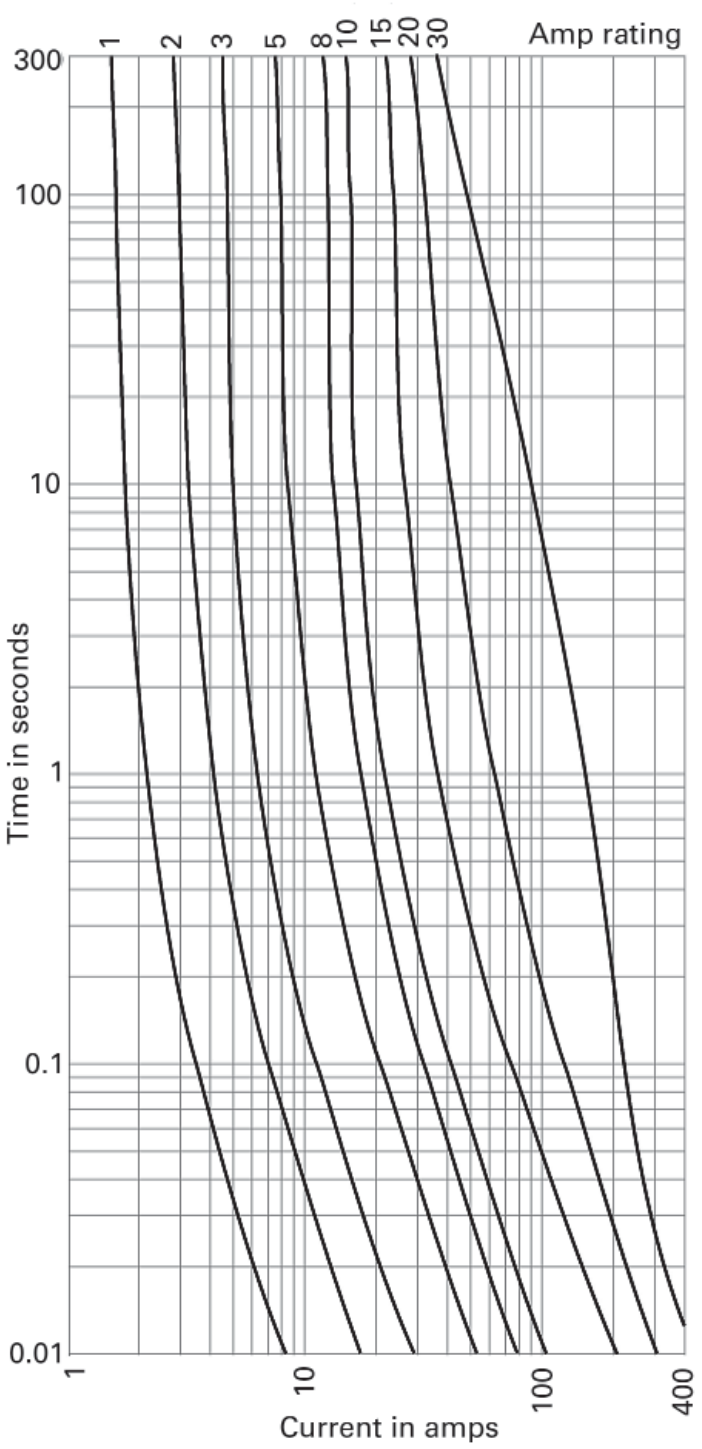
Catalogue numbers	Rated voltage	Rated current (Amps)	BCM Modular fuse holders	CHCC DIN-Rail holders	CCP2 Compact circuit protector	Panel mount holders	In-line holders
							1-pole
KTK-R-1/10	600 V a.c.	0.1	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-1/8	600 V a.c.	0.125	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-2/10	600 V a.c.	0.2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-1/4	600 V a.c.	0.25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-3/10	600 V a.c.	0.3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-4/10	600 V a.c.	0.4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-1/2	600 V a.c.	0.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-6/10	600 V a.c.	0.6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-3/4	600 V a.c.	0.75	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-1	600 V a.c.	1	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-1-1/2	600 V a.c.	1.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-2	600 V a.c.	2	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-2-1/2	600 V a.c.	2.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-3	600 V a.c.	3	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-3-1/2	600 V a.c.	3.5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-4	600 V a.c.	4	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-5	600 V a.c.	5	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-6	600 V a.c.	6	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-7	600 V a.c.	7	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-8	600 V a.c.	8	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-9	600 V a.c.	9	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-10	600 V a.c.	10	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-12	600 V a.c.	12	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-15	600 V a.c.	15	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-20	600 V a.c.	20	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-25	600 V a.c.	25	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ
KTK-R-30	600 V a.c.	30	BCM603-x_	CHCCxD_	CCP2-30CC	HPS-RR	HEZ

Notes:

The **BCM** and **CHCC** fuse holders are available in 1-, 2- and 3-pole versions
The **HPS-RR** is a panel mount bayonet type knob holder
The **HEZ** is a waterproof single-pole breakaway and non-breakaway in-line holder

KTK-R Class CC Limitron™ time-delay rejection type fuses

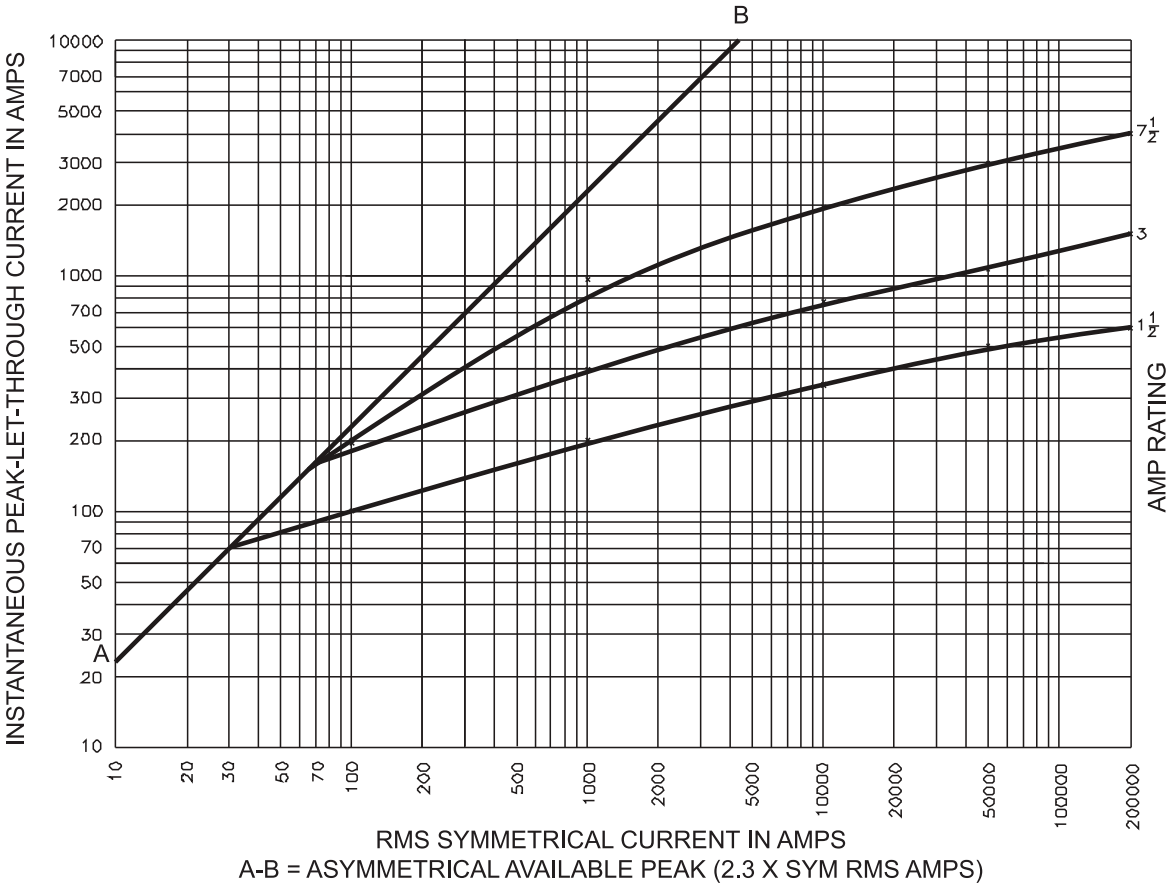
Time current curve - 1 A to 30 A



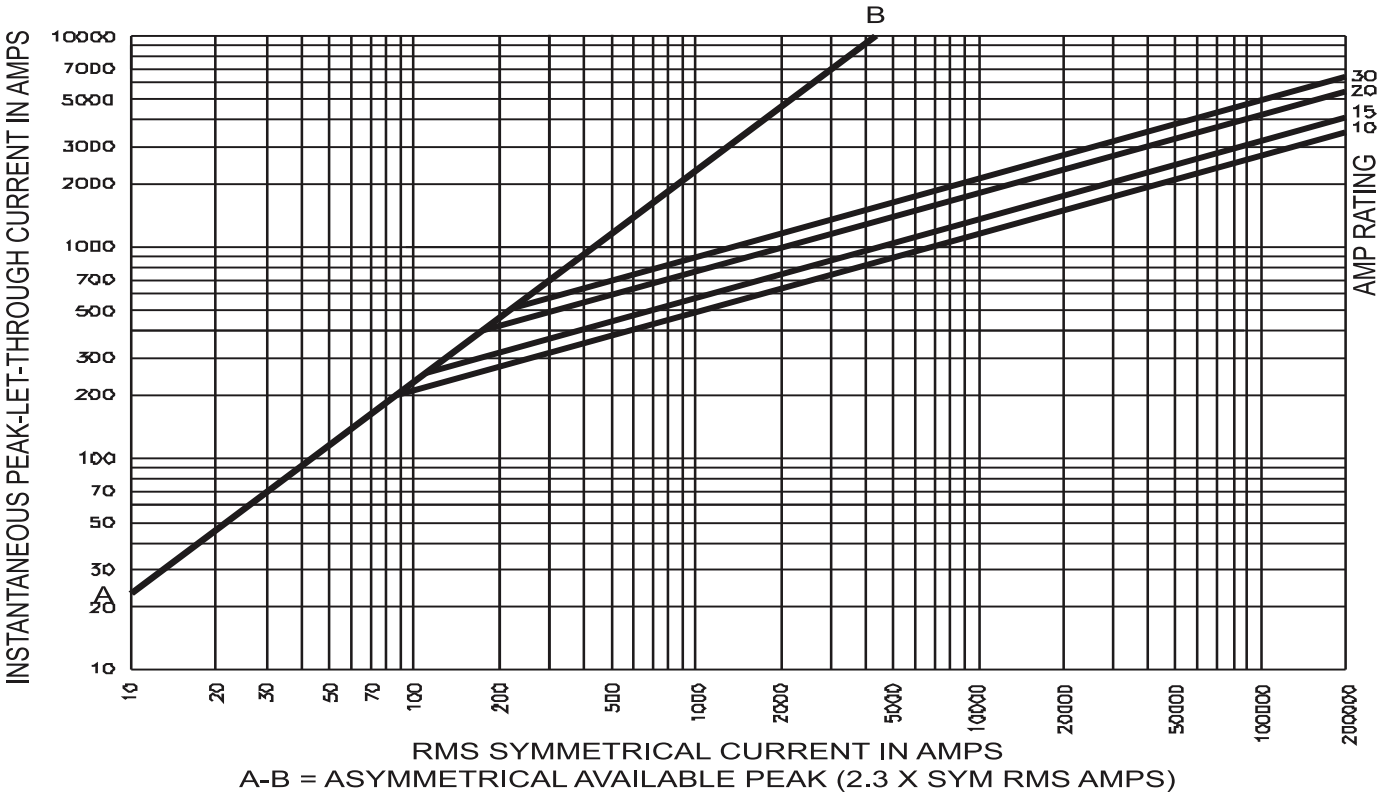
Data sheet: 1015

KTK-R Class CC Limitron™ time-delay rejection type fuses

Cut off curve - 1.5 A to 7.5 A



Cut off curve - 10 A to 30 A



Data sheet: 1015

BCM (Class CC) modular style fuse blocks with optional covers

Specifications

Description

Eaton's Busmann series BCM modular fuse blocks contain features that add versatility, reduce labor and enhance safety of any panel design. Optional IP20 finger-safe covers enhance safety with a lockout/tagout feature along with optional open fuse indication to speed troubleshooting.

Technical data

- Rated voltage: 600 V a.c./dc
- Rated current: 30 A
- SCCR up to 200 kA*

* Limited by fuse interrupting rating

Agency information

- UL Listed E14853 - IZLT
- CSA Certified 47235-6225-01
- RoHS Compliant
- CE



BCM603-3PQ with pressure plate and 1/4" quick-connect terminals

Covers*

- Covers are included in the overall UL Listing/Recognition and CSA Certification

* Covers sold separately in multiples of three units. Order one unit per pole.

Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

Flammability Technical data

- Blocks UL 94V0, self-extinguishing
- Covers UL 94HB, self-extinguishing

Operating and storage temperature range

- Blocks -40°C to +120°C
- Non indicating covers -40°C to +120°C
- Indicating covers -20°C to +90°C**

**Indication requires minimum 90 V and closed circuit to illuminate.

Cover Catalogue numbers

- For blocks with quick-connect terminals — CVR(I)-CCM-QC
- All other terminal options — CVR(I)-CCM

Catalogue numbers

Terminal type						
10-32 Phil-slot screw	**Screw with quick-connect***	**Pressure plate**	**Pressure plate with quick-connect***	**Box lug**	**Poles**	**Fuse/class**
BCM603-1S	BCM603-1SQ	BCM603-1P	BCM603-1PQ	BCM603-1C	1	CC
BCM603-2S	BCM603-2SQ	BCM603-2P	BCM603-2PQ	BCM603-2C	2	CC
BCM603-3S	BCM603-3SQ	BCM603-3P	BCM603-3PQ	BCM603-3C	3	CC

* 1/4" quick-connect terminal maximum Rated current dependent on female spade connector and wire Technical data.

Data sheet 10241

BCM (Class CC) modular style fuse blocks with optional covers

Recommended Bussmann series fuses

- Class CC: LP-CC, FNQ-R, KTK-R

Recommended DIN-Rail end stops

- Catalogue number: BRKT-ND
- Catalogue number: BRKT-NDSCRW2

Features

- Available in 1-, 2- and 3-pole configurations to meet stocking requirements
- Blocks are fully modular with a snap-together design that provides toolless assembly of multiple pole blocks at point-of-use to reduce inventory and save assembly time and labor
- DIN-Rail and panel mount versatility allows one product to be used for multiple applications, lowering inventory cost
- Compact footprint consumes minimal panel space
- Optional see-through cover enhances safety with IP20 finger-safe protection, lockout/tagout capability and open circuit indication
- Easy circuit identification with available universal marker labels for fuse block covers
- Tin-plated bimetallic copper fuse clips deliver superior fatigue resistance compared to traditional spring brass
- Terminal options to meet application needs including 1/4" spade quick-connect terminals for faster panel assembly

Terminals for 75/90°C Cu and AL wire

Terminal type	AWG range	AWG	Torque lb-in (N•m)
Box lug (C)	Cu 2-14 Al 2-8	Cu 2-3	50 (5.6)
		Cu 4-6	45 (5.1)
		Cu 8-14	35 (4.0)
		Al 2-6	50 (5.6)
		Al 8	40 (4.5)
Screw (S)	Cu 10-18	10-18	20 (2.3)
Screw/quick-connect* (SQ)			
Pressure plate (P)			
Pressure plate/quick-connect* (PQ)			

* ¼" quick-connect terminal maximum Rated current dependent on female spade connector and wire Technical data.

Recommended covers†

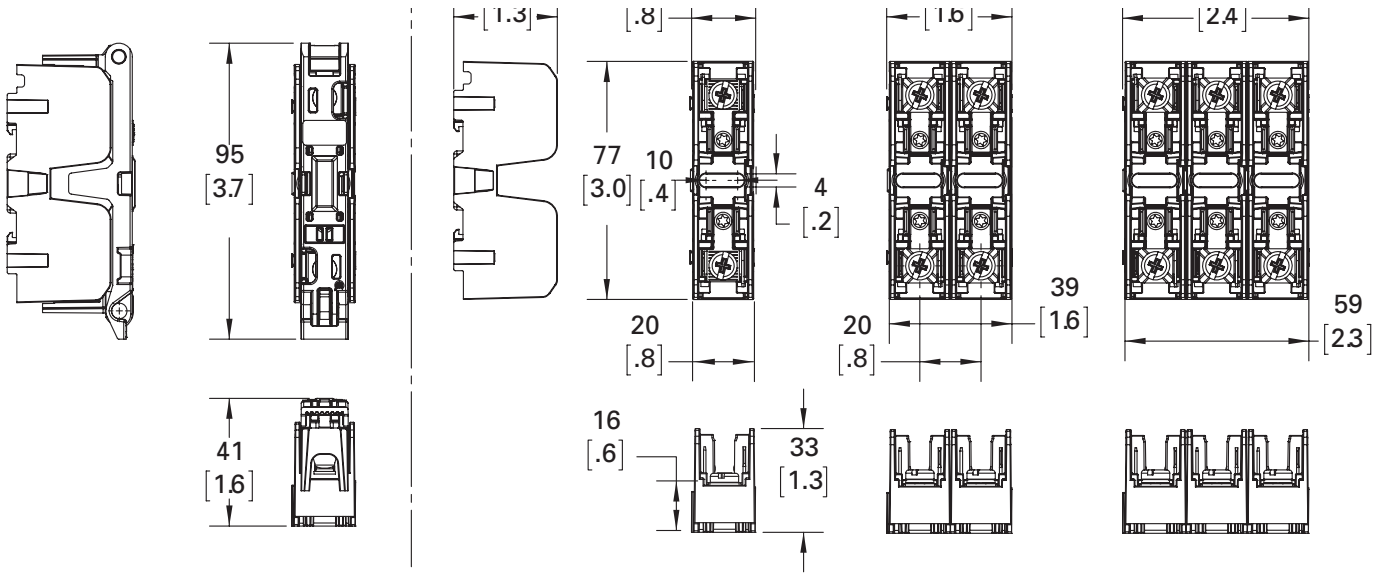
	Cover Catalogue no.	
Terminal type	Indicating	Non indicating
Box lug (C)	CVRI-CCM	CVR-CCM
Screw (S)	CVRI-CCM	CVR-CCM
Screw/quick-connect (SQ)	CVRI-CCM-QC	CVR-CCM-QC
Pressure plate (P)	CVRI-CCM	CVR-CCM
Pressure plate/quick-connect (PQ)	CVRI-CCM-QC	CVR-CCM-QC

† For use with 4 AWG max conductors.

Data sheet 10241

BCM (Class CC) modular style fuse blocks with optional covers

Dimensions mm (in)



CHCC Modular, IP20 finger-safe DIN-Rail holders

Specifications

Description

Eaton's Bussmann series CH DIN-Rail fuse holders are for UL class CC fuses . They are available with and without indication in 1-, 2- and 3-pole IP20 Finger-safe versions. A variety of accessories extends their application flexibitlity and they may be ganged together to meet specific application requirements.



Technical data

- Rated voltage: 600 V (or less) UL
- Rated current: 30 A UL
- SCCR : 200 kA RMS Sym.

Agency information

- UL Listed file E14853, Guide LZT
- CSA File 47235, Class 6225-01
- CCC
- RoHS compliant
- CE

Mounting:

- 35mm DIN-Rail

Wire range

- 75°C and 90°C Cu
- 18-4 AWG (0.8-21.1mm^2)
- Solid, stranded and fine stranded

Terminals

- Single or dual conductors
- Comb busbar
- Terminal screws
  - Standard phil-slot
  - Optional hex head (order by adding "-H" suffix to the Catalogue number,

Torque

- 30 lb-in (3.4 N•m) maximum

Flammability

- UL 94V0, self-extinguishing

Storage and operating temperature

- -4°F (-20°C) to +194°F (90°C) indicating
- -4°F (-20°C) to +248°F (120°C) non-indicating

Features

- High SCCR rated, UL Listed Class CC holder with optional open fuse indication for 600 V and 48 V d.c. (see Catalogue number table for details)
- Enhanced safety with IP20 finger-safe construction
- UL Recognized midget and IEC 10x38mm holders with factory assembled neutral pole option
- Agency Technical data up to 1000 V d.c. for use with PV fuses.
- Wiring flexibility with terminals rated for use with 75°C or 90°C solid, stranded and fine stranded wire, and fork terminals and comb busbars. (Use any higher temperature insulations at the 90°C ampacity with appropriate derating.)
- Complete range of UL Listed and high SCCR rated one- and three-phase finger-safe comb busbars and power feed lugs
- Optional hex head terminal screw makes it easier to achieve necessary torque values

Pack quantity

- 1-pole: 12
- 2-pole: 6
- 3-pole: 4
- 4-pole: 3

Data sheet 720147

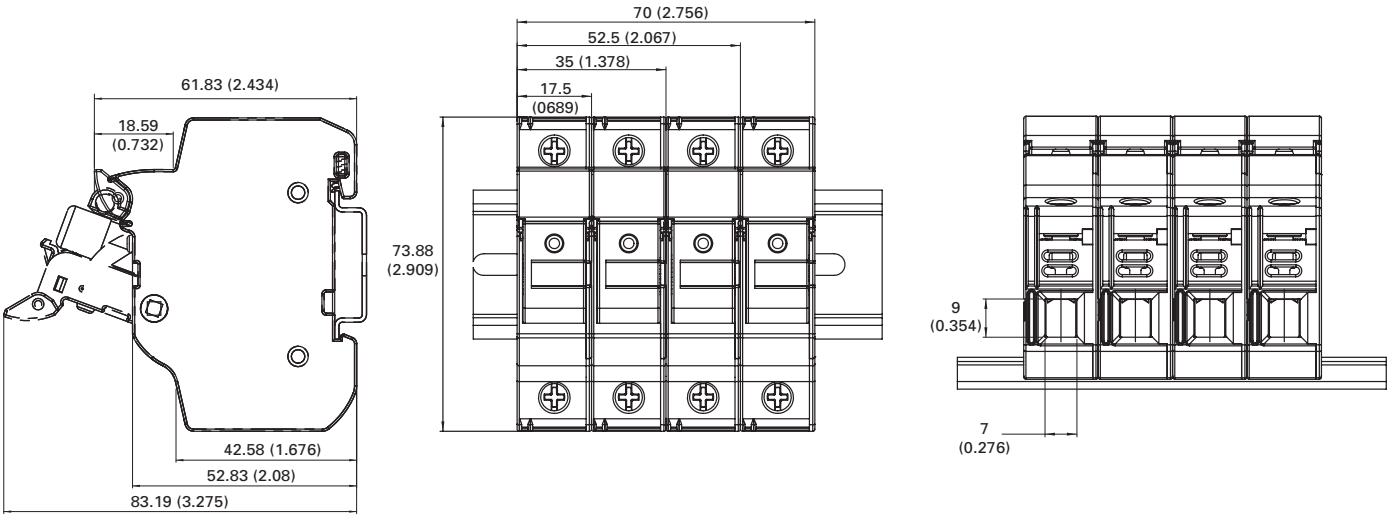
Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

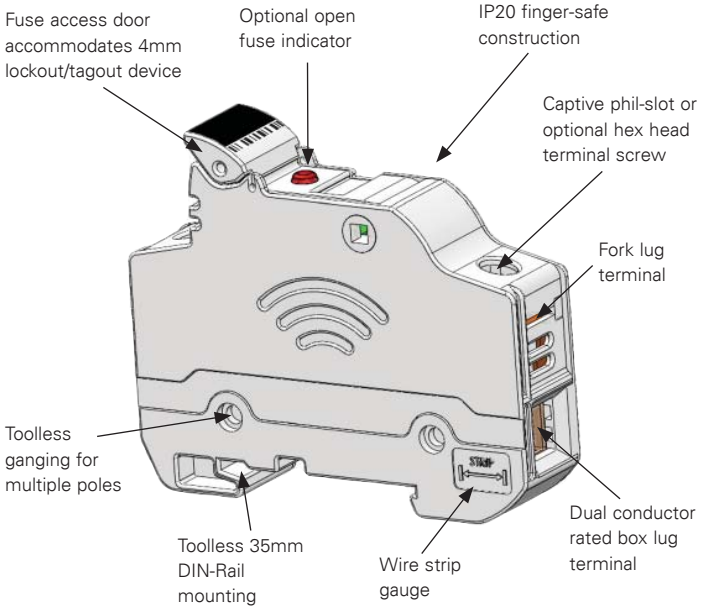
CHCC Modular, IP20 finger-safe DIN-Rail holders

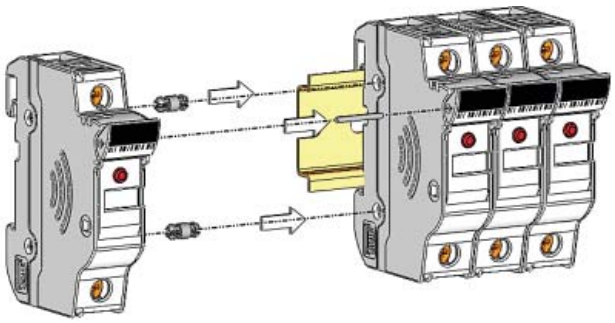
Catalogue numbers for CHCC Modular fuse holders suitable for Class CC UL fuse links

Series & size	Catalogue Number		Number of poles	UL		Terminal rating	Rated breaking capacity	Eaton's Bussmann series fuse links
	With indicator	Without Indicator		Rated voltage	Rated current			
CHCC Class CC	CHCC1DIU	CHCC1DU	1	600 V a.c. / V d.c.	30 A	Cable 75°C and 90°C Cu Cable	200 kA rms sym	LP-CC, FNQ-R, KTK-R
CHCC Class CC	CHCC2DIU	CHCC2DU	2	600 V a.c. / V d.c.	30 A		200 kA rms sym	
CHCC Class CC	CHCC3DIU	CHCC3DU	3	600 V a.c. / V d.c.	30 A		200 kA rms sym	
CHCC Class CC	N/A	CHCC1DI-48U	1	48 V d.c.	30 A		200 kA rms sym	

Dimensions mm (in)







Gang multiple poles to meet application requirements using kit Catalogue number JV-L (gangs up to four poles).

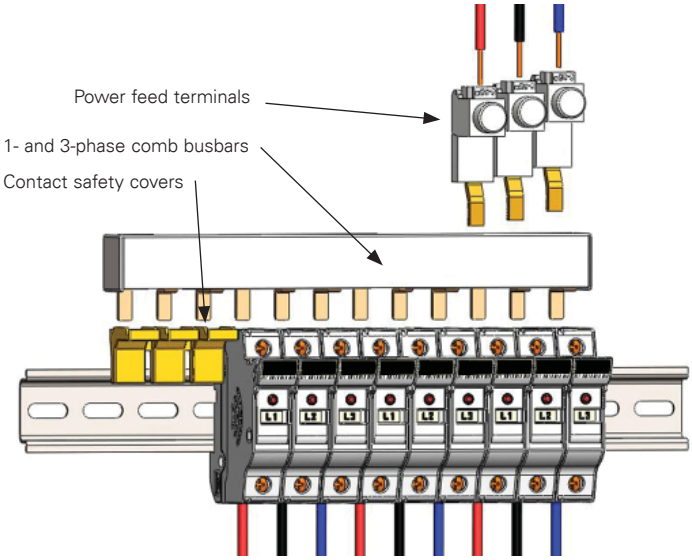
Data sheet 720147

CHCC Modular, IP20 finger-safe DIN-Rail holders - Accessories

Comb busbars

Description

- Easily distribute power in single-or three-phase systems
- Flexible cut-to-length busbars do not compromise the finger-safe protection (requires using endcaps)
- 100 kA SCCR when protected by a max 200 A Class J fuse
- Single-phase busbars rated to 1000 V d.c. and 100 A
- Three-phase busbars rated to 600 V and 100 A
- Power feed terminals for single-and three-phase systems



Agency information

- UL 508, File E195399

Technical data

- Rated voltage
  - 600 V max. (three-phase)
  - 1000 V d.c./600 V a.c. max. (single-phase)
- Rated current 100 A max.
- SCCR
  - 10 kA (default)
  - 100 kA (with upstream Class J max 200 A fuses)

Catalogue numbers

Catalogue number.	Phase	No. of pins	Endcaps*
BB1P100M3	Single	3	Yes*
BB1P100M6		6	
BB1P100M9		9	
BB1P100M12		12	
BB1P100M15		15	
BB1P100M57		57 pin cuttable	No**
BB3P100M6	Three	6	Yes*
BB3P100M9		9	
BB3P100M12		12	
BB3P100M15		15	
BB3P100M57		57 pin cuttable	No**

* With endcaps assembled. If cut to length, order additional endcaps separately.
** Order end caps separately, ECAP1P for single-phase busbars and ECAPMP for three-phase busbars.

CHCC Modular, IP20 finger-safe DIN-Rail holders - Accessories

Power feed terminals

Catalogue number	Descrption	Rated voltage	Rated current	Wire range	WIre rating*	Pack qty
PWR1PLP	Single-phase, low profile power feed terminal	1000 V a.c.	115 A	1/0-10 AWG Cu, max torque 50lb-in (5.6 Nm)	60°C	10
PWR35MM	35mm² three-phase power feed terminal for three-phase busbars	1000 V a.c.	115 A	1/0-10 AWG Cu, max torque 50lb-in (5.6 Nm)	60°C	10
PWR50MM	50mm2 direct feed power terminal	1000 V a.c.	115 A	1-14 AWG Cu, max torque 35lb-in (3.9 Nm)	75°C	10

* High temperature rated wire may be used with appropriate derating



PWR1PLP



PWR35MM



PWR50MM

Comb busbar safety covers and end caps

Catalogue numbers: FSCVR

Description

Spare comb busbar pin safety protection covers (used to cover exposed pins on comb busbars). Sold in quantity of ten strips of five covers each (50 covers in total)



Catalogue numbers ECAP1P

Description

End cap for single-phase comb busbars. Sold in quantity of 50.



Catalogue numbers ECAPMP

Description

End cap for three-phase comb busbars. Sold in quantity of 50.

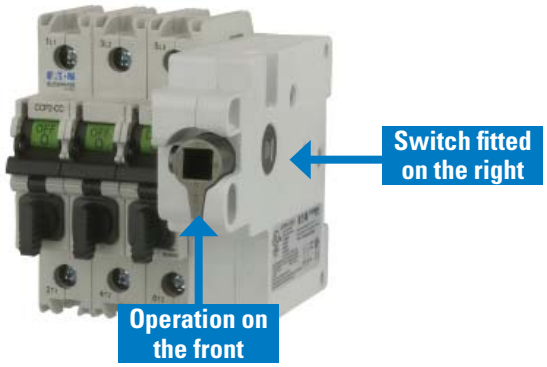


CCP2 Compact Circuit Protector for class CC fuse links

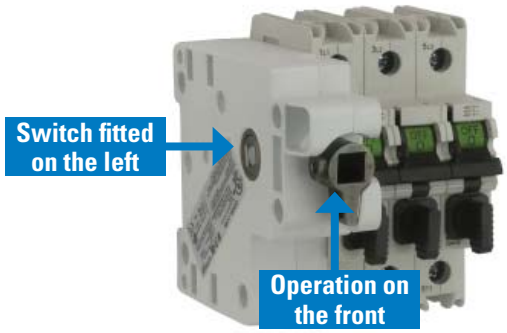
Range overview

Switch type	Description	CCP2-30CC	CCP2**R**-30CC	CCP2**RL**-30CC	CCP2**S**-30CC	CCP2**SL**-30CC
		Switch only	Switch with f**R**ont right rotary clockwise operation	Switch with f**R**ont **L**eft rotary clockwise operation	Switch with **S**ide right rotary clockwise operation	Switch with **S**ide **L**eft rotary counter-clockwise operation
Disconnect switches		30 A	30 A	30 A	30 A	30 A
1-pole		✓				
2-pole		✓	✓	✓	✓	✓
3-pole		✓	✓	✓	✓	✓
Accessories						
CCP2-AUX	Auxiliary contacts	✓		✓		✓
CCP2-MW1-3	Multi wire lug kit	✓	✓	✓	✓	✓
CCP2-TS1-3	Terminal cover	✓	✓	✓	✓	✓
CCP2-H4X-_1	Selector handle		✓	✓	✓	
CCP2-H4X-_2	Pistol handle		✓	✓	✓	
CCP2-NFPA-1	NFPA 79 compliant handle		✓	✓		
CCP2-SH1-290	290 mm shaft		✓	✓	✓	✓
CCP2-SH1-490	490 mm shaft		✓	✓	✓	✓

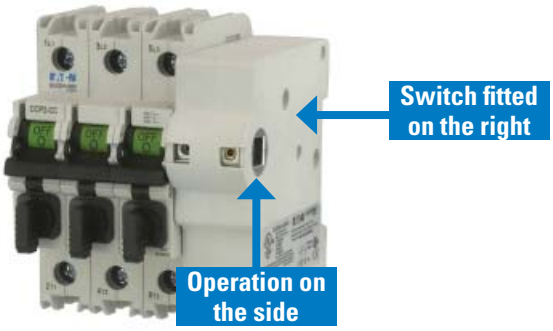
CCP2R (fRont right operation)



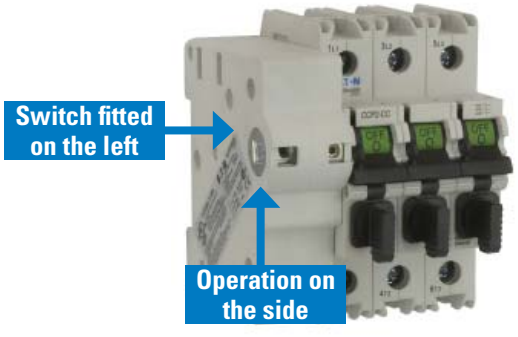
CCP2RL (fRont Left operation)



CCP2S (Side right operation)



CCP2SL (Side Left operation)



Data sheet 10789

CCP2 Compact Circuit Protector for class CC fuse links

Specifications

Description

The revolutionary next generation Eaton's Bussmann™ series Compact Circuit Protector (cat. no. CCP2) fused disconnect switch is 3/5 the footprint of a traditional fusible switch and provides up to a high 200 kA Short-Circuit Current Rating (SCCR) to help improve panel and assembly SCCR.

The 35 mm DIN-Rail mount CCP is available in a variety of configurations to meet many application needs including rotary operation.

Application flexibility is extended with an optional multi-wire lug kit, with finger-safe shrouds, that provides three additional wire ports on each pole for power distribution applications.

NO/NC auxiliary contacts are also available. They can easily be integrated into many monitoring systems.

Front and side rotary operated versions are easily applied for through-the-door or through the left or right side operation to enhance safety.

RoHS 2011/65/EU



CCP2 left front rotary switch

Technical data

- Rated voltage
  - 600 V a.c. (UL® Class CC)
  - 80 V d.c. (DC Class CC)
- Rated current: 30 A
- SCCR
  - 200 kA (UL Class CC)
  - 20 kA (DC Class CC/UL)

Poles

- 1-, 2- and 3-poles Catalogue number dependent

Agency information

- UL Class CC fuse versions
  - UL 98 Listed, Guide WHTY, File E302370
  - cULus to Canadian Standard 22.2 No. 4-04, UL Guide WHTY7, File 302370
- DC voltage UL Class CC version (CCP2-1-DCC)
  - UL 508 Listed, cULus 22.2, No. 1405
- RoHS compliant
- CE

Conductors/terminals

- 75°C Cu/Al, see conductor tables for size, type and torque information
- Box lug, single/dual conductor
- Fork terminal suitable for line, load or accessory connection
- Multi-wire lug kit — see accessories for details

Storage and operating temperature

- - 20°C to 75°C (-4°F to 167°F)*

* For fuse performance under or above 25°C, consult fuse performance derating charts in the Bussmann Division publication no. 3002, titled Selecting Protective Devices (SPD)

Lockout/tagout provisions

- Switch only — 4 mm lock or Brady pin-out device part number 90850
- Switch with rotary operating mechanism — 1/4" lock

Minimum enclosure size

- 10" x 8" x 6" (254 x 203 x 152 mm)

Mounting

- 35 mm DIN-Rail

Local open fuse indication minimum voltage**

- 90 V a.c. for AC switches
- 12 V d.c. for DC switches

** Open fuse indication requires an open fuse to be in the CCP2 and the switch in the ON position.

Accessories

- Multi-wire lug kit with terminal shrouds
- Selector and pistol handles for use with rotary operated switches
- 8 mm shafts for use with selector and pistol handles
- Auxiliary contacts
- PLC fuse monitor

Carton quantity and shipping weight

Item	Poles	Weight lbs (kg)
Switch only	12	2.84 (1.29)
Switch with side rotary mechanism	2	0.9 (0.404)
	3	1.12 (0.509)
Switch with front rotary mechanism	2	0.95 (0.431)
	3	1.18 (0.537)

Data sheet 10789

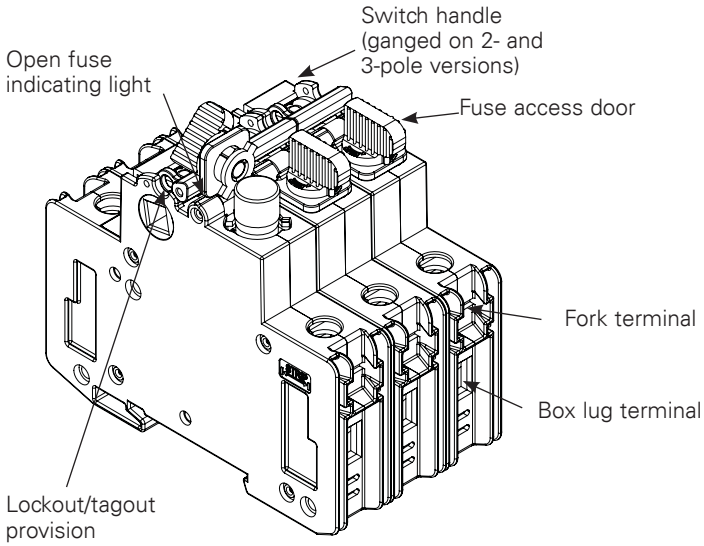
CCP2 Compact Circuit Protector for class CC fuse links

Features

- Extremely compact (18 mm wide per pole) design
- High SCCR up to 200 kA (UL Class CC)
- Disconnect rated for load isolation
- Full voltage rated up to 600 V a.c. or 80 V d.c.
- UL 98 Listed Class CC version is horsepower rated and suitable for branch circuit protection and disconnect
- Suitable for global installations, the switches comply with UL, cULus and IEC standards accepting UL Class CC
- Open fuse indication: Standard local open fuse indicating light for each pole
- IP20 finger-safe with 10 AWG (6 mm2) or larger wire (box lug terminals only)
- Built-in switch interlock prohibits removing the fuse under load
- Padlockable handle for lockout/tagout
  - 4 mm lock for switch only
  - 1/4" lock for rotary operated switches
- Rotary operated versions provide for through-the-door and through-the-side operation flexibility and enhanced safety with:
  - Right front switch operation
  - Left front switch operation
  - Right side switch operation
  - Left side switch operation
- Optional selector and pistol handles available for use with rotary operated versions
- Multi-wire lug kit with terminal shrouds allows for power distribution to multiple loads. Each lug has three ports rated for single and dual wires (see lug kit in accessories for conductor and torque details).



Right front rotary operated CCP2 switch



Data sheet 10789

Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

CCP2 Compact Circuit Protector for class CC fuse links

Catalogue numbers

Catalogue no.	Poles	Description	Rated current	Rated voltage	SCCR	Max horsepower rating (V a.c.) 120	240	480	600	Wire type/ size*	Compatible fuse links
Class CC											
CCP2-1-30CC	1	Switch only	30 A	347 V a.c.	200 kA	1/2	—	—	—	75°C Cu/Al 18-4 AWG Fork terminal††	LP-CC-1/2 to LP-CC-30 KTK-R-1/10 to KTK-R-30 FNQ-R-1/4 to FNQ-R-30
CCP2-2-30CC	2			600 V a.c.		—	2	—	—		
CCP2-3-30CC	3					3/4	3	5	7.5		
CCP2R-2-30CC	2	Switch with right front rotary operation		600 V a.c.		—	2				
CCP2R-3-30CC	3					3/4	3	5	7.5		
CCP2RL-2-30CC	2	Switch with left front rotary operation		600 V a.c.		—	2	—	—		
CCP2RL-3-30CC	3					3/4	3	5	7.5		
CCP2S-2-30CC	2	Switch with right side rotary operation		600 V a.c.		—	2	—	—		
CCP2S-3-30CC	3					3/4	3	5	7.5		
CCP2SL-2-30CC	2	Switch with left side rotary operation		600 V a.c.		—	2	—	—		
CCP2SL-3-30CC	3					3/4	3	5	7.5		
Single-pole DC switches											
CCP2-1-DCC	1	UL Class CC	30 A	80 V d.c.†	20 kA†	—	—	—	—	75°C Cu/Al 18-4 AWG Fork terminal††	LP-CC-1/2 to LP-CC-30 FNQ-R-15 to FNQ-R-20

* See box lug terminal conductor data table for details.
† SCCR may be lower, refer to installed fuse data sheet for interrupting rating at applied voltage.
††Fork terminal with a 4.3 mm gap for a #8-32 stud, 30 A max, insulated flange, wire size 12-10 AWG.

Box lug terminal conductor data

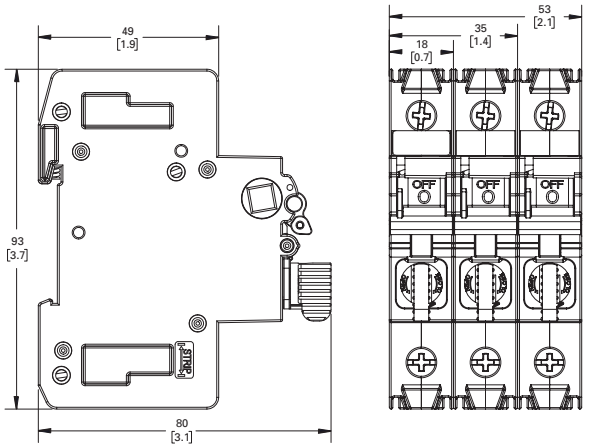
Type	AWG range	Class	Quantity	Torque N•m (lb-in)
Cu	4-18	Stranded, Class B to K	Single	2.26 (20)
	6-8	Stranded, Class B/C	Dual	3.39 (30)
	6-8	Stranded, Class K	Dual	2.26 (20)
	10-18	Stranded, Class B to K		
	10-18	Solid	Single/dual	
	4-18	Stranded, UL ferrule, Class B/C	Single	3.39 (30)
	6-18		Twin†	
	4-18	Stranded, UL ferrule, Class K	Single	2.82 (25)
	6-18		Twin†	
Al	4-8	Stranded	Single	2.26 (20)
	6		Dual	2.82 (25)
	8			2.26 (20)

† Two stranded conductors placed in one UL Listed twin ferrule.

Data sheet 10789

CCP2 Compact Circuit Protector for class CC fuse links

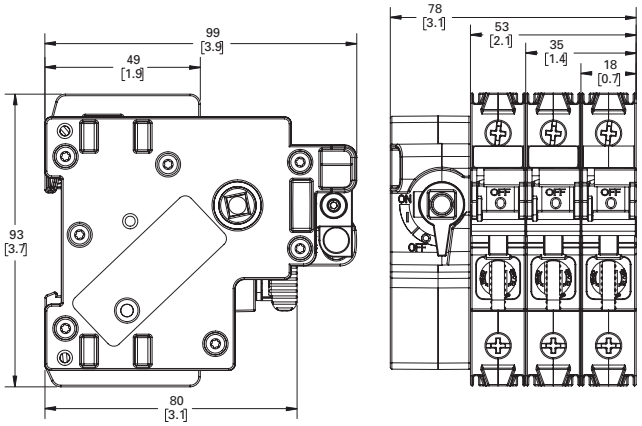
Dimensions mm (in), Switch only





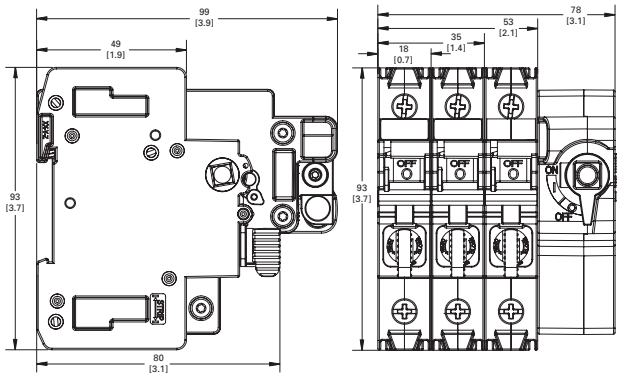
CCP2 switch

Dimensions mm (in), Left front and right rotary switches





CCP2 left front rotary switch



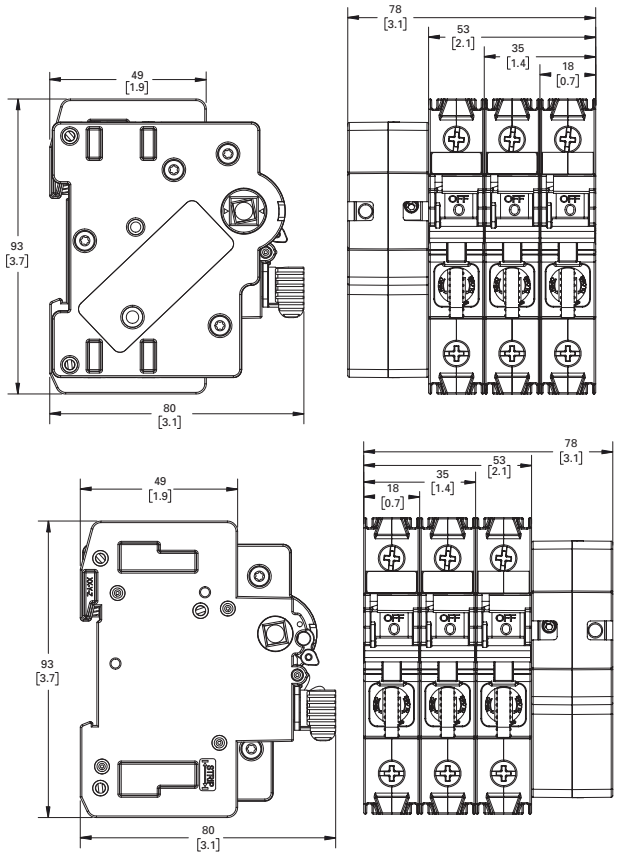


CCP2 right front rotary switch

Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

CCP2 Compact Circuit Protector for class CC fuse links

Dimensions mm (in), Left side and right side rotary switches





CCP2 left side rotary switch



CCP2 right side rotary switch

Data sheet 10789

CCP2 Compact Circuit Protector for class CC fuse links

Multi-wire lug kit

Specifications

Description

The multi-wire lug kit permits expanding each box lug terminal on the switch into a three-port terminal for power distribution applications.

Each multi-wire lug kit comes with three (3) three-port lugs and three terminal shrouds. Shrouds provide finger-safe protection when properly installed.

Lugs may be mounted on either the loadside or lineside to meet various application needs.

Ports on any one lug accept any conductor combination listed, e.g., one of the three ports may have dual 14 AWG wires and the other two ports single 10 AWG wires.

