## BUSSMANN SERIES

# Class R 250V and 600V modular ferrule and knifeblade fuse blocks





#### Catalog symbol:

- RM25\_ (250V)
- RM60\_ (600V)

#### **Description:**

Bussmann™ series Class R modular fuse blocks increase versatility, reduce labor and enhance safety for any panel or electrical system design. Available for the full Class R fuse amp range.

These fuse blocks feature a standard fuse clip reinforcing spring for enhanced electrical contact between the block and fuse. All blocks are available as single-pole versions that snap together for the required number of poles, or as factory configured 2-, and 3-pole versions to meet stocking requirements.

The modular design permits reducing inventory, assembly time and labor with tool-less assembly of multiple poles at point of use.

Ferrule fuse blocks up to 60 amps save panel space with the smallest width dimension on the market and feature DIN-Rail and panel mount versatility so that one product can be used for multiple applications with lower inventory cost.

Knifeblade fuse blocks from 100 to 600 amps feature phase barriers between poles for additional safety with up to four mounting holes per pole increase installation flexibility. All knifeblade blocks meet UL creep and clearance requirements for Industrial Power Circuits (UL 508 and UL 845).

Additionally, the 200 to 600 amp blocks 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.

Easy circuit identification is available for 30 and 60 amp blocks and covers with universal marker labels.

#### **Specifications:**

#### **Ratings**

- Volts
  - 250V
  - 600V
- · Amps up to 600
- Withstand 200kA RMS Sym

#### **Agency information**

- · Blocks:
  - UL® Listed E14853 IZLT and IZLT7
  - CSA® Certified 47235-6225-01
  - CE
  - RoHS Compliant
  - REACH declaration available upon request
- · Covers:
  - UL Listed E58836 JDVS
  - CSA Certified 47235-6225-01 (30 and 60A)
  - RoHS Compliant
  - REACH declaration available upon request



#### Technical Data 10489

Effective February 2016

# Class R 250V and 600V modular ferrule and knifeblade fuse blocks

#### **Poles**

• 1-, 2-, 3-pole units factory assembled

• Single-pole units snap together to create desired number of poles

#### Flammability ratings

Blocks: UL 94V0, self-extinguishingCovers: 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 90V and closed circuit to illuminate.

#### **Materials**

- Base: Thermoplastic
- Terminals
  - Tin-plated copper brass (30 and 60A)
  - Tin-plated aluminum (box lug)
- Covers:Thermoplastic

#### **Conductors**

• See catalog numbers for details and torque specifications



Dual lugs on 600A blocks for easier wiring using two, smaller conductors.

#### Class R ferrule fuse blocks



30 and 60 amp ferrule fuse blocks have DIN-rail and panel mounting capability, the modular designs allows blocks toand snap together for the desired number of poles. They accept optional snap-on covers for IP20 finger-safe protection and feature a lockout/tagout to improve electrical safety.

#### Class R knifeblade fuse blocks





100 to 600 amp knifeblade fuse blocks are panel mount with multiple holes for installation flexibility and the modular design allows blocks to snap together for the desired number of poles. They accept optional snap-on covers for IP20 finger-safe protection and feature a lockout/tagout provision to improve electrical safety.

Table 1: Class R 250V 30 and 60 amp block catalog numbers

		Terminal type					Optional covers*	
Fuse amp range	Poles	Box lug/ slot screw	Box lug/ hex screw	#10-32 Phil-slot screw	Screw with quick-connect	Pressure plate	Indicating**	Non-indicating
	1	RM25030-1CR	RM25030-1CHR	RM25030-1SR	RM25030-1QR	RM25030-1PR		
up to 30	2	RM25030-2CR	RM25030-2CHR	RM25030-2SR	RM25030-2QR	RM25030-2PR	CVRI-RH-25030	CVR-RH-25030
	3	RM25030-3CR	RM25030-3CHR	RM25030-3SR	RM25030-3QR	RM25030-3PR	_	
	1	RM25060-1CR	RM25060-1CHR					
35 to 60	2	RM25060-2CR	RM25060-2CHR	_	_	_	CVRI-RH-25060	CVR-RH-25060
	3	RM25060-3CR	RM25060-3CHR	-				

<sup>\*</sup> Covers sold separately, order one cover per pole.

Table 2: Class R 250V 30 and 60 amp block terminals and conductors

Terminal type	AWG type/ range	AWG	Torque N∙m (lb-in)	
		2-3	5.6 (50)	
Pov lug	75°C Cu 2-14,	4-6	5.1 (45)	
Box lug	AL 2-14,	8	4.5 (40)	
		10-14	4.0 (35)	
#10-32 Phil-slot screw	== /2.2.2			
Screw with quick-connect*	<sup>-</sup> 75/90°C <sub>-</sub> Cu 10-18	10-18	2.3 (20)	
Pressure plate	- 24 .3 10			

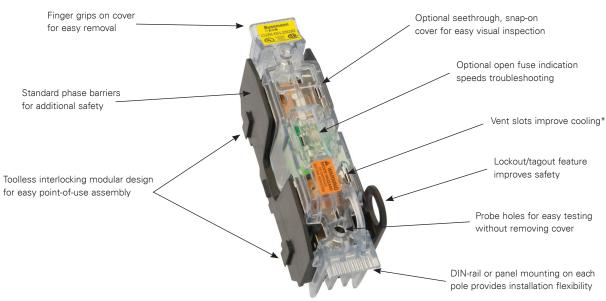
<sup>\* 3/16&</sup>quot; Quick-connect terminal maximum ampacity dependent on female spade connector and wire ratings.

