

Magnum low-voltage power circuit breakers (ANSI and IEC) renewal parts and accessories



Contents

Description	Page
Procedure for identifying breaker frame	2
Ordering instructions	2
Non-warranty repair	2
Magnum DS breaker catalog identification	2
Magnum DS fixed mounted breaker, standard frame (800–3200 A)	3
Magnum DS drawout breaker, double wide (800–3200 A)	3
Magnum DS drawout breaker, frame MDS (4000–6300 A)	4
Magnum DS drawout cassette (800–3200 A)	4
Breaker mechanism and related parts	5
Current path components	7
Electrical accessories	10
Cassette (cell) attachments	14
Internal accessories	17
External accessories	18
Mechanical interlock configurations	19
Mechanical interlock accessories	20
Standard breaker replacement parts	21
Trip unit kits and trip unit replacement parts	23

Note: Items in this renewal parts data book are designed for field installation by qualified personnel. Contact Eaton if assistance for field installation is required, or for information about any parts not referenced or identified.



Powering Business Worldwide

Procedure for identifying breaker frame

A

B

C

D

E

F

Magnum DS

MDSC16

Low Voltage AC Power Circuit Breaker

1600 Amp Frame 3 Pole 50/60 Hz

Interruption Ratings In Amps

Max Volts	Inst Trip	Short Delay
635	100.000A	85.000A
508	100.000A	85.000A
254	100.000A	85.000A

Accessories

Motor Operator	110 - 125 VAC	50/60 Hz
OTS/Bell Alarm		
Trip Unit Power	120 VAC	50/60 Hz
Aux Switches	2A / 2B	

G.O.# 1234567 It: 001 Seq: 002

Cust P.O. 1234567890

Code:

12/01/01 19:08:03 - 1

CAT#: MDSC183LEA 32MAA MNA2Y NNNAX

Enclosure Requirements Dwg: 2C13090

Installation and Operating Instructions: 2C12060

Made in USA

MDS type breaker

- A Low-voltage air circuit breaker family name
- B Breaker family designation number
- C Breaker frame size in amperes
- D Interrupting capacity rating
- E Accessories
- F Catalog number

The Catalog Number is a 25-digit number located on the breaker’s nameplate.

An example of this number is:

- MDSC183LEA32MAAMNA2YNNNAX

Eaton’s Magnum® circuit breakers can be identified using either the Catalog Number or the General Order Number (G.O. #), Item Number, and Sequence Number that are located on the breaker’s nameplate.

An example of what will be seen on the nameplate is:

- G.O. #1234567 It: 001, Seq 002

Ordering instructions

1. Check the nameplate to identify the type of breaker you have. (If adding accessories or options to existing breakers, you must also provide the information for those accessories.)
2. Identify the part(s) from the photos shown.
3. Determine the style or catalog number for the required parts.
4. Specify the quantity required.
5. Order the parts from your local Eaton distributor.
6. State the method of shipment.

IMPORTANT

EATON’S ENGINEERING SERVICES & SYSTEMS (EESS) OFFERS PARTS INSTALLATION AND AUTHORIZED REPAIR.

CALL 1-800-498-2678 FOR THE EESS DISTRICT OPERATING CENTER NEAREST YOU.

Non-warranty repair

Eaton offers non-warranty factory repair service for Magnum breakers. A non-warranty breaker is one that has exceeded its original factory warranty.

The non-warranty repair service features:

- Quality Magnum breaker repair specified and audited by factory engineers according to procedures
- Only genuine new Eaton replacement parts
- Original factory specifications and design drawings used by factory trained technicians
- One-year factory warranty issued from date of shipment from repair center
- Repair lead time of four to six weeks

Magnum DS breaker catalog identification

For Magnum breaker catalog number identification or order entry options, please visit Eaton.com/magnum and view catalog Volume 4—Circuit Protection, or search ‘CA08100005E’ on Eaton.com.