Catalogue number

- CCP2-MW1-3

Technical data

- Rated voltage 600 V
- Rated current 60 A max
- SCCR 200 kA

Agency information

- UL Recognized (lug only)
- RoHS compliant

Storage and operating temperature

- - 20°C to 75°C (-4°F to 167°F)

Multi-wire lug conductor information

- 75°C Cu/AL
- AWG size and quantity per port - see table below

Type	AWG range	Class	Quantity	Torque N•m (lb-in)
Cu/Al	4-6	Stranded, Class B/C	Single	3.95 (35)
	8			2.82 (25)
Cu	10-14	Stranded, Class B/C	Single/dual*	2.26 (20)
	10-14	Solid	Single	2.26 (20)
	8	UL ferrule, Class B to K	Single/twin†	2.82 (25)
	10-14			2.26 (20)

* Dual wire to be same size and type.
† Two stranded conductors placed in one UL Listed twin ferrule.

CCP2 box lug torque for multi-wire lug

- 4.52 N•m (40 lb-in)

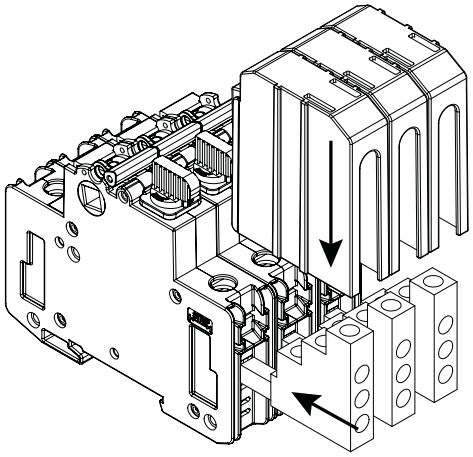


Terminal shroud accessory

Terminal shrouds are available without multi-wire terminals.

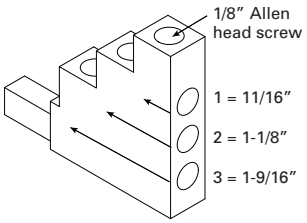
Catalogue no.	Description
CCP2-TS1-3	Pack of three

Installed on CCP2-3-xx



Multi-wire lugs mount in switch box lug terminals to provide three additional wire ports per pole. Lugs can be mounted on the switch lineside or loadside. Each multi-wire lug kit comes with three lugs and three shrouds.

Wire insulation strip lengths



Strip back wire insulation to the lengths as indicated in the illustration above and the table below.

Lug port	Strip wire insulation back (inch)
1	11/16
2	1-1/8
3	1-9/16



Wiring versatility is provided by single/dual rated box lug terminals on the switch, or by the three-port multi-wire lug kit that's also single/dual wire rated.

CCP2 Compact Circuit Protector for class CC fuse links

Selector and pistol handles

Specifications

Description

Selector and pistol handles for use with any 2- and 3-pole CCP2 rotary operated switch. Both selector and pistol handles are available in black/grey and red/yellow colors and clockwise/counterclockwise operating modes. Applying clockwise and counterclockwise operation depends upon the CCP2 rotary switch configuration. Installation requires an 8 mm shaft (ordered separately).

Each handle is rated NEMA 4X and capable of accepting up to three (3) 1/4" diameter shank locks for lockout/tagout in the OFF position. They can also be field configured for lock-on.

In application, only the clockwise operating handles in combination with either the left front or right front rotary switches provide a door interlock means to ensure the enclosure door remains shut during lockout/tagout or lock-on. Both clockwise and counterclockwise operating handles when mounted on the enclosure's left or right side do NOT provide a door interlock means.

See the Catalogue number table below for applicable rotary switch, handle and shaft combinations.

Catalogue symbol

- CCP2-H4X-_

Agency information

- UL Listed, Guide DIHS, File E140305
- NEMA 4X rating
- RoHS complaint
- CE

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

Packaging

- Each handle is packaged individually

Handle shafts

Catalogue symbol

- CCP2-SH1-_

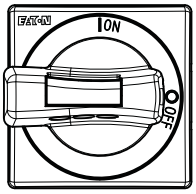
Description

Eight millimeter square shafts available in 290 and 490 millimeter (11.5 and 19.3 inch) lengths. Shafts are indexed to ensure handle/switch orientation for correct operation. Shafts are cut to length when installed.

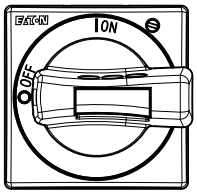
Packaging

- Each shaft is packaged separately

Selector handles

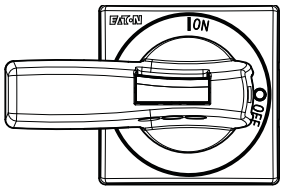


Counterclockwise
- CCP2-H4X-B1L
- CCP2-H4X-R1L

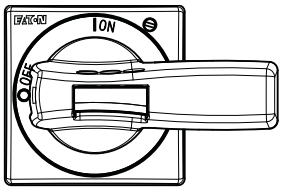


Clockwise
- CCP2-H4X-B1
- CCP2-H4X-R1

Pistol handles

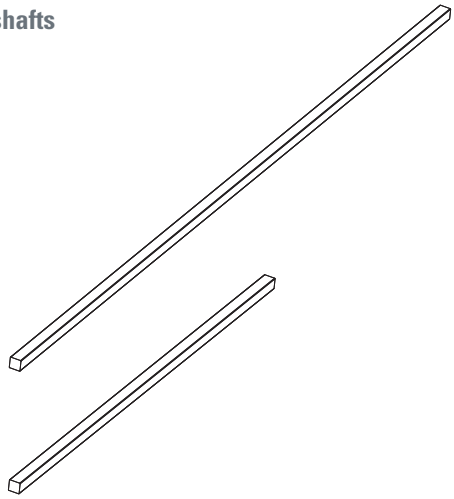


Counterclockwise
- CCP2-H4X-B2L
- CCP2-H4X-R2L



Clockwise
- CCP2-H4X-B2
- CCP2-H4X-R2

Handle shafts



For these switch Catalogue numbers	Description/operation	Order these handle Catalogue numbers (description)	Order either shaft Catalogue number
CCP2R-(pole)-30CC	Right front rotary, clockwise	• CCP2-H4X-B1 (selector, black/grey)	• CCP2-SH1-290 (11.5"/290 mm) • CCP2-SH1-490 (19.3"/490 mm)
CCP2RL-(pole)-30CC	Left front rotary, clockwise	• CCP2-H4X-R1(selector, red/yellow)	
CCP2S-(pole)-30CC	Right side rotary, clockwise	• CCP2-H4X-B2 (pistol, black/grey) • CCP2-H4X-R2 (pistol, red/yellow)	
CCP2SL-(pole)-30CC	Left side rotary, counterclockwise	• CCP2-H4X-B1L (selector, black/grey) • CCP2-H4X-R1L (selector, red/yellow) • CCP2-H4X-B2L (pistol, black/grey) • CCP2-H4X-R2L (pistol, red/yellow)	

Data sheet 10789

CCP2 Compact Circuit Protector for class CC fuse links

Auxiliary contacts



Specifications

Description

NO+NC contact output to indicate the switching mechanism status on the CCP2. A single unit can be mounted on any 1-, 2- or 3-pole CCP2 switch and the left front/left side rotary operated switches.

Catalogue number

- CCP2-AUX

Technical data

- Rated current up to 5 A
- Rated voltage up to 240 V a.c.
- NC/NO contacts are closed/open when the CCP2 switch is in the "ON" position (closed)

Description	Max per CCP2*	Signal output
Auxiliary contacts NO+NC for switch status	1 per CCP2 (1-, 2- or 3-pole)	5 A / 240 V a.c.

* The CCP2-AUX CANNOT be mounted on the right front and right side rotary operated versions.
De-energize all circuits and follow all prevailing safety procedures before installing or removing the CCP2-AUX.

Agency information

- UL 98 Recognized, Guide WHTY2, File E155130
- cURus to Canadian Standard 22.2 No. 4-04
- IEC 60947-5-1 AC-15
- IP20 finger-safe in installed state
- RoHS compliant
- CE

Wiring

- 75°C Cu, 20-16 AWG (0.5 to 1.5 mm²) wire
- Torque 0.56 N•m (5 lb-in)

Packaging

- The CCP2-AUX is packaged individually

Installation technique

- Mounts on the CCP2's right side ONLY and mechanically interlocks with the CCP2 switch handle with provided hardware. The CCP2-AUX CANNOT be mounted on the right front and right side rotary operated versions.

Storage and operating temperature

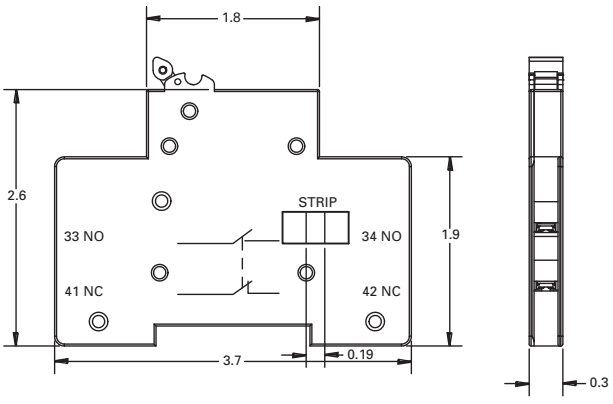
- -20°C to 75°C (-4°F to 167°F)



Installed on a CCP2-3-xx

Note: CCP2-AUX **CANNOT** be mounted on the right front and right side rotary operated versions.

Dimensions — in



Data sheet 10789

Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

CCP2 Compact Circuit Protector for class CC fuse links

Class CC Switches

For a complete assembly, select from the following required and optional components, and accessories.

Required		**Catalogue no.**		
		Switches	**Rated current**	**Poles**
		Switch		
		CCP2-1-30CC	30	1
		CCP2-2-30CC		2
		CCP2-3-30CC		3
		And		
Optional accessories		**Lug kits**	**Description**	
		CCP2-MW1-3	3-port multi-wire, 75°C Cu/Al, 14-6, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-3	Pack of 3	
		**Auxiliary contacts**	**Description**	
		CCP2-AUX	NO + NC, 5 A / 240 V	

CCP2 Compact Circuit Protector for class CC fuse links

Class CC counterclockwise switches

For a complete assembly, select from the following required and optional components, and accessories.

Required

	Catalogue no.		
	Switches	**Rated current**	**Poles**
	Left side rotary		
	CCP2SL-2-30CC	30	2
			3
	CCP2SL-2-30M		2
			2
	**And**		
	Rotary handles	**Description**	**NEMA rating**
	CCP2-H4X-B1L	Selector handle — black/grey	4X
	CCP2-H4X-R1L	Selector handle — red/yellow	
	CCP2-H4X-B2L	Pistol handle — black/grey	
	CCP2-H4X-R2L	Pistol handle — red/yellow	
	**And**		
	Shafts (8 mm)	**Length**	
	CCP2-SH1-290	290 mm	
	CCP2-SH1-490	490 mm	

And

Optional accessories

	**Lug kits**	**Description**
	CCP2-MW1-3	3-port multi-wire, 75°C Cu/Al, 14-6, includes terminal shrouds, pack of 3
	**Terminal shrouds**	**Description**
	CCP2-TS1-3	Pack of 3
	**Auxiliary contacts**	**Description —mounts on right side**
	CCP2-AUX	NO + NC, 5 A / 240 V

Class CC - UL low voltage fuse links, fuse holders and compact circuit protectors

CCP2 Compact Circuit Protector for class CC fuse links

Class CC clockwise rotary switches

For a complete assembly, select from the following required and optional components, and accessories.

Required		**Catalogue no.**		
		Switches	**Rated current**	**Poles**
		Right front rotary		
		CCP2R-2-30CC	30	2
		CCP2R-3-30CC		3
		**Left front rotary**		
		CCP2RL-2-30CC	30	2
		CCP2RL-3-30CC		3
		**Right side rotary**		
		CCP2S-2-30CC	30	2
		CCP2S-3-30CC		3
		**And**		
		Rotary handles	**Description**	**NEMA rating**
		CCP2-H4X-B1	Selector handle — black/grey	4X
		CCP2-H4X-R1	Selector handle — red/yellow	
		CCP2-H4X-B2	Pistol handle — black/grey	
		CCP2-H4X-R2	Pistol handle — red/yellow	
		**And**		
		Shafts (8 mm)	**Length**	
		CCP2-SH1-290	290 mm	
		CCP2-SH1-490	490 mm	
		And		
Optional accessories		**Lug kits**	**Description**	
		CCP2-MW1-3	3-port multi-wire, 75°C Cu/Al, 14-6, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-3	Pack of 3	
		**Auxiliary contacts**	**Description — cannot be used on right front or right side operated switches**	
		CCP2-AUX	NO + NC, 5 A / 240 V	

Data sheet 10789

CCP2 Compact Circuit Protector for class CC fuse links

Motor fuse sizing table: - LP-CC time-delay Class CC fuses

Voltage	Motor size (Hp)	Motor FLA (Amps)	Min (Amps)	Code max (Amps)	Heavy start (Amps)
115 V a.c., 1-phase	1/6	4.4	9	15	15
	1/4	5.8	12	20	20
	1/3	7.2	15	25	25
	1/2	9.8	30	30	30
230 V a.c., 1-phase	1/6	2.2	4.5	10	10
	1/4	2.9	6	10	10
	1/3	3.6	7	15	15
	1/2	4.9	10	15	15
	3/4	6.9	15	25	25
	1	8	25	25	30
	1-1/2	10	30	30	30
200 V a.c., 3-phase	1/2	2.5	5	10	10
	3/4	3.7	7.5	15	15
	1	4.8	10	15	15
	1-1/2	6.9	15	25	25
	2	7.8	25	25	30
208 V a.c., 3-phase	1/2	2.4	5	10	10
	3/4	3.5	7	15	15
	1	4.6	10	15	15
	1-1/2	6.6	15	20	25
	2	7.5	15	25	30
230 V a.c., 3-phase	1/2	2.2	4.5	10	10
	3/4	3.2	7	10	12
	1	4.2	9	15	15
	1-1/2	6	12	20	20
	2	6.8	15	25	25
	3	9.6	30	30	30
460 V a.c., 3-phase	1/2	1.1	2.25	6	6
	3/4	1.6	3.2	6	6.25
	1	2.1	4.5	10	10
	1-1/2	3	6	10	12
	2	3.4	7	15	15
	3	4.8	10	15	15
	5	7.6	25	25	30
575 V a.c., 3-phase	1/2	0.9	1.8	3	3.5
	3/4	1.3	2.8	6	6
	1	1.7	3.5	6	6.25
	1-1/2	2.4	5	10	10
	2	2.7	5.6	10	10
	3	3.9	8	15	15
	5	6.1	15	20	20
	7-1/2	9	30	30	30

Note: NEMA motors only (no IEC or design B energy efficient). Minimum size if no more than 1 start/hour. Code max if low to moderate reverse/jog/plug applications.

Heavy start permitted only if code max does not allow motor start-up. For high reverse/jog/plug applications or larger horsepower motors.

HEZ waterproof single-pole non-breakaway Class CC in-line holder

Specifications

Description

HEZ submersible, single-pole in-line rejection fuse holders are for UL Class CC fuses.

RoHS 2011/65/EU



Technical data

- Rated voltage 600 V
- Rated current up to 30 A limited by conductor size
- Withstand 200 kA RMS Sym.

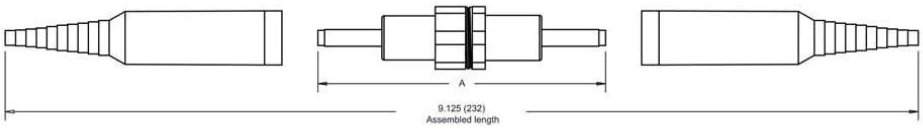
Agency information

- UL Listed, Guide IZLT, File E14853
- CSA Certified, Class 6225-01, File 47235
- RoHS compliant
- CE

Catalogue number

Catalogue no.	Type	Terminal	AWG range
HEZ-AA	Non-breakaway	Line/load Cu crimp	8-16 (2) 12-16

HEZ-AA Dimensions - in (mm)



HPS-RR panel mount bayonet-type knob holders for Class CC fuse links

Specifications



Technical data

- Rated voltage 600 V
- Rated current 30 A

Agency information

- UL Recognized, Guide IZLT2, File E14853
- CSA Certified, Class 6225-01, File 47235,
- CE

Flammability rating:

- UL 94HB

Terminals

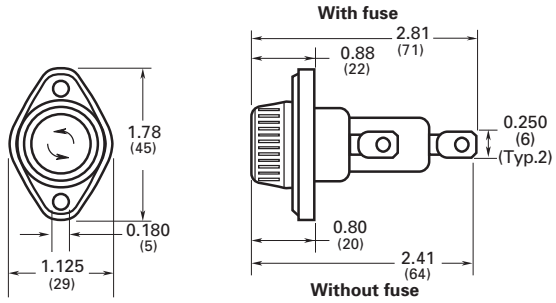
- Combination 1/4" quick-connect/solder terminals.

Catalogue number

Catalogue number.	Rated current	Rated voltage	Compatible fuse links
HPS-RR*†	30[1]	600 V a.c.	FNQ-R KTK-R, LP-CC

* -RR suffix version is UL Recognized for applications requiring branch circuit protection.
1 20 A max when used with quick-connect terminals.

Dimensions in (mm)





The power of space

Next generation Compact Circuit Protector for use with Class CF CUBEFuse™ requires up to 51% less space

Class CF - UL Low voltage fuse links and compact circuit protectors

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FCF Fast acting CUBEFuse™	50
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CUBEFuse™ finger-safe fuse holders	54
CCP2-CF Compact circuit protector	60



Class CF - UL Low voltage fuse links and compact circuit protectors

TCF Class CF Low-Peak time-delay CUBEFuse™

Specifications

Description

Eaton's Bussmann series Low-Peak CUBEFuse is a finger-safe UL Class CF current-limiting, dual-element, time-delay branch circuit fuse and fuse holder system; 10 seconds minimum operating time at 500% rated Rated current. With Class J electrical performance, teh time-delay CUBEFuse is available in indicating and non-indicating versions, this finger-safe fuse has a very compact, space-saving size and is easily applied using the CUBEFuse holder (TCFH_N), UL 98 Compact Circuit Protector switch (CCP2-_CF) or Compact Circuit Protector Base (CCP2B up to 100 A) used in the Quik-Spec™ Coordination Panelboard).

Technical data

- Rated voltage
  - 600 V a.c.
  - 300 V d.c.
- Rated current
  - 6 A to 400 A (indicating)
  - 1 A to 400 A (non-indicating)
- Breaking capacity
  - 300 kA RMS Sym. (Up to 100 A UL)
  - 200 kA RMS Sym. (110 to 400 A UL)
  - 200 kA RMS Sym. (Up to 100 A CSA)
  - 100 kA DC (Up to 400 A UL and up to 100 A CSA)
- Watts loss at rated current

Fuse	Watts
30	3.99
60	6.23
100	9.51
200	18.6
225	17.6
400	35.2

Standards / Agency information

- UL Listed Class CF fuse: Guide JDDZ, File E4273 (up to 400 A)
- CSA® Certified fuse: Class 1422-02, File 053787_C_000 (up to 100 A)
- CE (200 A and below) for use in UL panel boards
- RoHS compliant

RoHS 2011/65/EU



Features

- Smallest installed footprint of any UL Class CC, J, or R fuse solution
- Easy application using CUBEFuse holders (TCFH_N), UL 98 Compact Circuit Protector (CCP2) switches and Compact Circuit Protector Base (CCP2B up to 100 A). See data sheet 9007 for details on the CUBEFuse holder, 10801 for details on the CCP2-_CF switch and 1161 for the CCP2B.
- Holders and switches have an amp rating rejection feature to help prevent overfusing; 30, 60 and 100 A switches and holders will hold any CUBEFuse up to its rating, 200 and 400 A switches and 200, 225 and 400 A holders will hold any CUBEFuse 110 A and above up to its rating
- The indicating version features local easyID™ open fuse technology for faster troubleshooting and reduced downtime
- Faster response to damaging faults helps reduce destructive thermal and magnetic forces
- True dual-element fuse construction with a minimum 10 seconds time-delay at 500% of rating
- Long time-delay minimizes nuisance openings caused by temporary overloads and transient surges
- Up to 300 kA interrupting rating safely interrupts virtually any fault
- Robust cycling and inrush current withstand
- Low let-through currents under fault conditions
- Provides Type 2 "No Damage" protection for IEC motor starters when properly sized
- Easy selective coordination with any other Bussmann series Low-Peak Class CC, J, L or RK1 fuse with simple 2:1 amp ratio between upstream and downstream fuses

* Finger-safe status depends on final, installed application, and will require using accessory shrouds for 110 to 400 A Technical data.

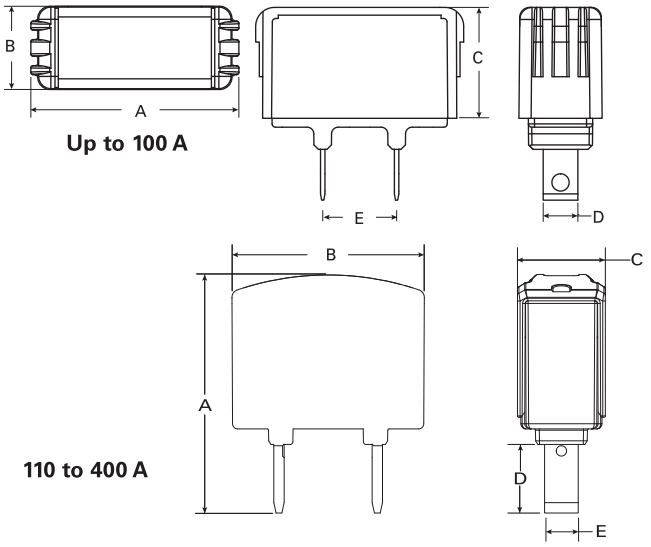
Typical applications

- Electrical panelboards
- Machinery disconnects
- Industrial controls and panels
- Required finger-safe systems

Data sheet: 9000

TCF Class CF Low-Peak time-delay CUBEFuse™

Dimensions in (mm)



	A	B	C	D	E
1 -15 A	1.88 (48)	0.75 (19)	1 (25)	0.23 (6)	0.67 (17)
17.5 A	1.88 (48)	0.75 (19)	1 (25)	0.27 (7)	0.67 (17)
20	1.88 (48)	0.75 (19)	1 (25)	0.27 (7)	0.67 (17)
25 and 30 A	1.88 (48)	0.75 (19)	1 (25)	0.31 (8)	0.67 (17)
35 and 40 A	2.13 (54)	1.0 (25)	1.13 (29)	0.36 (9)	0.67 (17)
45 and 50 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
60 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
70 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
80 and 90 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
100 A	3.01 (76)	1.0 (25)	1.26 (32)	0.57 (14)	0.67 (17)
110 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.51 (13)
125 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.51 (13)
150 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.51 (13)
175 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.57 (14.5)
200 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.57 (14.5)
225 A	3.62 (92)	2.9 (74)	1.34 (34)	1.02 (26)	0.63 (16)
250 A	4.25 (108)	3.46 (88)	1.69 (43)	1.47 (36)	0.73 (18.5)
300 A	4.25 (108)	3.46 (88)	1.69 (43)	1.47 (36)	0.79 (20)
350 A	4.25 (108)	3.46 (88)	1.69 (43)	1.47 (36)	0.86 (2.15)
400 A	4.25 (108)	3.46 (88)	1.69 (43)	1.47 (36)	0.86 (2.15)

Data sheet: 9000

Class CF - UL Low voltage fuse links and compact circuit protectors

TCF Class CF Low-Peak time-delay CUBEFuse™

Catalogue numbers - Indicating

Catalogue numbers	Rated voltage	Rated current (Amps)	Compatible TCFH_N CUBEFuse™ finger-safe fuse holders						Compatible CCP2 Disconnect switches (1-, 2-, 3-pole)			
			30 A	60 A	100 A	200 A	225 A	400 A	30 A	60 A	100 A	200 A
Indicating												
TCF6	600 V a.c./ 300 V d.c.	6	✓						✓			
TCF10	600 V a.c./ 300 V d.c.	10	✓						✓			
TCF15	600 V a.c./ 300 V d.c.	15	✓						✓			
TCF20	600 V a.c./ 300 V d.c.	20	✓						✓			
TCF25	600 V a.c./ 300 V d.c.	25	✓						✓			
TCF30	600 V a.c./ 300 V d.c.	30	✓						✓			
TCF35	600 V a.c./ 300 V d.c.	35		✓						✓		
TCF40	600 V a.c./ 300 V d.c.	40		✓						✓		
TCF45	600 V a.c./ 300 V d.c.	45		✓						✓		
TCF50	600 V a.c./ 300 V d.c.	50		✓						✓		
TCF60	600 V a.c./ 300 V d.c.	60		✓						✓		
TCF70	600 V a.c./ 300 V d.c.	70			✓						✓	
TCF80	600 V a.c./ 300 V d.c.	80			✓						✓	
TCF90	600 V a.c./ 300 V d.c.	90			✓						✓	
TCF100	600 V a.c./ 300 V d.c.	100			✓						✓	
TCF110	600 V a.c./ 300 V d.c.	110				✓						✓
TCF125	600 V a.c./ 300 V d.c.	125				✓						✓
TCF150	600 V a.c./ 300 V d.c.	150				✓						✓
TCF175	600 V a.c./ 300 V d.c.	175				✓						✓
TCF200	600 V a.c./ 300 V d.c.	200				✓						✓
TCF225	600 V a.c./ 300 V d.c.	225					✓					
TCF250	600 V a.c./ 300 V d.c.	250						✓				
TCF300	600 V a.c./ 300 V d.c.	300						✓				
TCF350	600 V a.c./ 300 V d.c.	350						✓				
TCF400	600 V a.c./ 300 V d.c.	400						✓				

Data sheet: 9000

TCF Class CF Low-Peak time-delay CUBEFuse™

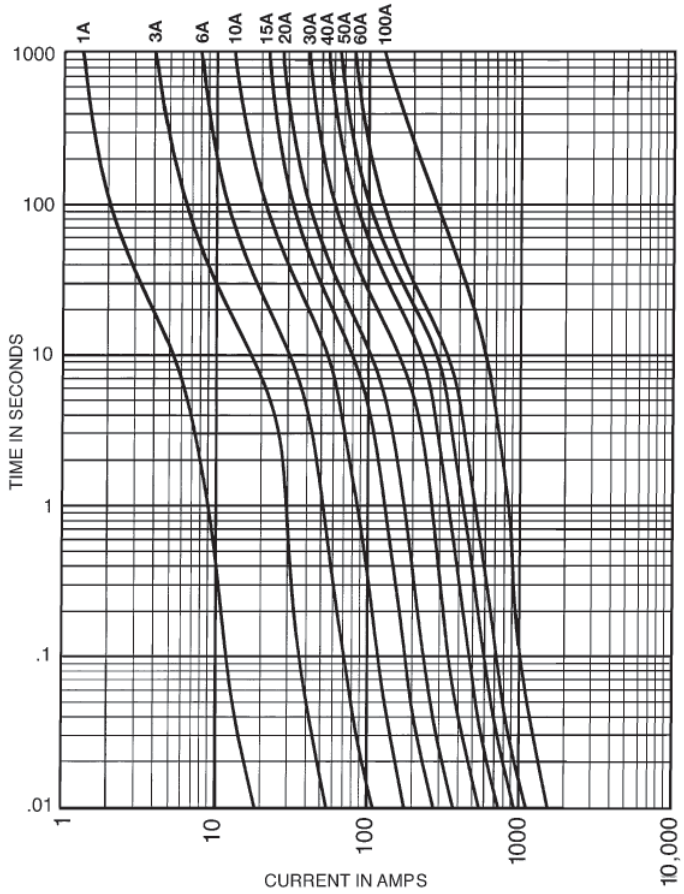
Catalogue numbers - Non-indicating

Catalogue numbers	Rated voltage	Rated current (Amps)	Compatible TCFH_N CUBEFuse™ finger-safe fuse holders						Compatible CCP2 Disconnect switches (1-, 2-, 3-pole)			
			30 A	60 A	100 A	200 A	225 A	400 A	30 A	60 A	100 A	200 A
Non-indicating												
TCF1RN	600 V a.c./ 300 V d.c.	1	✓						✓			
TCF3RN	600 V a.c./ 300 V d.c.	3	✓						✓			
TCF6RN	600 V a.c./ 300 V d.c.	6	✓						✓			
TCF10RN	600 V a.c./ 300 V d.c.	10	✓						✓			
TCF15RN	600 V a.c./ 300 V d.c.	15	✓						✓			
TCF17-1/2RN	600 V a.c./ 300 V d.c.	17.5	✓						✓			
TCF20RN	600 V a.c./ 300 V d.c.	20	✓						✓			
TCF25RN	600 V a.c./ 300 V d.c.	25	✓						✓			
TCF30RN	600 V a.c./ 300 V d.c.	30	✓						✓			
TCF40RN	600 V a.c./ 300 V d.c.	40		✓						✓		
TCF45RN	600 V a.c./ 300 V d.c.	45		✓						✓		
TCF50RN	600 V a.c./ 300 V d.c.	50		✓						✓		
TCF60RN	600 V a.c./ 300 V d.c.	60		✓						✓		
TCF70RN	600 V a.c./ 300 V d.c.	70			✓						✓	
TCF80RN	600 V a.c./ 300 V d.c.	80			✓						✓	
TCF90RN	600 V a.c./ 300 V d.c.	90			✓						✓	
TCF100RN	600 V a.c./ 300 V d.c.	100			✓						✓	
TCF110RN	600 V a.c./ 300 V d.c.	110				✓						✓
TCF125RN	600 V a.c./ 300 V d.c.	125				✓						✓
TCF150RN	600 V a.c./ 300 V d.c.	150				✓						✓
TCF175RN	600 V a.c./ 300 V d.c.	175				✓						✓
TCF200RN	600 V a.c./ 300 V d.c.	200				✓						✓
TCF225RN	600 V a.c./ 300 V d.c.	225					✓					
TCF250RN	600 V a.c./ 300 V d.c.	250						✓				
TCF300RN	600 V a.c./ 300 V d.c.	300						✓				
TCF350RN	600 V a.c./ 300 V d.c.	350						✓				
TCF400RN	600 V a.c./ 300 V d.c.	400						✓				

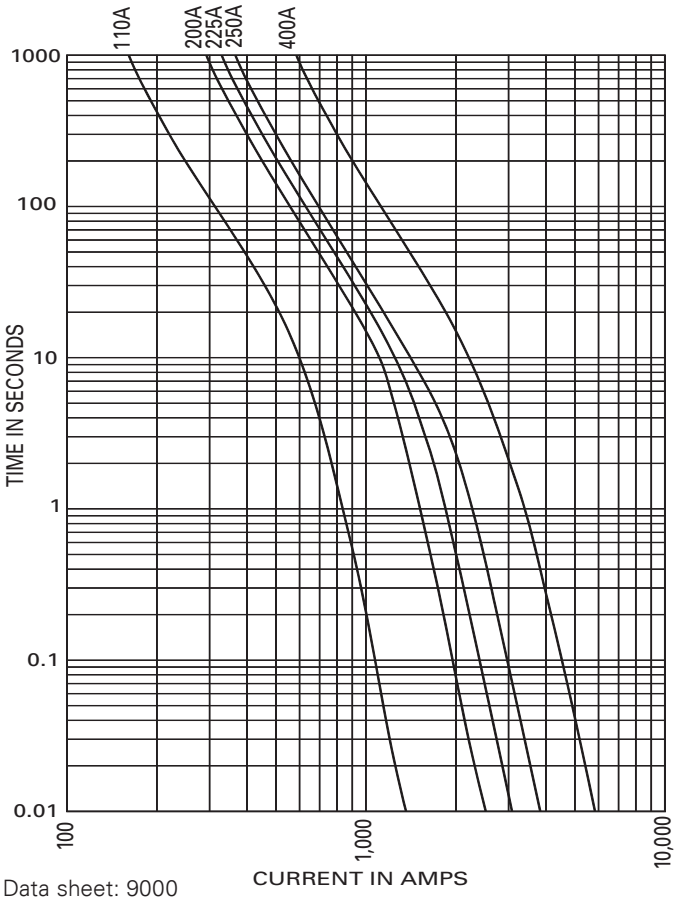
Class CF - UL Low voltage fuse links and compact circuit protectors

TCF Class CF Low-Peak time-delay CUBEFuse™

Time current curve - Up to 100 A



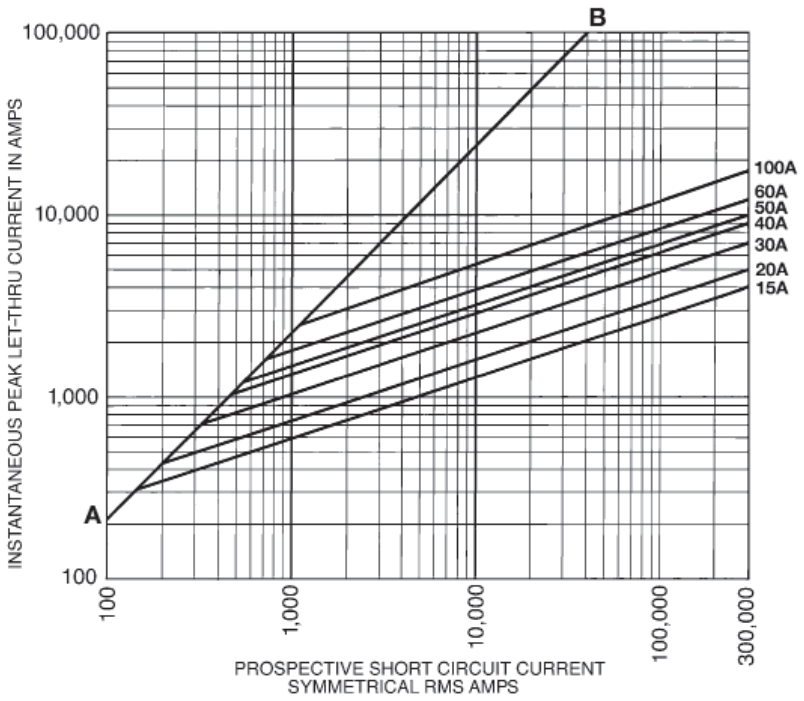
Time current curve - 110 A to 400 A



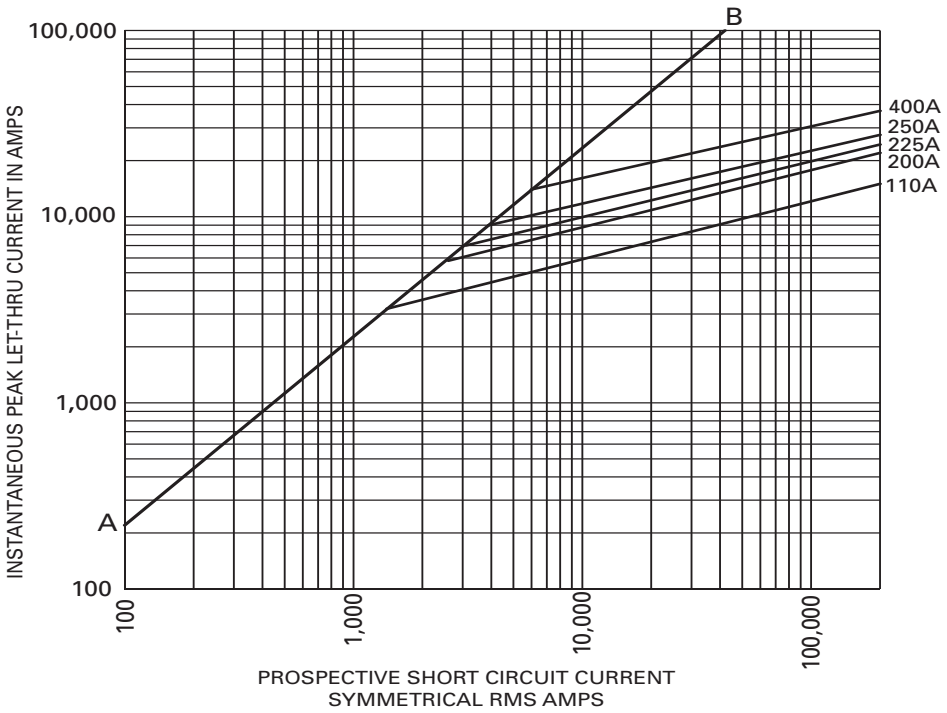
Data sheet: 9000

TCF Class CF Low-Peak time-delay CUBEFuse™

Cut-off curve - Up to 100 A



Cut-off curve - 110 A to 400 A



Data sheet: 9000

Class CF - UL Low voltage fuse links and compact circuit protectors

FCF Class CF fast-acting CUBEFuse™

Specifications

Description

Finger-safe, non-indicating, fast-acting CUBEFuse for UPS and critical applications with a 4 minute maximum clearing time at 200%, rated current for 1 to 30 A fuse, 6 minute maximum clearing time at 200%, rated current for 35 to 60 A fuse.



Technical data

- Rated voltage 600 V a.c./dc (or less)
- Rated current: 1 A to 100 A
- Breaking capacity
  - 300 kA RMS Sym. (UL up to 60 A)
  - 200 kA RMS Sym.
    (CSA all Technical data and UL 70 to 100 A)
  - 50 kA DC

Agency information

- UL Listed, Guide JDDZ, File E4273
- CSA Certified, Class 1422- 02, File 53787
- RoHS compliant
- CE for use in UL panel boards

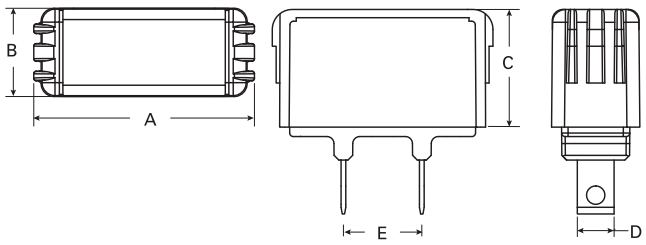
Features

- The world's first finger-safe power fast-acting fuse system
- Smallest installed footprint of any class fuse including Class CC, J, and RK
- Class CF meets Class J fast-acting electrical performance requirements
- True fast-acting for faster response to damaging faults to help reduce destructive thermal and magnetic forces
- High interrupting rating to safely interrupt faults up to 300 kA
- No venting of arc or molten metal and gases during opening
- Low let-through currents under fault conditions

Carton quantity

Rated current	Qty
1 A to 30 A	12
35 A to 60 A	12
70 A to 100 A	6

Dimensions in (mm)



	A	B	C	D	E
1 -15 A	1.88 (48)	0.75 (19)	1 (25)	0.23 (6)	0.67 (17)
20	1.88 (48)	0.75 (19)	1 (25)	0.27 (7)	0.67 (17)
25 and 30 A	1.88 (48)	0.75 (19)	1 (25)	0.31 (8)	0.67 (17)
40 A	2.13 (54)	1.0 (25)	1.13 (29)	0.36 (9)	0.67 (17)
45 and 50 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
60 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
70 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
80 and 90 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
100 A	3.01 (76)	1.0 (25)	1.26 (32)	0.57 (14)	0.67 (17)

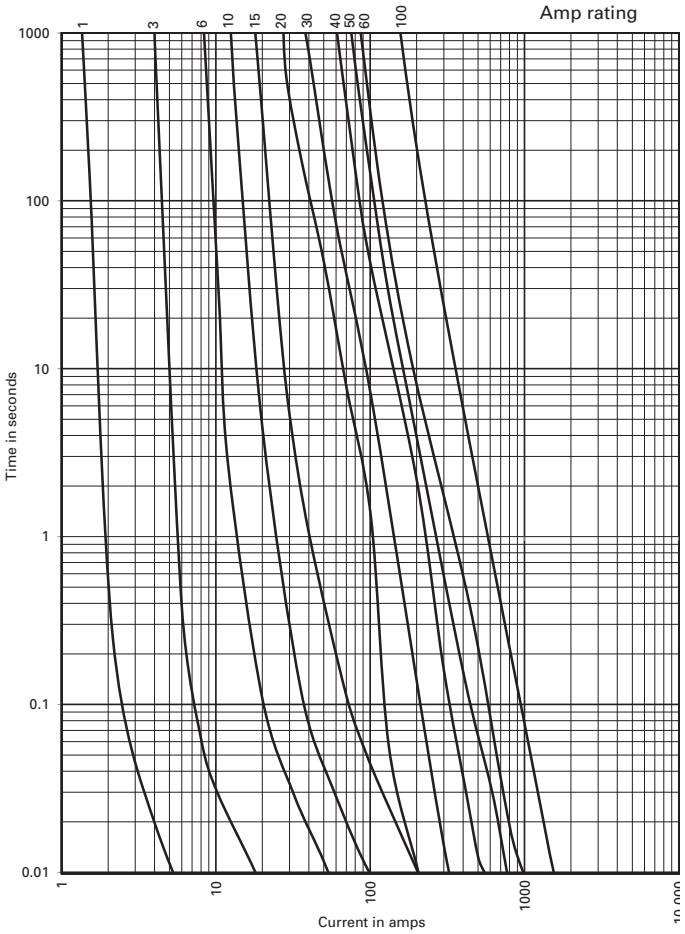
Data sheet 2147

FCF Class CF fast-acting CUBEFuse

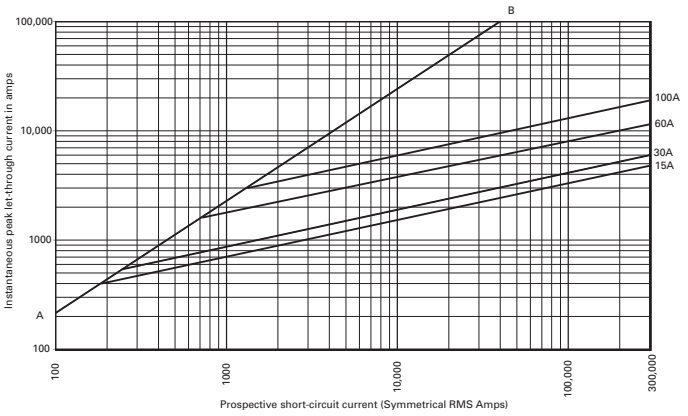
Catalogue numbers

Catalogue numbers	Rated voltage	Rated current (Amps)	Compatible TCFH_N CUBEFuse™ finger-safe fuse holders			Compatible CCP2 Disconnect switches (1-, 2-, 3-pole)		
			30 A	60 A	100 A	30 A	60 A	100 A
Non-indicating								
FCF1RN	600 V a.c./ V d.c.	1	✓			✓		
FCF3RN	600 V a.c./ V d.c.	3	✓			✓		
FCF6RN	600 V a.c./ V d.c.	6	✓			✓		
FCF10RN	600 V a.c./ V d.c.	10	✓			✓		
FCF15RN	600 V a.c./ V d.c.	15	✓			✓		
FCF20RN	600 V a.c./ V d.c.	20	✓			✓		
FCF25RN	600 V a.c./ V d.c.	25	✓			✓		
FCF30RN	600 V a.c./ V d.c.	30	✓			✓		
FCF40RN	600 V a.c./ V d.c.	40		✓			✓	
FCF45RN	600 V a.c./ V d.c.	45		✓			✓	
FCF50RN	600 V a.c./ V d.c.	50		✓			✓	
FCF60RN	600 V a.c./ V d.c.	60		✓			✓	
FCF70RN	600 V a.c./ V d.c.	70			✓			✓
FCF80RN	600 V a.c./ V d.c.	80			✓			✓
FCF90RN	600 V a.c./ V d.c.	90			✓			✓
FCF100RN	600 V a.c./ V d.c.	100			✓			✓

Time-current curve



Current limitation curves



Data sheet 2147

Class CF - UL Low voltage fuse links and compact circuit protectors

WCF fast-acting 690 V a.c. wind power CUBEFuse

Specifications

Description

Finger-safe, non-indicating, fast-acting CUBEFuse for wind power generation systems with a maximum clearing time at 200% rated current: 4 minutes for 1 to 30 amp fuses, 6 minutes for 35 to 60 amp fuses, 8 minutes for 70 to 100 amp fuses. For dimensions, see page 1-3.



Technical data

- Rated voltage: 690 V a.c.
- Rated current: 1-100 A
- Breaking capacity
  - 50 kA AC (1-60 A)
  - 30 kA AC (70-100 A)

Agency information

- UL Recognized, Guide JFHR2, File E56412
- cURus Component Certified C22.2
- RoHS compliant
- CE for use in UL panel boards

Features

- Maximize uptime and reliability using fuses designed and listed to UL 248-1
- Minimize chances of equipment failure and personnel injury when using full range fuses having the industry's fastest response time to low-magnitude faults
- Maximize return on investment with fuses proven to withstand harsh temperatures
- Minimize design time, operating outage time and replacement cost with fuses qualified in excessively changing environmental conditions
- Simplify compatibility with readily available industry standard holders
- Temperature derating — Designed to maximize rated capacity in elevated environmental temperatures
- Overload protection — Proven to clear faults faster than the UL requirement
- Power loss — Minimal energy consumption leading to increased efficiency

Typical application

- Protecting wind system transformers, pitch and speed controls, and turbine HV a.c. and lighting

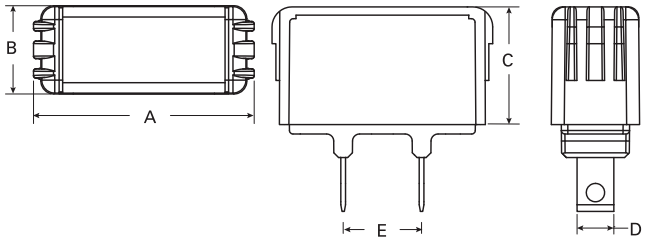
Operating and storage temperature range

-40°C to 90°C

Mounting

The wind CUBEFuse must be mounted in the 690 V WCF holders that are rated for 690 Rated voltage. Not to be installed in the CCP2-CF or CCP2B disconnect switches.