#### **Recommended Bussmann series fuses:**

Description	Volts	Amps	Data sheet no.
Ultimate protection time-delay Low-Peak™ LPN	250V	up to 60	1003
Advanced protection fast-acting Limitron™ KTN-R	250V	All	1043
Advanced protection energy efficient time-delay Fusetron™ FRN-R	250V	up to 60	1019

#### Recommended accessories for 30 and 60 amp blocks:

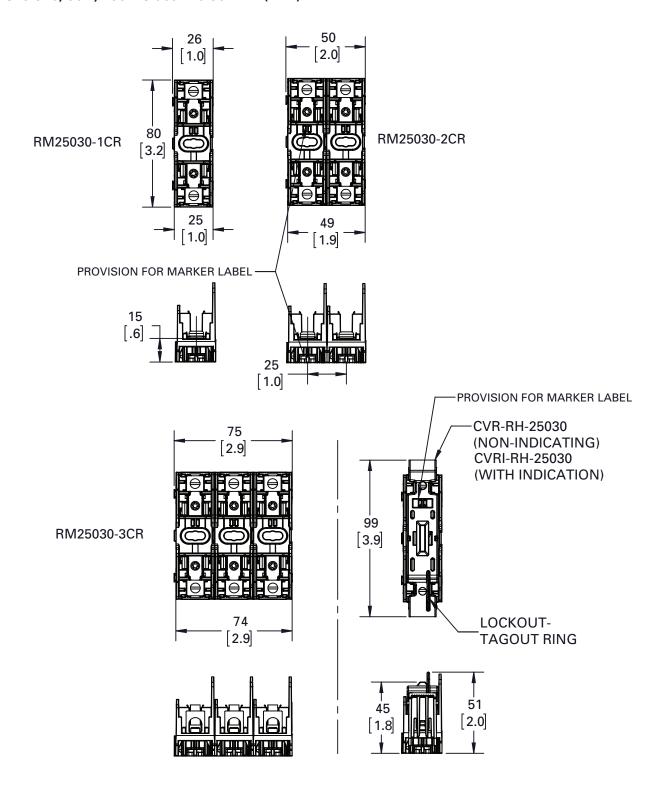
Description	Catalog no.
DIN Pail and stone	BRKT-ND
DIN-Rail end stops	BRKT-NDSCREW2
Marker labels	TM26CB



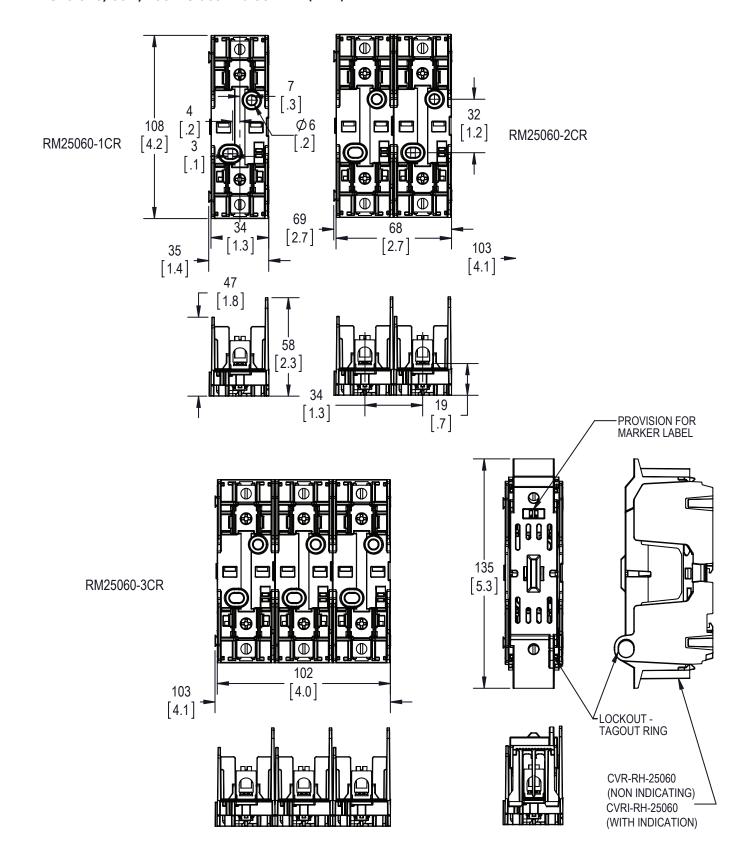
<sup>\*</sup>No fuse derating necessary.

<sup>\*\*</sup> Open fuse indication requires 90 volts minimum and closed circuit to operate.