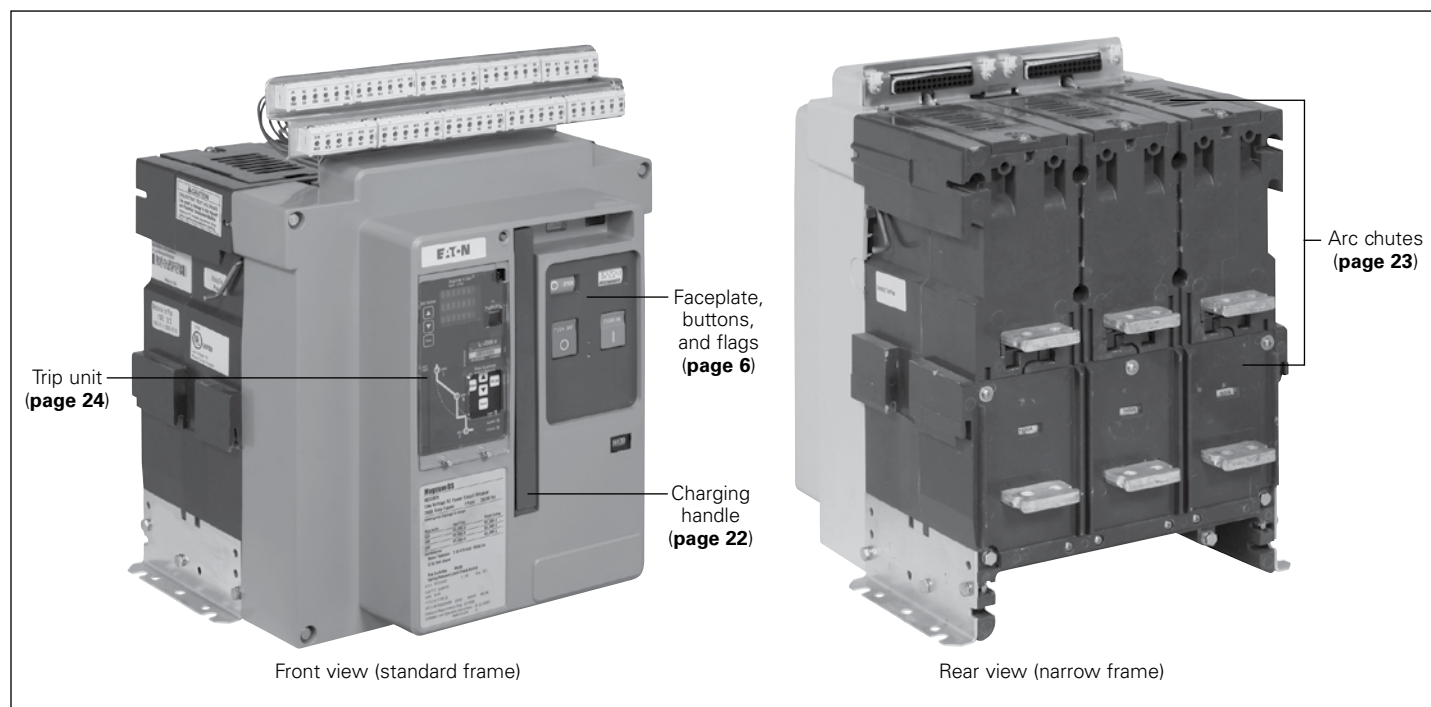


Figure 1. Magnum fixed mounted breaker (800–3200 A)

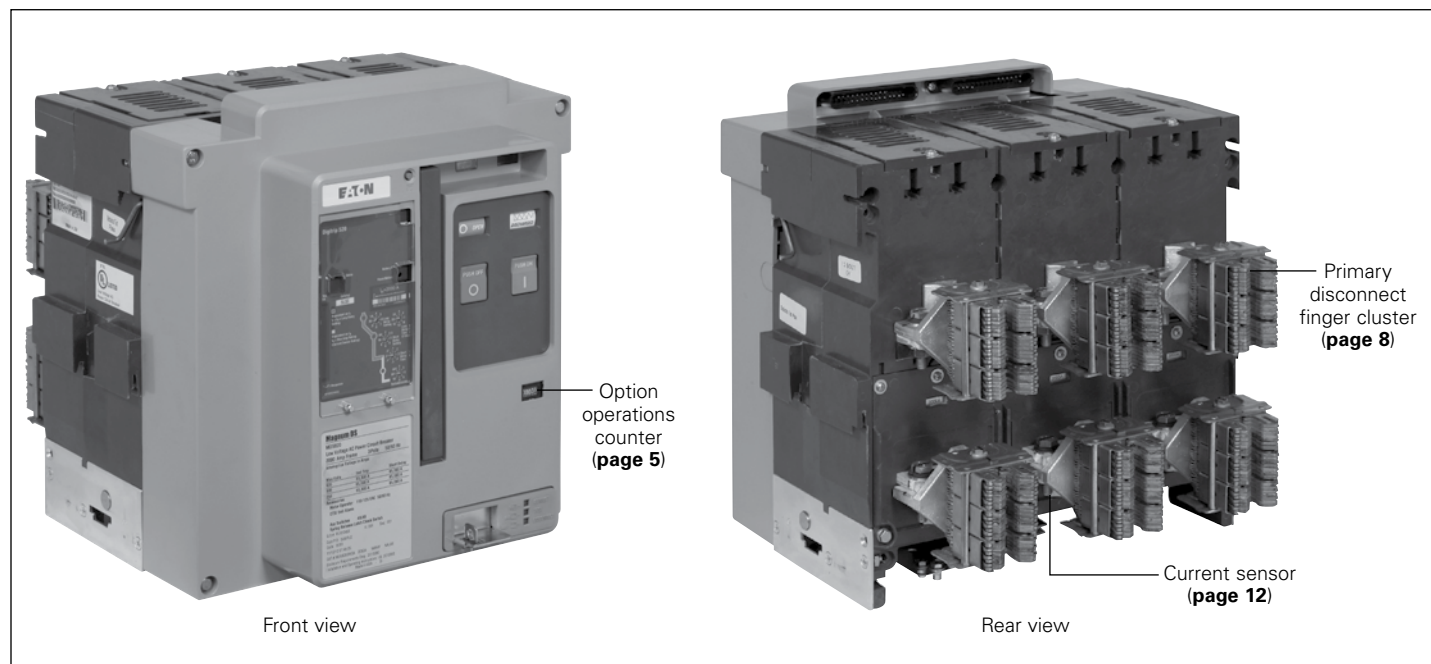


Figure 2. Magnum drawout breaker (800–2000 A), standard frame shown; up to 3200 A available—not shown