Dimensions in (mm)



	A	B	C	D	E
1 A to 15 A	1.88 (48)	0.75 (19)	1 (25)	0.23 (6)	0.67 (17)
20	1.88 (48)	0.75 (19)	1 (25)	0.27 (7)	0.67 (17)
25 and 30 A	1.88 (48)	0.75 (19)	1 (25)	0.31 (8)	0.67 (17)
35 and 40 A	2.13 (54)	1.0 (25)	1.13 (29)	0.36 (9)	0.67 (17)
45 and 50 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
60 A	2.13 (54)	1.0 (25)	1.13 (29)	0.44 (11)	0.67 (17)
70 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
80 and 90 A	3.01 (76)	1.0 (25)	1.26 (32)	0.49 (12)	0.67 (17)
100 A	3.01 (76)	1.0 (25)	1.26 (32)	0.57 (14)	0.67 (17)

Carton quantity

Rated current	Qty
1 A to 30 A	12
35 A to 60 A	12
70 A to 100 A20	6

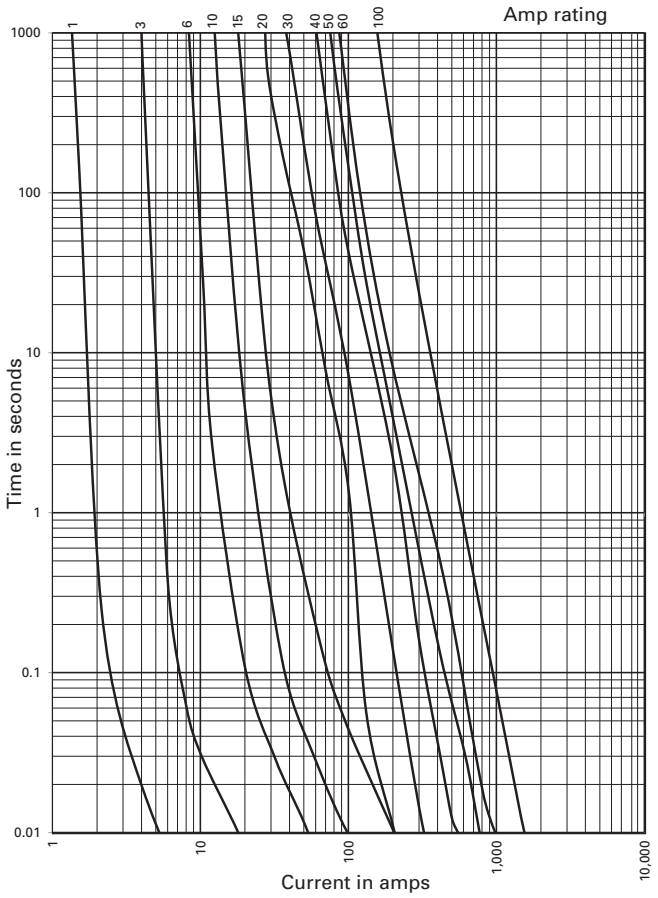
Data sheet 9009

WCF fast-acting 690 V a.c. wind power CUBEFuse

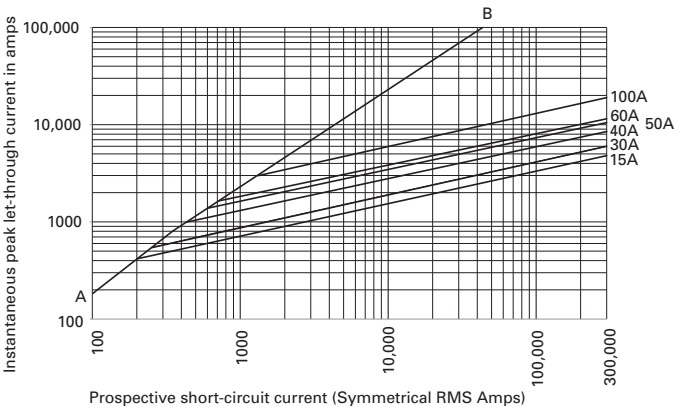
Catalogue numbers

Catalogue numbers	Rated voltage	Rated current (Amps))	Compatible TCFH_NW Wind CUBEFuse™ finger-safe fuse holders		
			30 A	60 A	100 A
WCF1RN	600 V a.c.	1	✓	✓	✓
WCF3RN	600 V a.c.	3	✓	✓	✓
WCF6RN	600 V a.c.	6	✓	✓	✓
WCF10RN	600 V a.c.	10	✓	✓	✓
WCF15RN	600 V a.c.	15	✓	✓	✓
WCF20RN	600 V a.c.	20	✓	✓	✓
WCF25RN	600 V a.c.	25	✓	✓	✓
WCF30RN	600 V a.c.	30	✓	✓	✓
WCF40RN	600 V a.c.	40		✓	✓
WCF45RN	600 V a.c.	45			
WCF45RN	600 V a.c.	45		✓	✓
WCF50RN	600 V a.c.	50		✓	✓
WCF60RN	600 V a.c.	60		✓	✓
WCF70RN	600 V a.c.	70			✓
WCF80RN	600 V a.c.	80			✓
WCF90RN	600 V a.c.	90			✓
WCF100RN	600 V a.c.	100			✓

Time current-curve



Cut-off curve



Data sheet 9009

Class CF - UL Low voltage fuse links and compact circuit protectors

CUBEFuse™ finger-safe fuse holders

Specifications

Description

Eaton's Bussmann series CUBEFuse holder is a finger-safe modular system of single-pole 30, 60, 100, 200, 225 and 400 amp holders. All holders dovetailed together to create the desired number of poles for the application, including mixed amp Technical data between the 30, 60 and 100 amp holders.

The 200, 225 and 400 amp holders require installing lugs to make conductor connections. These are listed on page 1-14.

The CUBEFuse holder is available as the 600 V UL Listed version utilizing the time-delay Low-Peak™ CUBEFuse (TCF up to 400 A) or fast-acting CUBEFuse (FCF up to 100 A), or the 690 V UL Recognized version utilizing the fast-acting wind CUBEFuse (WCF up to 100 A).



Technical data

- Rated voltage
  - 600 V a.c. / 300 V d.c. (UL Listed)
  - 690 V a.c. (UL Recognized up to 100 A)
- Rated current
  - 30, 60, 100, 200, 225, 400 A
- SCCR
  - 300 kA RMS Sym. (30, 60, 100 A UL Listed)
  - 200 kA RMS Sym. (200, 225, 400 A UL Listed)
  - 200 kA RMS Sym. (CSA® Certified 100 A and below)
  - 100 kA DC (UL Listed and CSA Certified 100 A and below)

Agency information

- 600 V UL Listed, Guide IZLT, File E14853
- 690 V UL Recognized, Guide IZLT2, File E14853
- CSA Certified, Class 6225-01, File 47235, cURus component Certified (30, 60 and 100 A holders)
- CE (100 A and below) for use in UL panel boards
- RoHS compliant

Mounting

- 35 mm DIN-Rail/panel (Up to 100 A)
- Panel mount (200 to 400 A)

Operating and storage temperature range

- -40°C to 80°C (-40°F to 176°F)

Conductor Technical data

Rated current	H	I	J	K	L	M	Max height with fuse
30	2.3 (58)	0.76 (19)	1.36 (34)	0.15 (4)	—	—	2.36 (60)
60	2.6 (66)	1.03 (26)	1.60 (41)	0.17 (4)	—	—	2.73 (69)
100	2.91 (74)	1.05 (27)	2.01 (51)	0.15 (4)	0.80 (20)	2.51 (64)	3.27 (83)

Features

- Finger-safe construction for enhanced safety*
- Amp rating rejection helps prevent overfusing by rejecting higher fuse amp Technical data
- Smallest installed fuse and holder footprint of any Class J or R installation
- All holders dovetail together to create the required number of poles, mixed 30, 60 and 100 A holders dovetail together
- 30, 60 and 100 A holders have dual wire rated box lug terminals for wiring ease
- 200, 225 and 400 A holders available with a variety of lugs and terminals for application flexibility
- Up to 300 kA SCCR withstands high fault currents

* 200, 225 and 400 A holders require installed shrouds.

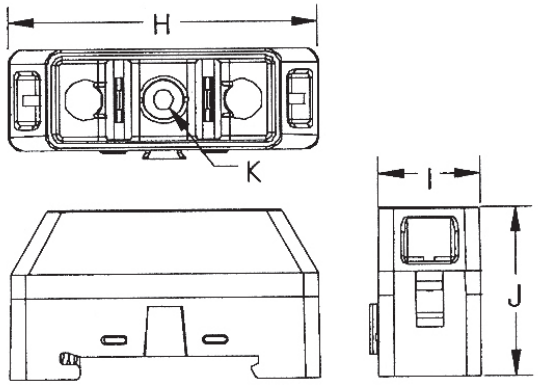
Data sheet. 9007

CUBEFuse™ finger-safe fuse holders

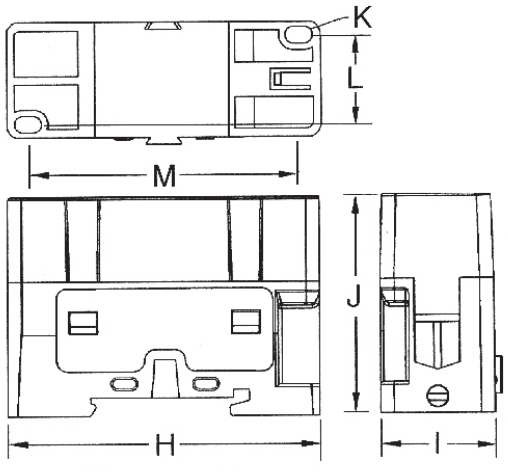
Catalogue numbers

Catalogue numbers	Rated voltage	Max holder Rated current	Compatible fuse links TCF and TCF_RN 1-30	TCF and TCF_RN 40-60	TCF and TCF_RN 70-100	TCF and TCF_RN 110- 200	TCF and TCF_RN 225	TCF and TCF_RN 250-400	FCF_RN 1-30	FCF_RN 40-60	FCF_RN 70-100	WCF_RN 1-30	WCF_RN 40-60	WCF_RN 70-100
600 V UL Listed														
TCFH30N	600 V a.c./ 300 V d.c.	30	✓						✓					
TCFH60N		60		✓						✓				
TCFH100N		100			✓						✓			
TCFH200N		200				✓								
TCFH225N		225					✓							
TCFH400N		400						✓						
690 V UL Recognised														
TCFH30NW	600 V a.c./300 V d.c.	30										✓		
TCFH60NW		60											✓	
TCFH100NW		100												✓

Dimensions in (mm) - 30, 60 and 100 A



30 and 60 amp holders



100 amp holder

Rated current	H	I	J	K	L	M	Max height with fuse
30	2.3 (58)	0.76 (19)	1.36 (34)	0.15 (4)	—	—	2.36 (60)
60	2.6 (66)	1.03 (26)	1.60 (41)	0.17 (4)	—	—	2.73 (69)
100	2.91 (74)	1.05 (27)	2.01 (51)	0.15 (4)	0.80 (20)	2.51 (64)	3.27 (83)



Conductor Technical data and torque for 30, 60 and 100 A holders

Technical data are for 75°C Cu AWG solid/stranded conductors. Torque is in N•m (lb-in).

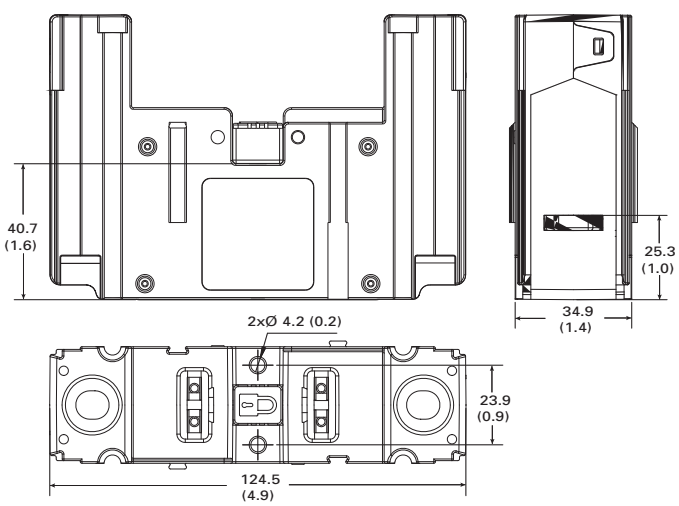
Terminal wire rating	Holder Catalogue no. TCFH30N / TCFH30NW	TCFH60N / TCFH60NW	TCFH100N / TCFH100NW
Single	8-10; 2.8 (25), 12-18; 2.6 (20)	10-14; 2.6 (20), 4-8; 3.9 (35)	10-18; 2.6 (20)**, 1-8; 4.5 (40)†
Dual	10-18; 2.8 (25)*	10-18; 2.6 (20), 6-8; 3.9 (35)	6; 5.1 (45)†

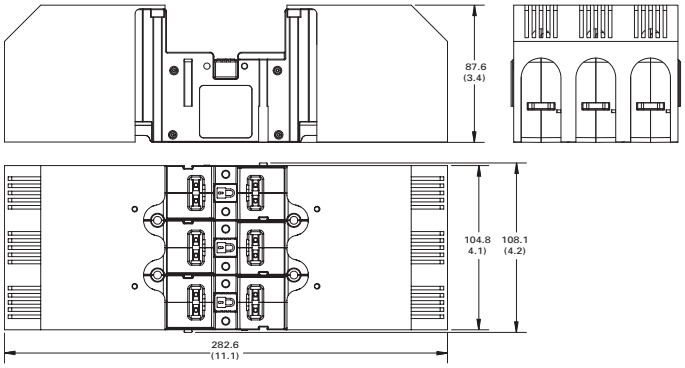
* 10-18 AWG stranded, 14-18 AWG solid
**Solid and stranded
† Stranded

Data sheet 9007

CUBEFuse™ finger-safe fuse holders

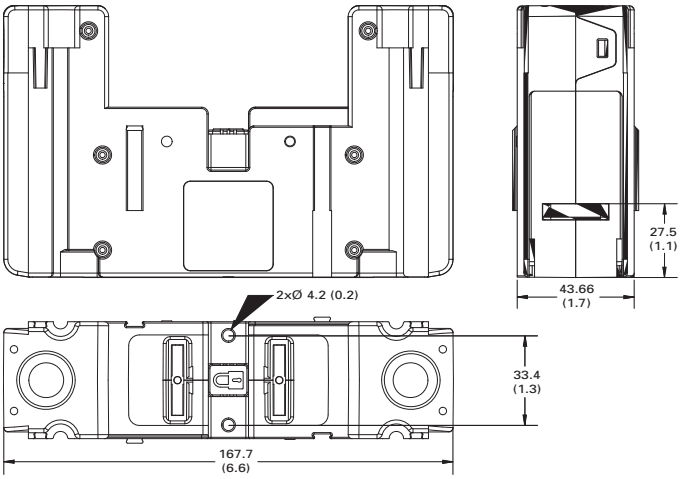
Dimensions in (mm) - 200 and 225 A

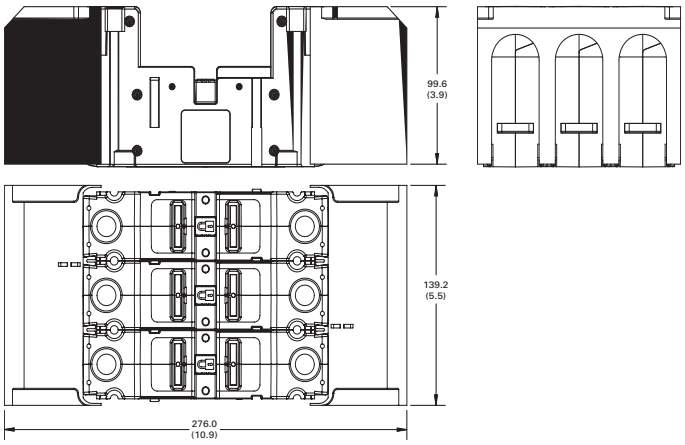




3-pole ganged 200 A holder with installed shroud

Dimensions in (mm) - 400 A





3-pole ganged 400 A holder with installed shroud



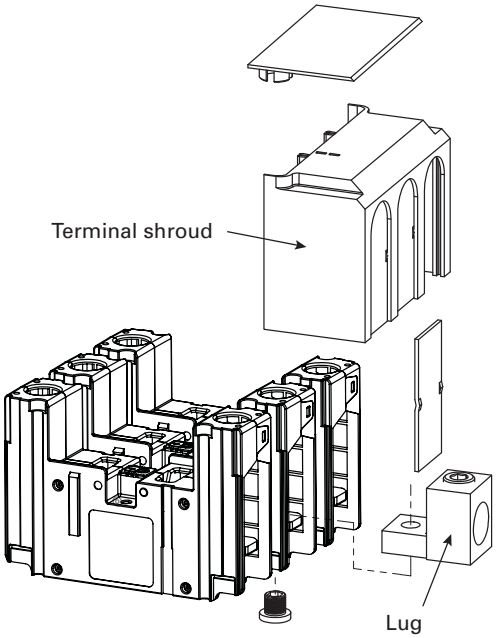
CUBEFuse™ finger-safe fuse holders

Available lug kits

For complete installation, the 200, 225 and 400 A CUBEFuse holders require lugs. The table below contains the information necessary for ordering the desired lug kit for the application.

Accessories

Catalogue no.	Holder Rated current	Description
CCP2-TS2-3	200/225	3-pole terminal shroud
CCP2-PB2		Phase barriers (pack of 2)
CCP2-CWK2		1/4" QC terminals. Use with CCP2-L2-1A, CCP2-MW2-3 and CCP2-MW2-6 lugs (pack of 12)
CCP2-TS6-3	400	3-pole terminal shroud
CCP2-PB6		Phase barriers (pack of 2)



All 200, 225 and 400 amp holders require installing lugs. Only three ganged holders can accept terminal shrouds. See table below.

Available lugs, conductor Technical data and terminal torques

Catalogue no.	Description	Lugs per cat. no.	Wire range AWG (mm²)	Wire type/ temp.	Conductor torque N•m (lb-in)	Lug mounting screw torque N•m (lb-in)
200/225 A holders						
CCP2-L2-1	Stainless steel lug	1	350-4 (185-25)	Cu 75°C	20.3 (180)	0.9 (8)
CCP2-L2-1A	Aluminum lug*	1	350-4 (185-25)	Cu/Al 75°C	28.2 (250)	13.5 (120)
CCP2-MW2-3	3-port multi-wire terminal with shroud*†	3	2-14 (35-2.5)	Cu/Al 75°C	7.9 (70)	10.8 (95)
CCP2-MW2-6	6-port multi-wire terminal with shroud*†	3	6-14 (16-2.5)	Cu/Al 75°C	2.8 (25)	10.8 (95)
* These lugs also accept 1/4" quick connect control wire terminals. Order Catalogue number CCP2-CWK2 (package of 12 terminals).						
400 A holders						
CCP2-L4-1	Stainless steel lug	1	500-3 (240-35)	Cu 75°C	42.0 (375)	22.0 (200)
CCP2-L4-1A	Aluminum lug	1	500-3 (240-35)	Cu/Al 75°C	42.0 (375)	
CCP2-L4B-3	Stainless steel lug kit with shroud†	3	750-500 (400-240)	Cu 75°C	57.0 (500)	
CCP2-L4B-3A	Aluminum lug kit with shroud†	3	750-500 (400-240)	Cu/Al 75°C	62.0 (550)	
CCP2-L6-3	2-port stainless steel lug kit with shroud	3	(2) 500-2 (240-35)	Cu 75°C	42.0 (375)	
CCP2-L6-3A	2-port aluminum lug kit with shroud	3	(2) 500-2 (240-35)	Cu/Al 75°C	42.0 (375)	
CCP2-MW6-6	6-port multi-wire terminal with shroud†	3	1/0-14 (50-2.5)	Cu/Al 75°C	10-14 = 3.9 (35) 8 = 4.5 (40) 4-6 = 5.0 (45 1/0-2 = 5.6 (50)	

† This is a lug kit with three lugs and a shroud for installation on three ganged CUBEFuse holders.

Data sheet 9007

Class CF - UL Low voltage fuse links and compact circuit protectors

CUBEFuse™ finger-safe fuse holders

Ordering a complete 200/225 A holder installation

For a complete installation, select from the following required and optional components, and accessories.

		Catalogue no.		
		Holders	**Rated current**	**Poles**
Required		TCFH200N	200 A	1 Order required quantity for installation
		TCFH225N	225 A	
		And		
		**Lug kits**	**Description**	
		CCP2-L2-1	Stainless steel lug, 75° Cu only, 350 kcmil-4, 1 per pack	
		CCP2-L2-1A	Aluminum lug, 75°C Cu/Al, 350 kcmil-4, 1 per pack	
		CCP2-MW2-3	3-port multi-wire lug, 75°C Cu/Al, 2-14, 3 per pack, includes terminal shroud	
		CCP2-MW2-6	6-port multi-wire lug, 75°C Cu/Al, 6-14, 3 per pack, includes terminal shroud	
		And		
Optional accessories		**Terminal shrouds**	**Description**	
		CCP2-TS2-3	3-pole terminal shroud with phase shields, 1 per pack	
		**Phase barriers**	**Description**	
		CCP2-PB2	Phase barriers, 2 per pack	
		**Control terminals**	**Description**	
		CCP2-CWK2	1/4" quick-connect control wire terminals - mounts on installed lug (cannot be used with lug CCP2-L2-3), 12 per pack	

Data sheet 9007

CUBEFuse™ finger-safe fuse holders

Ordering a complete 400 A holder installation

For a complete installation, select from the following required and optional components, and accessories.

		Catalogue no.		
		Holder	**Rated current**	**Poles**
Required		TCFH400N	400 A	1 Order required quantity for installation
		**And**		
		Lug kits	**Description**	
		CCP2-L4-1	Stainless steel lug, 75° Cu only, 500 kcmil-3, 1 per pack	
		CCP2-L4-1A	Aluminum lug, 75° Cu only, 500 kcmil-3, 1 per pack	
		CCP2-L4B-3	Stainless steel lug, 75° Cu only, 750-500 kcmil, 3 per pack, includes terminal shroud	
		CCP2-L4B-3A	Aluminum lug, 75°C Cu/Al, 750-500 kcmil, 3 per pack, includes terminal shroud	
		CCP2-L6-3	2-port stainless steel lug, 75° Cu only, 500 kcmil-2, 3 per pack, includes terminal shroud	
		CCP2-L6-3A	2-port aluminum lug, 75°C Cu/Al, 500 kcmil-2, 3 per pack, includes terminal shroud	
		CCP2-MW6-6	6-port multi-wire lug, 75°C Cu/Al, 1/0-14, 3 per pack, includes terminal shroud	
And				
Accessories		**Terminal shrouds**	**Description**	
		CCP2-TS6-3	3-pole terminal shroud with phase shields, 1 per pack	
		**Phase barriers**	**Description**	
		CCP2-PB6	Phase barriers, 2 per pack	

Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60, 100 and 200 A

Switch type	Description	CCP2-CF				CCP2**R**-CF			CCP2**RL**-CF			CCP2**S**-CF			CCP2**SL**-CF		
		Switch only				Switch with f**R**ont right rotary clockwise operation			Switch with f**R**ont **L**eft rotary clockwise operation			Switch with **S**ide right rotary clockwise operation			Switch with **S**ide **L**eft rotary counterclock-wise operation		
Disconnect switches		30 A	60 A	100 A	200 A	30 A	60 A	100 A	30 A	60 A	100 A	30 A	60 A	100 A	30 A	60 A	100 A
1-pole	CCP2 Class CF	✓	✓	✓	✓												
2-pole	CCP2 Class CF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
3-pole	CCP2 Class CF	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Accessories																	
CCP2-AUX	Auxiliary contacts	✓	✓						✓	✓					✓	✓	
CCP2-AUX-100				✓							✓						✓
CCP2-AUX-S					✓												
CCP2-SM	Side rotary mechanism				✓												
CCP2-RM2	Front rotary mechanism				✓												
CCP2-L2-1	Stainless steel lug				✓												
CCP2-L2-1A	Aluminium lug				✓												
CCP2-MW1-3	Multi wire lug kit	✓	✓			✓	✓		✓	✓		✓	✓		✓	✓	
CCP2-MW1-6				✓				✓			✓			✓			✓
CCP2-MW2-3					✓												
CCP2-MW2-6					✓												
CCP2-TS1-3	Terminal cover	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CCP2-TS1-6				✓				✓			✓			✓			✓
CCP2-TS2-3					✓												
CCP2-PB2	Phase barrier				✓												
CCP2-H4X-_1	Selector handle					✓	✓	✓	✓	✓	✓	✓	✓	✓			
CCP2-H4X-_2	Pistol handle					✓	✓	✓	✓	✓	✓	✓	✓	✓			
CCP2-H4X-_3	Pistol handle				✓												
CCP2-H4X-_4	Pistol handle				✓												
CCP2-HEX	Handle extension				✓												
CCP2-NFPA-1	NFPA 79 compliant handle					✓	✓	✓	✓	✓	✓						
CCP2-NFPA-2					✓												
CCP2-SH1-290	290 mm shaft					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CCP2-SH1-490	490 mm shaft					✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
CCP2-SH2-225	225 mm shaft				✓												
CCP2-SH2-425	425 mm shaft				✓												
CCP2-CWK2	Control wire				✓												

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Specifications

Description

The revolutionary, next generation Eaton's Bussmann™ series Compact Circuit Protector (cat. no. CCP2) is a fused UL® 98 branch circuit disconnect switch utilizing the UL Class CF time-delay or fast-acting CUBEFuse™ with Class J electrical performance. With up to a 51 percent smaller footprint than a traditional fusible solution, these switches provide a high 200 kA SCCR to help improve panel and assembly SCCR.

The 35 mm DIN-Rail mount CCP2 is available in a variety of 30, 60 and 100 amp configurations to meet many application needs including rotary operation.

The switch-only versions of the 30, 60 and 100 A disconnects are direct, drop-in replacements for the earlier models (noted by a catalog number starting "CCP-"). The auxiliary contacts and PLC remote fuse indicator are backwards compatible. The multi-wire lug kits and terminal shrouds are not.

Application flexibility is extended with an optional multi-wire lug kit, featuring finger-safe shrouds, that provides three (30 and 60 A switches) and six (100 A switches) additional wire ports on each pole for power distribution applications.

Other accessories include a PLC fuse monitor for open fuse indication and NO/NC auxiliary contacts that easily integrate into various monitoring systems.

Front and side rotary operated versions are easily applied for through-the-door or through the left or right side operation to enhance safety.

Technical data

- Rated voltage
  - 347 V a.c. (1-pole switches)
  - 600 V a.c. (2- and 3-pole switches)
  - 125 V d.c.*
- Rated current
  - 30 A
  - 60 A
  - 100 A
- SCCR
  - 200 kA RMS Sym.
  - 100 kA DC

Poles

- 1-, 2- and 3-poles see catalogue numbers details

Agency information

- UL 98 Listed, Guide WHTY, File E302370
- cULus to Canadian Standard 22.2 No. 4-04, Guide WHTY7, File E302370
- RoHS compliant
- CE for use in UL panel boards



Right side rotary operated CCP2 switch

Conductors/terminals

- 75°C Cu, see conductor tables for size, type and torque information
- Box lug, single/dual conductor
- Fork terminal suitable for line, load or accessory connection, max. 30 A suitable for use with:
  - 10-24 screw for 30 and 60 A switches
  - 1/4-28 screw for 100 A switches*
- Multi-wire lug kits — see accessories for details

* Can only accept forked terminals for up to 14AWG (Blue insulation terminals)

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)*

* For fuse performance under or above 25°C, consult fuse performance derating charts in the Bussmann Division publication no. 3002, titled Selecting Protective Devices (SPD)

Lockout/tagout provisions

- 1/4" lock, direct use on switches without rotary mechanisms requires a lock with a straight shank of sufficient length to engage all poles

Minimum enclosure size per UL 98*

- 30 and 60 A switch 10"x 8"x 6"(254 x 203 x 152 mm)
- 100 A switch, 12" x 10" x 6" (305 x 254 x 152 mm)

* Smaller enclosures may be used at the discretion of the user, with adherence to NEC minimum wire bend radius requirements.

Mounting**

- 35 mm DIN-Rail

**Switch is panel mount with flange handle cable operator.

Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Local open fuse indication minimum voltage

- 90 V a.c., requires an open fuse to be in the CCP2 and the switch in the ON position

Accessories

- Multi-wire lug kits with terminal shrouds
- Selector and pistol handles for use with rotary operated switches
- 8 mm shafts for use with selector and pistol handles
- Auxiliary contacts
- PLC fuse monitor
- NFPA 79 compliant handle
- Flange handle rod and cable operators

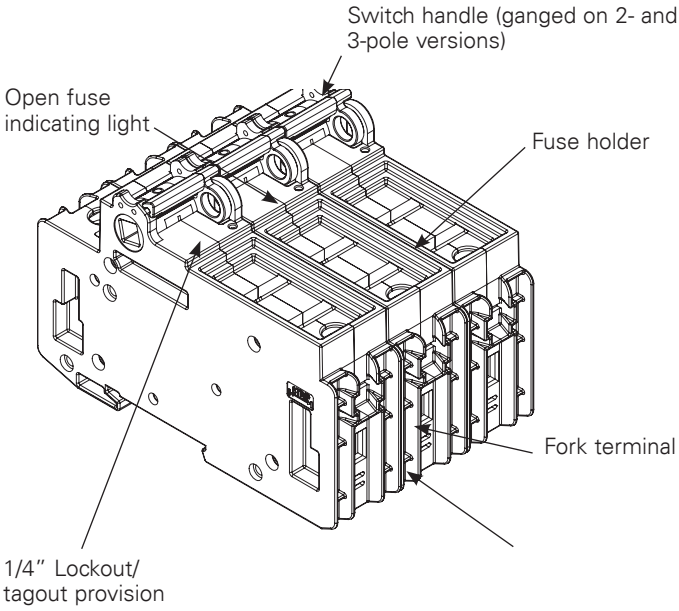
Carton quantity and shipping weight

Item	Poles	Qty.	Weight lb (kg)
30 and 60 amp switches			
Switch only	1-pole	12	3.8 (1.7)
Switch with side rotary mechanism	2-pole	1	1.3 (0.6)
	3-pole	1	1.6 (0.7)
Switch with front rotary mechanism	2-pole	1	1.3 (0.6)
	3-pole	1	1.6 (0.7)
100 amp switches			
Switch only	1-pole	6	3.1 (1.4)
Switch with side rotary mechanism	2-pole	1	1.7 (0.8)
	3-pole	1	2.3 (1.0)
Switch with front rotary mechanism	2-pole	1	1.7 (0.8)
	3-pole	1	2.3 (1.0)

Features

- Uses UL Class CF time-delay or fast-acting CUBEFuse with Class J electrical performance
- Extremely compact design at 25.4 mm (1 inch) wide per pole
- Amp rating rejection disconnects will not accept a CUBEFuse amp rating greater than switch rating
- High 200 kA short-circuit current rating
- Disconnect rated to provide means for load isolation
- Full voltage rated at 347 V a.c. (1-pole switches) and 600 V a.c. (2- and 3-pole switches)
- 125 V d.c.* rated to meet specialized applications
- UL 98 Listed and suitable for branch circuit disconnect and branch circuit protection with installed fuses
- Horsepower rated
- Open fuse indication: Local open fuse indication light standard on each pole
- Additional open fuse indication can be provided by the indicating time-delay CUBEFuse (6 to 100 A)
- Finger-safe construction with 10 AWG (6 mm^2) wire or larger
- Built-in switch interlock prohibits removing or installing the fuse while in the ON position
- Padlockable for lockout/tagout procedures with a 1/4" lock
- Rotary operated versions provide for through-the-door and through-the-side operation flexibility and enhanced safety with:
  - Right or left front operation
  - Right or left side operation
- Optional selector and pistol handles, and shafts available for use with rotary operated versions
- Multi-wire lug kits with terminal shrouds allow for power distribution to multiple loads. Each lug has three (30 and 60 A switches) or six (100 A switches) ports rated for single and dual wires (see lug kits in accessories for details).

* Switch amp rating and installed fuse amp rating dependent, see catalog number table for details.



Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Catalogue numbers

Catalog no.	Poles	Description/switch operation	Rated voltage	SCCR	Max Hp rating (V a.c.) 120	240	480	600
30 amp switches								
CCP2-1-30CF	1	Switch only	347 V a.c./125 V d.c.	200 kA AC 100 kA DC	1-1/2	—	—	—
CCP2-2-30CF	2		600 V a.c./125 V d.c.		—	3	—	—
CCP2-3-30CF	3		600 V a.c.		—	5	15	10
CCP2R-2-30CF	2	Right front rotary, clockwise	600 V a.c./125 V d.c.		—	3	—	—
CCP2R-3-30CF	3		600 V a.c.		—	5	15	10
CCP2RL-2-30CF	2	Left front rotary, clockwise	600 V a.c./125 V d.c.		—	3	—	—
CCP2RL-3-30CF	3		600 V a.c.		—	5	15	10
CCP2S-2-30CF	2	Right side rotary, clockwise	600 V a.c./125 V d.c.		—	3	—	—
CCP2S-3-30CF	3		600 V a.c.		—	5	15	10
CCP2SL-2-30CF	2	Left side rotary, counterclockwise	600 V a.c./125 V d.c.		—	3	—	—
CCP2SL-3-30CF	3		600 V a.c.		—	5	15	10
60 amp switches								
CCP2-1-60CF	1	Switch only	347 V a.c./125 V d.c.*	200 kA AC 100 kA DC	3	—	—	—
CCP2-2-60CF	2		600 V a.c./125 V d.c.*		—	7-1/2	—	—
CCP2-3-60CF	3		600 V a.c.		—	7-1/2	20	10
CCP2R-2-60CF	2	Right front rotary, clockwise	600 V a.c./125 V d.c.*		—	7-1/2	—	—
CCP2R-3-60CF	3		600 V a.c.		—	7-1/2	20	10
CCP2RL-2-60CF	2	Left front rotary, clockwise	600 V a.c./125 V d.c.*		—	7-1/2	—	—
CCP2RL-3-60CF	3		600 V a.c.		—	7-1/2	20	10
CCP2S-2-60CF	2	Right side rotary, clockwise	600 V a.c./125 V d.c.*		—	7-1/2	—	—
CCP2S-3-60CF	3		600 V a.c.		—	7-1/2	20	10
CCP2SL-2-60CF	2	Left side rotary, counterclockwise	600 V a.c./125 V d.c.*		—	7-1/2	—	—
CCP2SL-3-60CF	3		600 V a.c.		—	7-1/2	20	10
100 amp switches								
CCP2-1-100CF	1	Switch only	347 V a.c./125 V d.c.**	200 kA AC 100 kA DC	5	—	—	—
CCP2-2-100CF	2		600 V a.c./125 V d.c.**		—	10	—	—
CCP2-3-100CF	3		600 V a.c.		—	20	50	40
CCP2R-2-100CF	2	Right front rotary, clockwise	600 V a.c./125 V d.c.**		—	10	—	—
CCP2R-3-100CF	3		600 V a.c.		—	20	50	40
CCP2RL-2-100CF	2	Left front rotary, clockwise	600 V a.c./125 V d.c.**		—	10	—	—
CCP2RL-3-100CF	3		600 V a.c.		—	20	50	40
CCP2S-2-100CF	2	Right side rotary, clockwise	600 V a.c./125 V d.c.**		—	10	—	—
CCP2S-3-100CF	3		600 V a.c.		—	20	50	40
CCP2SL-2-100CF	2	Left side rotary, counterclockwise	600 V a.c./125 V d.c.**		—	10	—	—
CCP2SL-3-100CF	3		600 V a.c.		—	20	50	40

* 125 V d.c. for installed fuse amp Technical data up to 40 A. 24 V d.c. for installed fuse amp Technical data from 45 to 60 A.
**125 V d.c. for installed fuse amp Technical data up to 80 A, 24 V d.c. for installed fuse amp Technical data from 90 to 100 A.

Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Box lug terminal conductor data

Wire type	AWG range	Class	Quantity	Torque N•m (lb-in)
30 and 60 A switches				
75°C Cu	4-6	Stranded, Class B to K	Single	3.95 (35)
	8-18			2.26 (20)
	6-8	Stranded, Class B/C	Dual	3.39 (30)
		Stranded, Class K		2.26 (20)
	10-18	Stranded, Class B to K		
	10-18	Solid	Single/dual	2.26 (20)
	4-18	Stranded, UL ferrule, Class B/C	Single	3.39 (30)
	6-18		Twin†	
	4-18	Stranded, UL ferrule, Class K	Single	2.82 (25)
	6-18		Twin†	
100 A switches				
75°C Cu	12-18	Stranded, Class B/C	Single	2.26 (20)
	10			2.82 (25)
	8			4.52 (40
	4-6			5.08 (45)
	1-3			6.21 (55)
	4-12		Dual	5.08 (45)
	12-18	Stranded, UL ferrule, Class B/C	Single	2.26 (20)
	10			3.95 (35)
	1-8			4.52 (40)
	10-18		Twin†	2.26 (20)
	6-9			2.82 (25)
	10-18	Solid	Single/Dual	2.26 (20)
	8-18	Class K	Single	2.26 (20)
	1-7			3.39 (30)
	3-10		Dual	5.08 (45)
	8-18	Class K, UL ferrule	Single	2.26 (20)
	1-7			3.39 (30)
	6-18		Twin	2.26 (20)

† Two stranded conductors placed in one UL Listed twin ferrule.

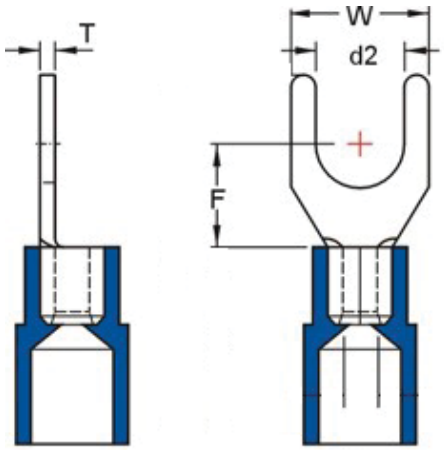
Lineside and loadside fork terminal

- Fork terminal suitable for line, load or accessory connection, max. 30 A suitable for use with:
  - 10-24 screw for 30 and 60 A switches
  - 1/4-28 screw for 100 A switches*

* Can only accept forked terminals for up to 14AWG (Blue insulation terminals)

Forked terminal sizes

Product no.	Stud size	Dimensions: inches (mm) d2	W	F	T
CCP2-X-30CF	#10	0.209 (5.3)	0.374 (9.5)	0.256 (6.5)	0.03 (0.75)
CCP2-X-60CF	#10	0.209 (5.3)	0.374 (9.5)	0.256 (6.5)	0.03 (0.75)
CCP2-X-100CF	1/4	0.252 (6.4)	0.400 (10.2)	0.410 (10.4)	0.03 (0.75)

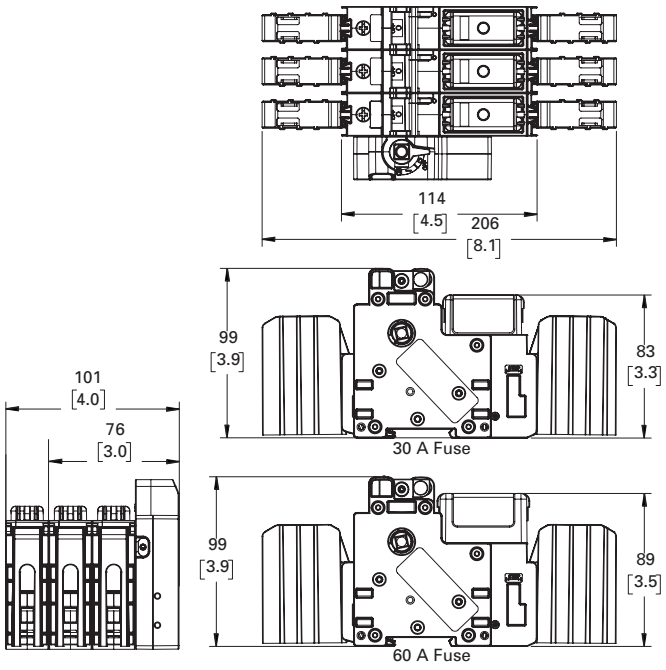


Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Dimensions mm (in) - Left front rotary switches

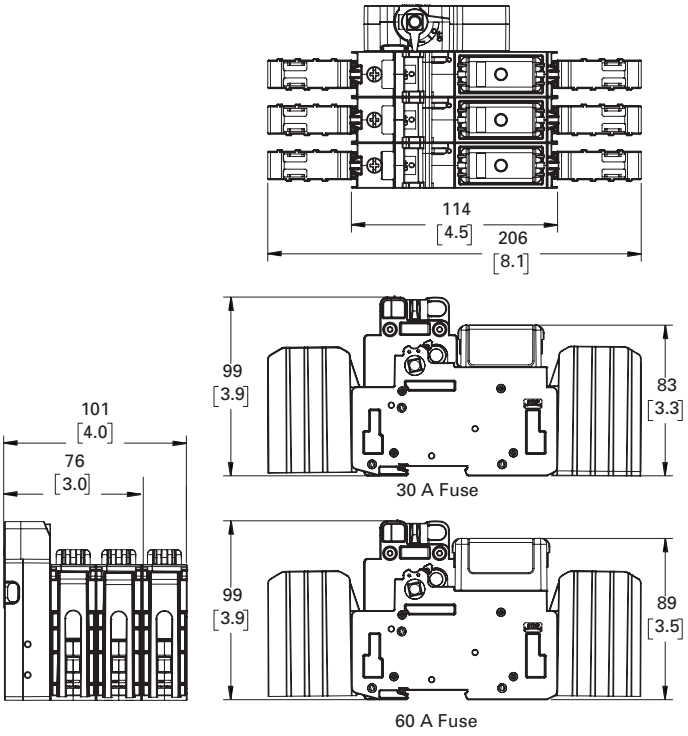
(shown with optional terminal shrouds)



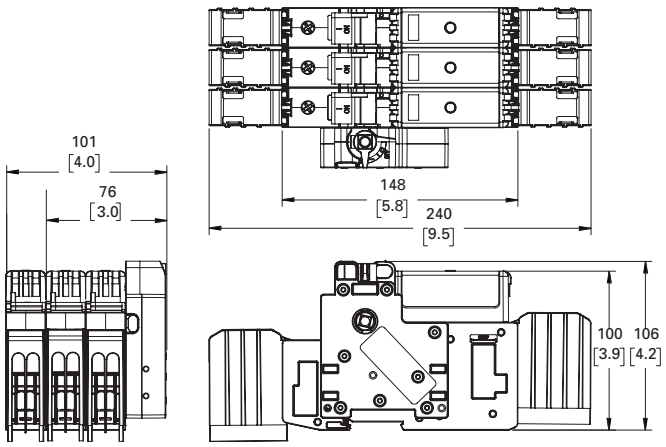
30 and 60 amp switches

Dimensions mm (in) - Right front rotary switches

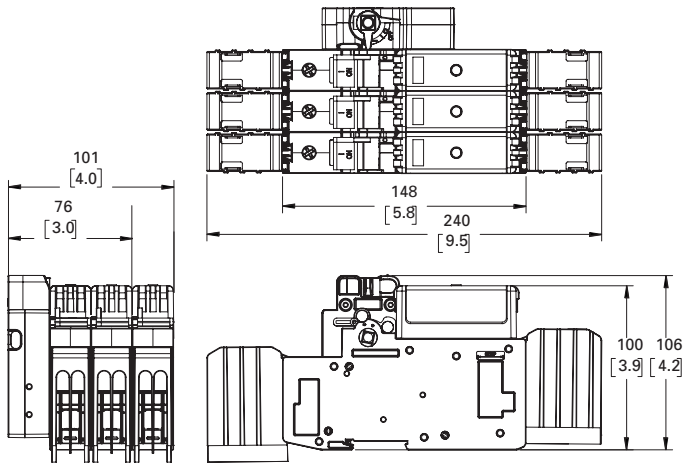
(shown with optional terminal shrouds)



30 and 60 amp switches



100 amp switches



100 amp switches



Data sheet 10801

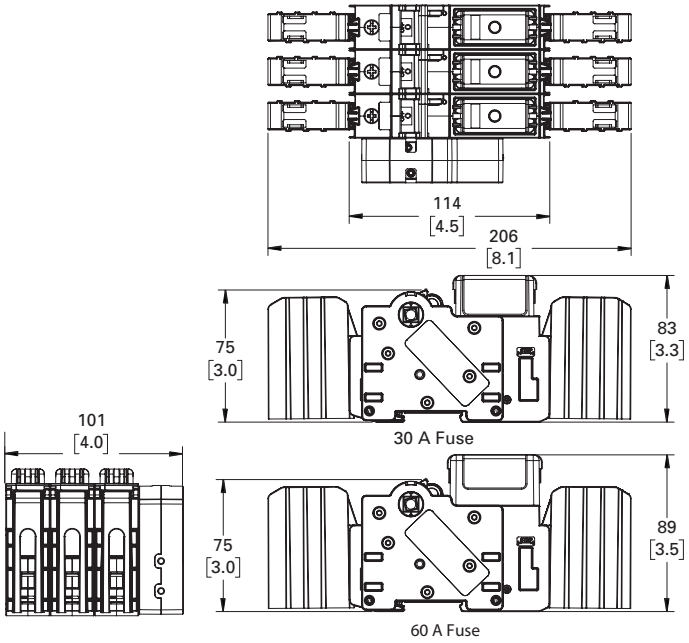


Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links - 30, 60 and 100 A

Dimensions mm (in) - Left side rotary switches

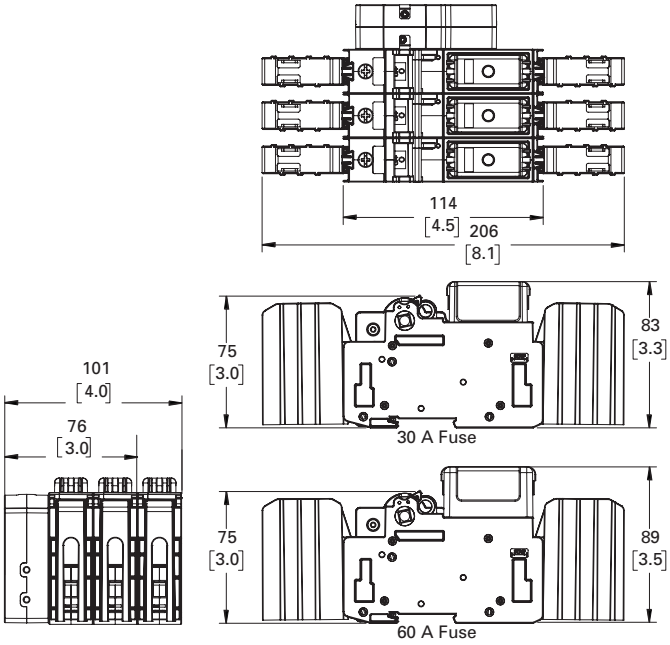
(shown with optional terminal shrouds)



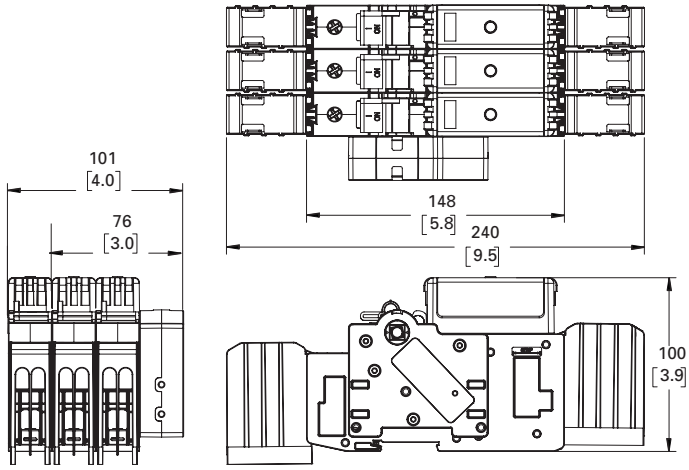
30 and 60 amp switches

Dimensions mm (in) - Right side rotary switches

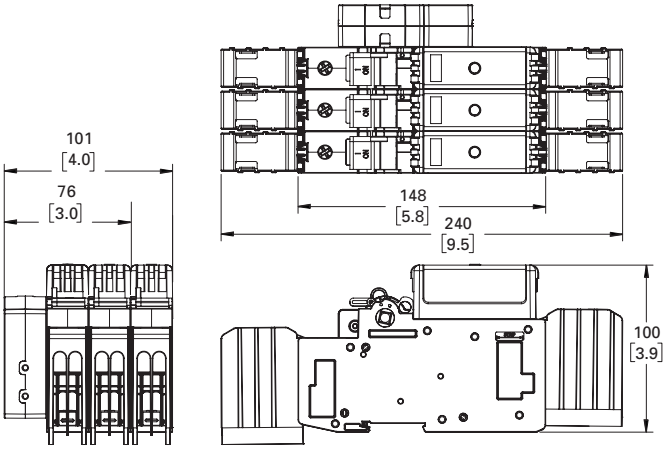
(shown with optional terminal shrouds)



30 and 60 amp switches



100 amp switches



100 amp switches



Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links - 200 A

Specifications

Description

Eaton's Bussmann series 200 A Compact Circuit Protector (CCP2) fused disconnect switches utilize the finger-safe UL Class CF time-delay CUBEFuse with Class J electrical performance. With up to a 69 percent smaller footprint than a traditional fusible solution, these switches provide a high 200 kA SCCR to help improve panel and assembly SCCR.