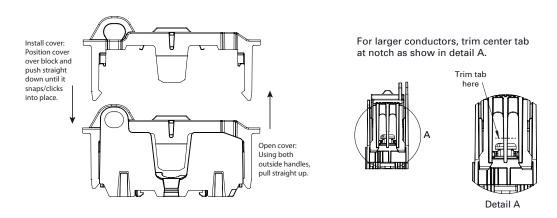
## Dimensions; 30A, 250V Class R block - in (mm)

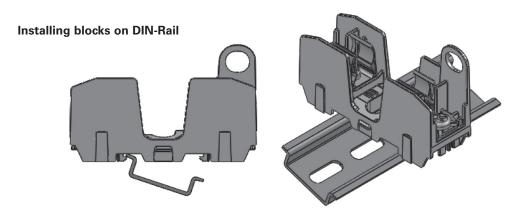


#### Dimensions; 60A, 250V Class R block - in (mm)



#### Installing/removing covers





Place one edge of DIN-Rail in fuse block base, then rotate block down until it clicks into place.



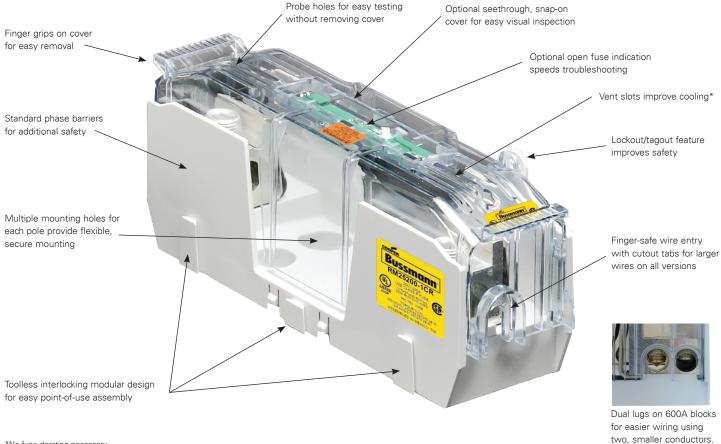
Table 3: Class H 250V 100 to 600 amp knifeblade blocks and covers

Fuse			Covers*		Conductors***		
amp range	Poles	Catalog nos.	Indicating**	Non-indicating	Solid and stranded	Fine stranded	Torque N•m (lb-in)
	1	RM25100-1CR			_	Cu 1-3 AWG	6.2 (55)
	1 111123100-10	1111/25100-1011			1/0-3 AWG; (2) Cu 4-6 AWG	Cu 4-6 AWG	5.6 (50)
70-100	2	RM25100-2CR	CVR-RH-25100	CVRI-RH-25100	2 4-6 AWG; (2) Cu 8 AWG	Cu 8 AWG	5.1 (45)
70-100	2	2 111/125100-2011	CVII-III I-25100		8 AWG; (2) Cu 10-14 AWG	_	4.5 (40)
		DN 40E 100 00D	<del></del>		Cu 10-14 AWG; AI 10-12 AWG	_	4.0 (35)
	3	RM25100-3CR					
	1	RM25200-1CR		CVRI-RH-25200	250kcmil-1 AWG	Cu 3/0-1 AWG	42 (375)
110-200	2	RM25200-2CR	CVR-RH-25200		2-6 AWG; (2) Cu 2-6 AWG	Cu 2-6 AWG	21 (275)
	3	RM25200-3CR					31 (275)
	1	RM25400-1CR		CVRI-RH-25400	600kcmil		57 (500)
225-400	2	RM25400-2CR	CVR-RH-25400		500kcmil-4 AWG	N/A	51 (450)
225-400	3	RM25400-3CR	CVII-IIII-25400	C V 1 11-1 11 1-2 5400	(2) Cu 3/0 - 4 AWG	IV/A	57 (500)
	3	NIVI25400-3CN			(2) Al 3/0 - 4 AWG		34 (300)
	1	RM25600-1CR					
450-600	2	RM25600-2CR	CVR-RH-25600	CVRI-RH-25600	2 (2) 500kcmil-4 AWG	N/A	51 (450)
	3	RM25600-3CR					

Covers sold separately, order one cover per pole.

#### **Recommended Bussmann series fuses:**

Description	Volts	Amps	Data sheet no.
Ultimate protection time-delay Low-Peak™ LPN	250V	70 to 600	1004
Advanced protection fast-acting Limitron™ KTN-R	250V	All	1043
Advanced protection energy efficient time-delay Fusetron™ FRN-R	250V	70 to 600	1020

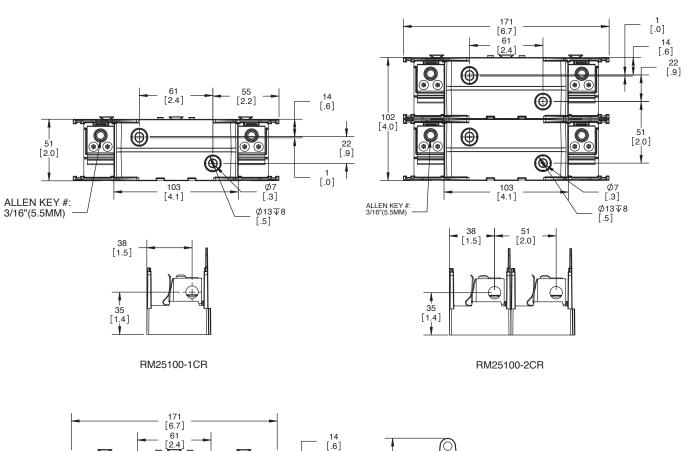


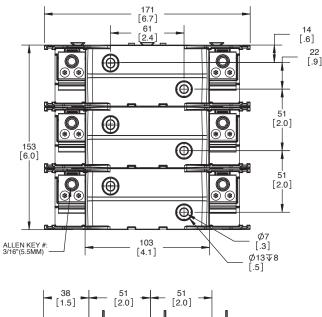
<sup>\*</sup>No fuse derating necessary.