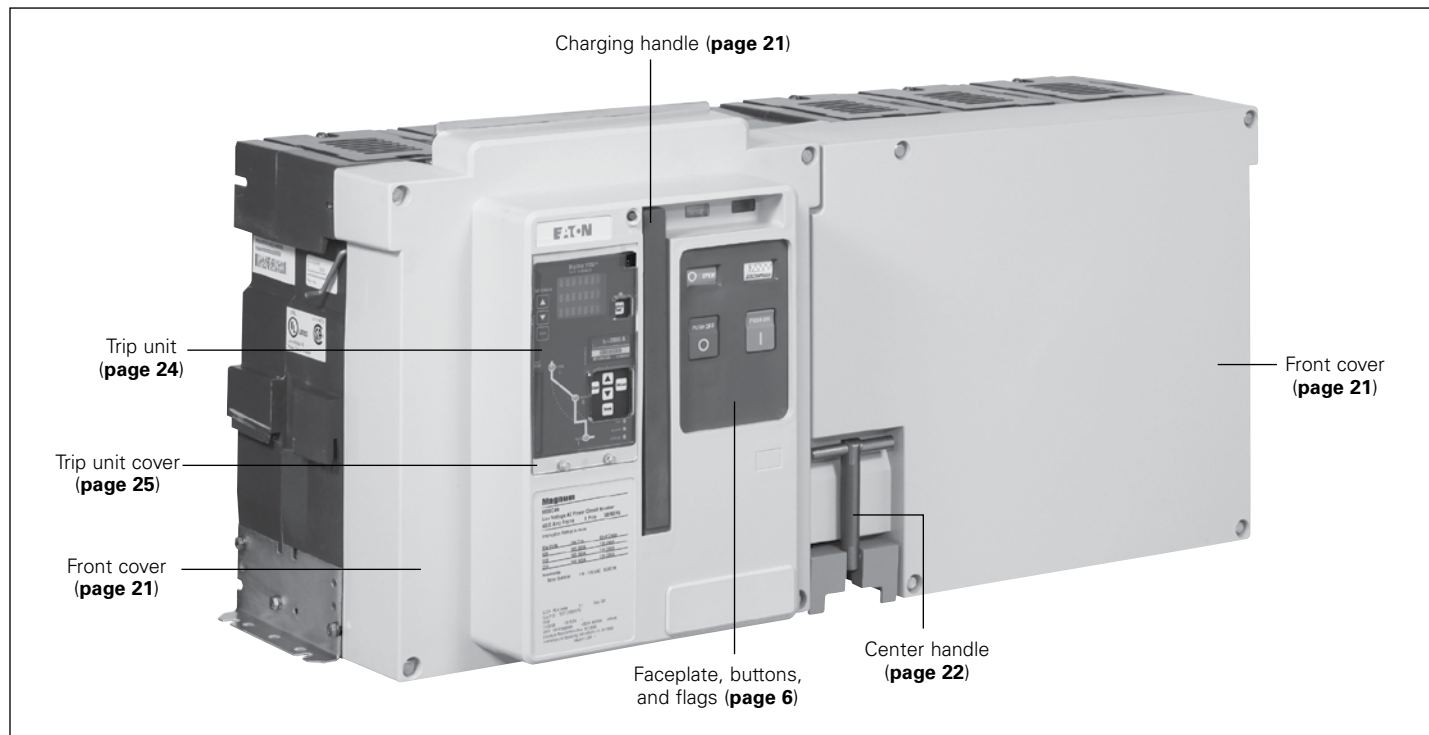


Figure 3. Magnum drawout breaker (ANSI 4000–6000 A, IEC 4000–6300 A), standard double wide

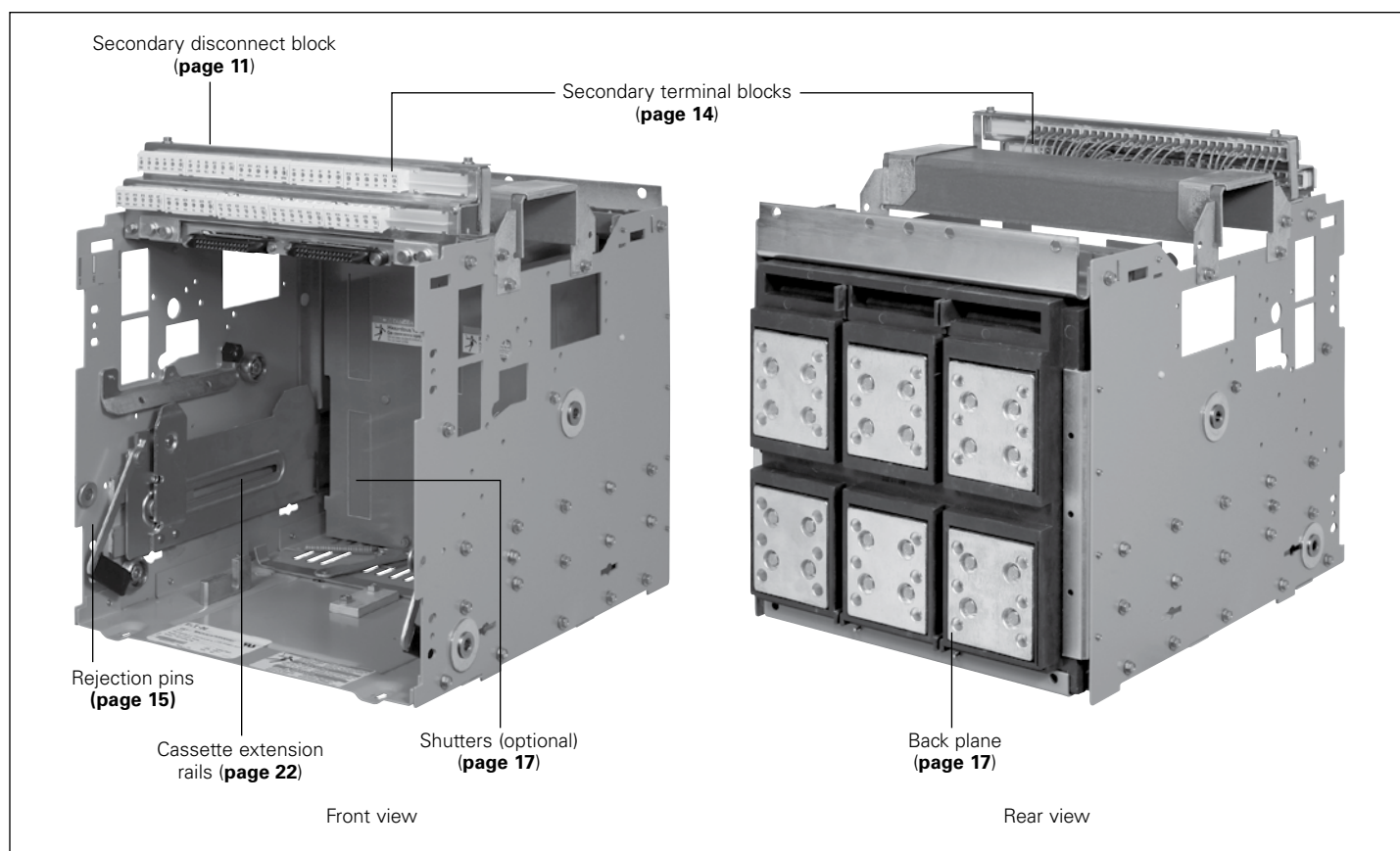
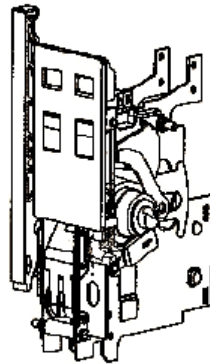