The panel mount 200 A CCP2 switches are available with a variety of accessories to meet many application needs including rotary and flange handle operation.

Rotary operators are available for front or side (right or left) operation. Front rotary operators are for three-pole switches only while the side operator may be applied to the right or left side of 1-, 2- and 3-pole units.

Other accessories include lugs, terminal shrouds, rotary pistol handles, flange rod and cable operating mechanisms, NO/NC auxiliary contacts that easily integrate into various monitoring systems and a handle extension.

Front and side rotary operated versions are easily applied for through-the-door or through the left or right side operation to enhance safety.



200 A switch



With front rotary accessory



With side rotary accessory

Technical data

- Rated voltage
  - 347 V a.c. (1-pole)
  - 600 V a.c. (2- and 3-pole)
- Rated current: 200 A
- SCCR: 200 kA RMS Sym.

Catalogue symbol

Catalog no.	Poles	Rated current	Description
CCP2-1-200CF	1	200	Switch only
CCP2-2-200CF	2		
CCP2-3-200CF	3		

Poles

- 1-, 2- and 3-poles see catalogue numbers table

Agency information

- UL 98 Listed, Guide WHTY, File E302370
- cULus to Canadian Standard 22.2 No. 4-04, Guide WHTY7, File E302370
- RoHS compliant

Conductors/terminals

- See available lug table for size, type and torque information

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)*

* For fuse performance under or above 25°C, consult fuse performance derating charts in the Bussmann Division publication no. 3002, titled Selecting Protective Devices (SPD)

Data sheet 10801

Lockout/tagout provisions using 1/4" lock

- Integral with switch handle
- Front rotary operating mechanism
- Rotary pistol handles
- Flange rod and cable operators

Minimum enclosure size

- 200 A switch 16 x 12 x 6" (405 x 305 x 150 mm)

Mounting

- Panel mount

Local open fuse indication minimum voltage

- 90 V a.c., requires an open fuse to be in the CCP2 and the switch in the ON position

Accessories

- Lugs and lug kits with terminal shrouds
- Pistol handles for use with rotary operated switches
- NFPA 79 compliant handle
- 12 mm shafts for use with selector and pistol handles
- Auxiliary contacts
- Flange handle rod and cable operators

Carton quantity

Item	Poles	Qty.
200 amp switches	1	1
	2	1
	3	1

Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links - 200 A

Features

- Uses UL Class CF time-delay CUBEFuse with Class J electrical performance
- Amp rating rejection feature will not accept a CUBEFuse amp Technical data greater than switch rating
- High 200 kA short-circuit current rating
- Disconnect rated to provide means for load isolation
- Full voltage rated at 600 V a.c.
- UL 98 Listed and suitable for branch circuit disconnect and branch circuit protection with installed fuses
- Horsepower rated (see table below)
- Standard local open fuse indication light on each pole speeds troubleshooting
- Built-in switch interlock prevents inserting or removing fuse while in the ON position
- Padlockable for lockout/tagout procedures with a 1/4" lock
- Front and side rotary operator accessories provide for through-the-door and through-the-side operation flexibility and enhanced safety
- Optional pistol handles and shafts available for use with rotary operator accessories
- Multi-wire lug kits with terminal shrouds allow for power distribution to multiple loads.

Catalogue numbers and horsepower Technical data

Catalogue no.	Poles	Description	Rated voltage AC	SCCR	Max Hp rating (V a.c.) 240	480	600
200 amp switches							
CCP2-1-200CF	1	Switch only	347	200 kA	—	—	—
CCP2-2-200CF	2		600		10	—	—
CCP2-3-200CF	3				50	100	150

Available lugs, conductor Technical data and terminal torques

Catalogue no.	Description	Lugs per cat. no.	Wire range AWG (mm^2)	Wire type/ temp.	Conductor torque N•m (lb-in)	Lug mounting screw torque N•m (lb-in)
200 A switches						
CCP2-L2-1	Stainless steel lug	1	350-4 (185-25)	Cu 75°C	20.3 (180)	0.9 (8)
CCP2-L2-1A	Aluminum lug*	1	350-4 (185-25)	Cu/Al 75°C	28.2 (250)	13.5 (120)
CCP2-MW2-3	3-port multi-wire terminal with shroud*	3	2-14 (35-2.5)	Cu/Al 75°C	7.9 (70)	10.8 (95)
CCP2-MW2-6	6-port multi-wire terminal with shroud*	3	6-14 (16-2.5)	Cu/Al 75°C	2.8 (25)	10.8 (95)

* These lugs also accept 1/4" quick connect control wire terminals. Order catalog number CCP2-CWK2 (package of 12 terminals).

Carton quantity

Catalogue no.	Description	Qty.
CCP2-L2-1	Stainless steel lug	1
CCP2-L2-1A	Aluminum lug	1
CCP2-MW2-3	3-port multi-wire terminal with shroud	3
CCP2-MW2-6	6-port multi-wire terminal with shroud	3
CCP2-CWK2	1/4" quick connect control wire terminals	12

Accessories

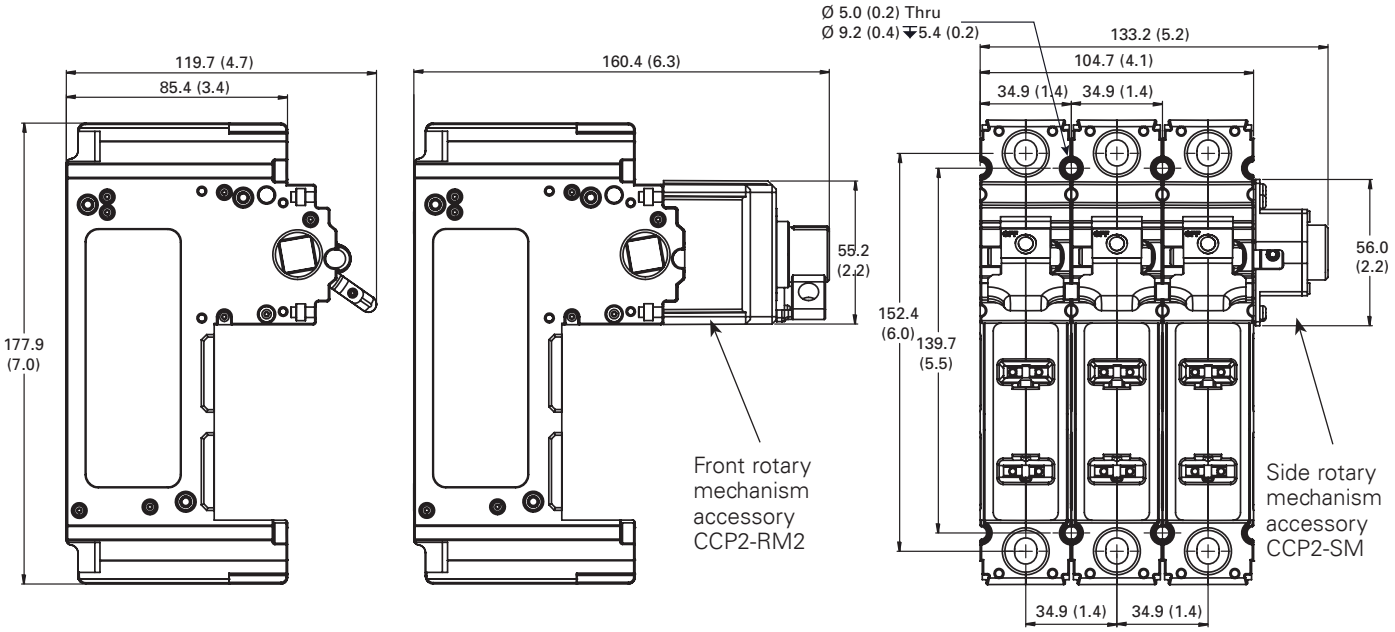
Catalogue no.	Switch Rated current	Description
CCP2-TS2-3	200	3-pole terminal shroud
CCP2-PB2		Phase barriers (pack of 2)
CCP2-RM2		Front rotary operator* (3-pole switch only)
CCP2-SM		Side rotary operator* (1-, 2- or 3-pole switches)

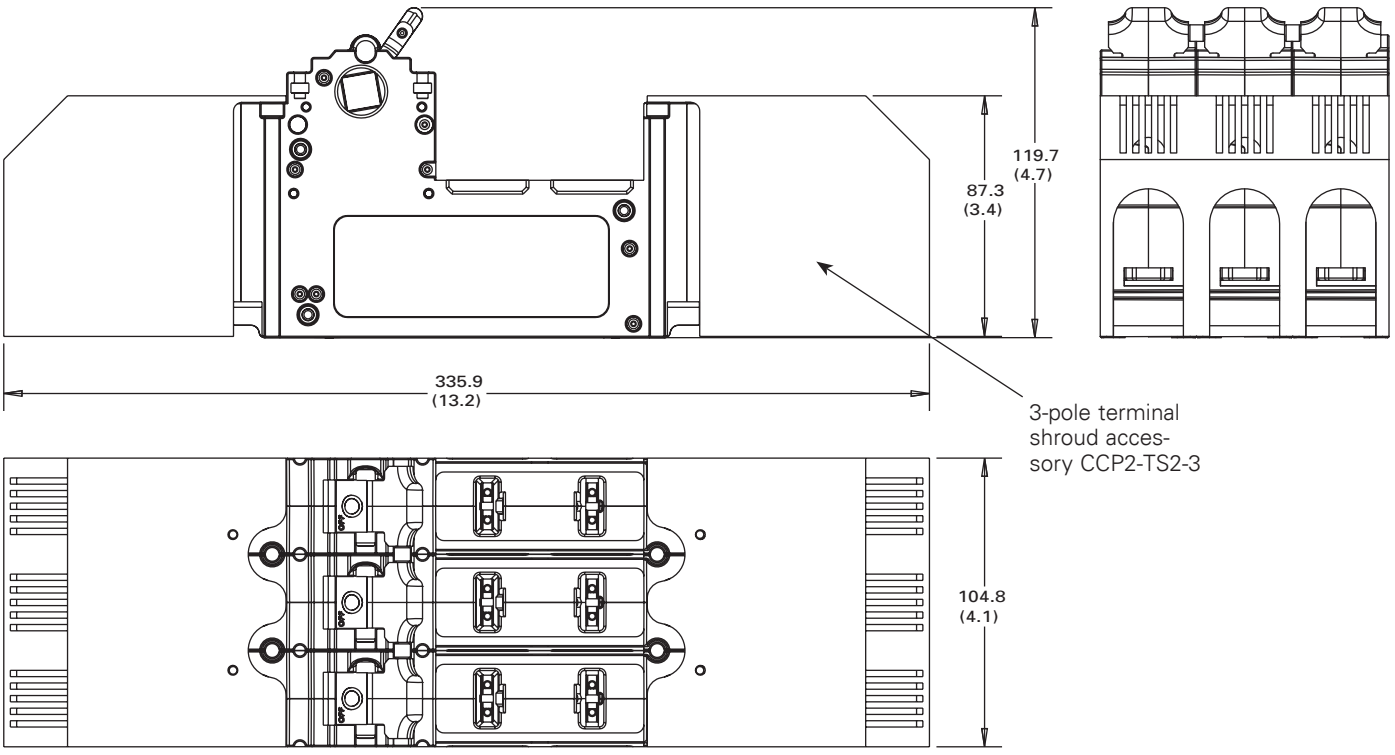
* Complete installation requires pistol handle and shaft, order separately.

Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links - 200 A

Dimensions mm (in) - 200 A





Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links

30, 60 and 100 A switch multi-wire lug kits

Description

The multi-wire lug kits permit expanding each box lug terminal on the switch into a three-port (30 and 60 A switches) or six-port (100 A switches) terminal for power distribution applications.

Each multi-wire lug kit comes with three lugs and three terminal shrouds. Shrouds provide finger-safe protection when properly installed.

Lugs may be mounted on either the loadside or lineside to meet various application needs.

Ports on any one lug accept any conductor combination listed, e.g., one of the ports may have dual 14 AWG wires and the other two ports single 10 AWG wires.

Catalog numbers

- CCP2-MW1-3 (30 and 60 A switches only)
- CCP2-MW1-6 (100 A switches only)

Technical data

- Rated voltage 600 V
- Rated current
  - 60 A max (CCP2-MW1-3)
  - 100 A max (CCP2-MW1-6)
- SCCR 200 kA

Agency information

- UL Recognized, Guide WHTY2, File E302370
- RoHS compliant

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

Multi-wire lug conductor information

- 75°C 4-16 Cu/ 4-8 Al
- AWG size and quantity per port - see table below

Type	AWG range	Class	Quantity	Torque N•m (lb-in)
Cu/Al	4-6	Stranded, Class B/C	Single	3.95 (35)
	8			2.82 (25)
Cu	10-14	Stranded, Class B/C	Single/dual*	2.26 (20)
	10-14	Solid	Single	2.26 (20)
	8	UL ferrule, Class B to K	Single/twin†	2.82 (25)
	10-14			2.26 (20)

* Dual wire to be same size and type.
† Two stranded conductors placed in one UL Listed twin ferrule.

CCP2 box lug torque for multi-wire lugs

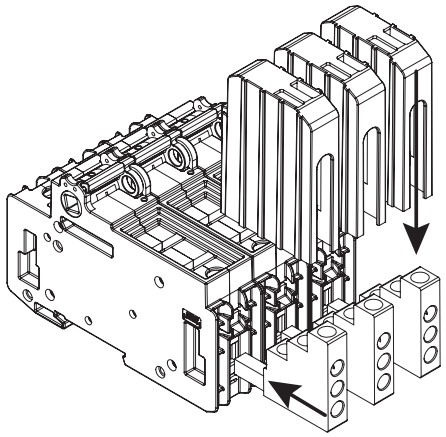
- 30/60 A switch lug, 4.52 N•m (40 lb-in)
- 100 A switch lug, 5.09 N•m (45 lb-in)

Carton quantity

Catalogue no.	Application	Qty.
CCP2-MW1-3	For 30/60 A switches only	3 lugs and 3 shrouds
CCP2-MW1-6	For 100 A switches only	

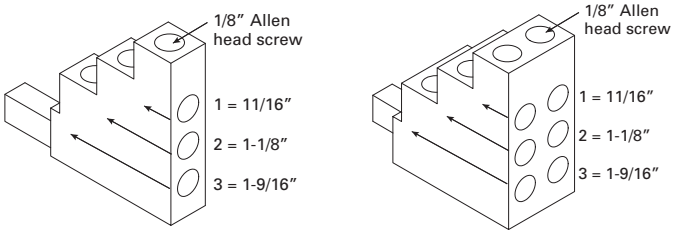
Data sheet 10801

Installed on CCP2-3-xx



Multi-wire lugs mount in switch box lug terminals to provide three additional wire ports per pole. Lugs can be mounted on the switch lineside or loadside. Each multi-wire lug kit comes with three lugs and three shrouds.

Wire insulation strip lengths



Strip back wire insulation to the lengths as indicated in the illustration above and the table below.

Lug port	Strip wire insulation back (inch)
1	11/16
2	1-1/8
3	1-9/16



Wiring versatility is provided by single/dual rated box lug terminals on the switch, or by the three-port or six-port multi-wire lug kits that are also single/dual wire rated.

CCP2 Compact Circuit Protector for class CF fuse links

200 A switch multi-wire lug kits

Description

The multi-wire lug kits permit expanding the terminal on the switch into a three-port (200 A switches) or six-port (200 A switches) terminal for power distribution applications.

Each multi-wire lug kit comes with three lugs and a 3-pole terminal shroud. The shroud provides finger-safe protection when properly installed.

Lugs can only be mounted on loadside to meet application needs.

Ports on any one lug accept any conductor combination listed, e.g., one of the ports may have dual 14 AWG wires and the other two ports single 10 AWG wires.

Catalog numbers

- CCP2-MW2-3 (3-port, 200 A switches only)
- CCP2-MW2-6 (6-port, 200 A switches only)

Technical data

- Rated voltage 600 V
- Rated current: 225 A max (CCP2-MW2-3 and CCP2-MW2-6)
- SCCR 200 kA

Agency information

- UL Recognized, Guide WHTY2, File E302370
- RoHS compliant

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

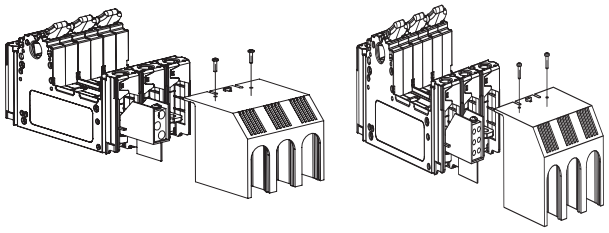
Multi-wire lug conductor information

- 75°C Cu/AL
- AWG size and quantity per port

Carton quantity

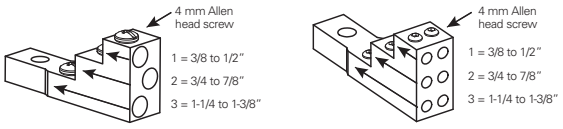
Catalogue no.	Application	Qty.
CCP2-MW2-3	For 200 A switches only	3 lugs and 1 3-pole shroud
CCP2-MW2-6		

Installed on CCP2-3-xx



3- and 6-port multi-wire lugs mounted on 200 A switches

Wire insulation strip lengths



CCP2-MW2-3 CCP2-MW2-6

Strip back wire insulation to the lengths indicated in the illustration above and the table below.

	Wire insulation strip length (inch)		
Lug kit	Lug port 1	Lug port 2	Lug port 3
CCP2-MW2-3	3/8 to 1/2	3/4 to 7/8	1-1/4 to 1-3/8
CCP2-MW2-6			

Available lugs, conductor Technical data and terminal torques

Catalogue no. 200 A switches	Description	Lugs per cat. no.	Wire range AWG (mm²)	Wire type/ temp.	Conductor torque N•m (lb-in)	Lug mounting screw torque N•m (lb-in)
CCP2-MW2-3	3-port multi-wire terminal with shroud*	3	2-14 (35-2.5)	Cu/Al 75°C	7.9 (70)	10.8 (95)
CCP2-MW2-6	6-port multi-wire terminal with shroud*	3	6-14 (16-2.5)	Cu/Al 75°C	2.8 (25)	10.8 (95)

* These lugs also accept 1/4" quick connect control wire terminals. Order catalog number CCP2-CWK2 (package of 12 terminals).

Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links

Selector and pistol handles

Description

Selector and pistol handles are used with rotary operated switches. Pistol handles for 200 A switches come in short and long versions. All handles are available in black/gray and red/yellow colors, and clockwise/counterclockwise operating modes. Front and right side operated switches use clockwise handles while left side operated switches use counterclockwise handles.

Installation requires an 8 mm shaft for 30, 60 and 100 A switches and a 12 mm shaft for 200 A switches (ordered separately).

Each handle is rated Type 1, 4X and 12, and accepts up to three (3) 1/4" diameter shank locks for lockout/tagout in the OFF position. They can also be field configured for lock-on and are defeatable.

Only the clockwise operating handles in combination with front rotary operating switches provide a door interlock means to ensure the enclosure door remains shut during lockout/tagout or lock-on. Rotary handles mounted on the enclosure's left or right side do NOT provide a door interlock means.

See the catalog number table below for applicable rotary switch, handle and shaft combinations.



Selector handles



Pistol handles —short and long

Agency information

- UL Listed, Guide DIHS/DIHS7, File E140305
- Type 1, 4X and 12
- RoHS compliant
- CE

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

Carton quantity

Catalogue no.	Description	Qty.
CCP2-H4X-_1	30/60/100 A selector handles	1
CCP2-H4X-_2	30/60/100 A pistol handles	1
CCP2-H4X-_3	200 A short pistol handles	1
CCP2-H4X-_4	200 A long pistol handles	1

Catalog symbol

- CCP2-H4X-_1 (selector handle for 30, 60 and 100 A switches)
- CCP2-H4X-_2 (pistol handle for 30, 60 and 100 A switches)
- CCP2-H4X-_3 (short pistol handle for 200 A switches)
- CCP2-H4X-_4 (long pistol handle for 200 A switches)

Handles and shafts for 30, 60 and 100 A switches

For catalogue no.	Description/operation	Order handle cat. no.	Order either 8 mm shaft cat. no.
CCP2R-(pole)-30CF	Right front rotary, clockwise	CCP2-H4X-B1 (selector, black/grey) CCP2-H4X-R1(selector, red/yellow) CCP2-H4X-B2 (pistol, black/grey) CCP2-H4X-R2 (pistol, red/yellow)	CCP2-SH1-290 (11.5"/290 mm) CCP2-SH1-490 (19.3"/490 mm)
CCP2R-(pole)-60CF			
CCP2R-(pole)-100CF			
CCP2RL-(pole)-30CF	Left front rotary, clockwise		
CCP2RL-(pole)-60CF			
CCP2RL-(pole)-100CF			
CCP2S-(pole)-30CF	Right side rotary, clockwise		
CCP2S-(pole)-60CF			
CCP2S-(pole)-100CF			
CCP2SL-(pole)-30CF	Left side rotary, counterclockwise	CCP2-H4X-B1L (selector, black/grey) CCP2-H4X-R1L (selector, red/yellow) CCP2-H4X-B2L (pistol, black/grey) CCP2-H4X-R2L (pistol, red/yellow)	
CCP2SL-(pole)-60CF			
CCP2SL-(pole)-100CF			

Handles and shafts for 200 A switches

For catalogue no.	Order front rotary mechanism cat. no.	Order right/ left side rotary mechanism cat. no.	Order front/right side clockwise handle cat. no.	Order left side counterclockwise handles (use only with CCP2-SM) cat. no.	Order either 12 mm shaft cat. no.
CCP2-(poles)-200CF	CCP2-RM2*	CCP2-SM	CCP2-H4X-B3 (short - black/grey) CCP2-H4X-R3 (short - red/yellow)	CCP2-H4X-B3L (short - black/grey) CCP2-H4X-R3L (short - red/yellow)	CCP2-SH2-225 (8.9"/225 mm)

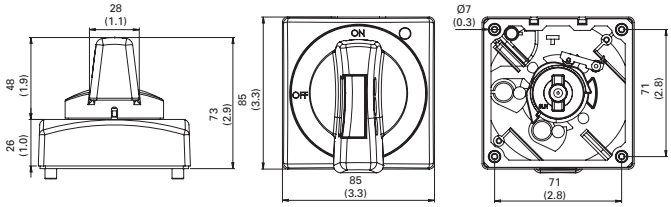
* For three-pole switches only.

Data sheet 10801

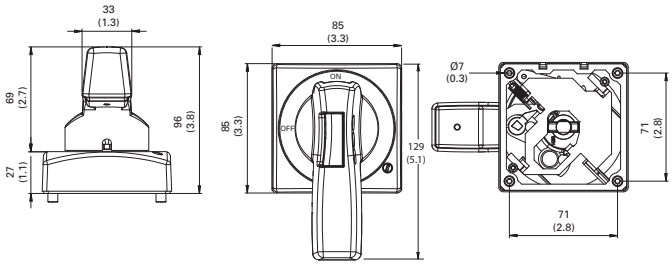
CCP2 Compact Circuit Protector for class CF fuse links

Handle dimensions mm (in)

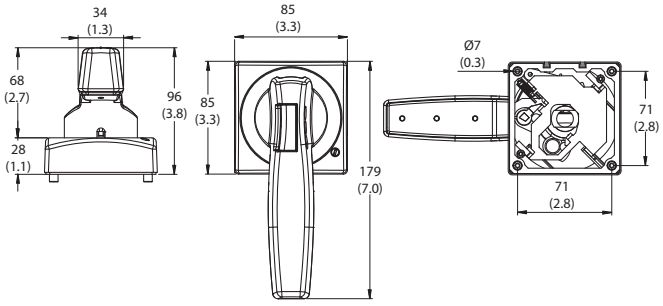
Selector for 8 mm shafts



Short pistol for 8 mm and 12 mm shafts



Long pistol for 12 mm shafts



NFPA 79 compliant handles



Catalog numbers

- CCP2-NFPA-1
  (8 mm shafts for 30-100 A switches)
- CCP2-NFPA-2
  (12 mm shafts for 200 and 400 A switches)

Description

NFPA 79 handles mount on the shaft of front rotary operated switch installations and provide a lockout means independent of the door position.

Carton quantity

Catalogue no.	Fits shaft size	Qty.
CCP2-NFPA-1	8 mm	1
CCP2-NFPA-2	12 mm	1

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Handle shafts

8 mm shafts



12 mm shafts



Catalog numbers

- CCP2-SH1-290 (8 mm, 290 mm long)
- CCP2-SH1-490 (8 mm, 490 mm long)
- CCP2-SH2-225 (12 mm, 225 mm long)
- CCP2-SH2-425 (12 mm, 425 mm long)

Description

Square shafts available in:

- 8 mm square by 290 and 490 mm lengths for 30, 60 and 100 A switches
- 12 mm square by 225 and 425 mm lengths for 200 A switches

All shafts are indexed to ensure handle/switch orientation for correct operation. Shafts are to be cut to length when installed.

Carton quantity

Catalogue no.	Size	Length	Qty.
CCP2-SH1-290	8 mm	290 mm	1
CCP2-SH1-490		490 mm	1
CCP2-SH2-225	12 mm	225 mm	1
CCP2-SH2-425		425 mm	1

CCP2 Compact Circuit Protector for class CF fuse links

Front rotary mechanisms for 200 A switches

Description

Front rotary mechanisms for through-the-door operation and install on the front of 3-pole switches only. These units provide at-switch lockout/tagout capability for enhanced safety. Complete installation requires installing pistol handle (short or long) and 12 mm shaft.

Packaged individually.

Catalogue numbers

- CCP2-RM2 (3-pole 200 A switches)



Side rotary mechanism for 200 A switches

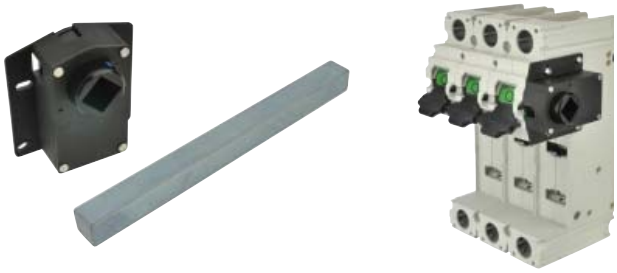
Description

Side rotary mechanism for through-the-side operation and installs on the left or right side (right side installation recommended) of any 1-, 2- or 3-pole 200 A switch. The side rotary mechanism does not provide for door interlock nor local lockout/tagout capability. Complete installation requires installing pistol handle (short or long) and 12 mm shaft.

Packaged individually.

Catalogue number

- CCP2-SM



Terminal shrouds

Description

3-pole shroud kit with shields for isolating the lugs on 3-pole 200 A switches.

Packaged individually.

Catalogue numbers

- CCP2-TS2-3 (3-pole 200 A switches)



Phase barriers

Description

Phase barrier kit with two phase barriers for isolation between the lugs on 3-pole 200 A switches.

Packaged individually.

Catalogue numbers

- CCP2-PB2 (3-pole 200 A switches)



Handle extension

Description

A handle extension to provide additional leverage for operating the switch in installations that do not have rotary mechanisms or flange operators installed. Does not mount on switch, provision for tether provided.

Packaged individually.

Catalogue number

- CCP2-HEX (1-, 2- and 3-pole 200 A switches)



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CCP2 Compact Circuit Protector for class CF fuse links

Auxiliary contacts for 30, 60 and 100 A switches

Description

NO+NC contact output to indicate the switching mechanism status on the CCP2. A single unit can be mounted on any 1-, 2- or 3-pole CUBEFuse CCP2 switch and the left front/left side rotary operated switches.

Catalogue numbers

- CCP2-AUX (30 and 60 A switches)
- CCP2-AUX-100 (100 A switches)

Technical data

- 240 V a.c. max
- 5 A max
- NC/NO contacts are closed/open when the CCP2 switch is in the "ON" position (closed)

Catalog no.	Switch	Description	Max per CCP2*	Technical data
CCP2-AUX	30/60 A only	Auxiliary contacts N/NC for switch status	1 per CCP2 (1-, 2- or 3-pole)	5 A / 240 V a.c.
CCP2-AUX-100	100 A only			

* The CCP2-AUX CANNOT be mounted on the right front and right side rotary operated versions, nor installed with the flange handle rod or cable operator. De-energize all circuits and follow all prescribed safety procedures before installing or removing the auxiliary contact device.

Agency information

- UL 98 Recognized, Guide WHTY2, File E155130
- cURus to Canadian Standard 22.2 No. 4-04
- Finger-safe in installed state
- RoHS compliant
- CE

Wiring

- 16-20 AWG (1.5 to 0.5 mm²) single and dual stranded wire
- 20 AWG (1.5 mm²) single and dual solid wire
- Torque 0.56 N•m (5 lb-in)
- Use only 75°C Cu wire

Packaging

- CCP2-AUX and CCP2-AUX-100 are packaged individually

Installation technique

Mounts on the CCP2's right side ONLY and mechanically interlocks with the CCP2 switch handle with provided hardware. The CCP2-AUX and CCP2-AUX-100 CANNOT be mounted on the right front and right side rotary operated versions, or installed with the flange handle rod or cable operator.

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

Carton quantity and shipping weight

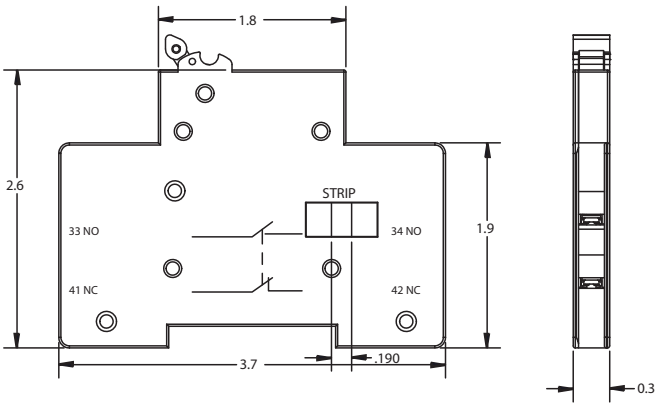
Catalog no.	Application	Qty.	Weight lb (kg)
CCP2-AUX	For 30 and 60 A switches only	1	0.14 (0.063)
CCP2-AUX-100	For 100 A switches only		



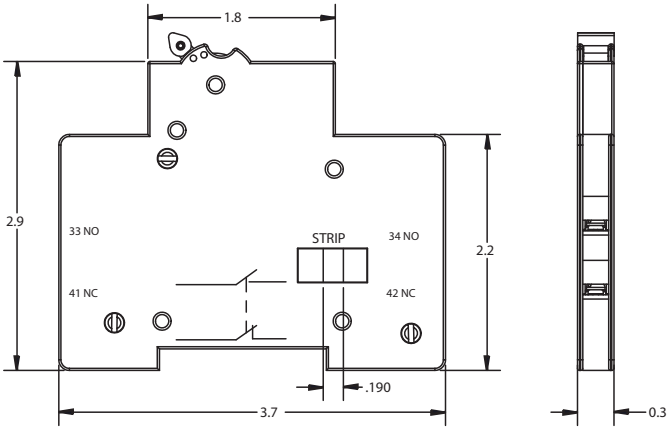
Installed on a CCP2-3-xx

Note: CCP2-AUX and CCP2-AUX-100 **CANNOT** be mounted on the right front and right side rotary operated versions, nor if a flange handle rod or cable operator is installed.

Dimensions in - CCP2-AUX



Dimensions in - CCP2-AUX-100



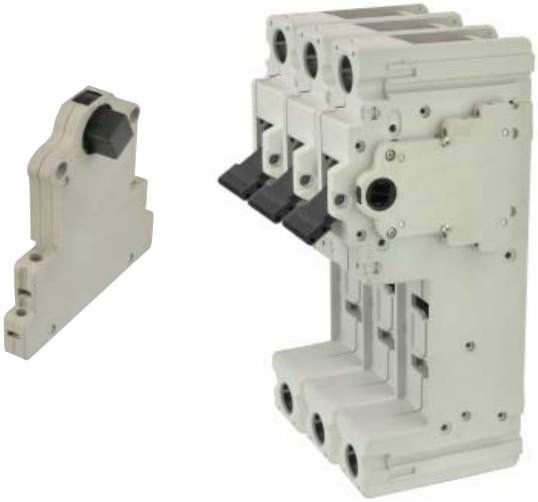
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CCP2 Compact Circuit Protector for class CF fuse links

Auxiliary contacts for 200 A switches

Description

NO+NC contact output to indicate the switching mechanism status on the CCP2. A single unit can be mounted on either side of any 1-, 2- or 3-pole switch (cannot be mounted on the same side as the CCP2-SM side rotary mechanism or the right side if a flange handle rod or cable operator is installed).



Catalogue number

- CCP2-AUX-S (200 A switches)

Technical data

- 240 V a.c. max
- 5 A max
- NC/NO contacts are closed/open when the CCP2 switch is in the "ON" position (closed)

Catalog no.	Switch	Description	Max per CCP2*	Technical data
CCP2-AUX-S	200 A	Auxiliary contacts NO+NC for switch status	1 per CCP2 (1-, 2- or 3-pole)	5 A / 240 V a.c.

* The CCP2-AUX-S CANNOT be mounted on the same side where the side rotary mechanism (CCP2-SM) is installed.
De-energize all circuits and follow all prescribed safety procedures before installing or removing the auxiliary contact device.

Agency information

- UL 98 Recognized, Guide WHTY2, File E155130
- cURus to Canadian Standard 22.2 No. 4-04
- Finger-safe in installed state
- RoHS compliant

Wiring

- 16-20 AWG (1.5 to 0.5 mm^2) single and dual stranded wire
- 20 AWG (1.5 mm^2) single and dual solid wire
- Torque 0.56 N•m (5 lb-in)
- Use only 75°C Cu wire

Technical installation

Mounts on either side of the 200 A switches and mechanically interlocks with the switch's handle with provided hardware. The CCP2-AUX-S CANNOT be mounted on the same side with an installed CCP2-SM side rotary mechanism, or the flange cable/rod operating mechanisms.

Storage and operating temperature

- -20°C to 75°C (-4°F to 167°F)

Installed on a CCP2-3-xx

Note: CCP2-AUX-S CANNOT be mounted on the same side as the side rotary mechanism CCP2-SM or the right side if a flange handle rod or cable operator is installed.

Packaging

- Packaged individually.

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CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 30 and 60 A CCP2 clockwise rotary switches

For a complete assembly, select from the following required and optional components, and accessories.

Required

	Catalog no.		
	Switches	**Rated current**	**Poles**
	Right front rotary		
	CCP2R-2-30CF	30	2
	CCP2R-3-30CF		3
	CCP2R-2-60CF	60	2
	CCP2R-3-60CF		3
	**Left front rotary**		
	CCP2RL-2-30CF	30	2
	CCP2RL-3-30CF		3
	CCP2RL-2-60CF	60	2
	CCP2RL-3-60CF		3
	**Right side rotary**		
	CCP2S-2-30CF	30	2
	CCP2S-3-30CF		3
	CCP2S-2-60CF	60	2
	CCP2S-3-60CF		3
	And		
	**Rotary handles**	**Description**	**Rating**
	CCP2-H4X-B1	Selector handle — black/grey	Type 1, 4X, 12
	CCP2-H4X-R1	Selector handle — red/yellow	
	CCP2-H4X-B2	Pistol handle — black/grey	
	CCP2-H4X-R2	Pistol handle — red/yellow	
	And		
	**Shafts (8 mm)**	**Length**	
	CCP2-SH1-290	290 mm	
	CCP2-SH1-490	490 mm	
	**NFPA 79 compliant handle**	**Color**	
	CCP2-NFPA-1	Red	

And

Optional accessories

	**Multi-wire lug kits**	**Description**
	CCP2-MW1-3	3-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3
	**Terminal shrouds**	**Description**
	CCP2-TS1-3	Pack of 3
	**Auxiliary contacts**	**Description — use with CCP2RL-(poles)-30/60CF switches**
	CCP2-AUX	NO/NC, 5 A / 240 V

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Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 30 and 60 A CCP2 switches

For a complete assembly, select from the following required and optional components, and accessories.

		Catalogue no.		
		Switches	**Rated current**	**Poles**
		Switch (used alone or with flange cable or flange rod handles)		
Required		CCP2-1-30CF	30	1
		CCP2-2-30CF		2
		CCP2-3-30CF		3
		CCP2-1-60CF	60	1
		CCP2-2-60CF		2
		CCP2-3-60CF		3
		And		
Optional accessories		**Multi-wire lug kits**	**Description**	
		CCP2-MW1-3	3-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-3	Pack of 3	
		**Auxiliary contacts**	**Description — mounts on right side, cannot be used with flange handle rod or cable operator**	
		CCP2-AUX	NO/NC, 5 A / 240 V	

Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 30 and 60 A CCP2 counterclockwise switches

For a complete assembly, select from the following required and optional components, and accessories.

Required

	Catalog no.		
	Switches	**Rated current**	**Poles**
	Left side rotary		
	CCP2SL-2-30CF	30	2
	CCP2SL-3-30CF		3
	CCP2SL-2-60CF	60	2
	CCP2SL-3-60CF		3
	And		
	**Rotary handles**	**Description**	**Rating**
	CCP2-H4X-B1L	Selector handle — black/grey	Type 1, 4X, 12
	CCP2-H4X-R1L	Selector handle — red/yellow	
	CCP2-H4X-B2L	Pistol handle — black/grey	
	CCP2-H4X-R2L	Pistol handle — red/yellow	
	And		
	**Shafts (8 mm)**	**Length**	
	CCP2-SH1-290	290 mm	
	CCP2-SH1-490	490 mm	
	**NFPA 79 compliant handle**	**Color**	
	CCP2-NFPA-1	Red	

And

Optional accessories

	**Multi-wire lug kits**	**Description**
	CCP2-MW1-3	3-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3
	**Terminal shrouds**	**Description**
	CCP2-TS1-3	Pack of 3
	**Auxiliary contacts**	**Description —mounts on right side**
	CCP2-AUX	NO/NC, 5 A / 240 V

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Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 100 A CCP2 clockwise rotary switches

For a complete assembly, select from the following required and optional components, and accessories.

Required		**Catalog no.**		
		Switches	**Rated current**	**Poles**
		Right front rotary		
		CCP2R-2-100CF	100	2
		CCP2R-3-100CF		3
		**Left front rotary**		
		CCP2RL-2-100CF	100	2
		CCP2RL-3-100CF		3
		**Right side rotary**		
		CCP2S-2-100CF	100	2
		CCP2S-3-100CF		3
		**And**		
		Rotary handles	**Description**	**Rating**
		CCP2-H4X-B1	Selector handle — black/grey	Type 1, 4X, 12
		CCP2-H4X-R1	Selector handle — red/yellow	
		CCP2-H4X-B2	Pistol handle — black/grey	
		CCP2-H4X-R2	Pistol handle — red/yellow	
		**And**		
		Shafts (8 mm)	**Length**	
		CCP2-SH1-290	290 mm	
		CCP2-SH1-490	490 mm	
		**NFPA 79 compliant handle**	**Color**	
		CCP2-NFPA-1	Red	
		And		
Optional accessories		**Multi-wire lug kits**	**Description**	
		CCP2-MW1-3	3-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-6	Pack of 3	
		**Auxiliary contacts**	**Description —mounts on right side**	
		CCP2-AUX	NO/NC, 5 A / 240 V	

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CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 100 A CCP2 switches

For a complete assembly, select from the following required and optional components, and accessories.

Required		**Catalog no.**		
		Switches	**Rated current**	**Poles**
		Switch (used alone or with flange cable or flange rod handles)		
		CCP2-1-100CF	100	1
		CCP2-2-100CF		2
		CCP2-3-100CF		3
		And		
Optional accessories		**Multi-wire lug kits**	**Description**	
		CCP2-MW1-6	6-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-6	Pack of 3	
		**Auxiliary contacts**	**Description — mounts on right side, cannot be used with flange handle rod or cable operator**	
		CCP2-AUX-100	NO/NC, 5 A / 240 V	

Data sheet 10801

Class CF - UL Low voltage fuse links and compact circuit protectors

CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 100 A CCP2 counterclockwise switches

For a complete assembly, select from the following required and optional components, and accessories.

Required		**Catalog no.**		
		Switches	**Rated current**	**Poles**
		Left side rotary		
		**CCP2SL-2-100CF**	**100**	**2**
		CCP2SL-3-100CF		**3**
		**And**		
		Rotary handles	**Description**	**Rating**
		CCP2-H4X-B1L	Selector handle — black/grey	Type 1, 4X, 12
		CCP2-H4X-R1L	Selector handle — red/yellow	
		CCP2-H4X-B2L	Pistol handle — black/grey	
		CCP2-H4X-R2L	Pistol handle — red/yellow	
		**And**		
		Shafts (8 mm)	**Length**	
		CCP2-SH1-290	290 mm	
		CCP2-SH1-490	490 mm	
		**NFPA 79 compliant handle**	**Color**	
		CCP2-NFPA-1	Red	
		And		
Optional accessories		**Multi-wire lug kits**	**Description**	
		CCP2-MW1-6	6-port multi-wire, 75°C 4-16 Cu/ 4-8 Al, includes terminal shrouds, pack of 3	
		**Terminal shrouds**	**Description**	
		CCP2-TS1-6	Pack of 3	
		**Auxiliary contacts**	**Description — mounts on right side**	
		CCP2-AUX-100	NO/NC, 5 A / 240 V	

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CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 200 A CCP2 switches

For a complete installation, select from the following required and optional components, and accessories.

		Catalog no.			
		Switches	**Rated current**	**Poles**	
Required		CCP2-1-200CF	200	1	
		CCP2-2-200CF		2	
		CCP2-3-200CF		3	
		**And**			
		Lug kits	**Description**		
		CCP2-L2-1	Stainless steel lug, 75° Cu only, 350 kcmil-4, 1 per pack		
		CCP2-L2-1A	Aluminum lug, 75°C Cu/Al, 350 kcmil-4, 1 per pack		
		CCP2-MW2-3	3-port multi-wire lug, 75°C Cu/Al, 2-14, 3 per pack, includes terminal shroud		
		CCP2-MW2-6	6-port multi-wire lug, 75°C Cu/Al, 6-14, 3 per pack, includes terminal shroud		
		And			
Optional accessories		**Rotary mechanisms**	**Description**		
		CCP2-SM	Side rotary mechanism - mounts on left or right side of 1-, 2- and 3-pole switches		
		CCP2-RM2	Front rotary mechanism - mounts only on 3-pole switches, requires clockwise rotating handle		
		**Rotary handles**	**Description**	**Rotation - must match switch rotation**	**Rating**
		CCP2-H4X-B3	Short pistol handle — black/grey	Clockwise For use with front rotary mechanism or side rotary mechanism CCP2-SM on the switch's right side	Type 1, 4X, 12
		CCP2-H4X-R3	Short pistol handle — red/yellow		
		CCP2-H4X-B4	Long pistol handle — black/grey		
		CCP2-H4X-R4	Long pistol handle — red/yellow		
		CCP2-H4X-B3L	Short pistol handle — black/grey	Counterclockwise Use **only** if installing side rotary mechanism CCP2-SM on the switch's left side	
		CCP2-H4X-R3L	Short pistol handle — red/yellow		
		CCP2-H4X-B4L	Long pistol handle — black/grey		
		CCP2-H4X-R4L	Long pistol handle — red/yellow		
		**Shafts (12 mm)**	**Length**		
		CCP2-SH2-225	225 mm		
		CCP2-SH2-425	425 mm		
		**NFPA 79 compliant handle**	**Color**		
		CCP2-NFPA-2	Red		

See further optional accessories page 84

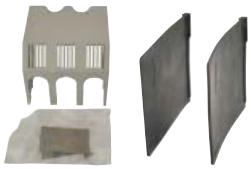
Data sheet 10801

CCP2 Compact Circuit Protector for class CF fuse links

Ordering a complete switch installation - 200 A CCP2 switches

For a complete installation, select from the following required and optional components, and accessories.

Accessories

	**Terminal shrouds**	**Description**
	CCP2-TS2-3	3-pole terminal shroud with phase shields, 1 per pack
	Phase barriers	**Description**
	CCP2-PB2	Phase barriers, 2 per pack
	**Control wire terminals**	**Description**
	CCP2-CWK2	1/4" quick-connect control wire terminals - mounts on installed lug (cannot be used with lug CCP2-L2-1), 12 per pack
	**Auxiliary contacts**	**Description**
	CCP2-AUX-S	NO/NC, 5 A, 240 V - Can be mounted on right or left side
	**Handle extension**	**Description**
	CCP2-HEX	Handle extension to facilitate operating 1-, 2 and 3-pole switches. Cannot be used when side or front rotary mechanisms or flange handle rod or cable operators are installed.

CCP2 Compact Circuit Protector for class CF fuse links

Motor sizing table (from NEC Tables 430.248 and 430.250) - Bussmann series TCF Low-Peak time-delay Class CF fuses

Voltage	Motor size (Hp)	Motor FLA (Amps)	Min (Amps)	NEC code max (Amps)	Heavy start* (Amps)
115 V a.c., 1-phase	1/6	4.4	10	10	10
	1/4	5.8	10	15	15
	1/3	7.2	15	15	15
	1/2	9.8	15	20	20
	3/4	13.8	25	25	30
	1	16	25	30	35
	1-1/2	20	30	35	45
	2	24	40	45	50
	3	34	50	60	70
	5**	56	90	100	125
	7-1/2	80	125	150	175
	10	100	150	175	225
230 V a.c., 1-phase	1/6	2.2	6	6	6
	1/4	2.9	6	6	6
	1/3	3.6	6	10	10
	1/2	4.9	10	10	10
	3/4	6.9	15	15	15
	1	8	15	15	17.5
	1-1/2	10	15	20	20
	2	12	20	25	25
	3	17	25	30	35
	5	28	45	50	60
	7-1/2	40	60	70	90
	10**	50	80	90	110
200 V a.c., 3-phase	1/2	2.5	6	6	6
	3/4	3.7	6	10	10
	1	4.8	10	10	10
	1-1/2	6.9	15	15	15
	2	7.8	15	15	17.5
	3	11	17.5	20	20
	5	17.5	30	35	35
	7-1/2	25.3	40	45	50
	20**	62.1	100	110	125
	25	78.2	125	150	175
	30	92	150	175	200

Note: Use NEC code max column for low to moderate reverse/jog/plug applications.

* Heavy Start permitted only if NEC code max does not allow motor start-up.

** If equipment terminations are rated for 60°C conductors only, the 60°C conductor ampacities must be utilized and therefore larger conductor sizes or conduit sizes may be required.