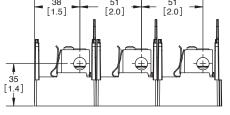
Open fuse indication requires 90 volts minimum and closed circuit to operate.

Ratings for copper and aluminum conductors except where otherwise noted.

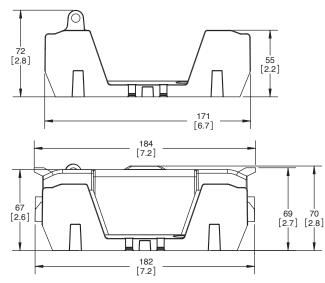
#### Dimensions; 100A, 250V Class R block - in (mm)





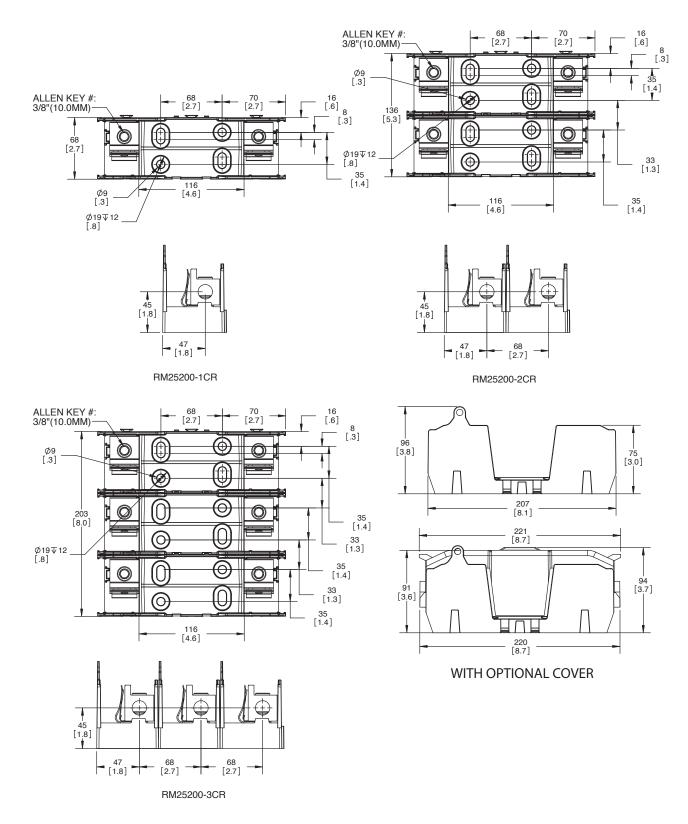


RM25100-3CR

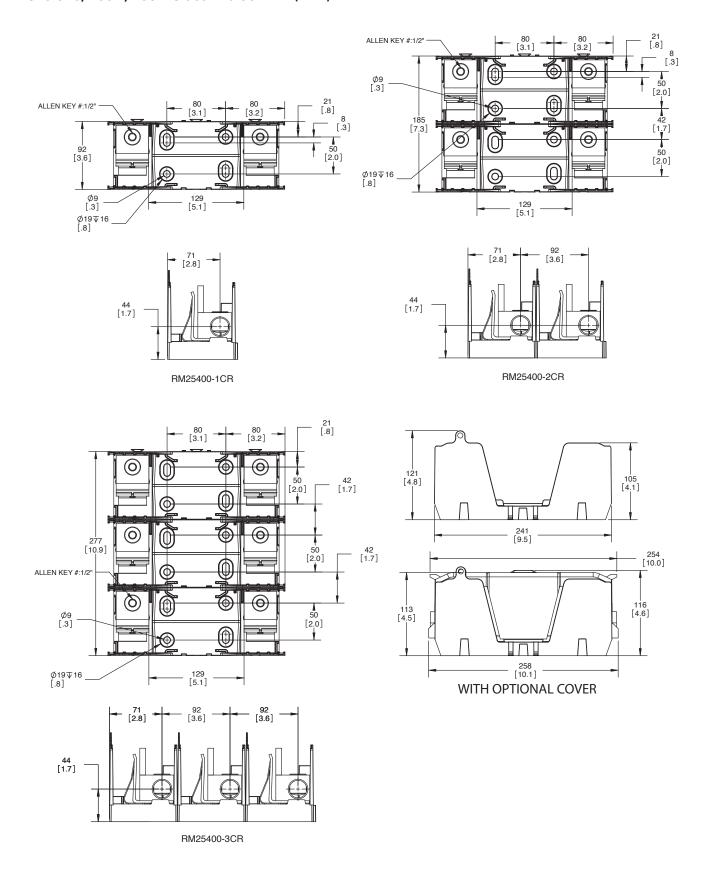


WITH OPTIONAL COVER

#### Dimensions; 200A, 250V Class R block - in (mm)



## Dimensions; 400A, 250V Class R block - in (mm)



#### Dimensions; 600A, 250V Class R block - in (mm)

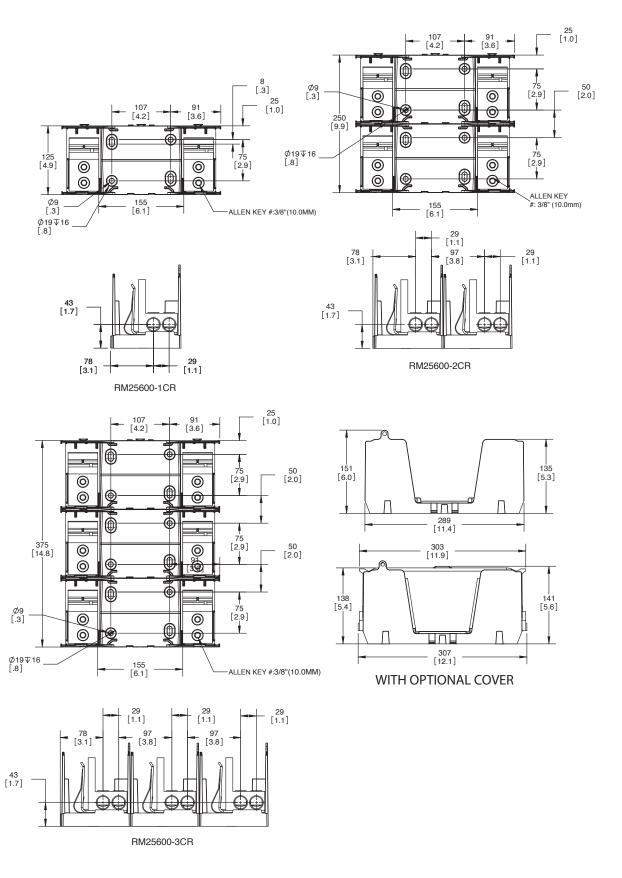


Table 4: Class R 600V 30 and 60 amp block catalog numbers

		Terminal type		Optional covers*			
Fuse amp range	Poles	Box lug/ slot screw	Box lug/ hex screw	#10-32 Phil-slot screw	Pressure plate	Indicating**	Non-indicating
	1	RM60030-1CR	RM60030-1CHR	RM60030-1SR	RM60030-1PR		