Figure 4. Magnum drawout cassette (800–3200 A), universal standard frame OEM cassette shown

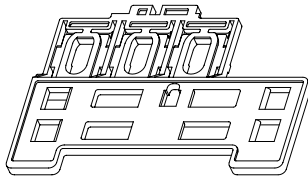
Breaker mechanism and related parts

Table 1. Magnum replacement mechanism sub-assembly kits



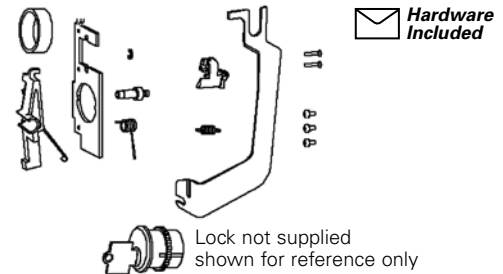
Frame size	Continuous ampere rating	Interrupting rating	Number of poles	Style number
Narrow	800–2000	42, 50, 65, 100	3	2C13202A34
			4	2C13202A35
	4000	65, 85, 100	3	2C13202A63
			4	2C13202A64
Standard	800–1600	42, 50, 65	3	2C13202A34
			4	2C13202A38
	800–1600	85, 100	3	2C13202A36
			4	2C13202A60
Double standard	2000–3200	65, 85, 100	3	2C13202A40
			4	2C13202A63
	3000, 4000, 5000	85, 100	3	2C13202A63
			4	2C13202A64
Standard	1200, 1600, 2000	150, 200	3	2C13202A61
	800	200	3	2C13202A34
	1200, 1600, 2000	200	3	2C13202A36
	3200	130	3	2C13202A40
Double standard	4000–5000	130	3	2C13202A63
	2500, 3200–5000	150, 200	3	2C13202A65

Table 2. Breaker accessories tray



Description	Style number
Tray where UVR shunt, spring releases, and auxiliary switch mount	2A10891G01

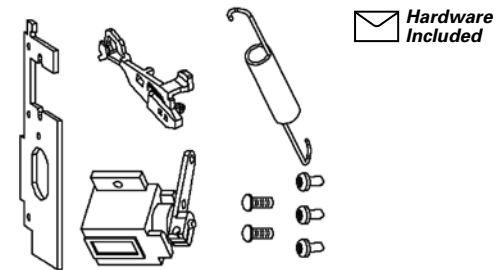
Table 3. Breaker key interlock provision



Lock type	Lock required ①	Key required ①	Catalog/ style number
Ronis	1104A	Protec	MBRLCKR
Castell	CL1019	CL1062	MBRLCKC
Kirk	KC40---10	KC40	MBRLCKK
Magnum CES	—	—	MBRLCKE
Front cover key interlock hole plug	—	—	76260DK12H

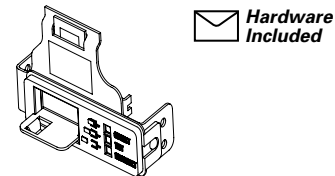
① Eaton does not supply lock or key, only the provision.