Voltage	Motor size (Hp)	Motor FLA (Amps)	Min (Amps)	NEC code max (Amps)	Heavy start* (Amps)
208 V a.c., 3-phase	1/2	2.4	6	6	6
	3/4	3.5	6	10	10
	1	4.6	10	10	10
	1-1/2	6.6	10	15	15
	2	7.5	15	15	15
	3	10.6	17.5	20	20
	5	16.7	25	30	35
	7-1/2	24.2	40	45	50
	20**	59.4	90	110	125
	25	74.8	125	150	150
	30	88	150	175	175
	40	114	175	200	250
230 V a.c., 3-phase	1/2	2.2	6	6	6
	3/4	3.2	6	6	6
	1	4.2	10	10	10
	1-1/2	6	10	15	15
	2	6.8	15	15	15
	3	9.6	15	20	20
	5	15.2	25	30	30
	7-1/2	22	35	40	45
	20**	54	90	100	110
	25	68	110	125	150
	30	80	125	150	175
	40	104	175	200	225
460 V a.c., 3-phase	1/2	1.1	3	3	3
	3/4	1.6	3	3	3
	1	2.1	6	6	6
	1-1/2	3	6	6	6
	2	3.4	6	6	6
	3	4.8	10	10	10
	5	7.6	15	15	15
	7-1/2	11	17.5	20	20
	10	14	25	25	30
	15	21	35	40	45
	20	27	40	50	60
	50**	65	100	125	125
	60	77	125	150	150
	75	96	150	175	200

Note: Use NEC code max column for low to moderate reverse/jog/plug applications.

* Heavy Start permitted only if NEC code max does not allow motor start-up.

** If equipment terminations are rated for 60°C conductors only, the 60°C conductor ampacities must be utilized and therefore larger conductor sizes or conduit sizes may be required.

CCP2 Compact Circuit Protector for class CF fuse links

Motor sizing table (from NEC Tables 430.248 and 430.250) - Bussmann series TCF Low-Peak time-delay Class CF fuses

Voltage	Motor size (Hp)	Motor FLA (Amps)	Min (Amps)	NEC code max (Amps)	Heavy start* (Amps)
575 V a.c., 3-phase	1/2	0.9	3	3	3
	3/4	1.3	3	3	3
	1	1.7	3	3	3
	1-1/2	2.4	6	6	6
	2	2.7	6	6	6
	3	3.9	6	10	10
	5	6.1	10	15	15
	7-1/2	9	15	20	20
	10	11	17.5	20	20
	40**	41	70	80	80
	50	52	80	100	110
	60	62	100	110	125
	75	77	125	150	150
	100	99	150	175	200

Note: Use NEC code max column for low to moderate reverse/jog/plug applications.

* Heavy Start permitted only if NEC code max does not allow motor start-up.
** If equipment terminations are rated for 60°C conductors only, the 60°C conductor ampacities must be utilized and therefore larger conductor sizes or conduit sizes may be required.

Class G - UL Low voltage fuse links and fuse holders

	Page
SC Fuse links	88
BG30x Fuse blocks	91
G30060 Fuse blocks	91
HEG non-breakaway in-line holders	93
HEH non-breakaway in-line holders	93
HPS-EE, HPS-JJ, HPS-FF Panel mount bayonet type knob holders	94



Class G - UL Low voltage fuse links and fuse holders

SC Class G general purpose fuse links

Specifications

Description

Fast-acting (1/2-6 A) and time-delay (7-60 A) Class G fuses. SC fuses are size rejecting measuring 13/32" in diameter by various lengths associated with their amp rating ranging from 1-5/16" to 2-1/4". This feature helps prevent overfusing.



Technical data

- Rated voltage
  - 600 V a.c. (1/2-20 A)
  - 480 V a.c. (25-60 A)
  - 170 V d.c. (1/2-20 A)
  - 300 V d.c. (25-60 A)
- Rated current 1/2 A to 60 A
- Breaking capacity
  - 100 kA RMS Sym.
  - 10 kA DC

Agency information

- UL Listed Std 248-5, Class G, Guide JDDZ, File E4273,
- CSA Certified, C22.2 No 248.5, Class 1422-01, File 53787
- RoHS compliant
- CE

Features

- Class G current limiting for component and branch circuit protection
- 100 kA interrupting rating provides cost-effective branch circuit fusing for systems with high short-circuit current levels
- Rejection feature with variations in length helps prevent overfusing

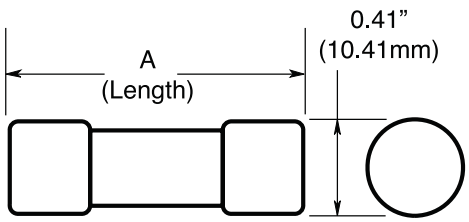
Typical applications

- Fusible branch circuit panelboards
- HV a.c. branch circuit protection

Carton quantity

Rated current	Carton qty
1/2 A - 20 A	4
25 A - 60 A	2

Dimensions in (mm)



Rated current	A
1/2-15	1.31 (33.3)
20	1.41 (35.8)
25 to 30	1.62 (41.1)
35 to 60	2.25 (57.1)

Data sheet 1024

SC Class G general purpose fuse links

Catalogue numbers

Catalogue numbers	Fuse body size	Rated voltage	Rated current
SC-1/2	1-5/16"	600 V a.c. / 170 V d.c.	0.5
SC-1	1-5/16"	600 V a.c. / 170 V d.c.	1
SC-1-1/2	1-5/16"	600 V a.c. / 170 V d.c.	1.5
SC-2	1-5/16"	600 V a.c. / 170 V d.c.	2
SC-2-1/2	1-5/16"	600 V a.c. / 170 V d.c.	2.5
SC-3	1-5/16"	600 V a.c. / 170 V d.c.	3
SC-4	1-5/16"	600 V a.c. / 170 V d.c.	4
SC-5	1-5/16"	600 V a.c. / 170 V d.c.	5
SC-6	1-5/16"	600 V a.c. / 170 V d.c.	6
SC-7	1-5/16"	600 V a.c. / 170 V d.c.	7
SC-8	1-5/16"	600 V a.c. / 170 V d.c.	8
SC-10	1-5/16"	600 V a.c. / 170 V d.c.	10
SC-12	1-5/16"	600 V a.c. / 170 V d.c.	12
SC-15	1-5/16"	600 V a.c. / 170 V d.c.	15
SC-20	1-13/32"	600 V a.c. / 170 V d.c.	20
SC-25	1-5/8"	480 V a.c. / 300 V d.c.	25
SC-30	1-5/8"	480 V a.c. / 300 V d.c.	30
SC-35	2-1/4"	480 V a.c. / 300 V d.c.	35
SC-40	2-1/4"	480 V a.c. / 300 V d.c.	40
SC-45	2-1/4"	480 V a.c. / 300 V d.c.	45
SC-50	2-1/4"	480 V a.c. / 300 V d.c.	50
SC-60	2-1/4"	480 V a.c. / 300 V d.c.	60

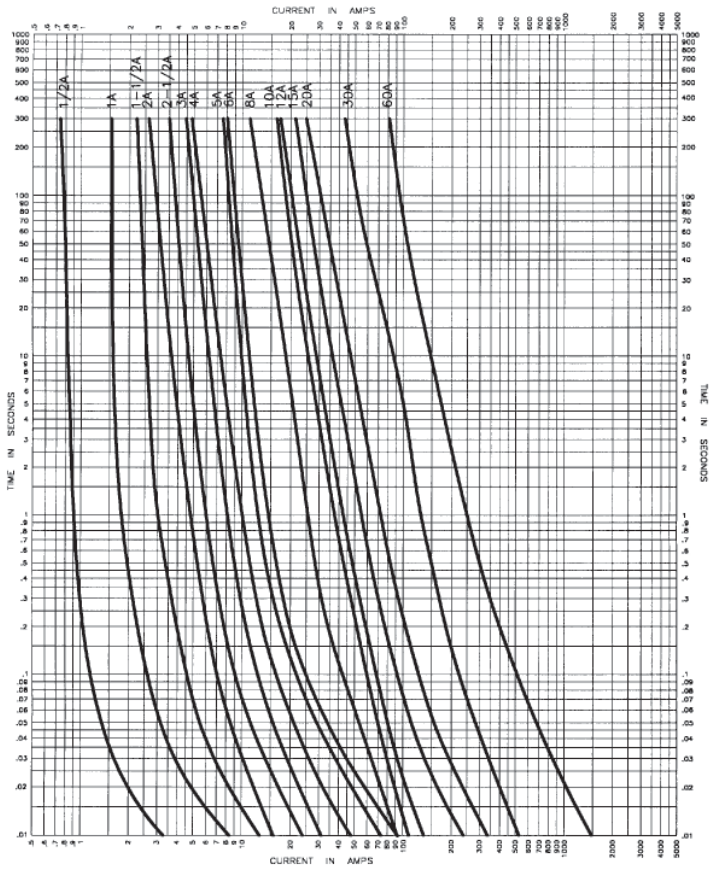
Compatible fuse blocks, panel mount holders and in-line holders

	Fuse blocks				Panel mount holders	In-line holders
Catalogue numbers	Screw with quck connect	Pressure plate w/ quick-connect	Box lug	Box lug w/ retaining clip	HPx Bayonet type	HEx
SC-1/2	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-1	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-1-1/2	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-2	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-2-1/2	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-3	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-4	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-5	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-6	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-7	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-8	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-10	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-12	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	N/A
SC-15	BG301(pole)SQ	BG301(pole)PQ	BG301(pole)B	N/A	HPG-EE and HPS-EE	HEG
SC-20	BG302(pole)SQ	BG301(pole)PQ	BG302(pole)B	N/A	HPS-JJ	HEH
SC-25	BG303(pole)S	BG303(pole)P	BG303(pole)B	N/A	HPS-FF	HEC
SC-30	BG303(pole)S	BG303(pole)P	BG303(pole)B	N/A	HPS-FF	HEC
SC-35	N/A	N/A	N/A	G30060-(pole)CR	N/A	HEJ
SC-40	N/A	N/A	N/A	G30060-(pole)CR	N/A	HEJ
SC-45	N/A	N/A	N/A	G30060-(pole)CR	N/A	HEJ
SC-50	N/A	N/A	N/A	G30060-(pole)CR	N/A	HEJ
SC-60	N/A	N/A	N/A	G30060-(pole)CR	N/A	HEJ

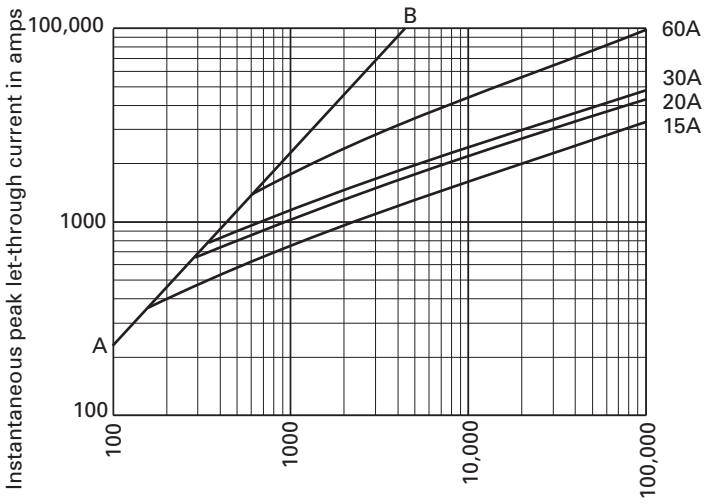
Class G - UL Low voltage fuse links and fuse holders

SC Class G general purpose fuse links

Time-current characteristics — average melt



Current limitation curves



Prospective short-circuit current (Symmetrical RMS Amps)
A-B = Asymmetrical available peak (2.3 x Sym. RMS Amps)

BG and G Class G fuse blocks

Specifications

RoHS 2011/65/EU



Description

Eaton's Bussmann series open style BG and G fuse blocks are available in 1-, 2- and 3-pole configurations and offer a variety of terminal options.

Technical data

- Rated voltage
  - 600 V (up to 20 A)
  - 480 V (25 A to 60 A)
- Rated current up to 60 A
- SCCR 100 kA RMS Sym.

Agency information

- UL Listed, 4248-5, Guide IZLT, File E14853
- 1-60 A CSA Certified, C22.2 No. 39, Class 6225-01, File 47235
- RoHS compliant

Mounting

- Panel
- DIN-Rail with DRA-1 adapter

Catalogue numbers

	Screw w/ quick-connect*	Pressure plate w/ quick-connect*	Box lug	Box lug w/ retaining clip	Poles	Compatible fuse links
Up to 15	BG3011SQ	BG3011PQ	BG3011B	N/A	1	SC-1/2 to SC-15
	BG3012SQ	BG3012PQ	BG3012B	N/A	2	
	BG3013SQ	BG3013PQ	BG3013B	N/A	3	
20	BG3021SQ	BG3021PQ	BG3021B	N/A	1	SC-20
	BG3022SQ	BG3022PQ	BG3022B	N/A	2	
	BG3023SQ	BG3023PQ	BG3023B	N/A	3	
25-30	BG3031S	BG3031P	BG3031B	N/A	1	SC-20 and SC-35
	BG3032S	BG3032P	BG3032B	N/A	2	
	BG3033S	BG3033P	BG3033B	N/A	3	
35-60	N/A	N/A	N/A	G30060-1CR	1	SC-35 to SC-60
	N/A	N/A	N/A	G30060-2CR	2	
	N/A	N/A	G30060-3C**	G30060-3CR	3	
AWG wire range/type	10-14 Cu	10-18 Cu	6-14 Cu (1-30 A) 2-14 Cu (35-60 A) 2-8 Al (35-60 A)	2-14 Cu 2-8 Al	N/A	N/A

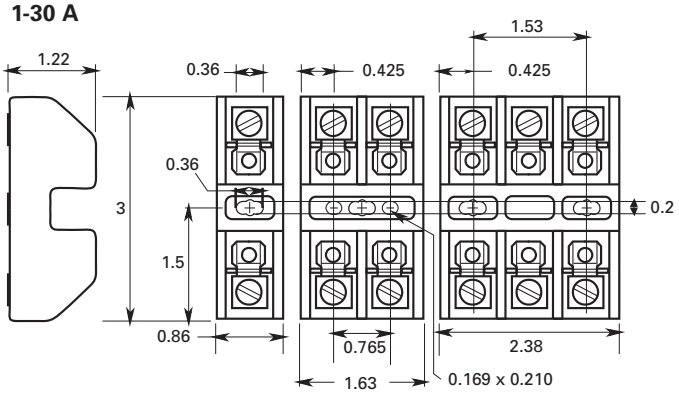
* Quick-connect rated 20 A max.
**Not RoHS compliant.

Data sheet 1106

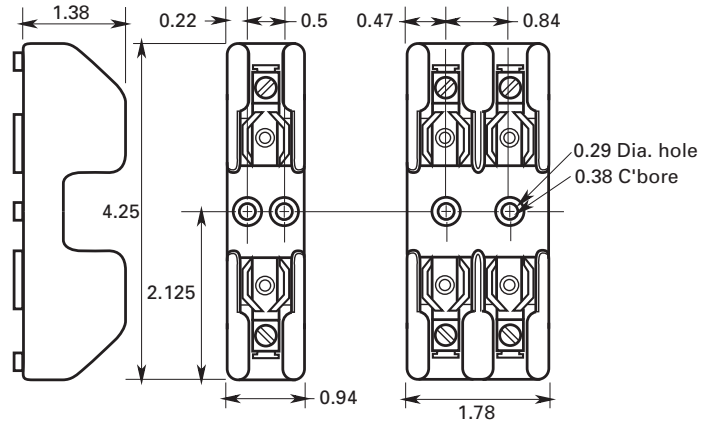
BG and G Class G fuse blocks

Dimensions in

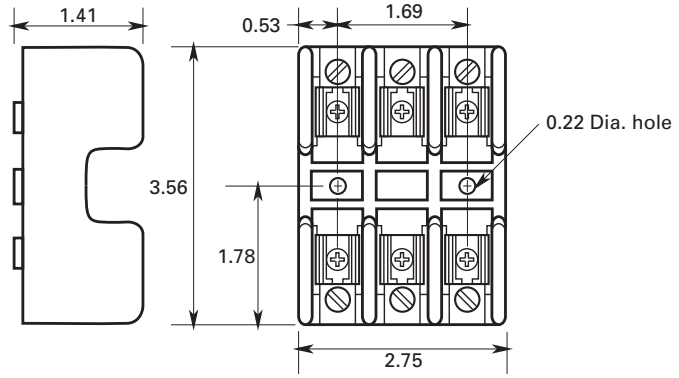
1-30 A



35-60 A



35-60 A 3-Pole G30060-3C and G30060-3CR



HEG and HEH † single-pole Class G fuse non-breakaway in-line holders

Specifications

Description

Class G size-rejecting non-breakaway submersible, single-pole in-line fuse holders available with many terminal options to meet application needs. Optional insulating boots provide additional protection from dust and moisture ingress (order separately).

RoHS 2011/65/EU

HEG

- 600 V
- 15 A



HEH

- 600 V
- 20 A



Technical data*

- Rated voltage up to 600 V
- Rated current up to 60 A
- SCCR 200 kA RMS Sym.

* Dependant upon fuse and conductor rating.

Insulating boots

Insulating boots are not included. Two insulating boots must be ordered separately, if required, for each holder ordered. When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200 percent of the RMS load current.

Catalogue numbers

Catalogue numbers	Description
2A0660	Single conductor
2A0661	Dual conductor

Recommended crimping tools

This list is not intended to exclude the use of other crimping tools that can provide similar crimps or indents.

Terminal code	T & B P/N (Die)	Terminal code	T & B P/N (Die)
A	WT-111M (C)	D	TBM5 (Brown)
	Sta-Kon ERG4002 (C)		TBM8 (Brown)
B	WT-115A (D)		WT-115A (F)
C	TBM5 (Grey)	Z	WT-111M (A)
	WT-115A (E)		Sta-Kon ERG4002 (A)
N, P, Q, R, T	TBM8 (Orange)	N/A	N/A

Non-breakaway catalogue number system

Rated current	Catalogue symbol	Loadside terminal	Lineside terminal	Loadside terminal: Terminal type	Loadside terminal: AWG Wire range*	Lineside terminal: Terminal type	Lineside terminal: AWG wire range*	HET neutral equivalent	Compatible fuse links
15	HEG	A	A	Cu crimp	8-16; (2) 12-16	Cu crimp	8-16; (2) 12-16	N/A	SC-1/2 to SC-15
20	HEH	A	A	Cu crimp	8-16; (2) 12-16	Cu crimp	8-16; (2) 12-16	N/A	SC-20

* Solid/stranded conductors unless otherwise noted.
† Not dual wire rated. One wire per opening.
††Same as Catalogue number as HEJ-LL, but packaged with two 2A0660 single conductor insulating boots.

To order: specify Catalogue symbol and the loadside terminal code. Then select a lineside terminal code that is available with the loadside terminal. Example: HEJ-BB defines a non-breakaway holder with a loadside copper crimp terminal for a single #6 or two #10 wires with a lineside copper crimp terminal for a single #6 or two #10 wires.

Data sheets 2123 (HEJ), 2124 (HEG, HEH)

Class G - UL Low voltage fuse links and fuse holders

HPS panel mount bayonet-type knob holders SC fuse links

Specifications



Description

- Bayonet-type knob
- Combination 0.25" quick-connect/solder terminals. (Standard, solder type terminals available.)
- The -EE, -JJ, -FF, and -RR holders are UL Recognized for applications requiring branch circuit protection
- Do not put tension on line (rear) terminal

Technical data*

- Rated voltage up to 600 V
- Rated current up to 30 A

* See Catalogue numbers for Technical data by specific holder.

Agency information

- UL Recognized, Guide IZLT2, File E14853
- CSA Certified, Class 6225-01, File 47235
- CE

Flammability rating:

- UL 94HB

Terminals

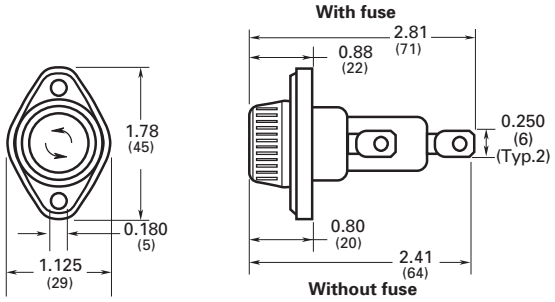
- Combination 1/4" quick-connect/solder terminals

Catalogue numbers

Catalogue no.	Rated current	Rated voltage (AC)	Fuse/description/length
HPS-EE*	15	600	SC Class G up to 15 A , 1-5/16"
HPS-JJ*	20	600	SC Class G 20 A, 1-13/32"
HPS-FF*†	30[1]	480	SC Class G 25 and 30 A, 1-5/8"

* -EE, -JJ, -FF suffix versions are UL Recognized for applications requiring branch circuit protection.
1 20 A max when used with quick-connect terminals.

Dimensions in (mm)



Data sheet no. 2113

Class J - UL Low voltage fuse links and fuse holders

	Page
LPJ-SP Fuse links	96
JKS Fuse links	99
CH30J Fuse holders	102
CH60J Fuse holders	102
JT(N)600 Modular finger safe fuse holders	103
JP Pyramid style 3-pole fuse blocks	105
JM Modular ferrule and knifeblade fuse blocks	106
BH-0111 Modular open center fuse block	115
BH-3144 and BH-3145 Modular open center fuse blocks	117



Class J - UL Low voltage fuse links and fuse holders

LPJ_SP Class J Low-Peak dual-element, time-delay fuse links

Specifications



Description

Dual-element, time-delay Class J fuse; 10 seconds (minimum) at 500% rated Rated current, available with optional indication on

Technical data

- Rated voltage
  - 600 V a.c. (or less)
  - 300 V d.c. (or less)*
- Rated current: 1 A to 600 A
- Breaking capacity:
  - 300 kA RMS Sym.
  - 100 kA DC

* Does not apply to indicating versions.

Agency information

- UL Listed, Guide JDDZ, File E4273
- CSA Certified Class J per CSA 22.2 No 248.8, Class 1422-02, File 53787
- RoHS compliant
- CE

Features

- Separate overload and short-circuit elements provide time delay for sizing of high inrush loads linked with Class J current limitation
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit
- Series combination Technical data with branch circuit breakers allows broad range of coverage, independent of breaker manufacturer

Typical applications

- Power panelboards
- Branch circuit breaker panelboard mains
- Machinery disconnects
- Industrial control

Carton quantity

10

Data sheets 1006 (0 to 60 A) and 1007 (70 to 600 A)

LPJ_SP Class J Low-Peak dual-element, time-delay fuse links

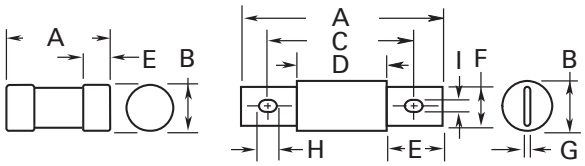
Catalogue numbers

Catalogue numbers without indication	Rated voltage	Catalogue numbers with indication	Rated voltage	Rated current (Amps)	JM600 Modular Open blocks	JP600 Pyramid blocks	JT600 Safety J ™ holders	CH Holders
LPJ-1SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	1	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-1-1/4SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	1.25	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-1-6/10SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	1.6	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-1-8/10SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	1.8	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-2SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	2	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-2-1/4SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	2.25	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-2-1/2SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	2.5	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-2-8/10SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	2.8	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-3SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	3	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-3-2/10SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	3.2	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-3-1/2SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	3.5	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-4SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	4	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-4-1/2SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	4.5	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-5SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	5	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-5-6/10SP	600 V a.c./ 300 V d.c.	N/A	600 V a.c.	5.6	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-6SP	600 V a.c./ 300 V d.c.	LPJ-6SPI	600 V a.c.	6	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-7SP	600 V a.c./ 300 V d.c.	LPJ-7SPI	600 V a.c.	7	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-8SP	600 V a.c./ 300 V d.c.	LPJ-8SPI	600 V a.c.	8	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-9SP	600 V a.c./ 300 V d.c.	LPJ-9SPI	600 V a.c.	9	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-10SP	600 V a.c./ 300 V d.c.	LPJ-10SPI	600 V a.c.	10	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-12SP	600 V a.c./ 300 V d.c.	LPJ-12SPI	600 V a.c.	12	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-15SP	600 V a.c./ 300 V d.c.	LPJ-15SPI	600 V a.c.	15	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-17-1/2SP	600 V a.c./ 300 V d.c.	LPJ-17-1/2SPI	600 V a.c.	17.5	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-20SP	600 V a.c./ 300 V d.c.	LPJ-20SPI	600 V a.c.	20	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-25SP	600 V a.c./ 300 V d.c.	LPJ-25SPI	600 V a.c.	25	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-30SP	600 V a.c./ 300 V d.c.	LPJ-30SPI	600 V a.c.	30	JM60030-x	JP60030-3	JT60030	CH30Jx
LPJ-35SP	600 V a.c./ 300 V d.c.	LPJ-35SPI	600 V a.c.	35	JM60060-x	N/A	JT60060	CH60Jx
LPJ-40SP	600 V a.c./ 300 V d.c.	LPJ-40SPI	600 V a.c.	40	JM60060-x	N/A	JT60060	CH60Jx
LPJ-45SP	600 V a.c./ 300 V d.c.	LPJ-45SPI	600 V a.c.	45	JM60060-x	N/A	JT60060	CH60Jx
LPJ-50SP	600 V a.c./ 300 V d.c.	LPJ-50SPI	600 V a.c.	50	JM60060-x	N/A	JT60060	CH60Jx
LPJ-60SP	600 V a.c./ 300 V d.c.	LPJ-60SPI	600 V a.c.	60	JM60060-x	N/A	JT60060	CH60Jx
LPJ-70SP	600 V a.c./ 300 V d.c.	LPJ-70SPI	600 V a.c.	70	JM60100-x	N/A	N/A	N/A
LPJ-80SP	600 V a.c./ 300 V d.c.	LPJ-80SPI	600 V a.c.	80	JM60100-x	N/A	N/A	N/A
LPJ-90SP	600 V a.c./ 300 V d.c.	LPJ-90SPI	600 V a.c.	90	JM60100-x	N/A	N/A	N/A
LPJ-100SP	600 V a.c./ 300 V d.c.	LPJ-100SPI	600 V a.c.	100	JM60100-x	N/A	N/A	N/A
LPJ-110SP	600 V a.c./ 300 V d.c.	LPJ-110SPI	600 V a.c.	110	JM60200-x	N/A	N/A	N/A
LPJ-125SP	600 V a.c./ 300 V d.c.	LPJ-125SPI	600 V a.c.	125	JM60200-x	N/A	N/A	N/A
LPJ-150SP	600 V a.c./ 300 V d.c.	LPJ-150SPI	600 V a.c.	150	JM60200-x	N/A	N/A	N/A
LPJ-175SP	600 V a.c./ 300 V d.c.	LPJ-175SPI	600 V a.c.	175	JM60200-x	N/A	N/A	N/A
LPJ-200SP	600 V a.c./ 300 V d.c.	LPJ-200SPI	600 V a.c.	200	JM60200-x	N/A	N/A	N/A
LPJ-225SP	600 V a.c./ 300 V d.c.	LPJ-225SPI	600 V a.c.	225	JM60400-x	N/A	N/A	N/A
LPJ-250SP	600 V a.c./ 300 V d.c.	LPJ-250SPI	600 V a.c.	250	JM60400-x	N/A	N/A	N/A
LPJ-300SP	600 V a.c./ 300 V d.c.	LPJ-300SPI	600 V a.c.	300	JM60400-x	N/A	N/A	N/A
LPJ-350SP	600 V a.c./ 300 V d.c.	LPJ-350SPI	600 V a.c.	350	JM60400-x	N/A	N/A	N/A
LPJ-400SP	600 V a.c./ 300 V d.c.	LPJ-400SPI	600 V a.c.	400	JM60400-x	N/A	N/A	N/A
LPJ-450SP	600 V a.c./ 300 V d.c.	LPJ-450SPI	600 V a.c.	450	JM60600-x	N/A	N/A	N/A
LPJ-500SP	600 V a.c./ 300 V d.c.	LPJ-500SPI	600 V a.c.	500	JM60600-x	N/A	N/A	N/A
LPJ-600SP	600 V a.c./ 300 V d.c.	LPJ-600SPI	600 V a.c.	600	JM60600-x	N/A	N/A	N/A

Class J - UL Low voltage fuse links and fuse holders

LPJ_SP Class J Low-Peak dual-element, time-delay fuse links

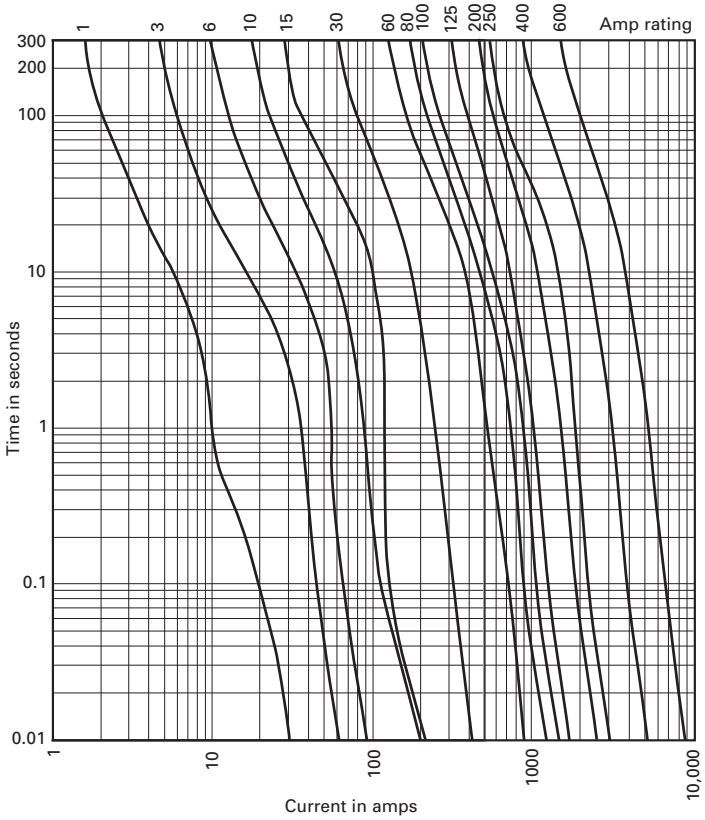
Dimensions in (mm)



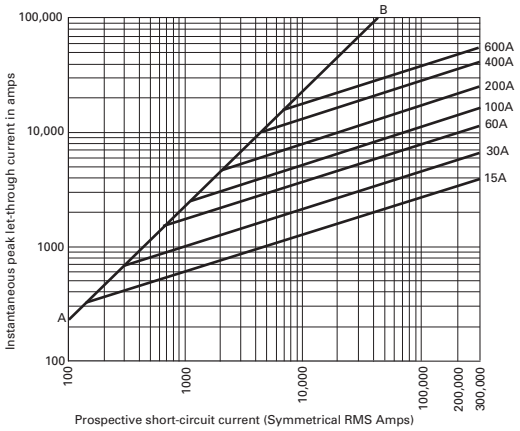
1 to 60A 70 to 600A

Amp range	A	B	C	D	E	F	G	H	I
1-30	2.25 (57)	0.81 (21)	N/A	N/A	0.5 (13)	N/A	N/A	N/A	N/A
35-60	2.38 (60)	1.06 (27)	N/A	N/A	0.63 (16)	N/A	N/A	N/A	N/A
70-100	4.63 (118)	1.13 (29)	3.63 (92)	2.63 (67)	1.0 (25)	0.75 (29)	0.13 (3)	0.41 (10)	0.28 (7)
110-200	5.75 (146)	1.63 (41)	4.38 (111)	3.0 (76)	1.38 (35)	1.13 (29)	0.19 (5)	0.38 (10)	0.28 (7)
225-400	7.12 (181)	2.11 (54)	5.25 (133)	3.26 (83)	1.87 (48)	1.62 (41)	0.25 (6)	0.56 (14)	0.4 (10)
450-600	8.0 (203)	2.6 (66)	6.0 (152)	3.31 (84)	2.12 (54)	2.0 (51)	0.53 (14)	0.72 (18)	0.53 (14)

Time-current characteristics — average melt



Current limitation curves



Data sheets 1006 (0 to 60 A) and 1007 (70 to 600 A)

JKS Class J Limitron™ fast-acting fuse links

Specifications



Description

Fast-acting, Class J current-limiting fuse. For superior electrical protection, Eaton recommends upgrading JKS fuse applications to Bussmann series Low-Peak LPJ fuses

Technical data

- Rated voltage 600 V a.c. (or less)
- Rated current: 1 A to 600 A
- Breaking capacity: 200 kA RMS Sym.

Agency information

- 600 V a.c., UL Listed, Std. 248-8, Class J, Guide JDDZ, File E4273,
- CSA Certified, Class 1422-02, File 53787
- CE

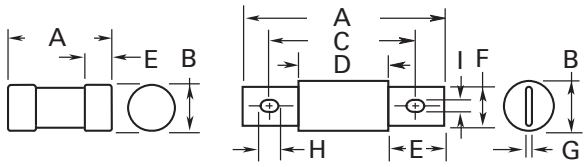
Features

- Current limitation for non-inductive circuits provides Class J current-limiting response to maximum ground fault and short-circuit conditions
- 200 kA interrupting rating provides protection at all circuit locations
- Economical circuit protection for high-fault current circuits

Typical applications

- Power panelboards
- Machinery disconnects

Dimensions



Rated current	A	B	C	D	E	F	G	H	I
1-30	2.25 (57)	0.81 (21)	N/A	N/A	0.5 (13)	N/A	N/A	N/A	N/A
35-60	2.38 (60)	1.06 (27)	N/A	N/A	0.63 (16)	N/A	N/A	N/A	N/A
70-100	4.63 (118)	1.13 (29)	3.63 (92)	2.63 (67)	1.0 (25)	0.75 (29)	0.13 (3)	0.41 (10)	0.28 (7)
110-200	5.75 (146)	1.63 (41)	4.38 (111)	3.0 (76)	1.38 (35)	1.13 (29)	0.19 (5)	0.38 (10)	0.28 (7)
225-400	7.12 (181)	2.11 (54)	5.25 (133)	3.26 (83)	1.87 (48)	1.62 (41)	0.25 (6)	0.56 (14)	0.4 (10)
450-600	8.0 (203)	2.6 (66)	6.0 (152)	3.31 (84)	2.12 (54)	2.0 (51)	0.53 (14)	0.72 (18)	0.53 (14)

Data sheets 1026 (0 to 60 A) and 1027 (70 to 600 A)

Class J - UL Low voltage fuse links and fuse holders

JKS Class J Limitron™ fast-acting fuse links

Catalogue numbers

Catalogue numbers	Rated voltage	Rated current (Amps)	JM600 Modular Open blocks	JP600 Pyramid blocks	JT600 Safety J ™ holders	CH Holders
JKS-1	600 V a.c.	1	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-2	600 V a.c.	2	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-3	600 V a.c.	3	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-4	600 V a.c.	4	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-5	600 V a.c.	5	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-6	600 V a.c.	6	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-8	600 V a.c.	8	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-10	600 V a.c.	10	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-12	600 V a.c.	12	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-15	600 V a.c.	15	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-20	600 V a.c.	20	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-25	600 V a.c.	25	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-30	600 V a.c.	30	JM60030-x	JP60030-3	JT60030	CH30Jx
JKS-35	600 V a.c.	35	JM60060-x	N/A	JT60060	CH60Jx
JKS-40	600 V a.c.	40	JM60060-x	N/A	JT60060	CH60Jx
JKS-45	600 V a.c.	450	JM60060-x	N/A	JT60060	CH60Jx
JKS-50	600 V a.c.	50	JM60060-x	N/A	JT60060	CH60Jx
JKS-60	600 V a.c.	60	JM60060-x	N/A	JT60060	CH60Jx
JKS-70	600 V a.c.	70	JM60100-x	N/A	N/A	N/A
JKS-80	600 V a.c.	80	JM60100-x	N/A	N/A	N/A
JKS-90	600 V a.c.	90	JM60100-x	N/A	N/A	N/A
JKS-100	600 V a.c.	100	JM60100-x	N/A	N/A	N/A
JKS-110	600 V a.c.	110	JM60200-x	N/A	N/A	N/A
JKS-125	600 V a.c.	125	JM60200-x	N/A	N/A	N/A
JKS-150	600 V a.c.	150	JM60200-x	N/A	N/A	N/A
JKS-175	600 V a.c.	175	JM60200-x	N/A	N/A	N/A
JKS-200	600 V a.c.	200	JM60200-x	N/A	N/A	N/A
JKS-225	600 V a.c.	225	JM60400-x	N/A	N/A	N/A
JKS-250	600 V a.c.	250	JM60400-x	N/A	N/A	N/A
JKS-300	600 V a.c.	300	JM60400-x	N/A	N/A	N/A
JKS-350	600 V a.c.	350	JM60400-x	N/A	N/A	N/A
JKS-400	600 V a.c.	400	JM60400-x	N/A	N/A	N/A
JKS-450	600 V a.c.	450	JM60600-x	N/A	N/A	N/A
JKS-500	600 V a.c.	500	JM60600-x	N/A	N/A	N/A
JKS-600	600 V a.c.	600	JM60600-x	N/A	N/A	N/A

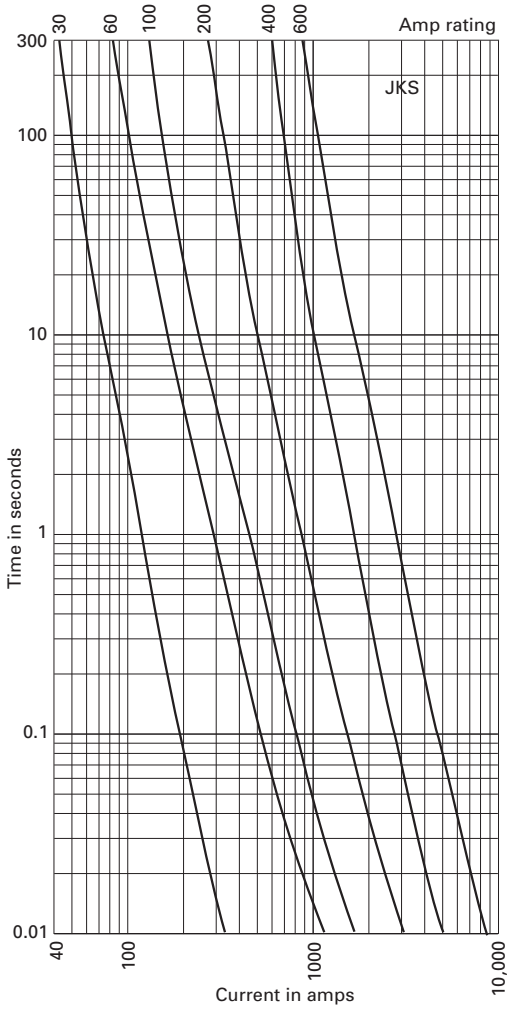
Notes:

The **JM** and **CH** are available in 1-, 2- and 3-pole versions

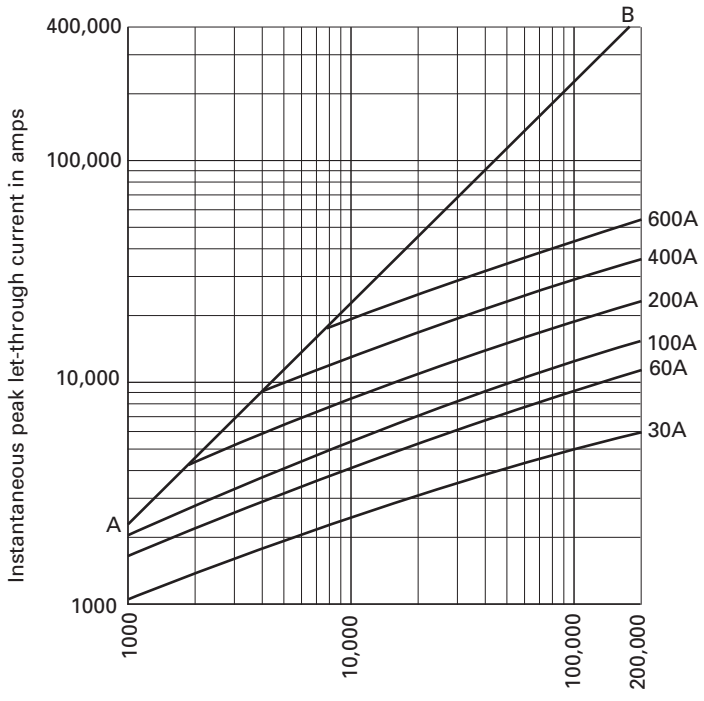
Data sheets 1026 (0 to 60 A) and 1027 (70 to 600 A)

JKS Class J Limitron™ fast-acting fuse links

Time-current characteristics — average melt



Current limitation curves



Data sheets 1026 (0 to 60 A) and 1027 (70 to 600 A)

Class J - UL Low voltage fuse links and fuse holders

CH30J and CH60J Class J fuse holder

Specifications

Description

The CH_J_ Class J fuse holders are available in 30 and 60 amp Technical data featuring IP20 finger-safe construction that can be either DIN-Rail or panel mounted. Available as factory configured 1-, 2- or 3-pole holders they are available with optional open fuse indication to speed troubleshooting.

Technical data

- Rated voltage 600 V (or less)
- Rated current: 30 A and 60 A
- SCCR 200 kA

Agency information

- UL Listed, Guide IZLT, File E14853, UL 4248/CSA 22.2 No. 4248.P
- CE

Conductors

- Single 1-18 AWG and dual 3-18 AWG Cu solid and stranded conductors

Terminal torque Technical data

- 10-18 AWG 24 lb-in
- 1-8 AWG 35 lb-in

Storage and operating temperature range*

- -20°C to +75°C

* For fuse selection on applications above or below 25°C, consult derating charts in the Bussmann Division publication no. 3002 "Selecting Protective Devices" (SPD).

- Flammability rating UL 94V0



30 A 60 A

Dimensions mm

Fuse Rated current	Poles	W	D	H
Up to 30 A	1	32	70	115
	2	64		
	3	96		
35-60 A	1	40	83	125
	2	80		
	3	120		

Features

- Choice of local fuse indication; easyID™ viewing window (for seeing indicator on LPJ-SPI indicating fuse) or neon lamp
- Versatile 1-, 2- and 3-pole versions for 0-30 A and 35-60 A fuses with dual wire rated connections simplify wiring
- Improved electrical safety with IP20 finger-safe construction with lock-out/tag-out feature. 3-phase fuse extraction assures all phases are opened for service work
- Flexible panel/35mm DIN-Rail mounting

Catalogue numbers

Without indication*	With indication**	Poles	Rated current	Rated voltage (AC/DC)	Compatible fuse links	IP20 finger-safe	AWG Cu wire range	Padlockable	Mounting
CH30J1	CH30J1I	1	30	600	LPJ-1SP to LPJ-30SP JKS-1 to JKS-30	Yes	Single 1-18, dual 3-18	Yes	35mm DIN/ panel
CH30J2	CH30J2I	2							
CH30J3	CH30J3I	3							
CH60J1	CH60J1I	1	60	600	LPJ-35SP to LPJ-60SP JKS-60	Yes	Single 1-18, dual 3-18	Yes	35mm DIN/ panel
CH60J2	CH60J2I	2							
CH60J3	CH60J3I	3							

* Local fuse indication 6 Rated current and above possible using Bussmann series LPJ_SPI permanent indication fuses.
**Neon indication non-fuse dependent, minimum voltage 90 V.

Data sheet 2144

JT(N)60030 and JT(N)60060 Safety J™ modular finger-safe Class J fuse holders

Specifications

RoHS 2011/65/EU



30 A version



60 A version

Description

Eaton's Bussmann series Safety J™ modular fuse holders are available in indicating and non-indicating versions. Finger-safe construction improves electrical safety, while modular construction permits dovetailing the required number of poles* at point of use. DIN-Rail mount provides for easy installation. Optional open fuse indication speeds troubleshooting.

* JT(N)60030 cannot be dovetailed to JT(N)60060.

Technical data

- Rated voltage 600 V a.c.
- Rated current
  - Up to 30 A (JT(N)60030)
  - 35–60 A (JT(N)60060)
- SCCR
  - 200 kA RMS Sym.
  - 300 kA self certified using Bussmann series LPJ_SP fuses

Agency information

- Listed to UL 4248: Guide IZLT, File 14853,
- CSA Certified: Class 6225-01, File 47235. IP20 per IEC 60529
- CE

JT60030, JTN60030 Flammability rating

- UL 94V0

Open fuse indication

Min. voltage: 90 V; neon lamp "ON" when fuse opens, voltage source and current path are present.

Features

- 300 kA SCCR with Bussmann series LPJ_SP fuses
- Rapid, flexible 35mm DIN-Rail mounting
- One piece interlocking design for assembling multiple pole blocks reduces inventory costs
- Removable fuse carrier allows fuse replacement away from base while maintaining finger-safe rating

Typical applications

- Industrial controls
- Process controls
- Small horsepower VFDs

Data sheet no. 1152

Class J - UL Low voltage fuse links and fuse holders

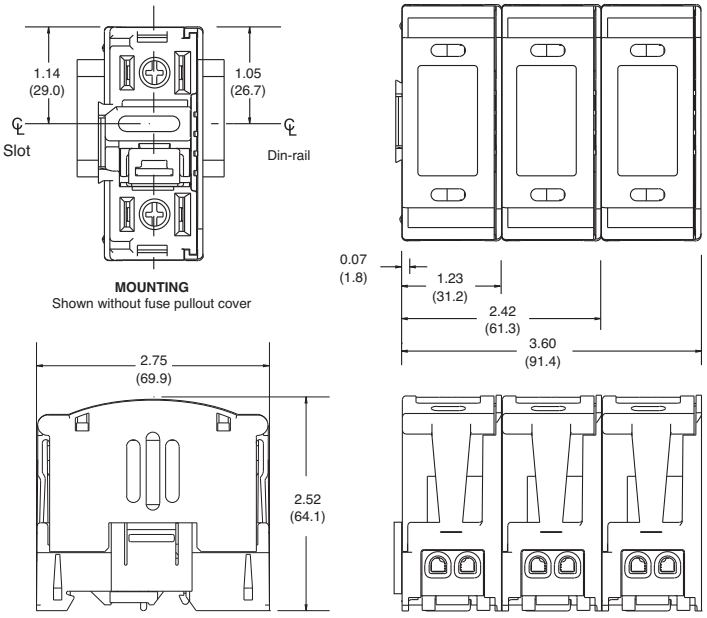
JT(N)60030 and JT(N)60060 Safety J™ modular finger-safe Class J fuse holders

Catalogue numbers and conductor information

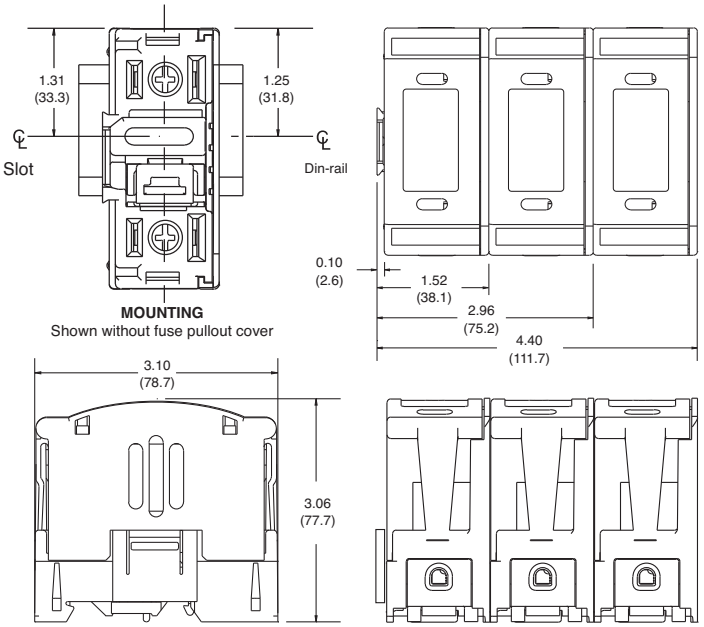
Holder Rated current	Non-indicating	Indicating*	Compatible fuse links	75°C Cu conductor size (AWG) and type	Terminal torque N•m (lb-in)
30	JT60030	JTN60030	LPJ-1SP to LPJ-30SP JKS-1 to JKS-30	8-18 stranded, single or dual** 10-18 solid, single or dual**	2.26 (20)
60	JT60060	JTN60060	LPJ-35SP to LPJ-60SP JKS-60	4-14 stranded or solid, single 8-10 stranded, dual**	5.1 (45)

* Indication non-fuse dependent, minimum 90 V.
**Dual wire applications must use conductors of the same size and type.