up to 30	2	RM60030-2CR	RM60030-2CHR	RM60030-2SR	RM60030-2PR	CVRI-RH-60030	CVR-RH-60030
	3	RM60030-3CR	RM60030-3CHR	RM60030-3SR	RM60030-3PR		
	1	RM60060-1CR	RM60060-1CHR				
35 to 60	2	RM60060-2CR	RM60060-2CHR		_	CVRI-RH-60060	CVR-RH-60060
	3	RM60060-3CR	RM60060-3CHR	_			

<sup>\*</sup> Covers sold separately, order one cover per pole.

Table 5: Class R 600V 30 and 60 amp block terminals and conductors

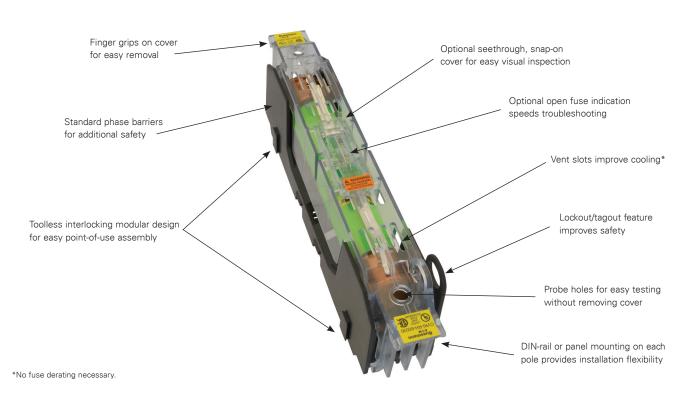
Terminal type	AWG type/range	AWG	Torque N∙m (lb-in)	
		2-3	5.6 (50)	
Day lua	75°C	4-6	5.1 (45)	
Box lug	Cu 2-14, AL 2-8	8	4.5 (40)	
		10-14	4.0 (35)	
#10-32 Phil-slot screw	75/90°C	10.10	2.2.(20)	
Pressure plate	_ Cu 10-18	10-18	2.3 (20)	

#### **Recommended Bussmann series fuses:**

Description	Volts	Amps	Data sheet no.
Ultimate protection time-delay Low-Peak LPS	600V	up to 60	1001
Advanced protection fast-acting Limitron KTS-R	600V	All	1044
Advanced protection energy efficient time-delay Fusetron FRS-R	600V	up to 60	1017