Table 4. Operations counter kit



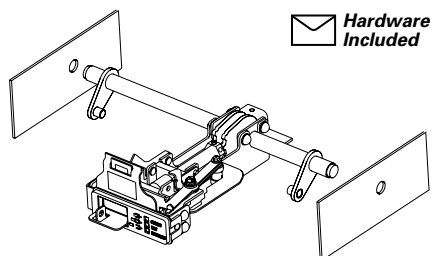
Description	Catalog number
Mechanical counter	MCOUNT

Table 5. Levering door and door mechanism



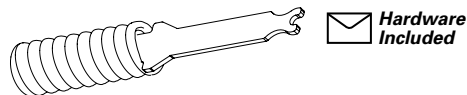
Breaker frame	Style number
MDS	2A10894G02
MWI	2A10894G01
SB	2A10894G03

Table 6. Levering mechanism assembly



Prefix	Continuous ampere rating	Number of poles	Frame size	Standard	Color	Style number
MDS	Up to 3200	3	Standard	ANSI	Medium grey	2A10855G05
MDS	Up to 3200	4	Standard	ANSI	Medium grey	2A10855G06
MDS	3200, 4000 and above	6	Double	ANSI	Medium grey	2A10855G07
MDS	4000 and above	8	Double	ANSI	Medium grey	2A10855G08
MDN	Up to 2000	3	Narrow	ANSI	Medium grey	2A10855G15
MDN	Up to 2000	4	Narrow	ANSI	Medium grey	2A10855G16
MDN	4000 and above	6	Double narrow	ANSI	Medium grey	2A10855G19
MDN	4000 and above	8	Double narrow	ANSI	Medium grey	2A10855G20
MWI	Up to 4000	3	Standard	IEC	Dark grey	2A10855G25
MWI	Up to 4000	4	Standard	IEC	Dark grey	2A10855G26
MWN	Up to 2000	3	Narrow	IEC	Dark grey	2A10855G21
MWN	Up to 2000	4	Narrow	IEC	Dark grey	2A10855G22
MWN	4000	6	Double narrow	IEC	Dark grey	2A10855G23
MWM	4000	8	Double narrow	IEC	Dark grey	2A10855G24
MWI	4000 and above	6	Double	IEC	Dark grey	2A10855G27
MWI	4000 and above	8	Double	IEC	Dark grey	2A10855G28
SBS	Up to 3000	3	Standard	ANSI	Light grey	2A10855G01
SBS	Up to 3000	4	Standard	ANSI	Light grey	2A10855G02
SBS	Up to 2000	3	Narrow	ANSI	Light grey	2A10855G11
SBS	Up to 2000	4	Narrow	ANSI	Light grey	2A10855G12
SBS	2500, 3000, 4000, 5000	3	Double	ANSI	Light grey	2A10855G03
SBS	3000, 4000, 5000	4	Double	ANSI	Light grey	2A10855G04
SBN	4000	3	Double narrow	ANSI	Light grey	2A10855G17
SBN	4000	4	Double narrow	ANSI	Light grey	2A10855G18

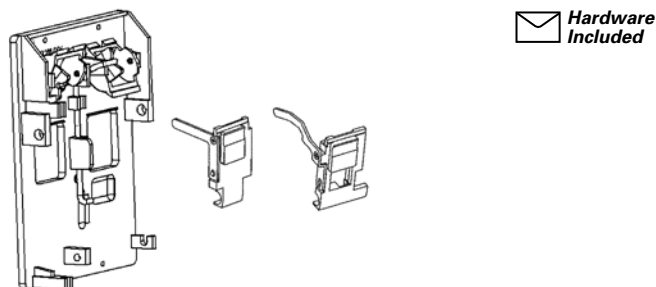
Table 7. Opening spring and guide



Description ①	Style number
Returns pole shaft to open position	2A10893G01

① Needs two sets for 4000 A and above breakers.

Table 8. Faceplate, buttons, and flags

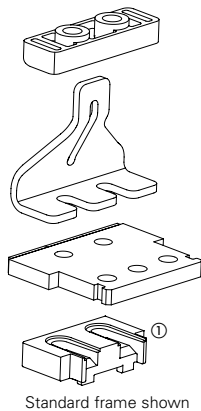


Description	Style number
Faceplate, buttons, and flags	2A10895G01
Reverse color button kit	2410895G99 ①
Faceplate and flags	2C12299G03
On buttons	2A10290G04
Off buttons	2A10299G02

① Includes faceplate with buttons and flags.