Dimensions in (mm) - JT(N)60030



Dimensions in (mm)- JT(N)60060



JT(N)60030

Data sheet no. 1152

JP pyramid style 3-pole Class J fuse blocks

Specifications

RoHS 2011/65/EU



Description

Eaton's Bussmann series JP (pyramid) open fuse block provides a means of mounting a three-pole 30 amp Class J fuse block with a footprint that is narrower than traditional solutions.

Technical data

- Rated voltage 600 V a.c.
- Rated current 30 A
- SCCR 200 kA RMS Sym.

Agency information

- UL Listed, UL 4248, Guide IZLT, File E14853
- CSA Certified, C22.2 No. 39, Class 4225-04, File 47235
- CE

Flammability rating

- UL 94V0

Mounting

- Panel
- 35mm DIN-Rail*

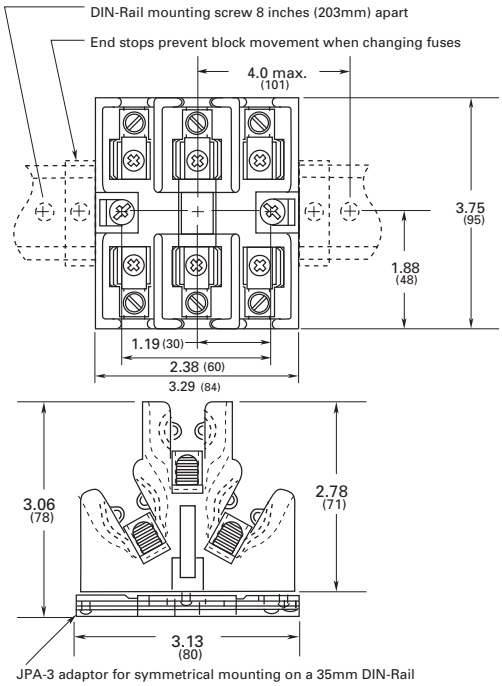
* To order DIN-Rail, specify Catalogue number DRL35MMLO (1 meter).

Catalogue number

	Mounting			Terminals/AWG wire range/type	
Catalogue no.	Panel	DIN-Rail*	Compatible fuse links	Pressure plate	Box lug
JP60030-3PR	Yes	No	LPJ-1SP to LPJ-30SP	10-14 Cu	—
JP60030-3CR	Yes	No	JKS-1 to JKS-30	—	2-14 Cu/Al
JP60030-3COR	Yes	No		—	2-14 Cu
JP60030-3PRA	No	Yes		10-14 Cu	—
JP60030-3CRA	No	Yes		—	2-14 Cu/Al
JP60030-3CORA	No	Yes		—	2-14 Cu

* Requires adapter, order Catalogue number JPA-3.

Dimensions in



Data sheet 1108

Class J - UL Low voltage fuse links and fuse holders

JM modular ferrule and knifeblade Class J fuse blocks

Specifications

Description

Eaton's Bussmann series Class J modular fuse blocks enhance safety for any panel or electrical system design and are available for the full Class J fuse amp range.

All blocks are available as single-pole versions that snap together at point of use, or as factory configured 2-, and 3-pole versions.

All blocks are equipped with a fuse clip reinforcing spring to minimize temperature rise while maintaining reliable surface contact between the fuse and clip over the block's service life.

Ferrule fuse blocks up to 60 Rated current have the smallest width dimension on the market and feature DIN-Rail or panel mount versatility. Easy circuit identification is available for 30 and 60 amp blocks and covers with universal marker labels.

Knifeblade fuse blocks from 100 to 600 Rated current feature phase barriers for additional safety with up to four mounting holes per pole for increased installation flexibility. All knifeblade blocks meet UL creep and clearance requirements for Industrial Power Circuits (UL 508 and UL 845). The 200 to 600 amp blocks also meet the higher UL creep and clearance requirements for Power Distribution Standards (UL 98, UL 67, UL 489, UL 891 and UL 869A)

All blocks have optional IP20 finger-safe high clarity, see-through covers for inspecting wire terminations or thermography measurements without removal. All covers enhance safety by featuring probe holes for easier, safer testing and a lockout/tagout capability. These covers also have optional open fuse indication to speed troubleshooting.

RoHS 2011/65/EU



30 and 60 amp blocks are DIN-Rail and panel mount. Optional covers increase safety.



100 to 600 amp blocks are panel mount. Optional covers increase safety.

Technical data

- Rated voltage 600 V
- Rated current up to 600 A
- SCCR 200 kA RMS Sym.

Agency information

- Blocks: UL Listed E14853 — IZLT and IZLT7, CSA Certified, 47235-6225-01, CE, RoHS Compliant
- Covers; UL Listed E58836 - JDVS, CSA Certified 47235-6225-01 (30 and 60 A), RoHS Compliant

Poles

- 1-, 2-, 3-pole units factory assembled
- Single-pole units snap together to create desired number of poles

Flammability Technical data

- Blocks: UL 94V0, self-extinguishing
- Covers: UL 94HB, self-extinguishing

Operating and storage temperature range

- Blocks -40°C to +120°C
- Covers; non-indicating -40°C to +120°C, indicating -20°C to +90°C*

* Indication requires minimum 90 V and closed circuit to illuminate.

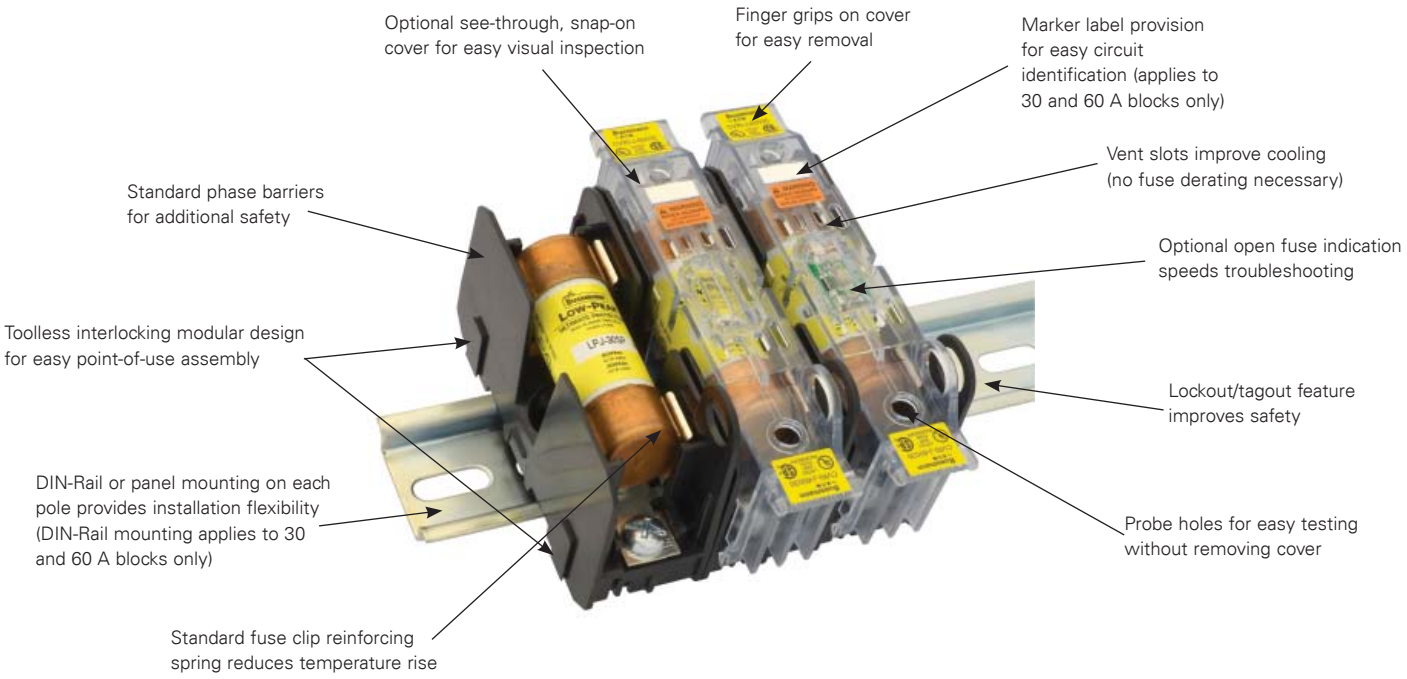
Conductors

- See Catalogue numbers for details and torque specifications.

Data sheet 10488

JM modular ferrule and knifeblade Class J fuse blocks

30 and 60 amp blocks and covers features and benefits



Catatogue numbers 30 A and 60 A blocks and covers

	Catalogue no./terminal type				Optional covers*		
Poles	**Box lug/slot screw**	**Box lug/hex screw**	**10-32 Phil-slot screw**	**Pressure plate**	**Indicating****	**Non-indicating**	**Compatible fuse links**
1	JM60030-1CR	JM60030-1CHR	JM60030-1SR	JM60030-1PR	CVRI-J-60030	CVR-J-60030	LPJ-1SP to LPJ-30SP JKS-1 to JKS-30
2	JM60030-2CR	JM60030-2CHR	JM60030-2SR	JM60030-2PR			
3	JM60030-3CR	JM60030-3CHR	JM60030-3SR	JM60030-3PR			
1	JM60060-1CR	JM60060-1CHR	—	—	CVRI-J-60060	CVR-J-60060	LPJ-35SP to LPJ-60SP JKS-60
2	JM60060-2CR	JM60060-2CHR					
3	JM60060-3CR	JM60060-3CHR					

* Covers sold separately, one cover per pole.
**Open fuse indication requires 90 Rated voltage minimum and closed circuit to operate.

30 and 60 amp block terminals and conductors

Terminal type	AWG type/range	AWG	Torque N•m (lb-in)
Box lug	75°C Cu 2-14, Al 2-8	2-3	5.6 (50)
		4-6	5.1 (45)
		8	4.5 (40)
		10-14	4.0 (35)
10-32 Phil-slot screw	75/90°C Cu 10-18	10-18	2.3 (20)
Pressure plate			

30 and 60 amp Recommended accessories

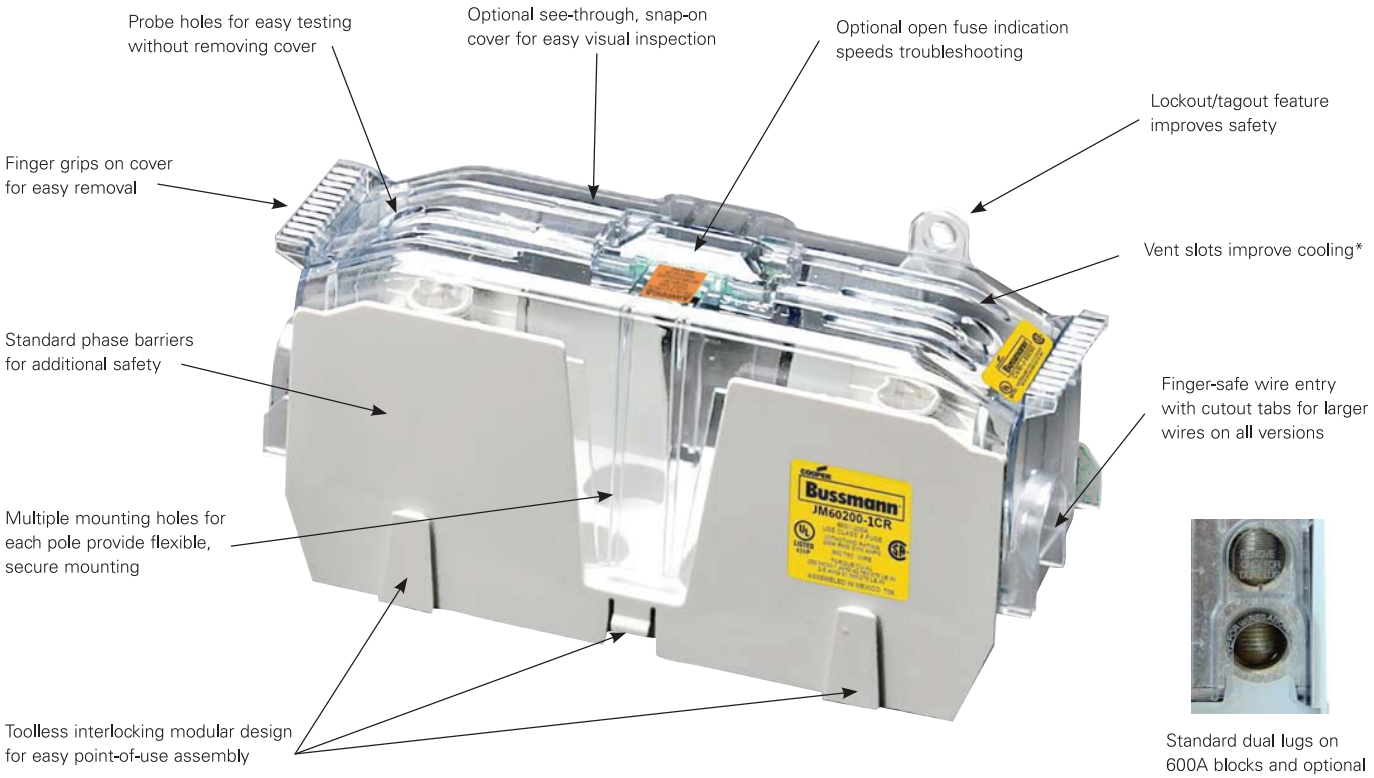
Description	Catalogue number
DIN-Rail end stops	BRKT-ND
	BRKT-NDSCREW2
Marker labels	TM26CB

Data sheet 10488

Class J - UL Low voltage fuse links and fuse holders

JM modular ferrule and knifeblade Class J fuse blocks

100 to 600 amp knifeblade blocks and covers features and benefits



Standard dual lugs on 600A blocks and optional dual lugs on 400A blocks for easier wiring using two, smaller conductors.

*No fuse derating necessary.

Catalogue numbers 100 A to 600 A knifeblade blocks and covers

		Optional covers*		Conductors***			
Poles	**Catalogue no.**	**Non-indicating**	**Indicating****	**Solid and stranded**	**Fine stranded**	**Torque N•m (lb-in)**	**Compatible fuse links**
1	JM60100-1CR	CVR-J-60100-M	CVRI-J-60100-M	—	Cu 1-3 AWG	6.2 (55)	LPJ-100SP JKS-100
				1/0-3 AWG; (2) Cu 4-6 AWG	Cu 4-6 AWG	5.6 (50)	
2	JM60100-2CR			2 4-6 AWG; (2) Cu 8 AWG	Cu 8 AWG	5.1 (45)	
				8 AWG; (2) Cu 10-14 AWG	—	4.5 (40)	
3	JM60100-3CR			Cu 10-14 AWG; Al 10-12 AWG	—	4.0 (35)	
1	JM60200-1CR	CVR-J-60200-M	CVRI-J-60200-M	250kcmil-1 AWG	Cu 3/0-1 AWG	42 (375)	LPJ-110SP to LPJ-200SP JKS-110 to JKS-200
2	JM60200-2CR			2-6 AWG; (2) Cu 2-6 AWG	Cu 2-6 AWG	31 (275)	
3	JM60200-3CR						
1	JM60400-1CR	CVR-J-60400-M	CVRI-J-60400-M	600kcmil	N/A	57 (500)	LPJ-225SP to LPJ-400SP JKS-225 to JKS-400
2	JM60400-2CR			500kcmil-4 AWG		51 (450)	
3	JM60400-3CR			(2) Cu 3/0 - 4 AWG		57 (500)	
1	JM60400-1MW22						
2	JM60400-2MW22			(2) Al 3/0 - 4 AWG		34 (300)	
3	JM60400-3MW22						
1	JM60600-1CR	CVR-J-60600	CVRI-J-60600	2 (2) 500kcmil-4 AWG	N/A	51 (450)	LPJ-450SP to LPJ-600SP JKS-450 to JKS-600
2	JM60600-2CR						
3	JM60600-3CR						

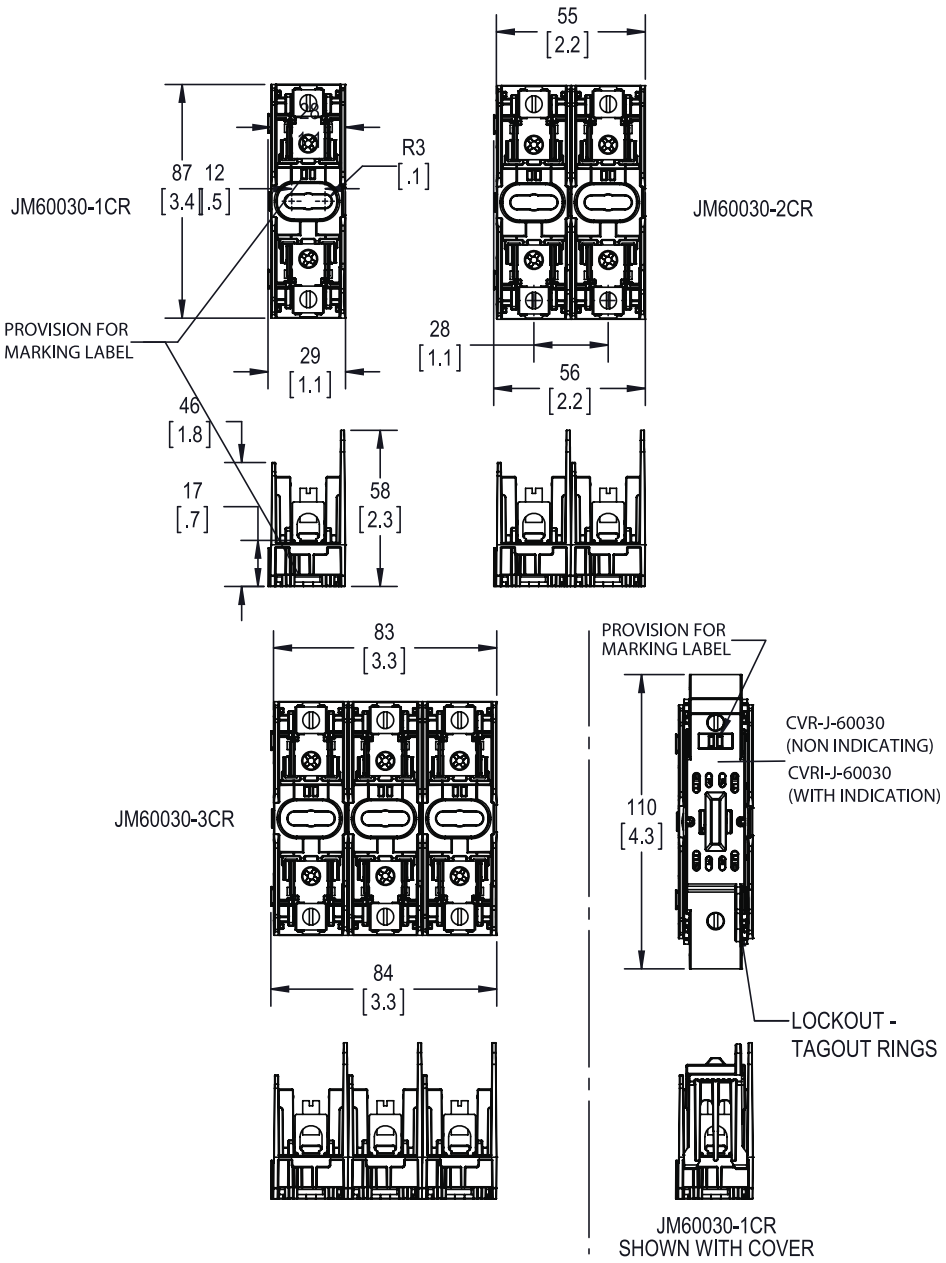
* Covers sold separately.
** Open fuse indication requires 90 Rated voltage minimum and closed circuit to operate.
*** Technical data for copper and aluminum conductors except where otherwise noted.

Recommended for bare stripped conductors only, not recommended for bootlace or cable terminal lugs

Data sheet 10488

JM modular ferrule and knifeblade Class J fuse blocks

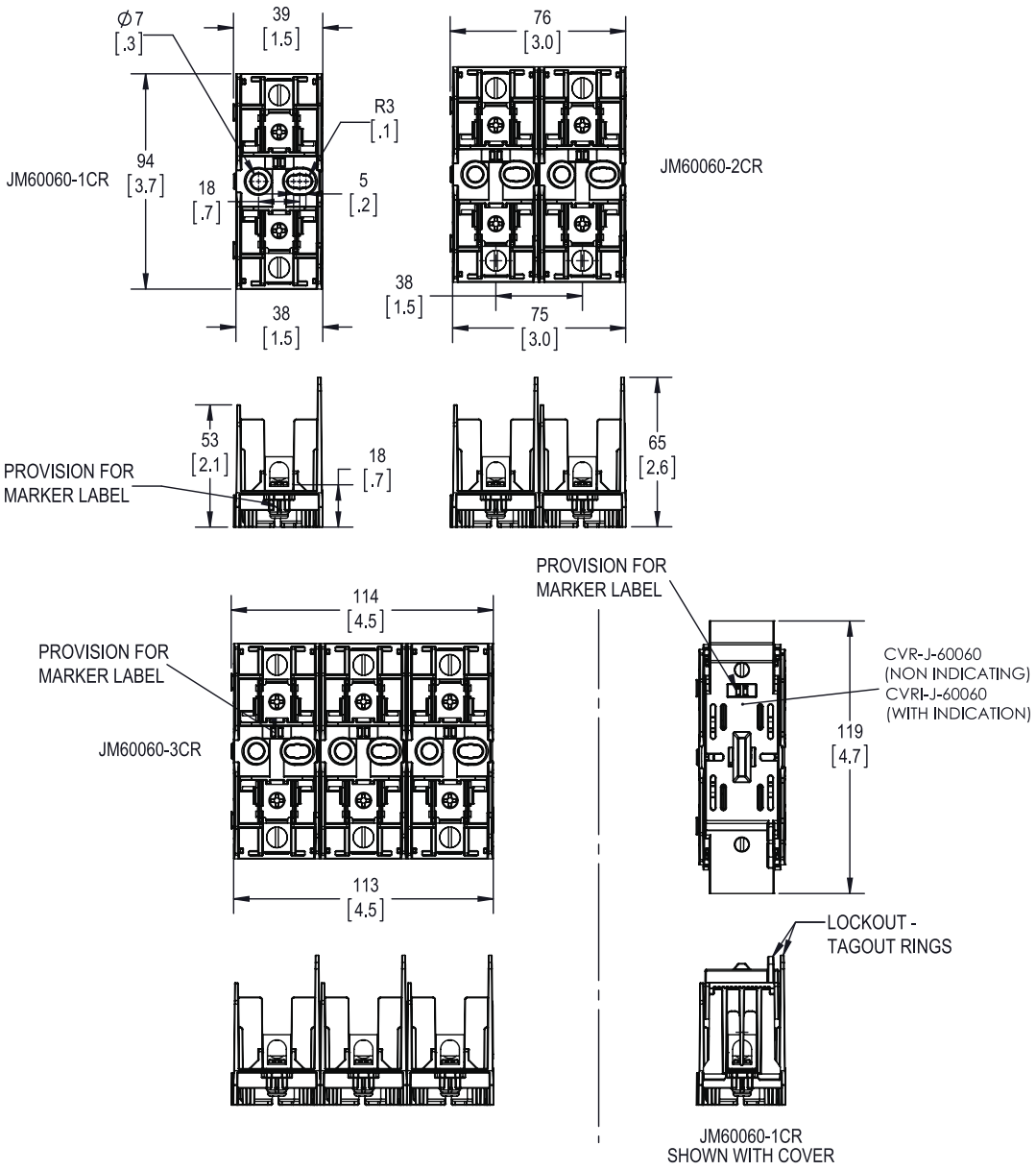
Dimensions in (mm) - 30 A



Class J - UL Low voltage fuse links and fuse holders

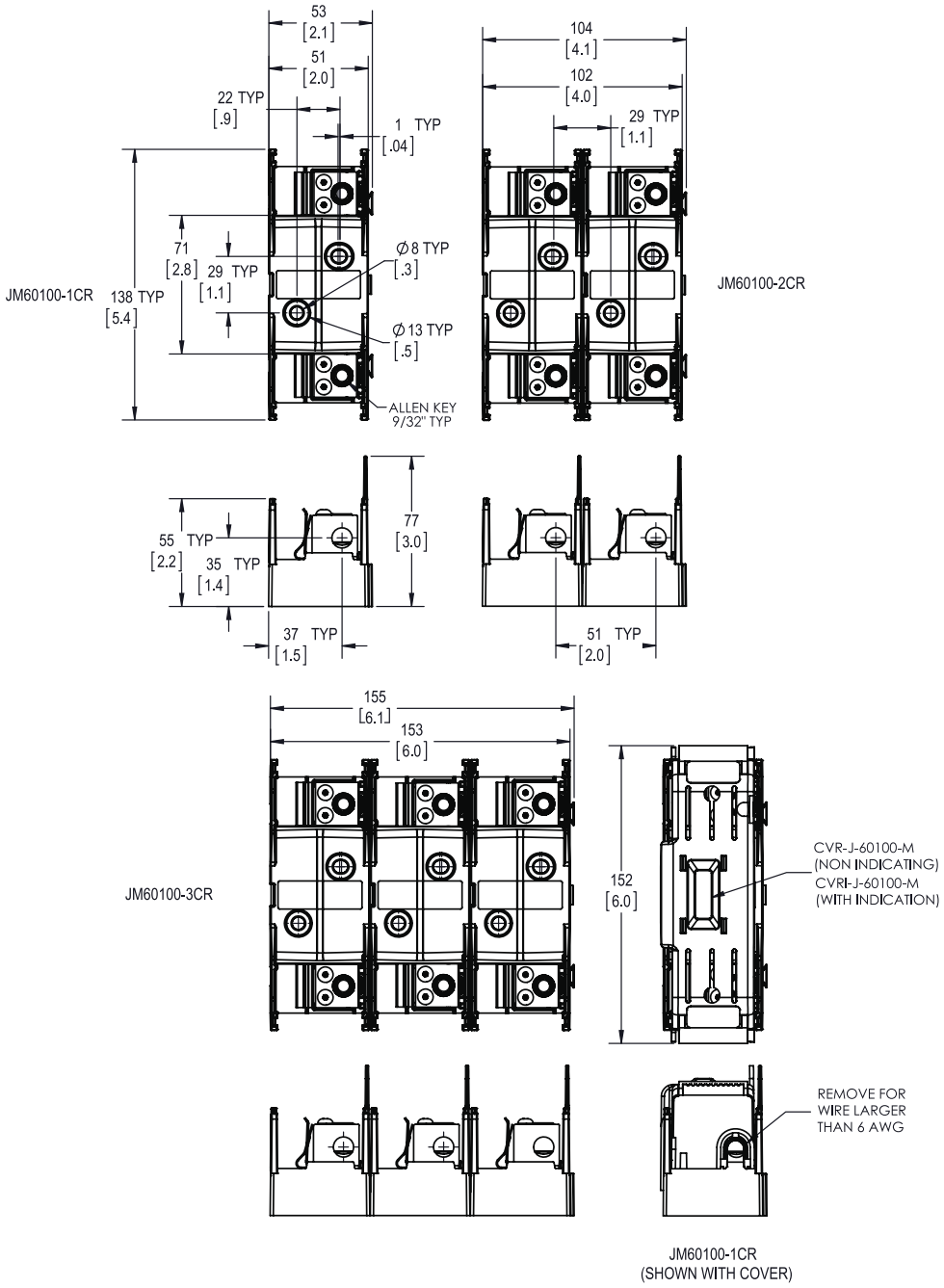
JM modular ferrule and knifeblade Class J fuse blocks

Dimensions in (mm) - 60 A



JM modular ferrule and knifeblade Class J fuse blocks

Dimensions in (mm) - 100 A

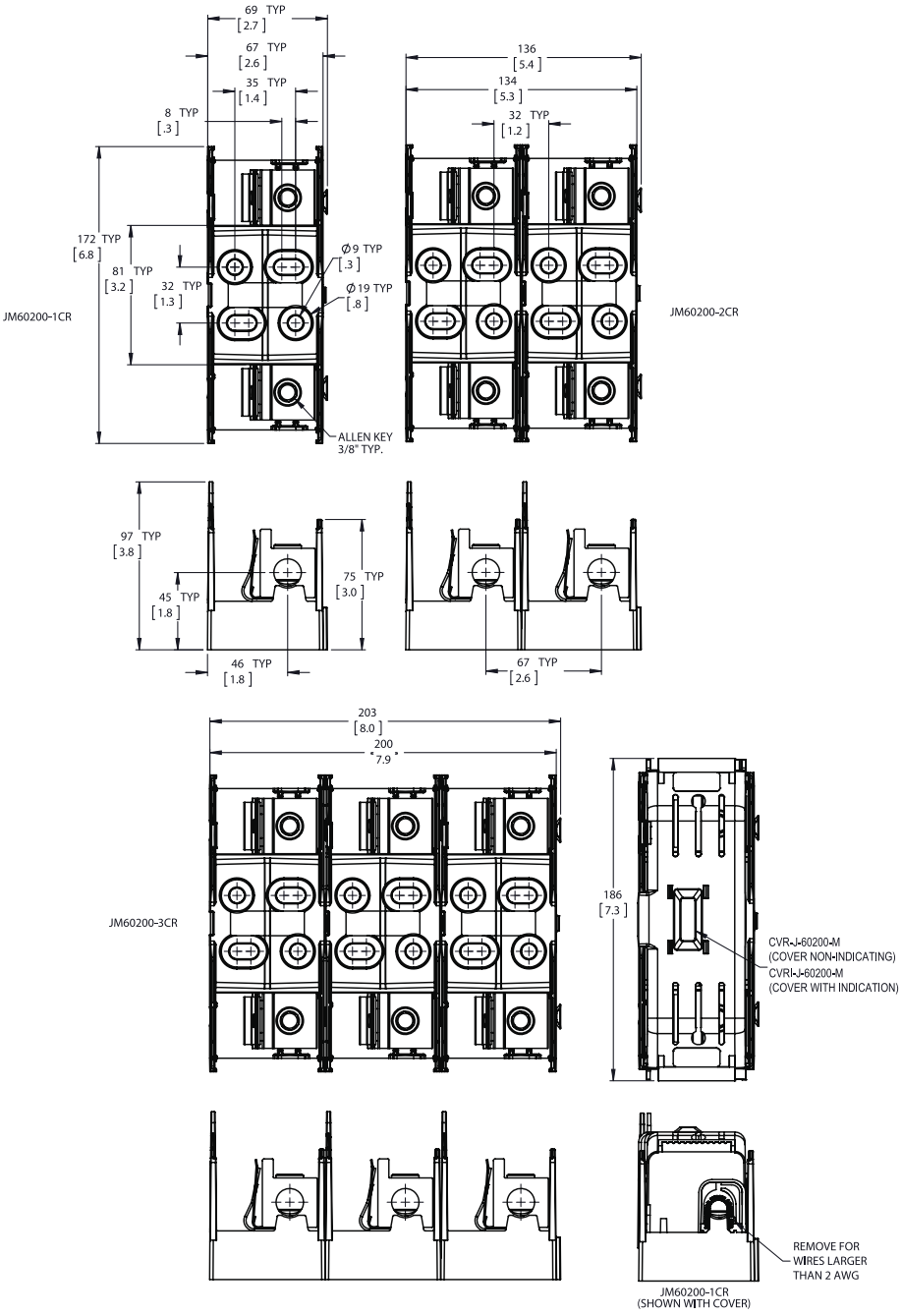


Data sheet 10488

Class J - UL Low voltage fuse links and fuse holders

JM modular ferrule and knifeblade Class J fuse blocks

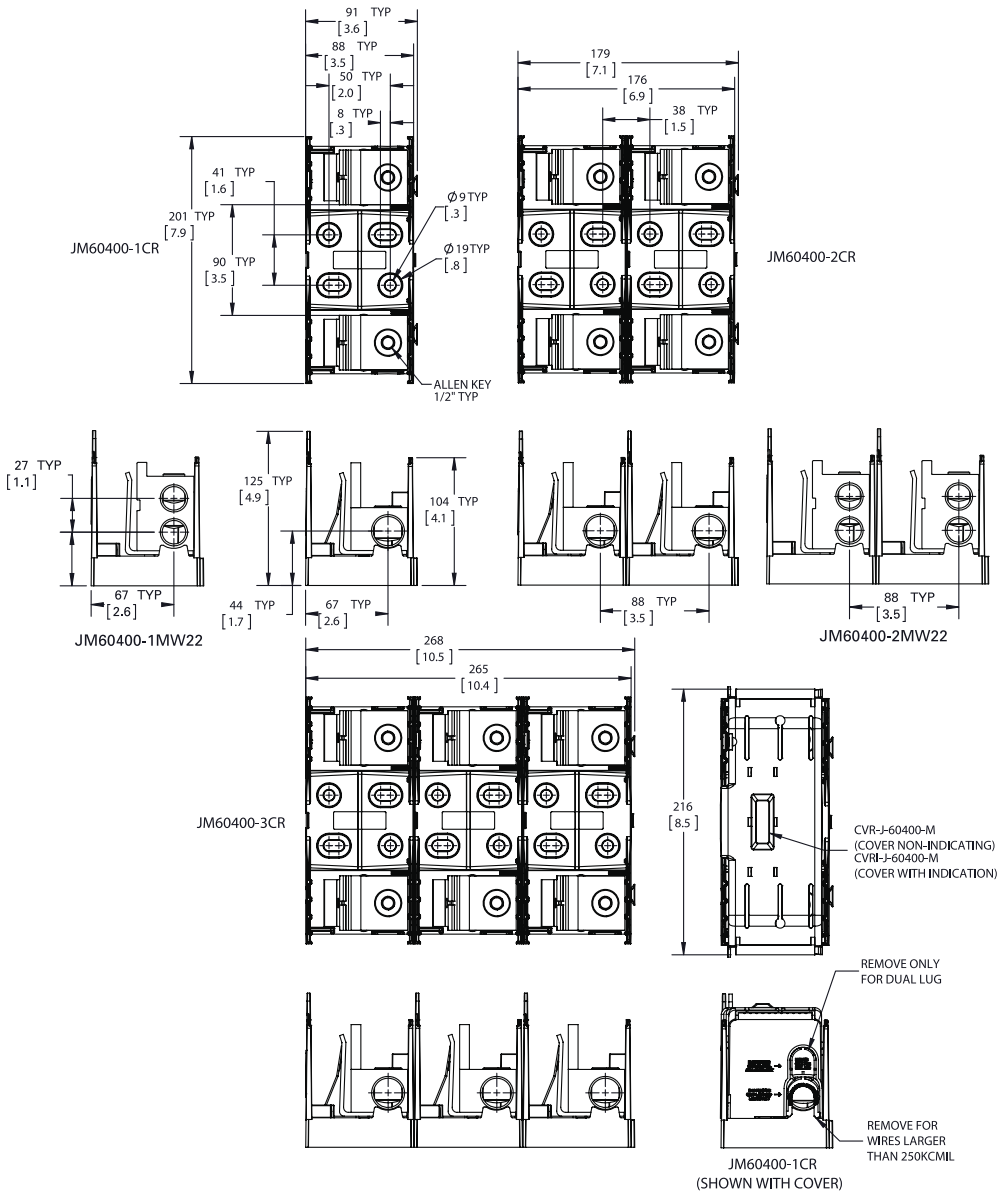
Dimensions in (mm) - 200 A



Data sheet 10488

JM modular ferrule and knifeblade Class J fuse blocks

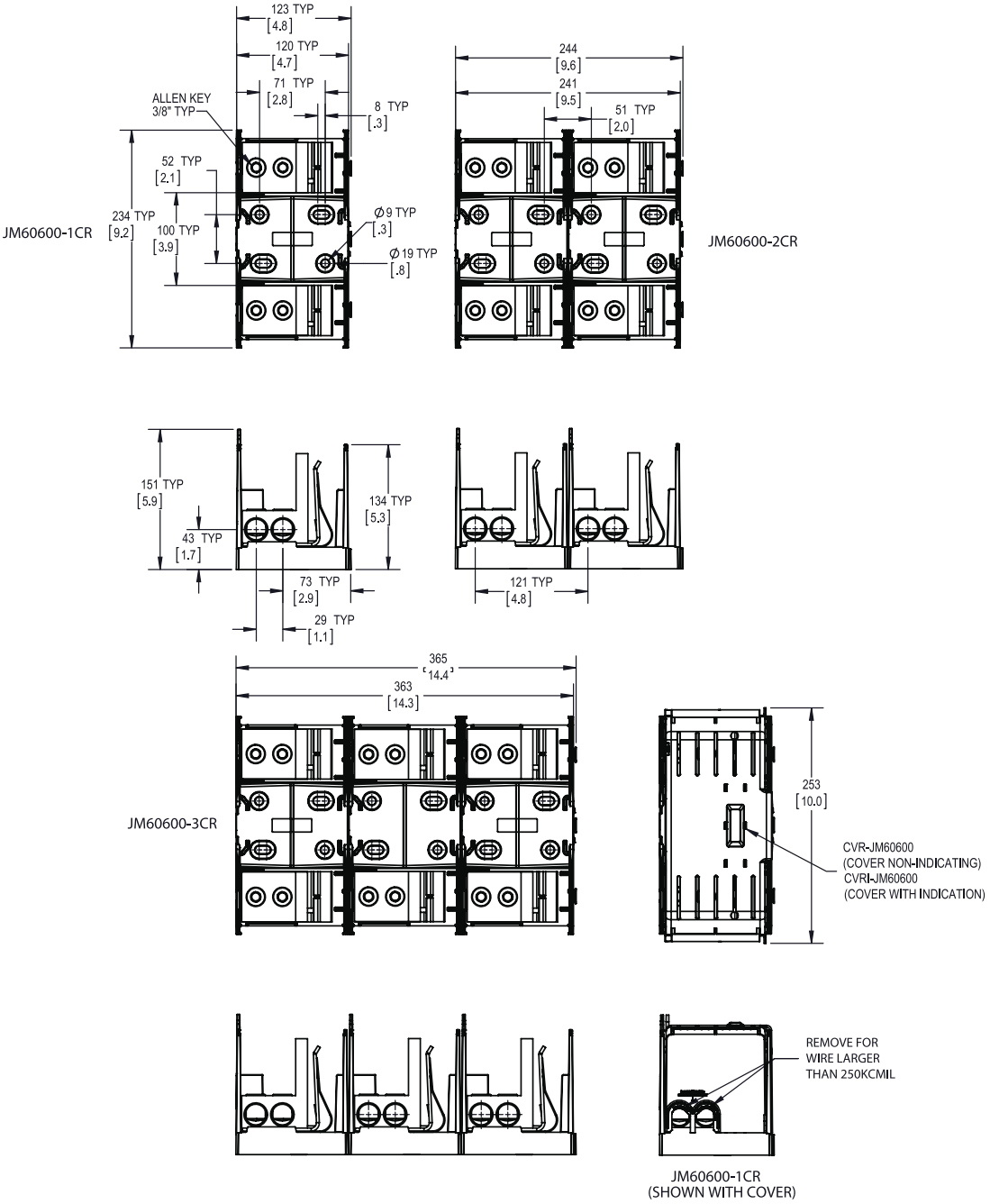
Dimensions in (mm) - 400 A



Class J - UL Low voltage fuse links and fuse holders

JM modular ferrule and knifeblade Class J fuse blocks

Dimensions in (mm) - 600 A



BH-0111 Modular open-center fuse block

Specifications



Description

BH-0111 modular fuse block is are for use with Class J fuse links rated from 65 A to 100 A

Catalogue number

- BH-0111

Technical data

- Rated voltage 700 V
- Rated current: 100 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V
- CSA Certified, Class 6225-01, File No. 47235 up to 700 V
- RoHS compliant
- CE

Material

- Base-light-weight, high temperature thermoplastic
- Mounting studs - plated steel
- Washer - spring steel
- Nuts - plated steel
- Connector: tin-plated aluminum

Conductors - AWG Cu

- One hole connector accepts 14 - 2/0
- Two hole connector accepts 14 - 1/0

Features

- A wide range of mounting configurations
- High Short-Circuit Current Rating (SCCR) based upon installed fuse up to 200 kA RMS Sym.

Typical applications

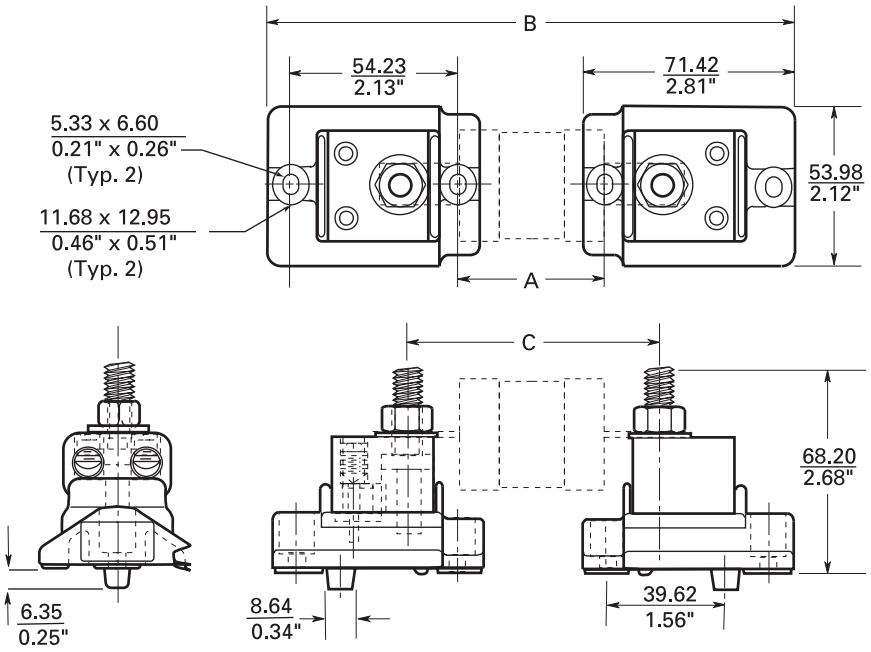
- Solid state control circuits
- VFDs
- UPS systems

Data sheet 1200

Class J - UL Low voltage fuse links and fuse holders

BH-0111 Modular open-center fuse block

Dimensions mm (in)



				Dimensions - mm (in)		
Compatible Class J fuse links	**Fuse block**	**Stud dia (in)**	**Fuse Rated voltage**	**A**	**B**	**C**
JKS 65 to 100 A	BH-0111	1/4	600	53.17 (290)	183.39 (7.220)	91.95 (3.620)
LPJ 65 A to 100 A	BH-0111	1/4	600	58.17 (2.290)	183.39 (7.220)	91.95 (3.620)

BH-3144 and BH-3145 Modular open-center fuse block

Specifications

RoHS 2011/65/EU



Description

BH-3144 and BH-3145 modular fuse block is are for use with Class J .fuse links rated from 225 A to 600 A

Catalogue number

- BH-3144
- BH-3145

Technical data

- Rated voltage 700 V
- Rated current: 700 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V
- CSA Certified, Class 6225-01, File No. 47235 up to 700 V
- RoHS compliant
- CE

Material

- Base-light-weight, high temperature thermoplastic
- Mounting studs - plated steel
- Washer - spring steel
- Nuts - plated steel
- Connector: tin-plated aluminum

Conductors - AWG Cu

- Connector accepts 6 - 250 kcmil

Typical applications

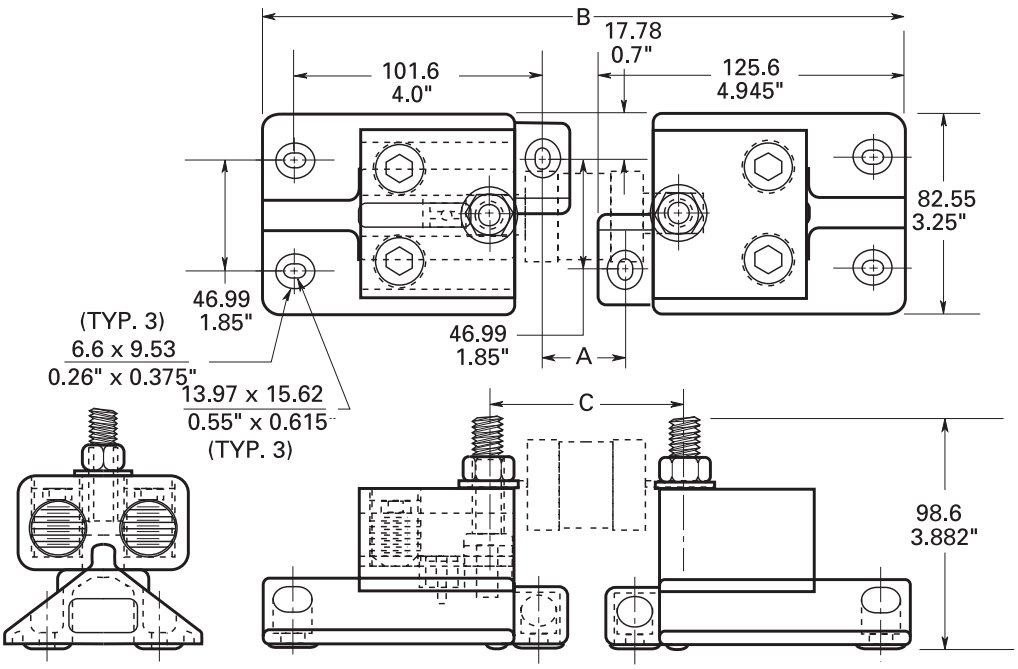
- Solid state control circuits
- VFDs
- UPS systems

Data sheet 1203

Class J - UL Low voltage fuse links and fuse holders

BH-3144 and BH-3145 Modular open-center fuse block

Dimensions mm (in)



Compatible Class J fuse links	Fuse block	Stud dia (in)	Fuse Rated voltage	Dimensions - mm (in) A	B	C
JKS 225 A to 400 A	BH-3145	3/8	600	90.42 (3.56)	319.02 (12.56)	133.35 (5.25)
JKS 450 A to 600 A	BH-3144	7/16	600	109.47 (4.31)	338.07 (13.31)	152.40 (6.00)
LPJ 225 A to 400 A	BH-3145	3/8	600	90.42 (3.56)	319.02 (12.56)	133.35 (5.25)
LPJ 450 A to 600 A	BH-3144	7/16	600	109.47 (4.31)	338.07 (13.31)	152.40 (6.00)

Class L - UL Low voltage fuse links and fuse holders

	Page
KRP-C_SP Fuse links	120
KRP-CL Fuse links	123
KTU Fuse links	124
KLU Fuse links	127



Class L - UL Low voltage fuse links

KRP-C_SP Class L Low-Peak time-delay fuse links

Specifications

RoHS 2011/65/EU



Description

Time-delay Class L fuses — 4 seconds (minimum) at 500% rated Rated current. Use KRP-CL for current Technical data under 601 A.