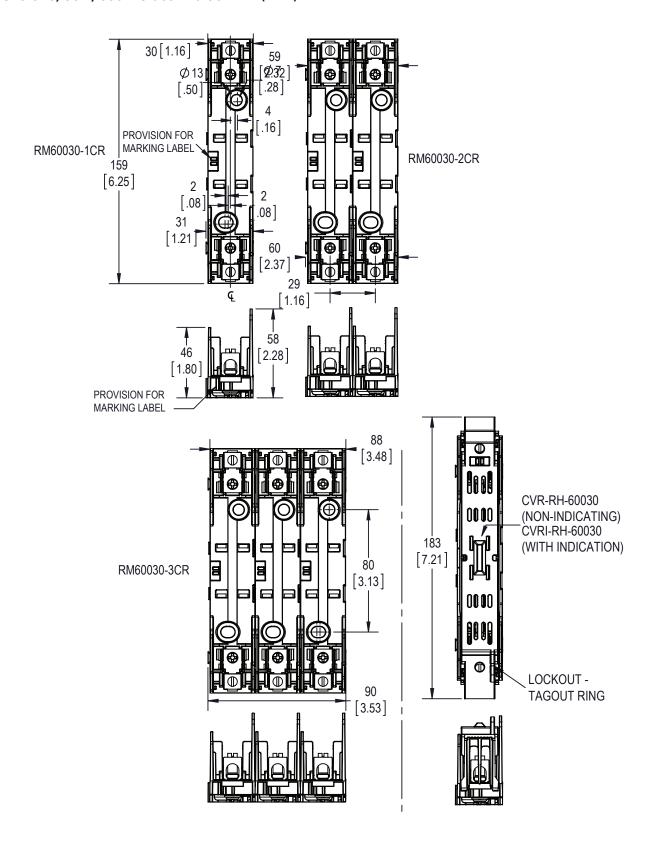
#### Recommended accessories for 30 and 60 amp blocks:

Description	Catalog no.
DIN Pail and atoms	BRKT-ND
DIN-Rail end stops	BRKT-NDSCREW2
Marker labels	TM26CB

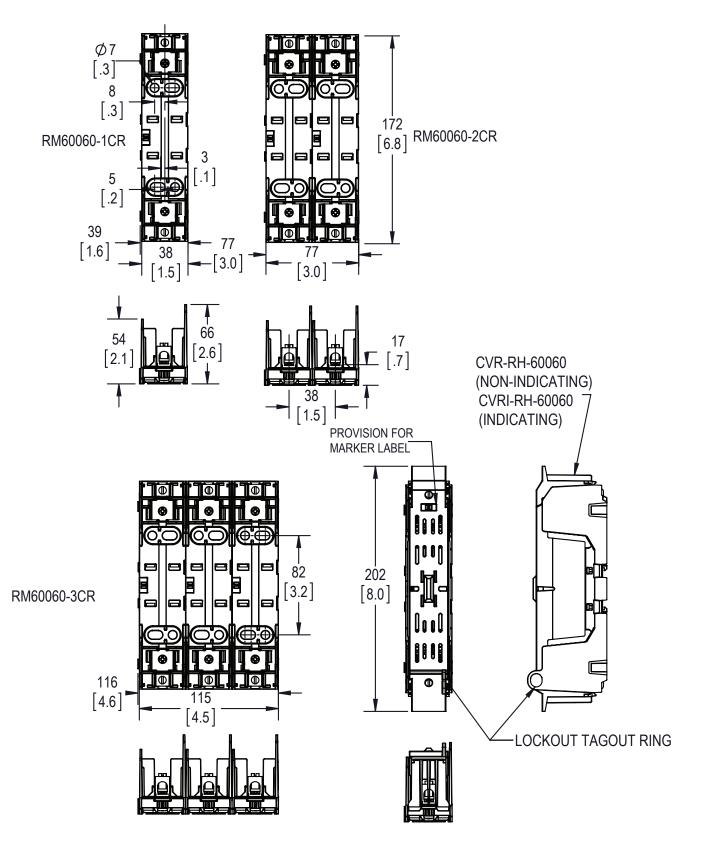


<sup>\*\*</sup> Open fuse indication requires 90 volts minimum and closed circuit to operate.

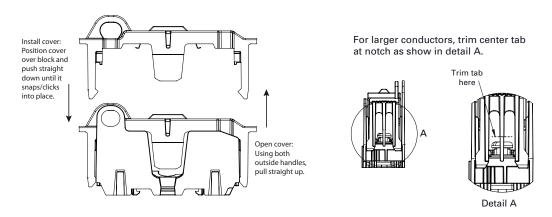
#### Dimensions; 30A, 600V Class R block - in (mm)

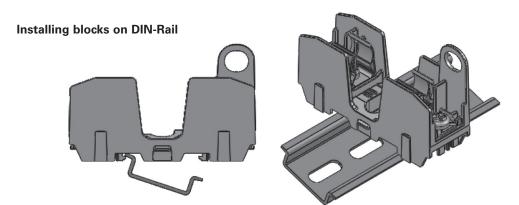


#### Dimensions; 60A, 600V Class R block - in (mm)



#### Installing/removing covers





Place one edge of DIN-Rail in fuse block base, then rotate block down until it clicks into place.