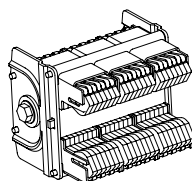
Current path components

Table 9. Breaker stationary contact kit



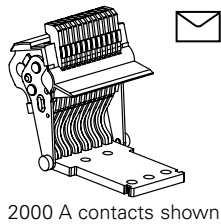
Continuous ampere rating	Standard	Interrupting capacity (kA)	Number of poles	Frame type	Kits required	Style number
800	ANSI	42/50	3	Standard	1	2A10896G02
800/1200/1600	ANSI	65	3	Standard	1	2A10896G02
800/1200/1600	ANSI	85/100	3	Standard	1	2A10896G03
800 (MDSL)	ANSI	200	3	Standard	1	2A10896G02
1200/1600	ANSI	50	3	Standard	1	2A10896G02
1200/1600 (MDSL)	ANSI	200	3	Standard	1	2A10896G03
1200/1600/2000 (MDSX)	ANSI	200	3	Standard	1	2A10896G23
1200/1600/2000 (SBSE)	ANSI	150	3	Standard	1	2A10896G23
2000	ANSI	65/85/100	3	Standard	1	2A10896G03
2000 (MDSL)	ANSI	200	3	Standard	1	2A10896G04
2500/3000/3200	ANSI	65/85/100/130	3	Standard	1	2A10896G04
800	ANSI	42/50	4	Standard	1	2A10896G06
800/1200/1600	ANSI	65	4	Standard	1	2A10896G06
800/1200/1600/2000	ANSI	85/100	4	Standard	1	2A10896G07
1200/1600	ANSI	50	4	Standard	1	2A10896G06
2000	ANSI	65	4	Standard	1	2A10896G07
2500/3000/3200	ANSI	65/85/100	4	Standard	1	2A10896G08
2500/3000 (SBSE)	ANSI	150	3	Double ①	2	2A10896G23
3200/4000/5000/6000 (MDSE)	ANSI	150	3	Double ①	2	2A10896G23
3200/4000/5000 (MDSX)	ANSI	200	3	Double ①	2	2A10896G23
3200/4000/5000/6000 (MDDX)	ANSI	200	3	Double ①	2	2A10896G04
4000	ANSI	85/100	3	Double ①	2	2A10896G03
5000/6000	ANSI	85/100	3	Double ①	2	2A10896G04
4000 (SBSE)	ANSI	150	3	Double ①	2	2A10896G04
5000 (SBSE)	ANSI	150	3	Double ①	2	2A10896G23
4000	ANSI	85/100	4	Double ①	2	2A10896G07
5000/6000	ANSI	85/100	4	Double ①	2	2A10896G08
800/1200/1600	ANSI	Up to 100	3	Narrow	1	2A10896G12
800/1200/1600	ANSI	Up to 100	4	Narrow	1	2A10896G15
4000/5000	ANSI	65/85/100	3	Double narrow ①	2	2A10896G21
4000/5000	ANSI	65/85/100	4	Double narrow ①	2	2A10896G22
800/1000/1250/1600	IEC	40/65	3	Standard	1	2A10896G02
800/1000/1250/1600	IEC	85/100	3	Standard	1	2A10896G03
2000	IEC	65/85/100	3	Standard	1	2A10896G03
2500/3200	IEC	65/85/100/125	3	Standard	1	2A10896G04
4000	IEC	65/85/100	3	Standard	1	2A10896G04
800/1000/1250/1600	IEC	40/65	4	Standard	1	2A10896G06
800/1000/1250/1600/2000	IEC	85/100	4	Standard	1	2A10896G07
2000	IEC	65	4	Standard	1	2A10896G07
2500/3200	IEC	65/85/100/125	4	Standard	1	2A10896G08
4000	IEC	65/85/100	4	Standard	1	2A10896G08
4000	IEC	65/85/100	3	Double standard ①	2	2A10896G03
5000/6300	IEC	85/100	3	Double standard ①	2	2A10896G04
4000	IEC	65/85/100	4	Double standard ①	2	2A10896G07
5000/6300	IEC	85/100	4	Double standard ①	2	2A10896G04
800/1000/1250/1600/2000	IEC	40/50/65	3	Narrow	1	2A10896G12
800/1000/1250/1600/2000	IEC	40/50/65	4	Narrow	1	2A10896G15
4000	IEC	65/85/100	3	Double narrow ①	2	2A10896G21
4000	IEC	65/85/100	4	Double narrow ①	2	2A10896G08

① Not required for narrow frame.

Table 10. Primary disconnects (finger clusters)


Breaker frame	Continuous ampere rating	Standard	Frame size	Interrupting capacity (kA)	Style number	
					Three-pole (includes qty. 6)	Four-pole (includes qty. 8)
MDS	800	ANSI	Standard	42	2A10898G09	2A10898G13
MDS	800/1200/1600	ANSI	Standard	50/65	2A10898G10	2A10898G14
SBS	800/1200/1600	ANSI	Standard	65	2A10898G10	2A10898G14
MDS/SBS	800/1200/1600	ANSI	Standard	85/100	2A10898G11	2A10898G15
MDSL/MDDX	800	ANSI	Standard	200	2A10898G36	—
MDSL/MDDX	1200/1600	ANSI	Standard	200	2A10898G11	—
MDSX/MDDX	1200/1600	ANSI	Standard	200	2A10898G12	—
MDN	800/1200/1600	ANSI	Narrow	42/50/65/100	2A10898G29	2A10898G26
SBN	800/1200/1600	ANSI	Narrow	50/65/100	2A10898G22	2A10898G26
MDS	2000	ANSI	Standard	65/85/100	2A10898G11	2A10898G15
MDSL/MDSX/MDDX	2000	ANSI	Standard	200	2A10898G12	—
MDS	2500/3000/3200	ANSI	Standard	65/85/100	2A10898G12	2A10898G16
MDS/SBS	4000	ANSI	Double	85/100	2A10898G11 (2)	2A10898G15 (2)
MDS	4000	ANSI	Double	130	2A10898G12 (2)	—
MDS/SBS	4000	ANSI	Double narrow	65/85/100	2A10898G34	2A10898G35
MDSE	4000	ANSI	Double	150	2A10898G12 (2)	—
MDSX/MDDX	4000/5000	ANSI	Double	200	2A10898G12 (2)	—
MDS	5000	ANSI	Double	85/100	2A10898G12 (2)	2A10898G16 (2)
MWI	800	IEC	Standard	40	2A10898G01	2A10898G05
MWI	800/1600	IEC	Standard	65	2A10898G02	2A10898G06
MWI	800/1000/1250/1600	IEC	Standard	85/100	2A10898G03	2A10898G07
MWI	1000/1250	IEC	Standard	40/65	2A10898G02	2A10898G06
MWN	800/1000/1250	IEC	Narrow	40	2A10898G21	2A10898G25
MWN	800/1000/1250/1600	IEC	Narrow	50/65	2A10898G22	2A10898G26
MWI	2000	IEC	Standard	65/85/100	2A10898G03	2A10898G07
MWN	2000	IEC	Narrow	50/65	2A10898G22	2A10898G26
MWI	2500/4000	IEC	Standard	65/85/100	2A10898G04	2A10898G08
MWI	3200	IEC	Standard	65/85/100/125	2A10898G04	2A10898G08
MWI	4000	IEC	Double	65/85/100	2A10898G03 (2)	2A10898G07 (2)
MWI	4000	IEC	Double narrow	65/85/100	2A10898G34	2A10898G35
MWI	5000/6300	IEC	Double	85/100	2A10898G04 (2)	2A10898G08 (2)
SBSE	1200/1600/2000	ANSI	Standard	150	2A10898G12	—
SBSE	2500/3000/4000/5000	ANSI	Double	150	2A10898G12 (2)	—