Technical data

- Rated voltage
  - 600 V a.c. (or less)
  - 300 V d.c. (601 A to 2000 A, 3000 A)
- Rated current: 601 A to 6000 A
- Breaking capacity:
  - 300 kA RMS Sym.
  - 100 kA DC

Agency information

- UL Listed 248-10, Guide JFHR, File E56412
- CSA Certified. Class 1422-02, File 53787
- Class L per CSA C22.2 No 248.10
- RoHS compliant
- CE

Features

- Time-delay of 4 seconds at 5 times rating allows closer sizing on large motor loads combined with Class L current limitation
- Selective coordination ratio of 2:1 (within Low-Peak fuse family) prevents electrical shutdowns from extending beyond the failed circuit
- Interrupting rating of 300 kA RMS symmetrical provides adequate Technical data without obsolescence for all electrical systems, big or small
- Quality construction, using high-grade materials, provides lower watts loss and operating temperatures with superior arc quenching during current-limiting action

Typical applications

- Large distribution switchboards
- Power panelboards
- Large machinery disconnects

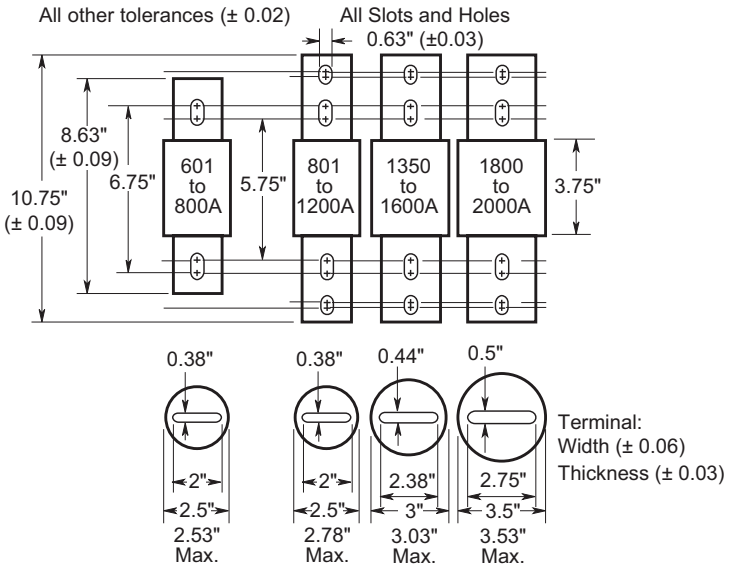
Data sheet no. 1008(601-2000 A) and 1009 (2001-6000 A)

KRP-C_SP Class L Low-Peak time-delay fuse links

Catalogue numbers

			Recommended fuse blocks	
Catalogue numbers	**Rated voltage**	**Rated voltage**	**1-pole**	**3-pole**
KRP-C-601SP	600 V a.c./ 300 V d.c.	601	51215	51235
KRP-C-650SP	600 V a.c./ 300 V d.c.	650	51215	51235
KRP-C-700SP	600 V a.c./ 300 V d.c	700	51215	51235
KRP-C-750SP	600 V a.c./ 300 V d.c.	750	51215	51235
KRP-C-800SP	600 V a.c./ 300 V d.c	800	51215	51235
KRP-C-801SP	600 V a.c./ 300 V d.c.	801	N/A	N/A
KRP-C-900SP	600 V a.c./ 300 V d.c	900	N/A	N/A
KRP-C-1000SP	600 V a.c./ 300 V d.c.	1000	N/A	N/A
KRP-C-1100SP	600 V a.c./ 300 V d.c	1100	N/A	N/A
KRP-C-1200SP	600 V a.c./ 300 V d.c.	1200	N/A	N/A
KRP-C-1350SP	600 V a.c./ 300 V d.c	1350	N/A	N/A
KRP-C-1400SP	600 V a.c./ 300 V d.c.	1400	N/A	N/A
KRP-C-1500SP	600 V a.c./ 300 V d.c	1500	N/A	N/A
KRP-C-1600SP	600 V a.c./ 300 V d.c.	1600	N/A	N/A
KRP-C-1800SP	600 V a.c./ 300 V d.c	1800	N/A	N/A
KRP-C-1900SP	600 V a.c./ 300 V d.c.	1900	N/A	N/A
KRP-C-2000SP	600 V a.c./ 300 V d.c	2000	N/A	N/A
KRP-C-2001SP	600 V a.c.	2001	N/A	N/A
KRP-C-2400SP	600 V a.c.	2400	N/A	N/A
KRP-C-2500SP	600 V a.c.	2500	N/A	N/A
KRP-C-3000SP	600 V a.c./ 300 V d.c	3000	N/A	N/A
KRP-C-3500SP	600 V a.c.	3500	N/A	N/A
KRP-C-4000SP	600 V a.c.	4000	N/A	N/A
KRP-C-4500SP	600 V a.c.	4500	N/A	N/A
KRP-C-5000SP	600 V a.c.	5000	N/A	N/A
KRP-C-6000SP	600 V a.c.	6000	N/A	N/A

Dimensions in (mm) - 601 A to 2000 A

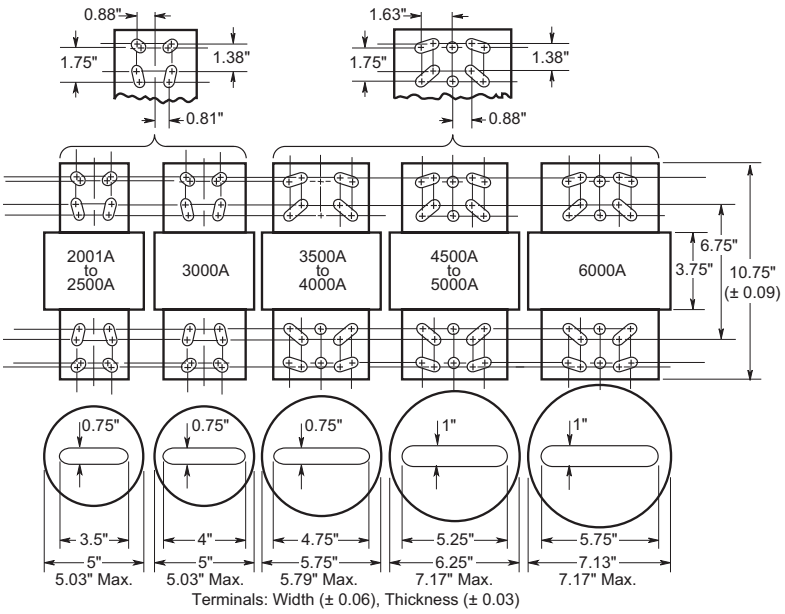


Data sheet no. 1008(601-2000 A) and 1009 (2001-6000 A)

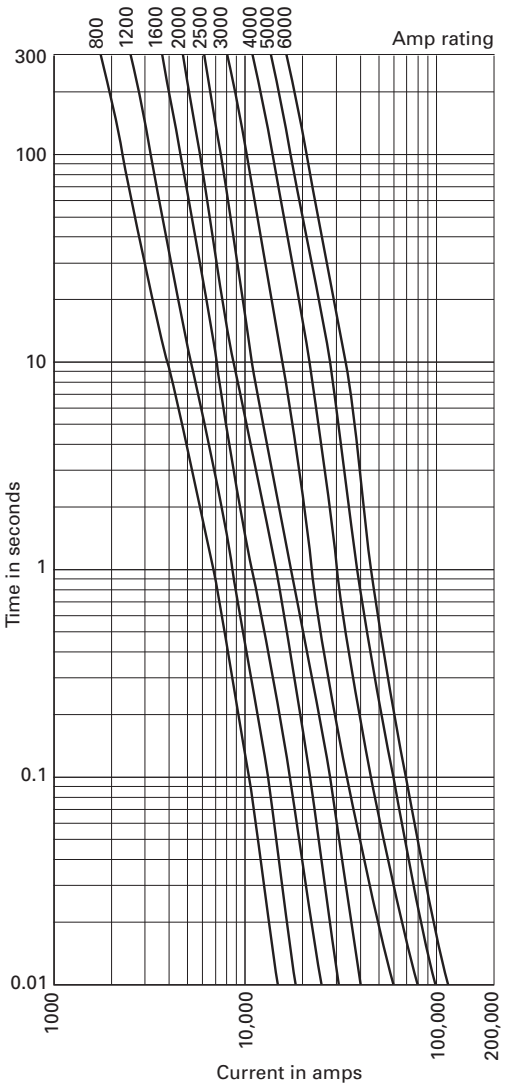
Class L - UL Low voltage fuse links

KRP-C_SP Class L Low-Peak time-delay fuse links

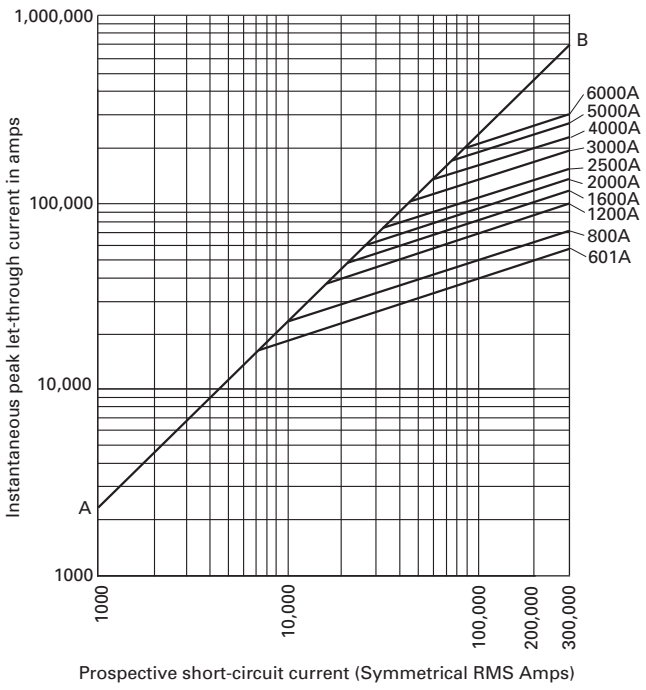
Dimensions in (mm) - 2001 A to 6000 A



Time-current characteristics — average melt



Current limitation curves



Data sheet no. 1008(601-2000 A) and 1009 (2001-6000 A)

KRP-CL current-limiting, time-delay fuse links

Specifications



Description

Current-limiting, time-delay fuse with Class L dimensions for the 601-800 A case size.

Technical data

- Rated voltage: 600 V a.c. (or less)
- Rated current: 225 A to 600 A
- Breaking capacity: 200 kA RMS Sym.

Agency information

- RoHS compliant

Features

- Time-delay of 4 seconds at 5 times rating allows closer sizing inductive loads coupled with an equivalent Class L current limitation
- 601 A to 800 A Class L case size permits applying circuit protection from 225 to 600 A for downsize fusing of 800 A clas L fuses switches

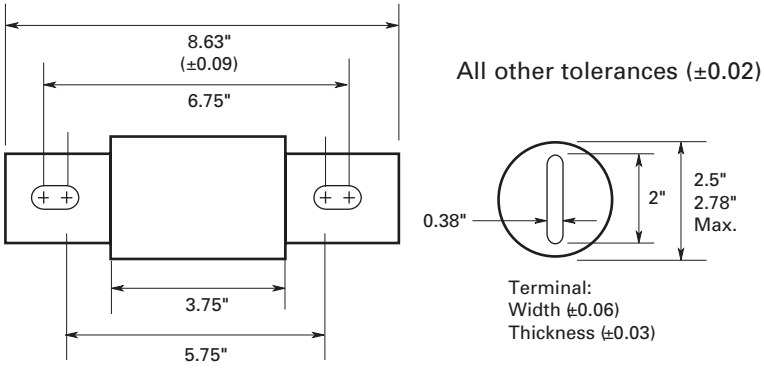
Typical applications

- Large distribution switchboards
- Power panelboards
- Machinery disconnects

Catalogue numbers

			Recommended fuse blocks	
Catalogue numbers	**Rated voltage**	**Rated current**	**1-pole**	**3-pole**
KRP-CL-225	600 V a.c.	225	51215	51235
KRP-CL-250	600 V a.c.	250	51215	51235
KRP-CL-300	600 V a.c.	300	51215	51235
KRP-CL-350	600 V a.c.	350	51215	51235
KRP-CL-400	600 V a.c.	400	51215	51235
KRP-CL-450	600 V a.c.	450	51215	51235
KRP-CL-500	600 V a.c.	500	51215	51235
KRP-CL-600	600 V a.c.	600	51215	51235

Dimensions - in



Data sheet no. 1016

Class L - UL Low voltage fuse links

KTU Class L Limitron fast-acting fuse links

Specifications

Description

Fast-acting, Class L fuses. For superior electrical protection, Eaton recommends upgrading KTU fuse applications to Bussmann series Low-Peak KRP-C fuses.



Technical data

- Rated voltage: 600 V a.c. (or less)
- Rated current: 601 A to 6000 A
- Breaking capacity 200 kA RMS Sym.

Agency information

- UL Listed, Std 248-10, Class L, Guide JDDZ, File E4273
- CSA Certified, Class 1422-02, File 53787
- RoHS compliant
- CE

Features

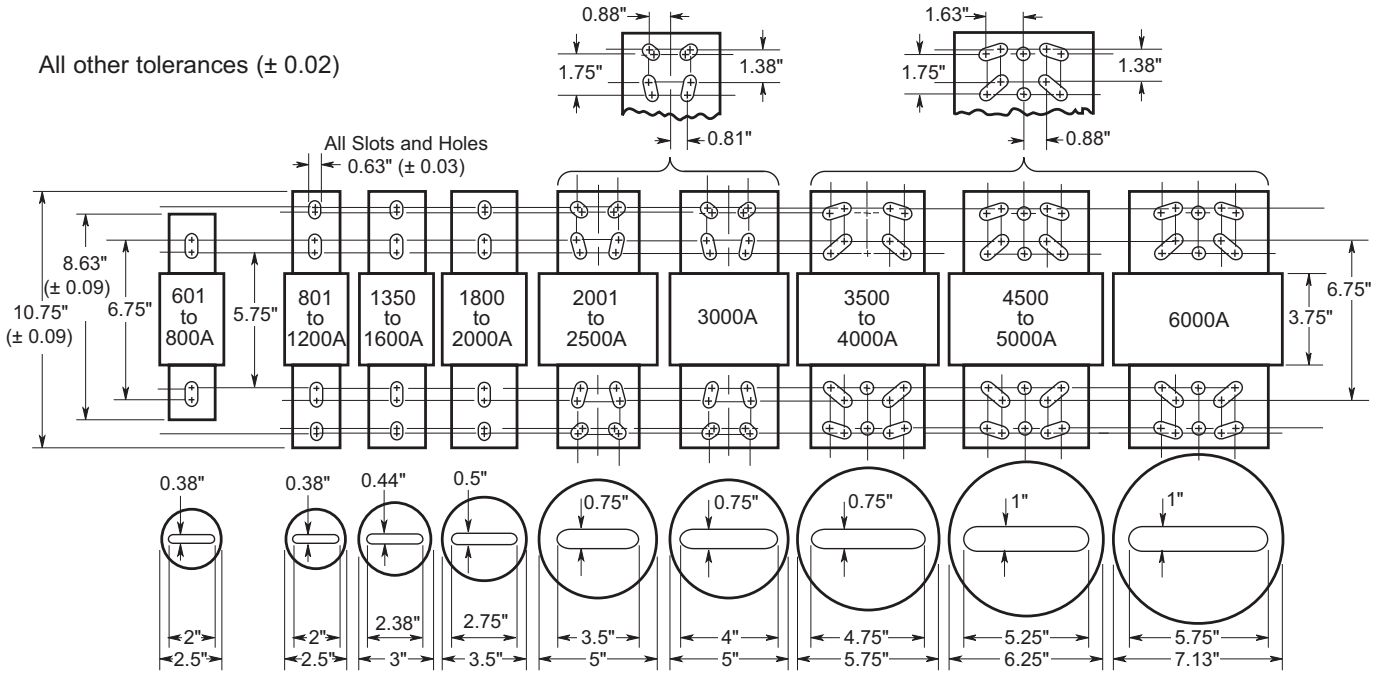
- 200 kA interrupting rating provides protection at all circuit locations
- Economical protection for high-fault current circuits
- Quality construction using high-grade materials provides lower watts loss and operating temperatures with superior arc quenching during current-limiting action

Typical applications

- Large distribution switchboards
- Power panelboards

Dimensions in

All other tolerances (± 0.02)



Terminals: Width (± 0.06), Thickness (± 0.03)

Data sheet no. 1010

KTU Class L Limitron fast-acting fuse links

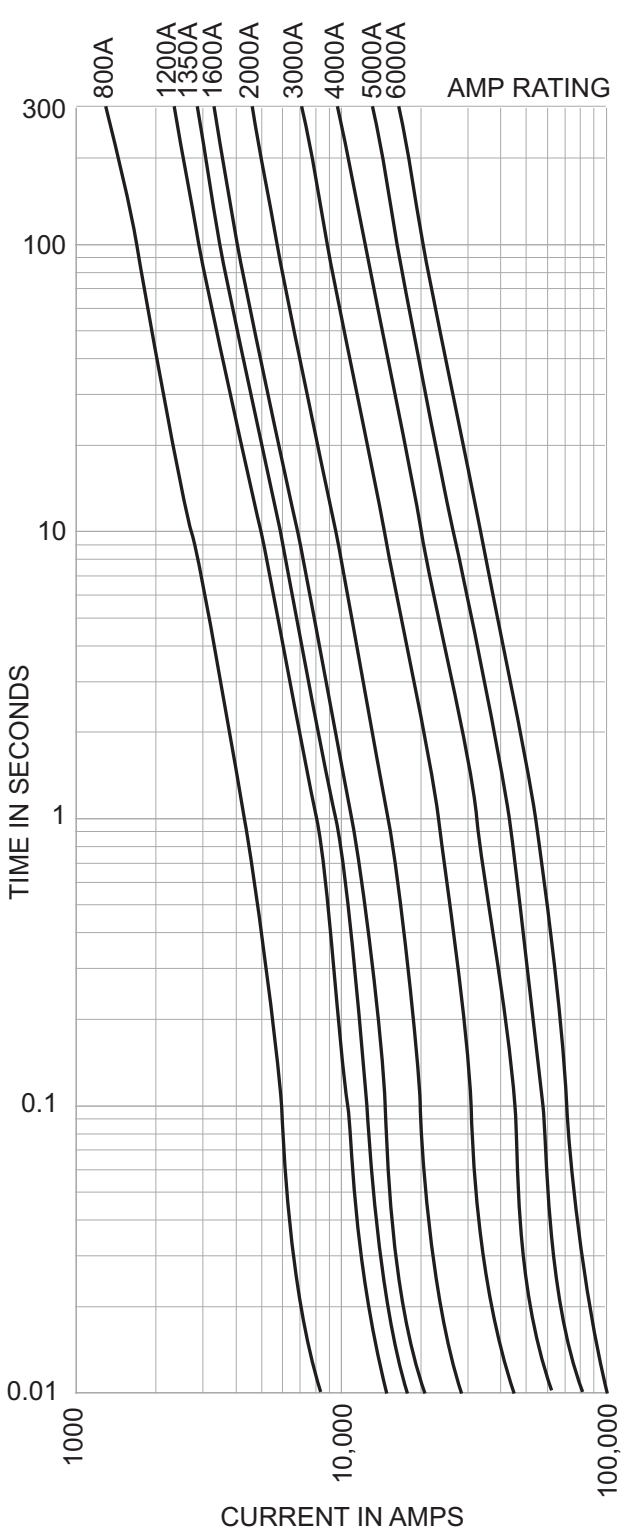
Catalogue numbers

			Recommended fuse blocks	
Catalogue numbers	**Rated voltage**	**Rated current**	**1-pole**	**3-pole**
KTU-601	600 V a.c.	601	51215	51235
KTU-650	600 V a.c.	650	51215	51235
KTU-700	600 V a.c.	700	51215	51235
KTU-750	600 V a.c.	750	51215	51235
KTU-800	600 V a.c.	800	51215	51235
KTU-801	600 V a.c.	801	51215	51235
KTU-850	600 V a.c.	850	51215	51235
KTU-900	600 V a.c.	900	51215	51235
KTU-1000	600 V a.c.	1000	51215	51235
KTU-1100	600 V a.c.	1100	51215	51235
KTU-1200	600 V a.c.	1200	51215	51235
KTU-1400	600 V a.c.	1400	N/A	N/A
KTU-1500	600 V a.c.	1500	N/A	N/A
KTU-1600	600 V a.c.	1600	N/A	N/A
KTU-1800	600 V a.c.	1800	N/A	N/A
KTU-2000	600 V a.c.	2000	N/A	N/A
KTU-2001	600 V a.c.	2001	N/A	N/A
KTU-2400	600 V a.c.	2400	N/A	N/A
KTU-2500	600 V a.c.	2500	N/A	N/A
KTU-3000	600 V a.c.	3000	N/A	N/A
KTU-3500	600 V a.c.	3500	N/A	N/A
KTU-4000	600 V a.c.	4000	N/A	N/A
KTU-5000	600 V a.c.	5000	N/A	N/A
KTU-6000	600 V a.c.	6000	N/A	N/A

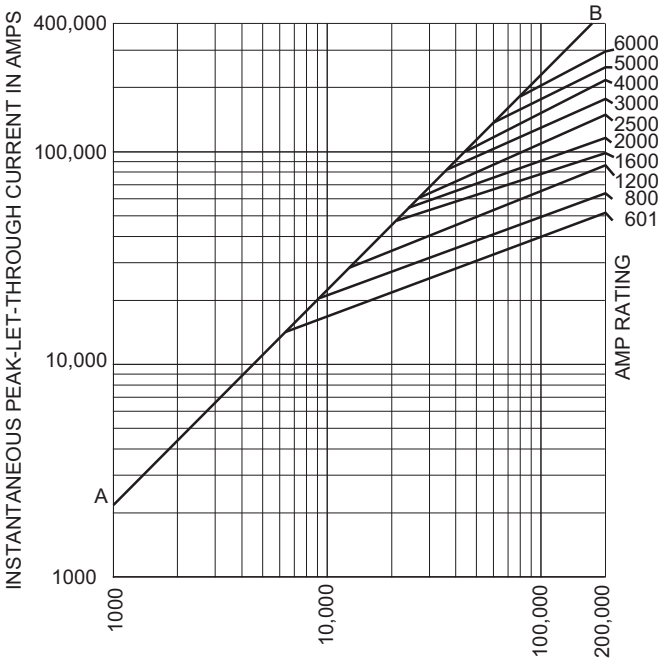
Class L - UL Low voltage fuse links

KTU Class L Limitron fast-acting fuse links

Time-current curve



Cut-off curve



A-B = ASYMMETRICAL AVAILABLE PEAK (2.3 X SYM RMS AMPS)

Data sheet 1010

KLU Class Limitron time-delay fuse links

Specifications



Description

Time-delay, Class L fuses - 5 seconds (minimum) at 500% rated Rated current. For superior electrical protection, Eaton recommends upgrading KLU fuse applications to Bussmann series Low-Peak KRP-C fuses, see page 1-22. Use KRP-CL for current Technical data under 601 A. For dimensions, see page 1-4.

Technical data

- Rated voltage: 600 V a.c. (or less)
- Rated current: 601 A to 4000 A
- Breaking capacity: 200 kA RMS Sym.

Agency information

- UL Listed, Std 248-10, Class L, Guide JDDZ, File E4273,
- CSA Certified, CSA Class 1422-02, File 53787
- RoHS compliant
- CE

Features

- 200 kA interrupting rating provides protection at all circuit locations
- Economical protection for high-fault current circuits

Typical applications

- Large distribution switchboards
- Power panelboards
- Large machinery disconnects

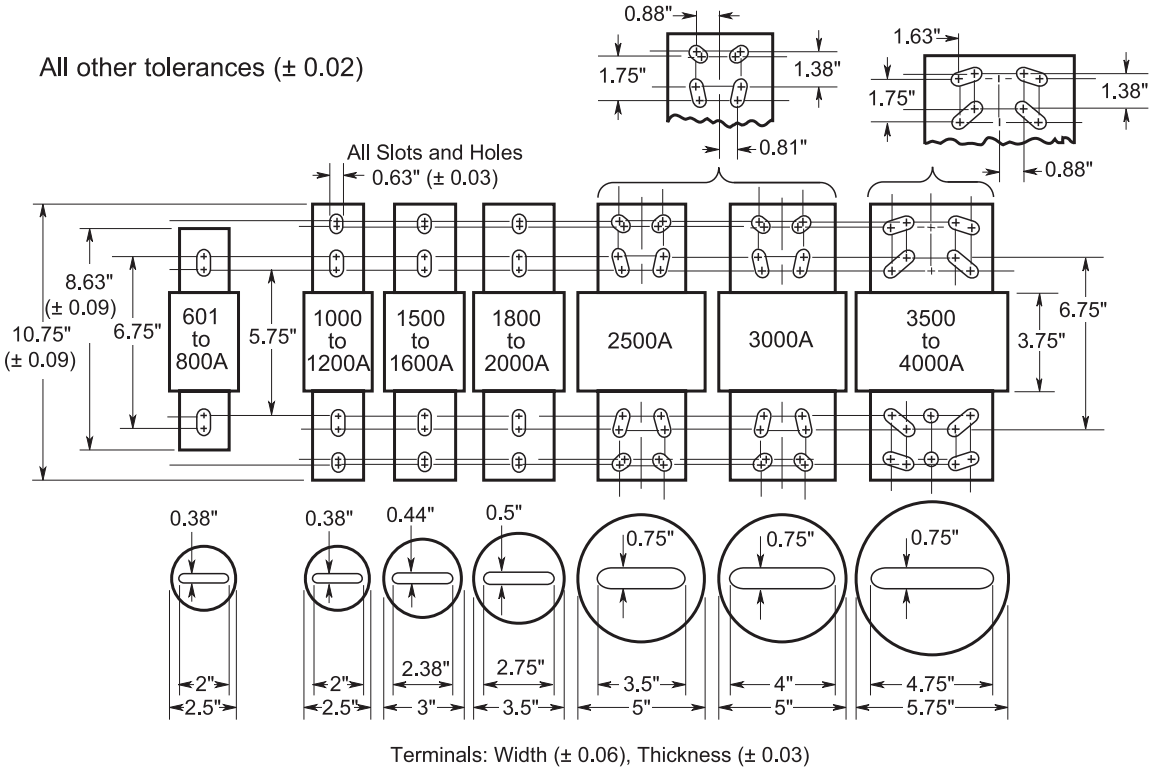
Catalogue numbers

			Recommended fuse blocks	
Catalogue numbers	**Rated voltage**	**Rated current**	**1-pole**	**3-pole**
KLU-601	600 V a.c.	601	51215	51235
KLU-650	600 V a.c.	650	51215	51235
KLU-700	600 V a.c.	700	51215	51235
KLU-800	600 V a.c.	800	51215	51235
KLU-1000	600 V a.c.	1000	51215	51235
KLU-1200	600 V a.c.	1200	51215	51235
KLU-1500	600 V a.c.	1500	N/A	N/A
KLU-1600	600 V a.c.	1600	N/A	N/A
KLU-1800	600 V a.c.	1800	N/A	N/A
KLU-2000	600 V a.c.	2000	N/A	N/A
KLU-2500	600 V a.c.	2500	N/A	N/A
KLU-3000	600 V a.c.	3000	N/A	N/A
KLU-4000	600 V a.c.	4000	N/A	N/A

Class L - UL Low voltage fuse links

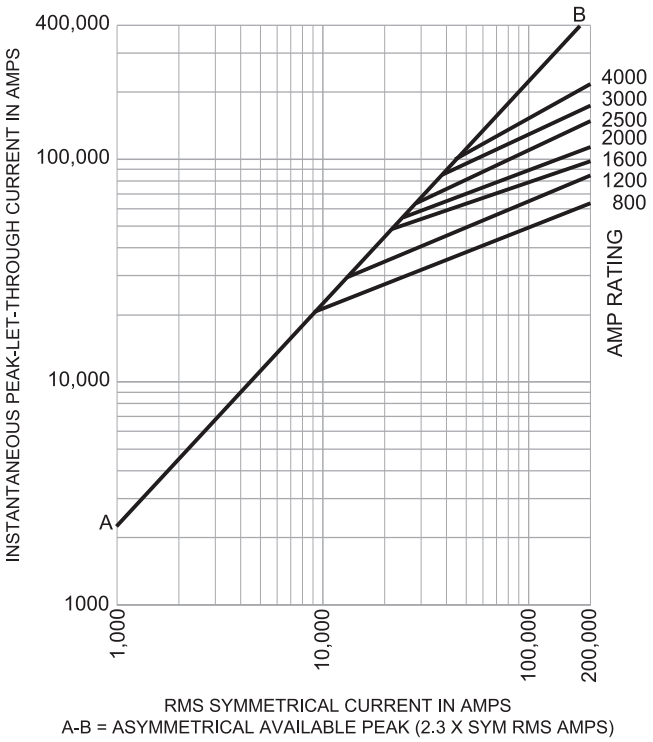
KLU Class L Limitron time-delay fuse links

Dimensions - in



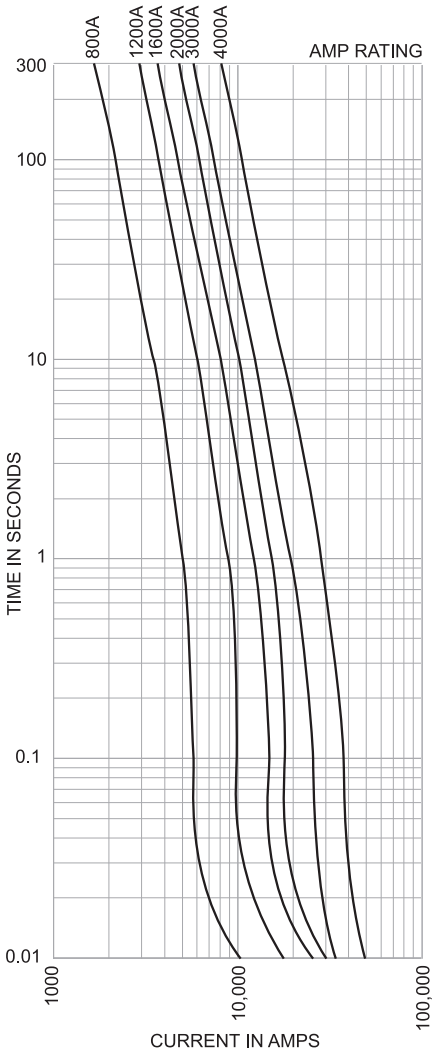
Terminals: Width (± 0.06), Thickness (± 0.03)

Current-limitation curve



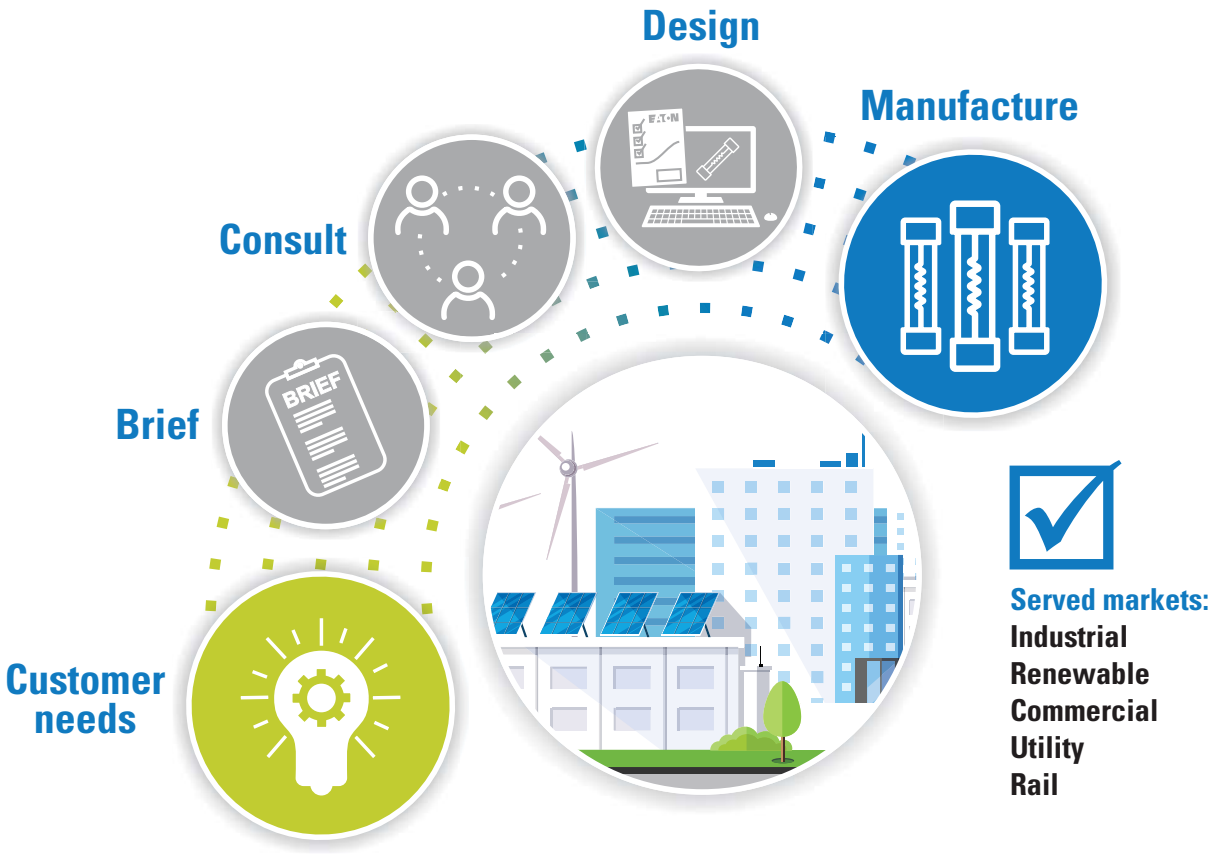
KLU Class L Limitron time-delay fuse links

Time-current curve - average melt



Data sheet 1013

Customised fuse design service



Eaton's Field Applications Engineers are able to draw upon more than 100 years of fuse design knowledge to fully meet your application needs and ensure you can rely on the best in class electrical circuit protection solutions.

As the trend towards clean energy continues to drive new technologies in renewable energy generation, energy storage, electrical transportation and the adoption of DC technology throughout wider industries, the demand for customised fusing products has only increased.

Our Application and Design Engineers located at R&D centres in North America, Europe and Asia can leverage over 100 years of fuse design and application experience along with our in-house test labs to meet any customised solution requests for **Eaton's Bussmann series fuses.**

Our services include:

- New current/voltage ratings
- Design to meet I^2t requirements
- Customised mounting connection and plating materials
- Modify indicator locations/ add or remove indicators
- Special end connections
- Acquire UL/IEC/CCC/CSA certificates
- Customised testing such as shock vibration

Contact us today:

For general fuse enquiries: buletechnical@eaton.com

For high speed fuses enquiries : bulehighspeedtechnical@eaton.com

Powering Business Worldwide

We make what matters work.

Class T - UL Low voltage fuse links and fuse holders

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Class T -UL Low voltage fuse links and fuse holders

JJN Class T Limitron fast acting fuse links

Specifications



Description

Very fast-acting, current-limiting 300 V (JJN) and 600 V (JJS) Class T fuse links.

Technical data

- Rated voltage
  - 300 V a.c. (or less)
  - 160 V d.c. (15 A to 600 A)
  - 170 V d.c. (601 A to 1200 A)
- Rated current: 1 A to 1200 A
- Breaking capacity
  - 200 kA RMS Sym.
  - 20 kA DC @ 160 V d.c. (JJN)

Agency information

- UL Listed, Std 248-15, Class T, Guide JDDZ, File E4273,
- CSA Certified, Class 1422-02, File 53787
- RoHS compliant
- CE

Features

- Series combination Technical data with branch circuit breakers allows broad range of coverage, independent of breaker manufacturer
- Current limitation for non-inductive circuits provides Class T current-limiting response to maximum ground fault and short-circuit conditions
- 200 kA interrupting rating provides protection for virtually all circuit locations
- Small footprint allows more efficient use of panel space

Typical applications

- Large apartment complexes
- Multi-family meter stacks
- VFD line protection

Data sheet. 1025

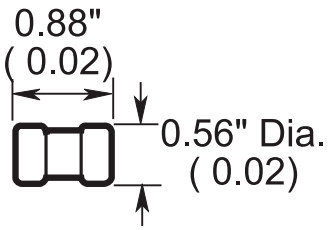
JJN Class T Limitron fast acting fuse links

Catalogue numbers

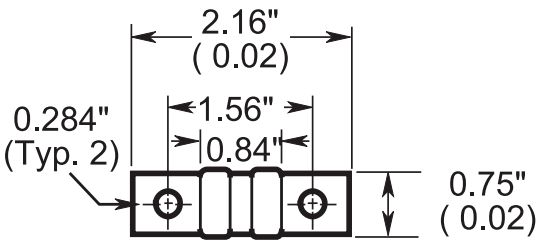
			Recommended fuse blocks						
			Box lug				Screw		
Catalogue numbers	Rated voltage	Rated current	1-pole	2-pole	3-pole	4-pole	2-pole	3-pole	4-pole
JJN-1	300 V a.c./ 160 V d.c.	1	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-2	300 V a.c./ 160 V d.c.	2	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-3	300 V a.c./ 160 V d.c.	3	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-6	300 V a.c./ 160 V d.c.	6	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-10	300 V a.c./ 160 V d.c.	10	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-15	300 V a.c./ 160 V d.c.	15	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-20	300 V a.c./ 160 V d.c.	20	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-25	300 V a.c./ 160 V d.c.	25	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-30	300 V a.c./ 160 V d.c.	30	N/A	T30030-2CR	T30030-3CR	T30030-4CR	T30030-2SR	T30030-3SR	T30030-4SR
JJN-35	300 V a.c./ 160 V d.c.	35	N/A	T30060-2CR	T30060-3CR	T30060-4CR	T30060-2SR	T30060-3SR	T30060-4SR
JJN-40	300 V a.c./ 160 V d.c.	40	N/A	T30060-2CR	T30060-3CR	T30060-4CR	T30060-2SR	T30060-3SR	T30060-4SR
JJN-45	300 V a.c./ 160 V d.c.	45	N/A	T30060-2CR	T30060-3CR	T30060-4CR	T30060-2SR	T30060-3SR	T30060-4SR
JJN-50	300 V a.c./ 160 V d.c.	50	N/A	T30060-2CR	T30060-3CR	T30060-4CR	T30060-2SR	T30060-3SR	T30060-4SR
JJN-60	300 V a.c./ 160 V d.c.	60	N/A	T30060-2CR	T30060-3CR	T30060-4CR	T30060-2SR	T30060-3SR	T30060-4SR
JJN-70	300 V a.c./ 160 V d.c.	70	TM30100-1CR	T30100-2CR	TM30100-3CR	N/A	N/A	N/A	N/A
JJN-80	300 V a.c./ 160 V d.c.	80	TM30100-1CR	T30100-2CR	TM30100-3CR	N/A	N/A	N/A	N/A
JJN-90	300 V a.c./ 160 V d.c.	90	TM30100-1CR	T30100-2CR	TM30100-3CR	N/A	N/A	N/A	N/A
JJN-100	300 V a.c./ 160 V d.c.	100	TM30100-1CR	T30100-2CR	TM30100-3CR	N/A	N/A	N/A	N/A
JJN-110	300 V a.c./ 160 V d.c.	110	TM30200-1CR	N/A	TM30200-3CR	N/A	N/A	N/A	N/A
JJN-125	300 V a.c./ 160 V d.c.	125	TM30200-1CR	N/A	TM30200-3CR	N/A	N/A	N/A	N/A
JJN-150	300 V a.c./ 160 V d.c.	150	TM30200-1CR	N/A	TM30200-3CR	N/A	N/A	N/A	N/A
JJN-175	300 V a.c./ 160 V d.c.	175	TM30200-1CR	N/A	TM30200-3CR	N/A	N/A	N/A	N/A
JJN-200	300 V a.c./ 160 V d.c.	200	TM30200-1CR	N/A	TM30200-3CR	N/A	N/A	N/A	N/A
JJN-225	300 V a.c./ 160 V d.c.	225	TM30400-1CR	N/A	N/A	N/A	N/A	N/A	N/A
JJN-250	300 V a.c./ 160 V d.c.	250	TM30400-1CR	N/A	N/A	N/A	N/A	N/A	N/A
JJN-300	300 V a.c./ 160 V d.c.	300	TM30400-1CR	N/A	N/A	N/A	N/A	N/A	N/A
JJN-350	300 V a.c./ 160 V d.c.	350	T30400-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-400	300 V a.c./ 160 V d.c.	400	T30400-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-450	300 V a.c./ 160 V d.c.	450	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-500	300 V a.c./ 160 V d.c.	500	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-600	300 V a.c./ 160 V d.c.	600	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-700	300 V a.c./ 170 V d.c.	700	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-800	300 V a.c./ 170 V d.c.	800	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-1000	300 V a.c./ 170 V d.c.	1000	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A
JJN-1200	300 V a.c./ 170 V d.c.	1200	T30600-1	N/A	N/A	N/A	N/A	N/A	N/A

JJN Class T Limitron fast acting fuse links

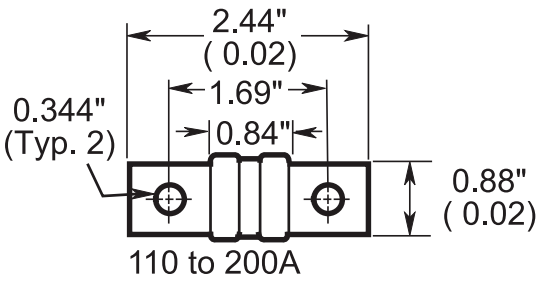
Dimensions in - 35 A to 60 A



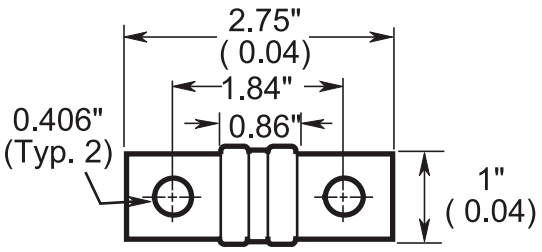
Dimensions in - 70 A to 100 A



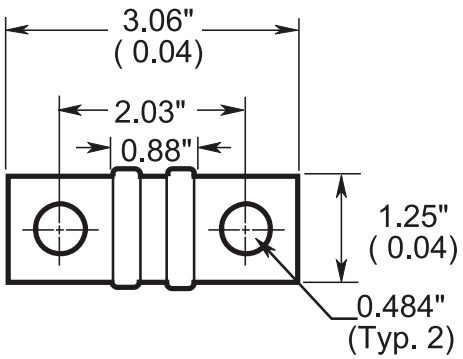
Dimensions in - 110 A to 200 A



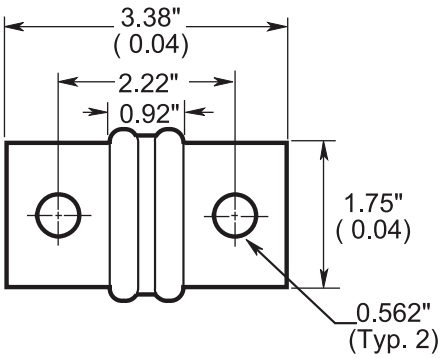
Dimensions in - 225 A to 400 A



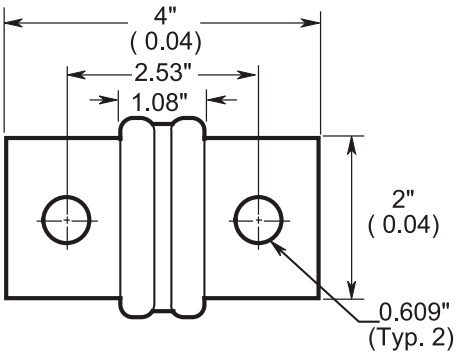
Dimensions in - 450 A to 600 A



Dimensions in - 700 A and 800 A



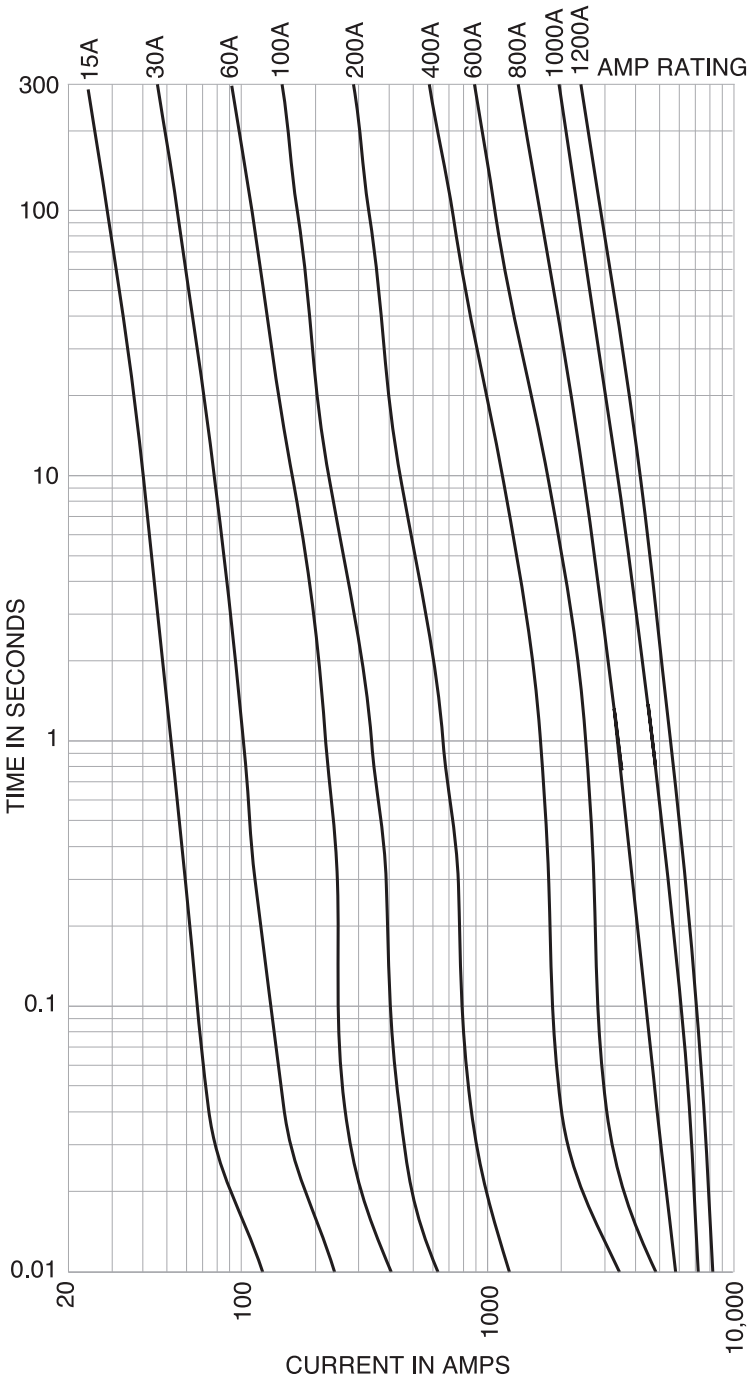
Dimensions in - 1000 A to 1200 A



Data sheet 1025

JJN Class T Limitron fast acting fuse links

Time-current curve - average melt

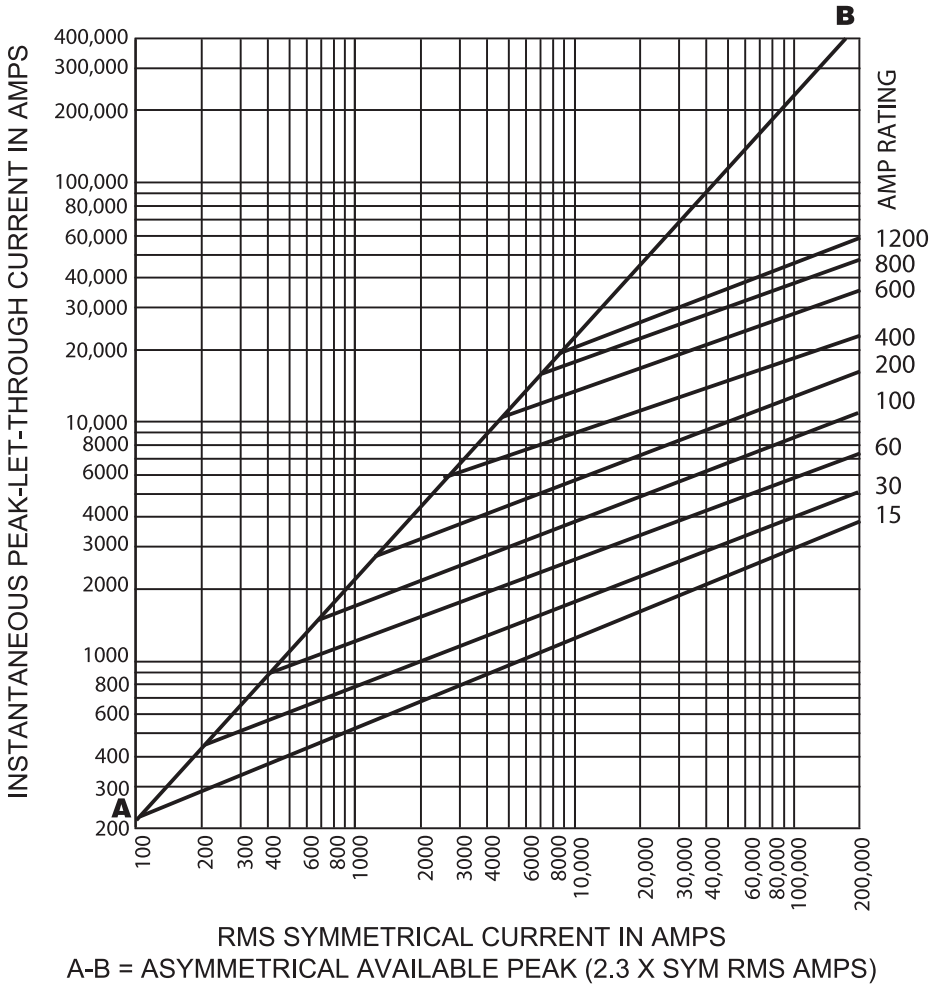


Data sheet 1025

Class T -UL Low voltage fuse links and fuse holders

JJN Class T Limitron fast acting fuse links

Current-limiting curves



Current-limiting effects

Prosp. S.C.C.	Let-through current (apparent RMS Sym. vs. fuse rating)								
—	15 A	30 A	60 A	100 A	200 A	400 A	600 A	800 A	1200 A
500	1000	1000	1000	1000	1000	1000	1000	1000	1000
1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
5000	1000	1000	1000	1000	2000	3000	5000	5000	5000
10,000	1000	1000	1000	2000	2000	4000	6000	7000	9000
15,000	1000	1000	1000	2000	3000	4000	6000	9000	10,000
20,000	1000	1000	1000	2000	3000	5000	7000	10,000	11,000
25,000	1000	1000	2000	2000	3000	5000	7000	10,000	12,000
30,000	1000	1000	2000	2000	3000	5000	8000	11,000	13,000
35,000	1000	1000	2000	3000	4000	6000	8000	11,000	13,000
40,000	1000	1000	2000	3000	4000	6000	9000	11,000	13,000
50,000	1000	1000	2000	3000	4000	7000	9000	12,000	15,000
60,000	1000	1000	2000	3000	4000	7000	10,000	13,000	16,000
70,000	1000	1000	2000	3000	5000	7000	10,000	14,000	17,000
80,000	1000	2000	2000	3000	5000	8000	11,000	15,000	17,000
90,000	1000	2000	2000	3000	6000	8000	11,000	15,000	18,000
100,000	1000	2000	2000	4000	6000	8000	12,000	16,000	19,000
150,000	1000	2000	3000	4000	6000	9000	13,000	17,000	22,000
200,000	2000	2000	3000	4000	7000	9000	15,000	19,000	23,000

Data sheet 1025

JJS Class T Limitron fast acting fuse links

Specifications

Description

Very fast-acting, current-limiting 600 V (JJS) Class T fuses.