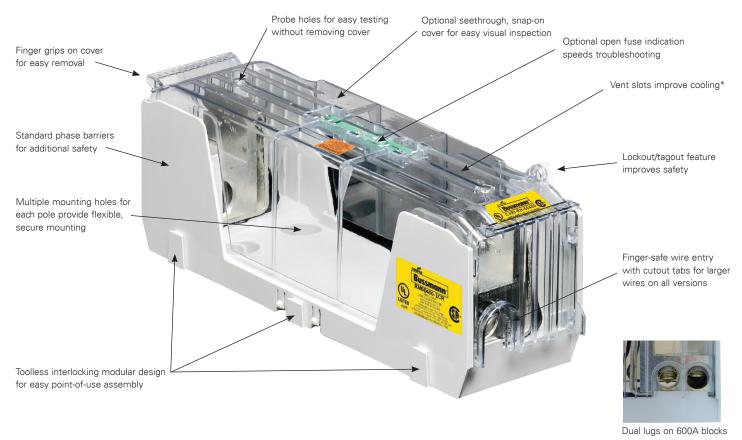


Table 6: Class R 600V 100 to 600 amp knifeblade blocks and covers

Fuse			Covers*		Conductors***		
amp range	Poles	Catalog nos.	Indicating**	Non-indicating	Solid and stranded	Fine stranded	Torque N∙m (lb-in)
	1	RM60100-1 CR			_	Cu 1-3 AWG	6.2 (55)
		NIVIOUIUU-I Ch			1/0-3 AWG; (2) Cu 4-6 AWG	Cu 4-6 AWG	5.6 (50)
70-100	2	RM60100-2CR	CVR-RH-60100	CVRI-RH-60100	2 4-6 AWG; (2) Cu 8 AWG	Cu 8 AWG	5.1 (45)
	۷				8 AWG; (2) Cu 10-14 AWG	_	4.5 (40)
	3	RM60100-3CR			Cu 10-14 AWG; AI 10-12 AWG	_	4.0 (35)
	1	RM60200-1CR		CVRI-RH-60200	250kcmil-1 AWG	Cu 3/0-1 AWG	42 (375)
110-200	2	RM60200-2CR	CVR-RH-60200		2.6.4\4\6.12\6.12\6.12\6.14\6.1	Cu 2-6 AWG	21 (275)
	3	RM60200-3CR			2-6 AWG; (2) Cu 2-6 AWG		31 (275)
	1	RM60400-1CR		0) (D) D)   00 400	600kcmil		57 (500)
225 400	2	RM60400-2CR			500kcmil-4 AWG	NI/A	51 (450)
225-400	3	DN460400 2CD	CVN-NH-60400	CVRI-RH-60400	(2) Cu 3/0 - 4 AWG	N/A	57 (500)
	3	RM60400-3CR			(2) Al 3/0 - 4 AWG		34 (300)
	1	RM60600-1CR					
450-600	2	RM60600-2CR	CVR-RH-60600	CVRI-RH-60600	2 (2) 500kcmil-4 AWG	N/A	51 (450)
	3	RM60600-3CR					

#### **Recommended Bussmann series fuses:**

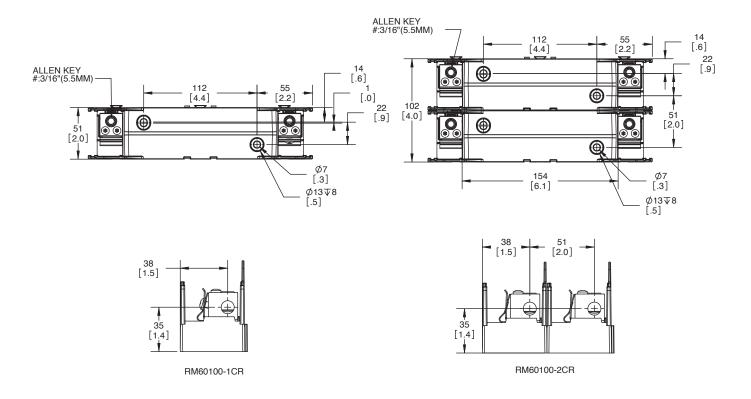
Description	Volts	Amps	Data sheet no.
Ultimate protection time-delay Low-Peak LPS	600V	70 to 600	1004
Advanced protection fast-acting Limitron KTS-R	600V	All	1044
Advanced protection energy efficient time-delay Fusetron FRS-R	600V	70 to 600	1018

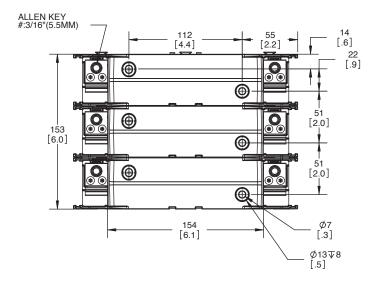


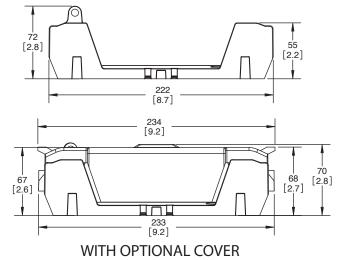
<sup>\*</sup>No fuse derating necessary.

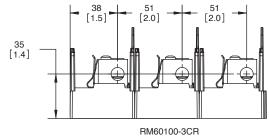
Covers sold separately.
Open fuse indication requires 90 volts minimum and closed circuit to operate.
Ratings for copper and aluminum conductors except where otherwise noted.