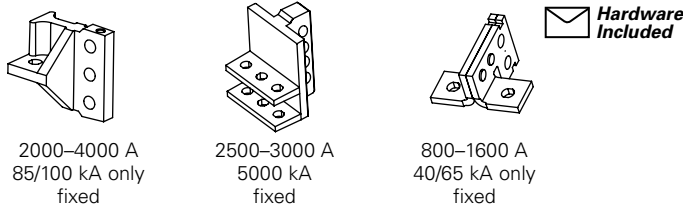
Table 11. Breaker moving contact kit



 Hardware Included

Continuous ampere rating	Interrupting capacity (kA)	Number of poles	Frame type	Kits required	Standard	Style number
800	42	3	Standard	1	ANSI	2A10897G01
800 (MDSL)	200	3	Standard	1	ANSI	2A10897G02
800/1200/1600	50/65	3	Standard	1	ANSI	2A10897G02
800/1200/1600/2000	85/100	3	Standard	1	ANSI	2A10897G03
1200/1600 (MDSL)	200	3	Standard	1	ANSI	2A10897G03
1200/1600/2000 (MDSX)	200	3	Standard	1	ANSI	2A10897G27
2000	65	3	Standard	1	ANSI	2A10897G03
1200/1600/2000 (SBSE)	150	3	Standard	1	ANSI	2A10897G27
2000 (MDSL)	200	3	Standard	1	ANSI	2A10897G04
2500/3000/3200	65/85/100/130	3	Standard	1	ANSI	2A10897G04
800	42	4	Standard	1	ANSI	2A10897G05
800/1200/1600	50/65	4	Standard	1	ANSI	2A10897G06
800/1200/1600/2000	85/100	4	Standard	1	ANSI	2A10897G07
2000	65	4	Standard	1	ANSI	2A10897G07
2500/3000/3200	65/85/100	4	Standard	1	ANSI	2A10897G08
4000	65/85/100	3	Double	2	ANSI	2A10897G09
5000/6000	65/85/100	3	Double	2	ANSI	2A10897G10
4000/5000/6000	130	3	Double	2	ANSI	2A10897G10
3200/4000/5000/6000 (MDSE)	150	3	Double	2	ANSI	2A10897G27
4000/5000 (SBSE)	150	3	Double	2	ANSI	2A10897G27
3200/4000/5000 (MDSX)	200	3	Double	2	ANSI	2A10897G27
3200/4000/5000/6000 (MDDX)	200	3	Double	2	ANSI	2A10897G10
4000	65/85/100	4	Double	2	ANSI	2A10897G11
5000/6000	65/85/100	4	Double	2	ANSI	2A10897G12
800/1200/1600	42/50/65/100	3	Narrow	1	ANSI	2A10897G22
2000	65/100	3	Narrow	1	ANSI	2A10897G22
800/1200/1600	42/50/65/100	4	Narrow	1	ANSI	2A10897G24
2000	65/100	4	Narrow	1	ANSI	2A10897G24
4000/5000	65/85/100	3	Double narrow	2	ANSI	2A10897G25
4000/5000	65/85/100	4	Double narrow	2	ANSI	2A10897G26
800	40	3	Standard	1	IEC	2A10897G01
1000/1250	40	3	Standard	1	IEC	2A10897G02
800/1000/1250/1600	65	3	Standard	1	IEC	2A10897G02
800/1000/1250/1600/2000	85/100	3	Standard	1	IEC	2A10897G03
2000	65	3	Standard	1	IEC	2A10897G03
2500/3200	65/85/100/125	3	Standard	1	IEC	2A10897G04
800	40	4	Standard	1	IEC	2A10897G05
1000/1250	40	4	Standard	1	IEC	2A10897G06
800/1000/1250/1600	65	4	Standard	1	IEC	2A10897G06
800/1000/1250/1600/2000	85/100	4	Standard	1	IEC	2A10897G07
2000	65	4	Standard	1	IEC	2A10897G07
2500/3200	65/85/100/125	4	Standard	1	IEC	2A10897G08
4000	65/85/100	3	Double	2	IEC	2A10897G09
5000/6300	85/100	3	Double	2	IEC	2A10897G10
4000	65/85/100	4	Double	2	IEC	2A10897G11
5000/6300	85/100	4	Double	2	IEC	2A10897G12
800/1000/1250/1600	40/50	3	Narrow	1	IEC	2A10897G21
800/1000/1250/1600/2000	65	3	Narrow	1	IEC	2A10897G22
2000	50	3	Narrow	1	IEC	2A10897G22
800/1000/1250/1600	40/50	4	Narrow	1	IEC	2A10897G23
800/1000/1250/1600/2000	65	4	Narrow	1	IEC	2A10897G24
2000	50	4	Narrow	1	IEC	2A10897G24
4000	65/85/100	3	Double narrow	2	IEC	2A10897G25
4000	65/85/100	4	Double narrow	2	IEC	2A10897G26