Technical data

- Rated voltage: JJS 600 V a.c. (or less)
- Rated current: 1 A to 800 A
- Breaking capacity:200 kA RMS Sym.

Agency information

- UL Listed, Std 248-15, Class T, Guide JDDZ, File E4273
- CSA Certified, Class 1422-02, File 53787
- RoHS compliant
- CE

Features

- Series combination Technical data with branch circuit breakers allows broad range of coverage, independent of breaker manufacturer
- Current limitation for non-inductive circuits provides Class T current-limiting response to maximum ground fault and short-circuit conditions
- 200 kA interrupting rating provides protection for virtually all circuit locations
- Small footprint allows more efficient use of panel space

Typical applications

- Large apartment complexes
- Multi-family meter stacks
- VFD line protection.

Data sheet 1029

Class T -UL Low voltage fuse links and fuse holders

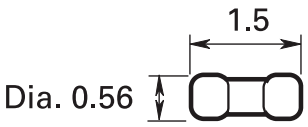
JJS Class T Limitron fast acting fuse links

Catalogue numbers

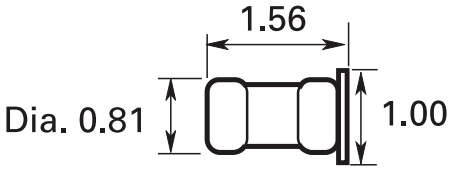
			Recommended fuse blocks					
			Box lug			Screw		
Catalogue numbers	Rated voltage	Rated current	1-pole	2-pole	3-pole	1-pole	2-pole	3-pole
JJS-1	600 V a.c.	1	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-2	600 V a.c.	2	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-3	600 V a.c.	3	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-6	600 V a.c.	6	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-10	600 V a.c.	10	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-15	600 V a.c.	15	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-20	600 V a.c.	20	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-25	600 V a.c.	25	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-30	600 V a.c.	30	T60030-1CR	T60030-2CR	T60030-3CR	T60030-1SR	T60030-2SR	T60030-3SR
JJS-35	600 V a.c.	35	T60060-1CR	T60060-2CR	TM60100-3CRR	T60060-1SR	T60060-2SR	T60100-3SR
JJS-40	600 V a.c.	40	T60060-1CR	T60060-2CR	TM60100-3CRR	T60060-1SR	T60060-2SR	T60100-3SR
JJS-45	600 V a.c.	45	T60060-1CR	T60060-2CR	TM60100-3CRR	T60060-1SR	T60060-2SR	T60100-3SR
JJS-50	600 V a.c.	50	T60060-1CR	T60060-2CR	TM60100-3CRR	T60060-1SR	T60060-2SR	T60100-3SR
JJS-60	600 V a.c.	60	T60060-1CR	T60060-2CR	TM60100-3CRR	T60060-1SR	T60060-2SR	T60100-3SR
JJS-70	600 V a.c.	70	TM60100-1CR	T60100-2C	TM60100-3CR	N/A	N/A	N/A
JJS-80	600 V a.c.	80	TM60100-1CR	T60100-2C	TM60100-3CR	N/A	N/A	N/A
JJS-90	600 V a.c.	90	TM60100-1CR	T60100-2C	TM60100-3CR	N/A	N/A	N/A
JJS-100	600 V a.c.	100	TM60100-1CR	T60100-2C	TM60100-3CR	N/A	N/A	N/A
JJS-110	600 V a.c.	110	TM60200-1CR	N/A	TM60200-3CR	N/A	N/A	N/A
JJS-125	600 V a.c.	125	TM60200-1CR	N/A	TM60200-3CR	N/A	N/A	N/A
JJS-150	600 V a.c.	150	TM60200-1CR	N/A	TM60200-3CR	N/A	N/A	N/A
JJS-175	600 V a.c.	175	TM60200-1CR	N/A	TM60200-3CR	N/A	N/A	N/A
JJS-200	600 V a.c.	200	TM60200-1CR	N/A	TM60200-3CR	N/A	N/A	N/A
JJS-225	600 V a.c.	225	TM60400-1CR	N/A	N/A	N/A	N/A	N/A
JJS-250	600 V a.c.	250	TM60400-1CR	N/A	N/A	N/A	N/A	N/A
JJS-300	600 V a.c.	300	TM60400-1CR	N/A	N/A	N/A	N/A	N/A
JJS-350	600 V a.c.	350	TM60400-1CR	N/A	N/A	N/A	N/A	N/A
JJS-400	600 V a.c.	400	TM60400-1CR	N/A	N/A	N/A	N/A	N/A
JJS-450	600 V a.c.	450	TM60600-1CR	N/A	N/A	N/A	N/A	N/A
JJS-500	600 V a.c.	500	TM60600-1CR	N/A	N/A	N/A	N/A	N/A
JJS-600	600 V a.c.	600	TM60600-1CR	N/A	N/A	N/A	N/A	N/A
JJS-800	600 V a.c.	800	N/A	N/A	N/A	N/A	N/A	N/A

JJS Class T Limitron fast acting fuse links

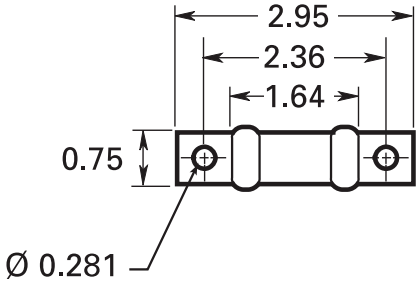
Dimensions in - 1 A to 30 A



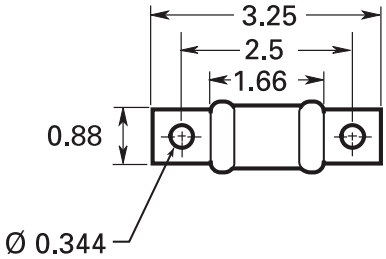
Dimensions in - 35 A to 60 A



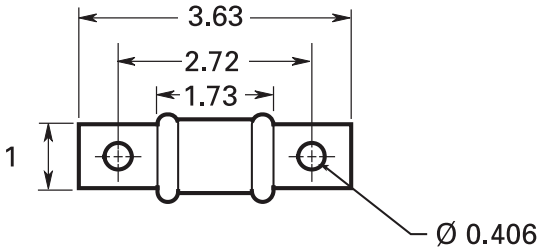
Dimensions in - 70 A to 100 A



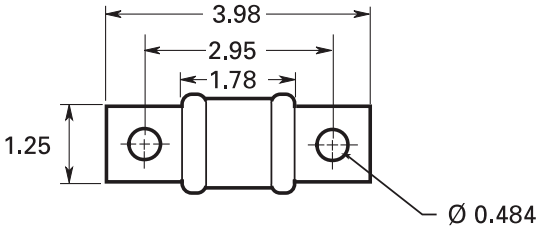
Dimensions in - 110 A to 200 A



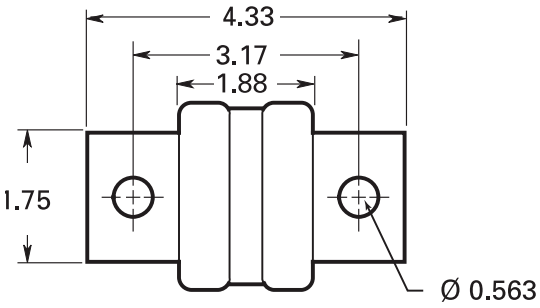
Dimensions in - 225 A to 400 A



Dimensions in - 450 A to 600 A



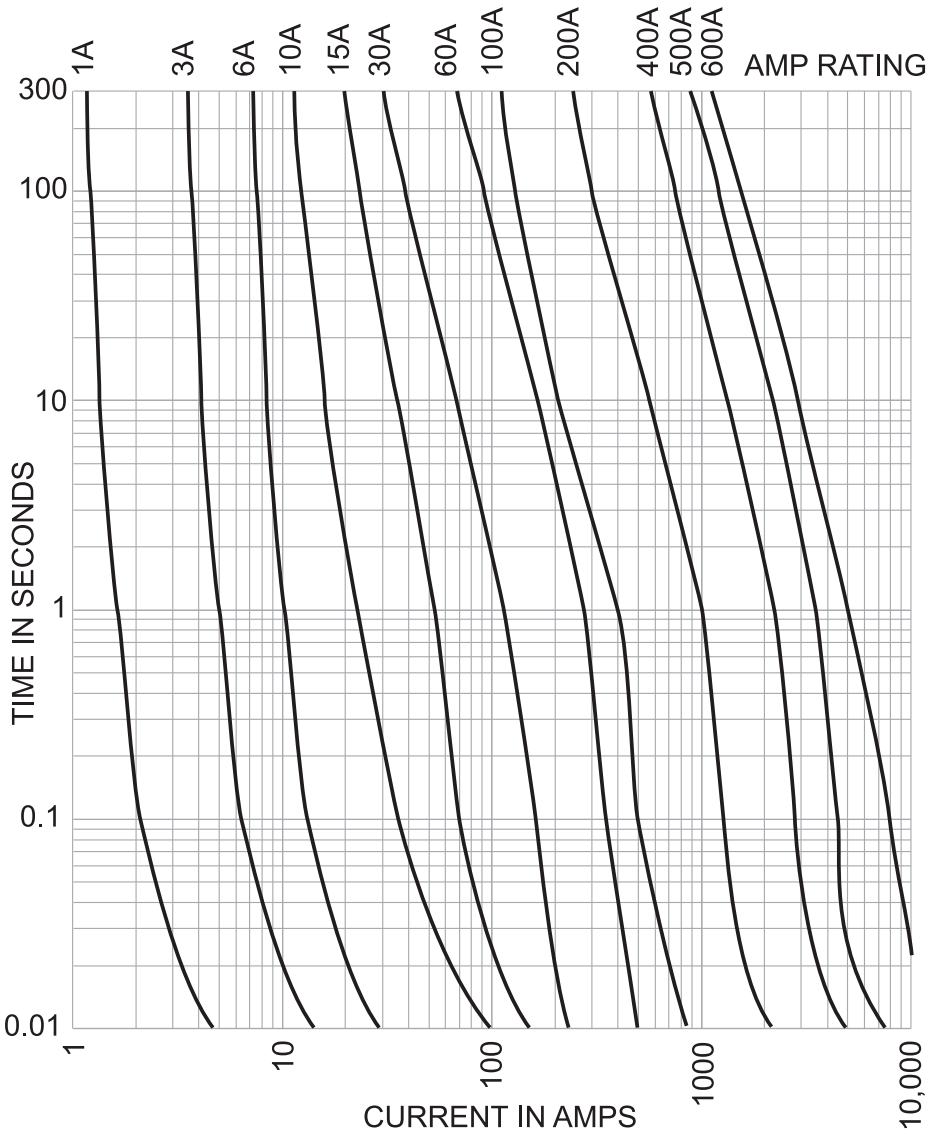
Dimensions in - 800 A



Data sheet 1029

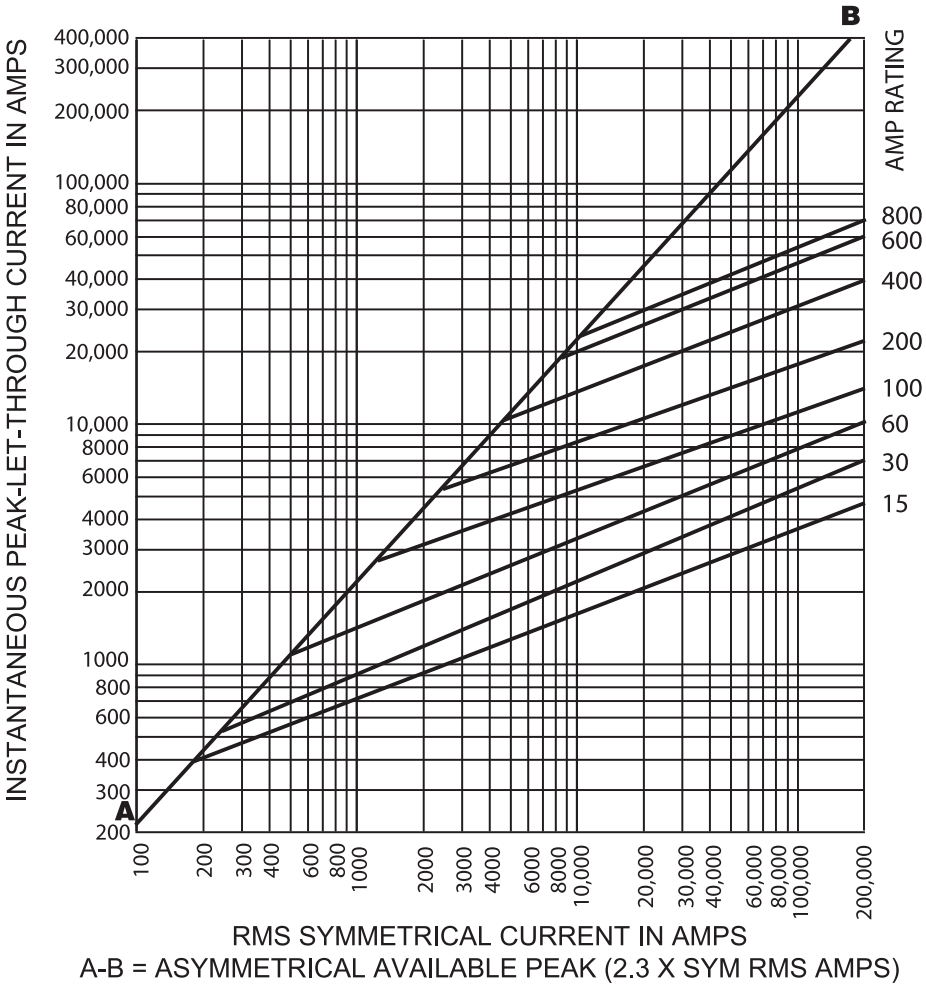
JJS Class T Limitron fast acting fuse links

Time-current curve - average melt



JJS Class T Limitron fast acting fuse links

Current-limiting curves



Current-limiting effects

Prosp. S.C.C.	Let-through current (apparent RMS Sym. vs. fuse rating)							
—	15A	30A	60A	100A	200A	400A	600A	800A
500	1000	1000	1000	1000	1000	1000	1000	1000
1000	1000	1000	1000	1000	1000	1000	1000	1000
5000	1000	1000	1000	2000	3000	4000	5000	5000
10,000	1000	1000	1000	2000	3000	6000	8000	9000
15,000	1000	1000	2000	3000	4000	7000	10,000	11,000
20,000	1000	1000	2000	3000	4000	7000	10,000	12,000
25,000	1000	1000	2000	3000	5000	7000	11,000	13,000
30,000	1000	1000	2000	3000	5000	8000	12,000	14,000
35,000	1000	1000	2000	3000	5000	9000	13,000	15,000
40,000	1000	2000	2000	4000	5000	9000	13,000	15,000
50,000	1000	2000	2000	4000	6000	10000	14,000	17,000
60,000	1000	2000	3000	4000	6000	10000	16,000	18,000
70,000	1000	2000	3000	4000	7000	11000	17,000	19,000
80,000	1000	2000	3000	4000	7000	11000	17,000	20,000
90,000	1000	2000	3000	4000	7000	12000	18,000	21,000
100,000	2000	2000	3000	5000	7000	12,000	19,000	22,000
150,000	2000	3000	4000	6000	8000	14,000	22,000	25,000
200,000	2000	3000	4000	6000	9000	16,000	24,000	28,000

Data sheet 1029

Class T -UL Low voltage fuse links and fuse holders

T300 and TM300 300 volt Class T fuse blocks

Specifications

Description

Eaton's Bussmann series T300 fuse blocks are open fuse blocks for use with Class T fuses up to 600 Rated current in various pole configurations from 1- to 4-poles. T300 blocks use Eaton's Bussmann series JJN fuses.



Technical data

- Rated voltage 300 V
- Rated current up to 600 A
- SCCR 200 kA RMS Sym.



Agency information

- UL Listed UL 4248, Guide IZLT, File E14853,
- CSA Certified, Class 6225-01, File 47235
- CE



Flammability rating

- UL 94V0

Features

- Provide 1-, 2-, 3- and 4-pole housing for 300 V a.c. Class T fuses
- High 200 kA RMS Sym. Short-Circuit Current Rating
- Class T fuse blocks have a small foot print, providing substantial space savings in equipment

Typical applications

- 300 V or less control systems
- 300 V or less individual control circuits

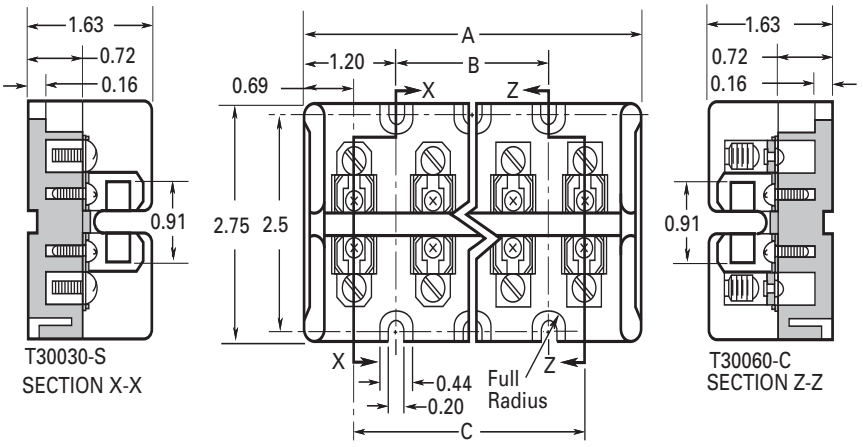
Catalogue numbers

Catalogue no./terminals		Rated current	Poles	Terminal AWG wire range/type	Compatible fuse links
Screw	Box lug				
T30030-2SR	T30030-2CR	Up to 30	2	SR 10-18 Cu CR 6-14 Cu/Al	JJN-1 to JJN-30
T30030-3SR	T30030-3CR		3		
T30030-4SR	T30030-4CR		4		
T30060-2SR	T30060-2CR	31-60	2	CR 2-14 Cu/Al SR 10-18 Cu	JJN-30 to JJN-60
T30060-3SR	T30060-3CR		3		
T30060-4SR	T30060-4CR		4		
N/A	TM30100-1CR	61-100	1	1/0-8 Cu/Al	JJN-70 to JJN-100
N/A	TM30100-3CR		3		
N/A	TM30200-1CR	101-200	1	250kcmil-6 Cu/Al	JJN-110 to JJN-200
N/A	TM30200-3CR		3		
N/A	TM30400-1CR	201-400	1	600kcmil-2/0 Cu/Al	JJN-225 to JJN-400
N/A	TM30600-1CR	401-600	1	(2) 600kcmil-4/0 Cu/Al	JJN-450 to JJN-600

Data sheet 1115

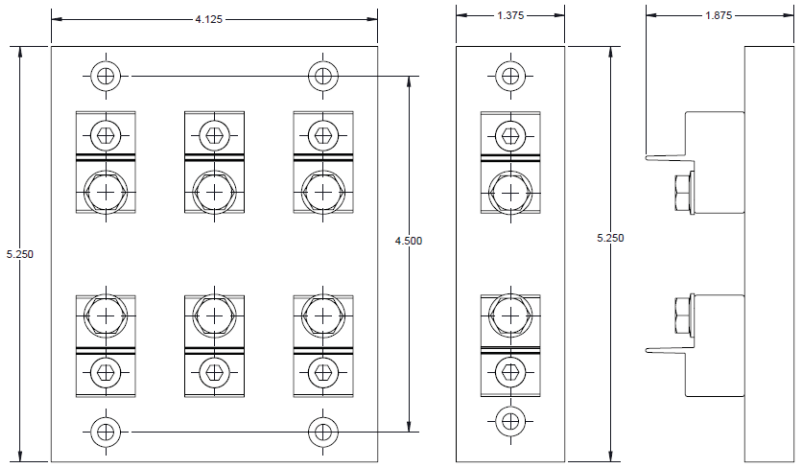
T300 and TM300 300 volt Class T fuse blocks

Dimensions in - T30030 and T30060 Up to 60 A

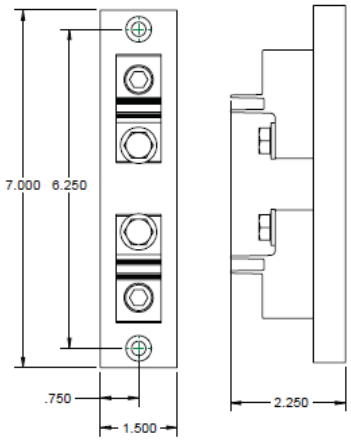


	Dimensions — in		
Catalogue no.	**A**	**B**	**C**
T30030-2	2.41	N/A	1.03
T30060-2	2.41	N/A	1.03
T30030-3	3.44	1.03	2.06
T30060-3	3.44	1.03	2.06
T30030-4	4.47	2.06	3.09
T30060-4	4.47	2.06	3.09

Dimensions in - TM30100-xCR



Dimensions in - TM30200-1CR

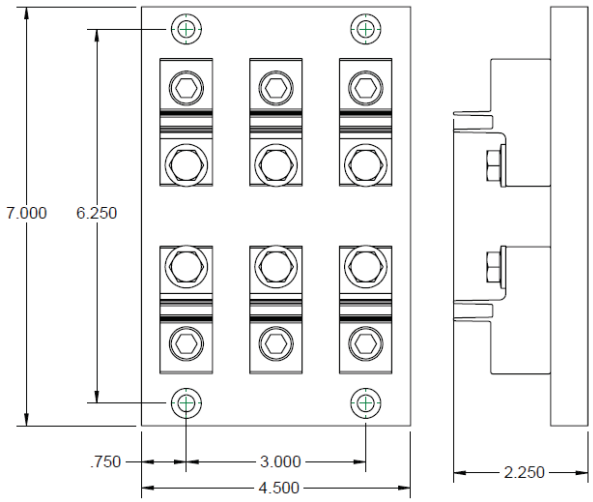


Data sheet 1115

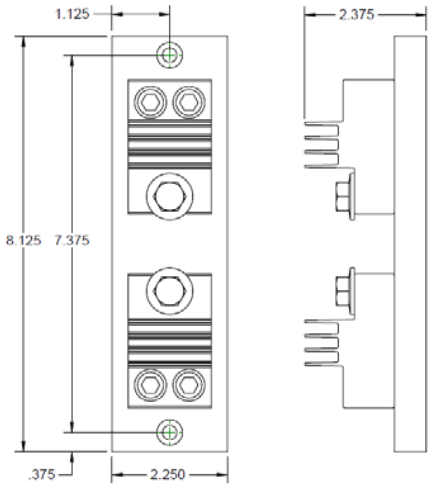
Class T -UL Low voltage fuse links and fuse holders

T300 and TM300 300 volt Class T fuse blocks

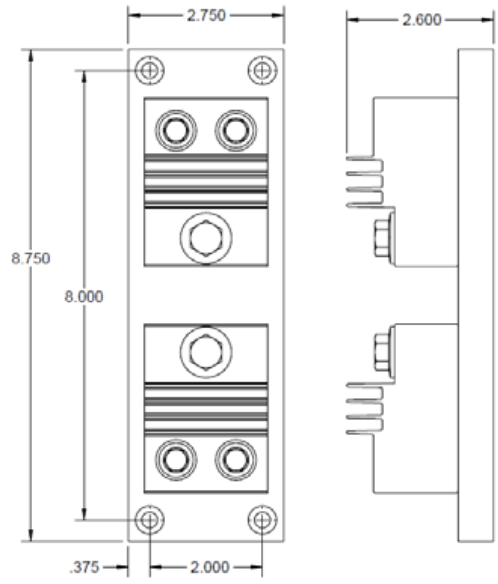
Dimensions in - TM30200-3CR



Dimensions in - TM30400-1CR



Dimensions in - TM30600-1CR



Data sheet 1115

T600 and TM600 600 Volt Class T fuse blocks

Specifications

Description

Eaton's Bussmann series T600 fuse blocks are open fuse blocks for use with Class T fuses up to 600 Rated current in various pole configurations from 1- to 3-poles. T600 blocks use Bussmann series JJS fuses.



Technical data

- Rated voltage 600 V
- Rated current up to 600 A
- SCCR 200 kA RMS Sym.

Agency information

- UL Listed, UL 4248, Guide IZLT, File E14853
- CSA Certified, Class 6225-01, File 47235
- CE

Flammability rating

- UL 94V0

Features

- Provide 1-, 2- and 3-pole housing for 600 V a.c. Class T fuses.
- High 200 kA RMS Sym. Short-Circuit Current Technical data
- Class T fuse blocks have a small foot print, providing substantial space savings in equipment

Typical applications

- 600 V or less control systems
- 600 V or less individual control circuits

Catalogue number

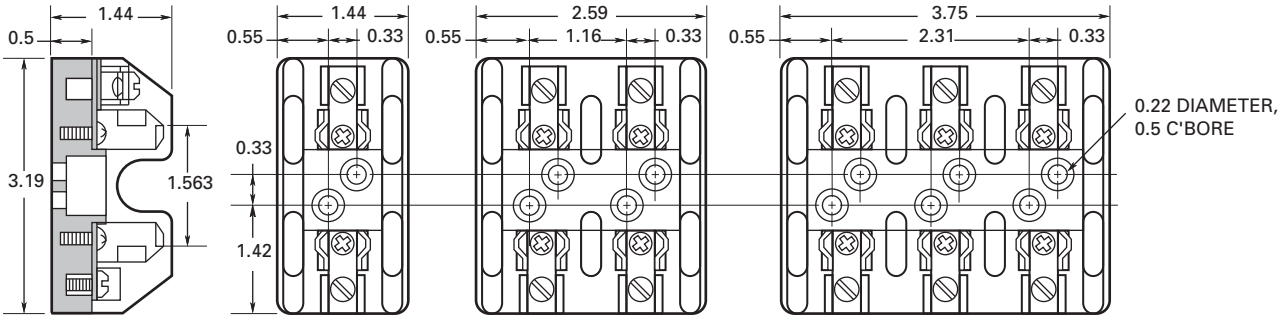
Catalogue no./terminals		Rated current	Poles	Terminal AWG range/ type	Compatible fuse links
Screw	Box lug				
T60030-1SR	T60030-1CR	Up to 30	1	SR 10-18 Cu CR 2-14 Cu/Al	JJS-1 to JJS-30
T60030-2SR	T60030-2CR		2		
T60030-3SR	T60030-3CR		3		
T60060-1SR	T60060-1CR	31-60	1	SR 10-18 Cu CR 2-14 Cu/Al	JJS-35 to JJS-60
T60060-2SR	T60060-2CR		2		
T60060-3SR	T60060-3CR		3		
N/A	TM60100-1CR	61-100	1	2/0-14 Cu/Al	JJS-70 to JJS-100
N/A	TM60100-3CR		3		
N/A	TM60200-1CR	101-200	1	250kcmil-6 Cu/Al	JJS-110 to JJS-200
N/A	TM60200-3CR		1		
N/A	TM60400-1CR	201-400	1	600kcmil-2/0 Cu/Al	JJS-225 to JJS-400
N/A	TM60600-1CR	401-600	1	(2) 600kcmil-4/0 Cu/Al	JJS-450 to JJS-600

* UL Listed, Guide IZLT, File E14853, CSA Certified Class 6225-01, File 21455M18.

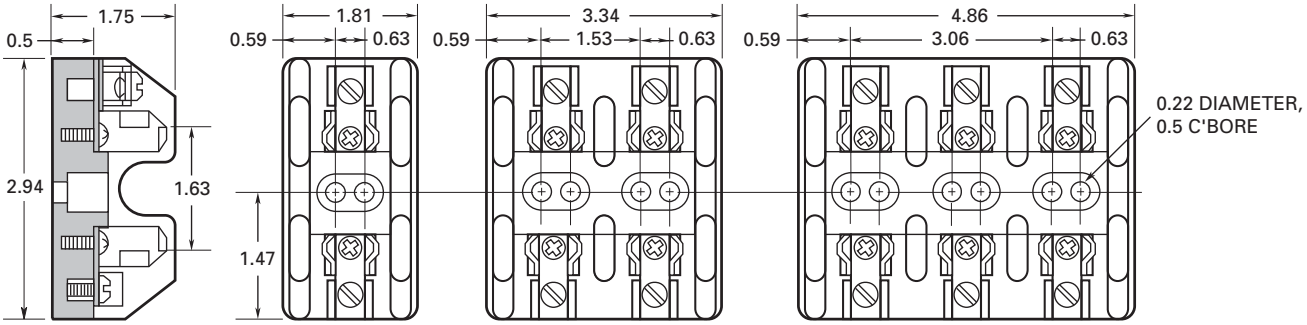
Class T -UL Low voltage fuse links and fuse holders

T600 and TM600 600 Volt Class T fuse blocks

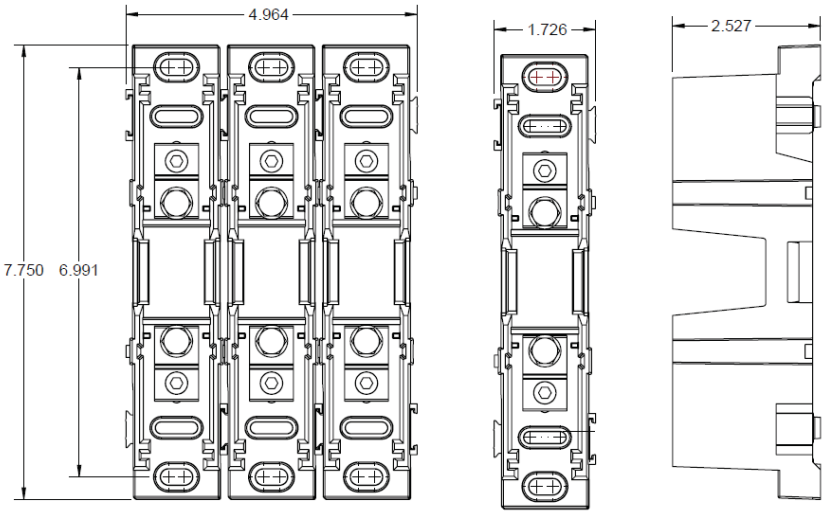
Dimensions in - T600 Up to 30 A



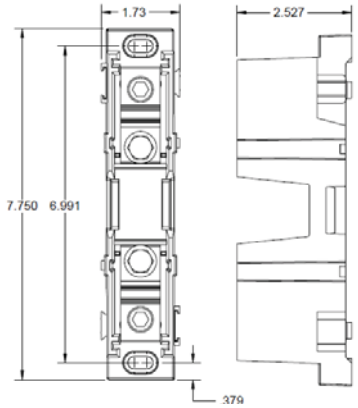
Dimensions in - T600 31 A to 60 A



Dimensions in - TM60100-xCR

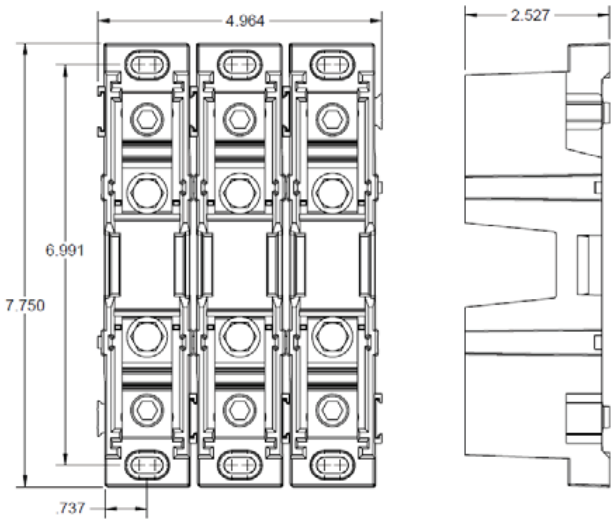


Dimensions in - TM60200-1CR

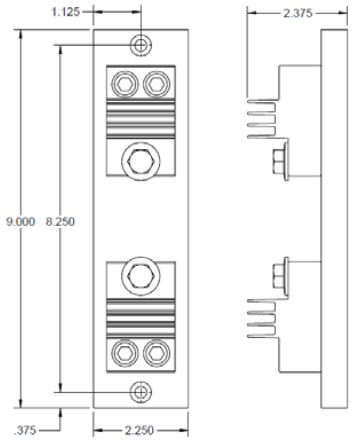


T600 and TM600 600 Volt Class T fuse blocks

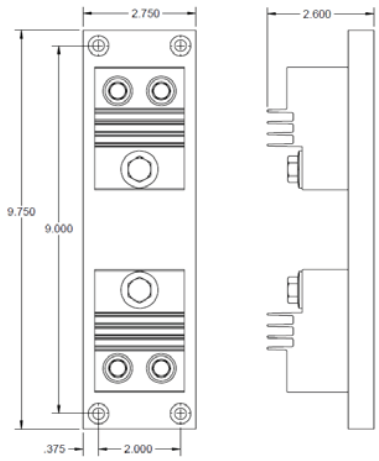
Dimensions - in - TM60200-3CR



Dimensions - in - TM60400-1CR



Dimensions - in - TM60600-1CR



Data sheet 1116

BH-0111 Modular open-center fuse block

Specifications



Description

BH-0111 modular fuse block is used with Class T JJS fuse links rated from 70 A to 100 A

Catalogue number

- BH-0111

Technical data

- Rated voltage 700 V
- Rated current: 100 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V
- CSA Certified, Class 6225-01, File No. 47235 up to 700 V
- RoHS compliant
- CE

Material

- Base-light-weight, high temperature thermoplastic
- Mounting studs - plated steel
- Washer - spring steel
- Nuts - plated steel
- Connector: tin-plated aluminum

Conductors - AWG Cu

- One hole connector accepts 14 - 2/0
- Two hole connector accepts 14 - 1/0

Features

- A wide range of mounting configurations
- High Short-Circuit Current Rating (SCCR) based upon installed fuse up to 200 kA RMS Sym.

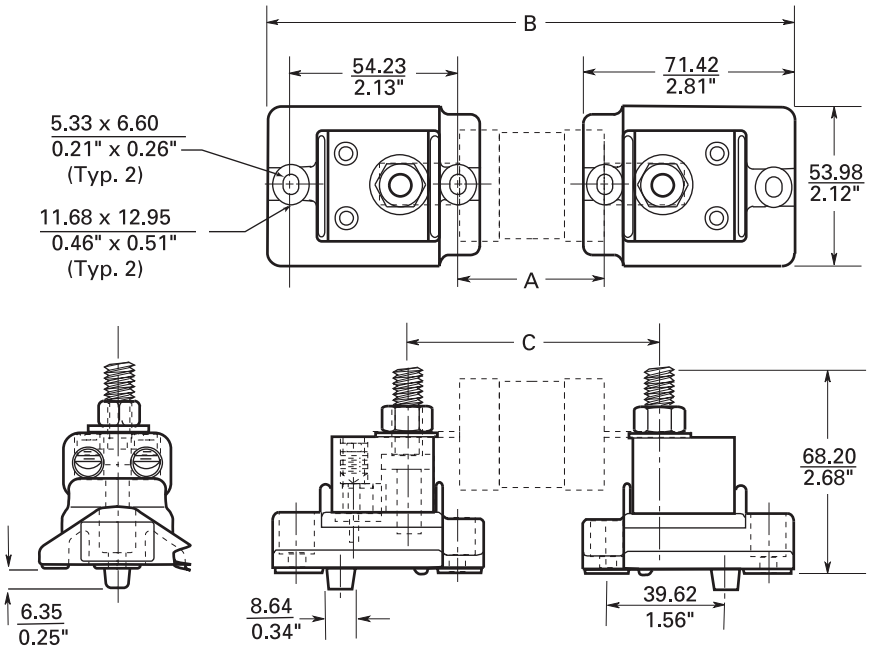
Typical applications

- Solid state control circuits
- VFDs
- UPS systems

Data sheet 1200

BH-0111 Modular open-center fuse block

Dimensions mm (in)



				Dimensions - mm (in)		
Compatible Class T fuse links	**Fuse block**	**Stud dia (in)**	**Fuse Rated voltage**	**A**	**B**	**C**
JJS 70 to 100 A	BH-0111	1/4	600	25.96 (1.022)	151.18 (5.952)	59.74 (2.352)

BH-1132 and BH-1133 Modular open-center fuse block

Specifications



Description

Eaton's Bussmann series modular fuse blocks are used with Class T JJN and JJS fuse links.

Catalogue number

- BH-1132
- BH-1133

Technical data

- Rated voltage 700 V
- Rated current: 400 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V
- CSA Certified, Class 6225-01, File No. 47235 up to 700 V
- RoHS compliant
- CE

Material

- Base-light-weight, high temperature thermoplastic
- Mounting studs - plated steel
- Washer - spring steel
- Nuts - plated steel
- Connector: tin-plated aluminum

Conductors - AWG Cu

- Connector accepts 6 - 250 kcmil

Features

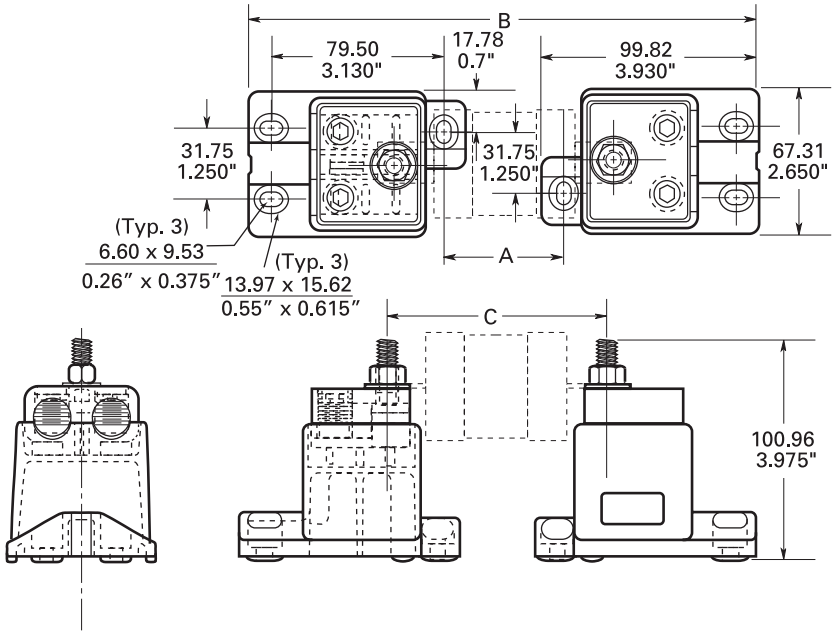
- A wide range of mounting configurations
- High Short-Circuit Current Rating (SCCR) based upon installed fuse up to 200 kA RMS Sym.

Typical applications

- Solid state control circuits
- VFDs
- UPS systems

BH-1132 and BH-1133 Modular open-center fuse block

Dimensions mm (in)



Compatible Class T fuse links	Fuse block	Stud dia (in)	Fuse Rated voltage	Dimensions - mm (in)		
				A	B	C
JJN 225 A to 400 A	BH-1133	3/8	300	1.88 (0.074)	181.20 (7.134)	46.84 (1.844)
JJS 110 A to 200 A	BH-1132	5/16	600	1.872 (0.737)	197.61 (7.78)	63.68 (2.507)
JJS 225 A to 100 A	BH-1133	3/8	600	24.08 (0.948)	203.40 (8.008)	69.04 (2.718)

BH-3144 Modular open-center fuse block

Specifications

RoHS 2011/65/EU



Description

BH-3144 modular fuse block is used with Class T JJS and JJN.fuse links rated from450 A to 600 A

Catalogue number

- BH-3144

Technical data

- Rated voltage 700 V
- Rated current: 700 A
- SCCR 200 kA RMS Sym. or fuse IR, whichever is lower

Agency information

- UL Recognized, Guide EZLT2, File No. E14853 up to 700 V
- CSA Certified, Class 6225-01, File No. 47235 up to 700 V
- RoHS compliant
- CE

Material

- Base-light-weight, high temperature thermoplastic
- Mounting studs - plated steel
- Washer - spring steel
- Nuts - plated steel
- Connector: tin-plated aluminum

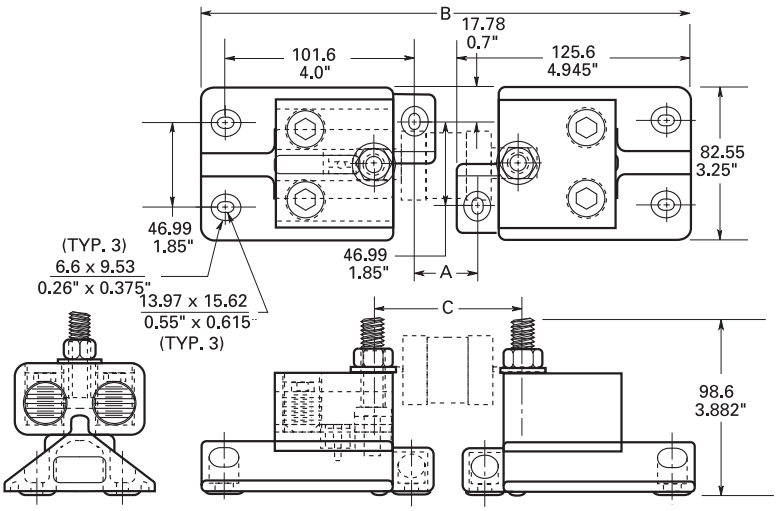
Conductors - AWG Cu

- Connector accepts 6 - 250 kcmil

Typical applications

- Solid state control circuits
- VFDs
- UPS systems

Dimensions mm (in)



Compatible Class J fuse links	Fuse block	Stud dia (in)	Fuse Rated voltage	Dimensions - mm (in) A	B	C
JJN 450 A to 600 A	BH-3144	7/16	300	8.66 (0.341)	237.26 (9.341)	51.59 (2.031)
JJS 450 A to 600 A	BH-3144	7/16	600	32.08 (1.263)	260.48 (10.263)	75.01 (2.953)

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Notes

Contact details

Customer satisfaction team

Eaton's Customer Satisfaction team is available to answer questions regarding Bussmann series products.

Calls can be made between:

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

The Customer Satisfaction team can be reached via:

Phone: 00 44 (0) 1509 882 600

Fax: 00 44 (0) 1509 882 786

Emails:

For orders and sales enquiries: GBBURSales@eaton.com

For forecasting information: buleforecasting@eaton.com

For payment advice: EES-paymentadvice@eaton.com

Online resources

Visit www.eaton.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 available to answer your technical and application queries.

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

General technical enquiries:
buletechnical@eaton.com

For enquiries related to high speed fuse links:
bulehighspeedtechnical@eaton.com

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For more information, visit Eaton.com.

Contact your local Eaton office

Eaton Electrical Products Limited
Unit 1,Hawker Business Park
Melton Road
Burton-on-the-Wolds
LE12 5TH
Leicestershire
United Kingdom
GBBURsales@eaton.com
www.eaton.com

Eaton Industries Manufacturing GmbH
Electrical Sector EMEA
Route de la Longeraie
71110 Morges, Switzerland
Eaton.eu

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