#### Dimensions; 100A, 600V Class R block - in (mm)

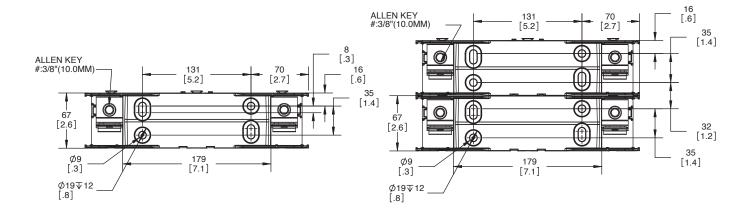


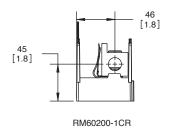


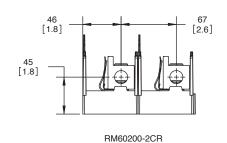


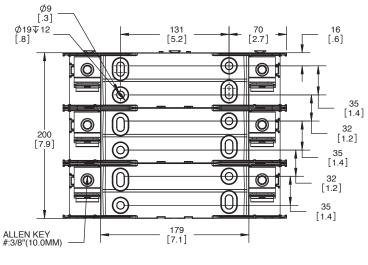


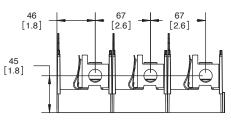
#### Dimensions; 200A, 600V Class R block - in (mm)



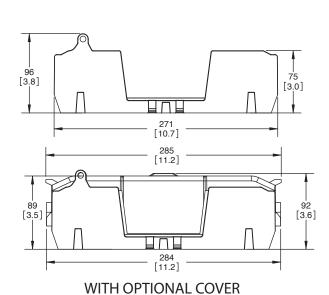




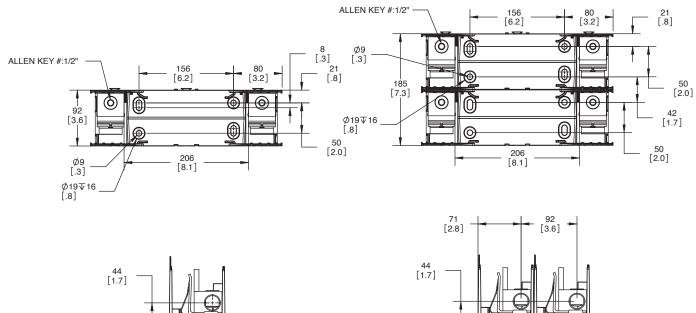


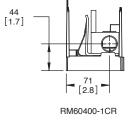


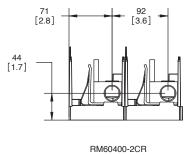
RM60200-3CR

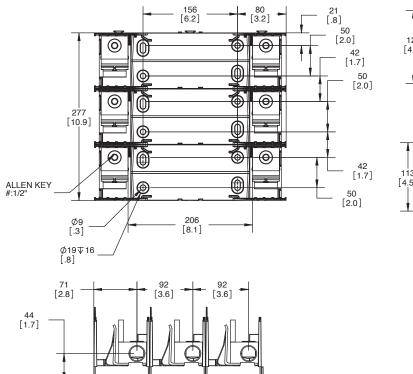


#### Dimensions; 400A, 600V Class R block - in (mm)

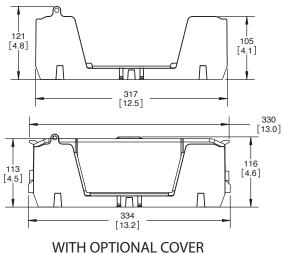


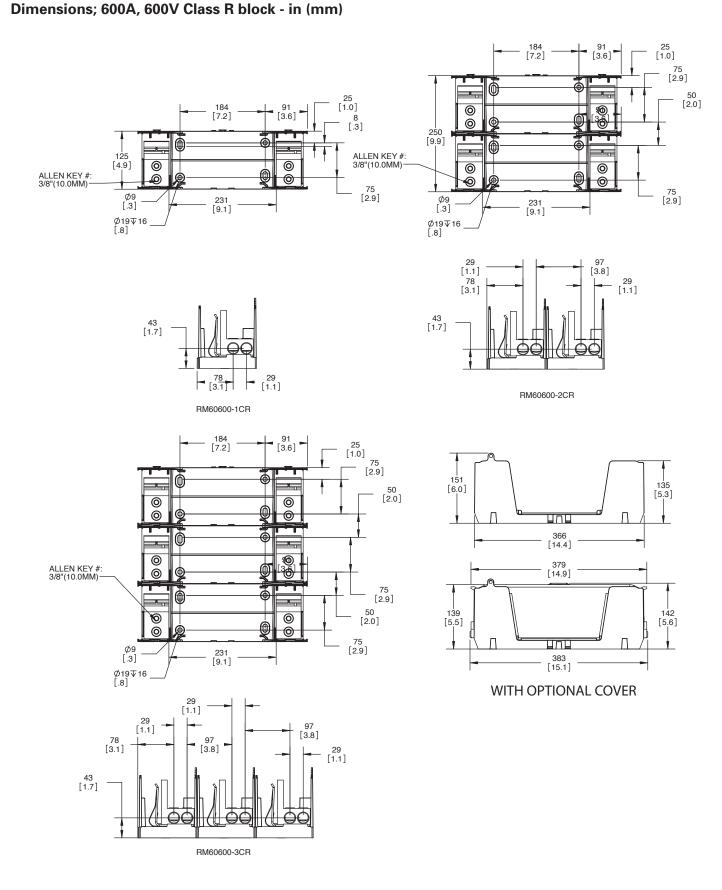






RM60400-3CR





Class R 250V and 600V modular ferrule and knifeblade fuse blocks

Technical Data 10489 Effective February 2016

21

Technical Data 10489 Effective February 2016

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