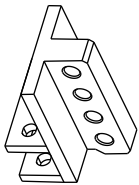
Table 12. Vertical adapters for fixed mounted circuit breakers and Narrow frame drawout cassettes



Continuous ampere rating	Interrupting capacity	Catalog/style number		Catalog number (not three-pole/ four-pole)
		Three-pole	Four-pole	
800–1600	40/65	MVADP16	MVADP416	—
800–1600	85/100	MVADP20	MVADP420	—
2300	65/85/100	MVADP20	MVADP420	—
2500/3200	65/85/100	MVADP32	MVADP432	—
4000	65/85/100	MVADP40 ①	MVADP440 ①	—
5000/6000	85/100	MVADP50 ①	MVADP450 ①	—
Narrow	All ratings	2A11795G61	2A11795G62	—
800–2000	65	MVADP320N	MVADP420N	—
4000 A, Narrow frame fixed vertical adapter kit	—	MVADP340N	MVADP440N	—
3000/3200 A, drawout vertical adapter kit with heat sink	—	MVADPF32	—	—
Fixed vertical adapter kit, single-pole	3/3.2/5/6.3	—	—	MVADPF432

① Quantity will be 12 for three-pole or 16 for four-pole.

Table 13. Additional vertical terminal adapter kits



3/4 x 4 inch
adapter only fixed

Description	Breaker frame	Number of poles	Style number
Bus stab kit, 1/2-inch, 800–2000 A	—	3	1B93097G01
Bus stab kit, 3/4-inch, 2000–3200 A	—	3	1B93097G02
Vertical adapter kit, 800–1600 A	Drawout/fixed	1	2A11795G41
Vertical adapter kit 1P, 2000 A	Fixed	1	2A11795G42
Vertical adapter kit for DS, 3200 A, with heat sink	Drawout	4	2A11795G49
Narrow frame vertical adapter kit	—	1	2A11795G63
3/4 x 4 inches	Fixed	—	2C12351H10
3/4 x 4 inches	Drawout	—	2C12351H11
1/2 x 3 inches	Fixed	—	2C12352H02
1/2 x 3 inches	Drawout	—	2C12352H03
3/8 x 3 inches, narrow	Fixed	—	2C12352H22
0.50 x 2.09 inches	—	—	2C12393G01

Electrical accessories

Table 14. Shunt trip (opening coil) kit



Control voltage	Type	Catalog number
110–127 Vac/Vdc	Standard duty	MST1
208–240 Vac/Vdc	Standard duty	MST2
24 Vdc	Standard duty	MST3
48 Vdc	Standard duty	MST4
110/127 Vac/Vdc	Continuous duty	MSTA
60 Vdc	Continuous duty	MSTD
48 Vdc	Continuous duty	MSTH
24 Vdc	Continuous duty	MSTL
220/250 Vac/Vdc	Continuous duty	MSTR

Table 15. Spring release (closing coil) kit



Control voltage	Catalog number
110–127 Vac/Vdc	MSRA
208–240 Vac/Vdc	MSRR
24 Vdc	MSRC
48 Vdc	MSRH
60 Vdc	MSRS

Table 16. Auxiliary switch kit



Description	Catalog/ style number
2a/2b contacts	MAUX2
Assembly: shunt trip auxiliary switch	2C12791G02

Table 17. Motor operator kit



 Hardware Included

Control voltage	Charging time (sec)	Catalog/ style number
24 Vdc	5	MMOTL
48 Vdc	5	MMOTK
60 Vdc	5	MMOTS
110–125 Vac/Vdc	5	MMOTW
208–240 Vac/Vdc	5	MMOTT
Motor operator support bracket	—	2C12729H02
24 Vdc	3	2A11794G25
48 Vdc	3	2A11794G24
110–125 Vac/Vdc	3	2A11794G34
208–277 Vac/Vdc	3	2A11794G35
Motor operator cut off switch	—	2A10777H02

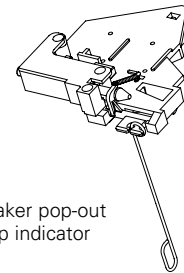
Notes: Applicable for all Magnum frames.
Manufacturing change 2nd quarter 2003. The new motor operator is a direct replacement and will include all the required materials to mount in the location once housing the old motor operator.

Table 18. Undervoltage release



Control voltage	Catalog number
110–125 Vac	MUVRA
208–240 Vac	MUVRR
24 Vdc	MUVRC
32 Vdc	MUVRG
48 Vdc	MUVRH
110–125 Vdc	MUVRE
208–240 Vdc	MUVRF
380–415 Vac	MUVRX
480 Vac	MUVRJ
600 Vac	MUVRK
60 Vdc	MUVRS

Table 19. Breaker pop-out trip indicator with switches and bell alarm—overcurrent trip switch (OTS)



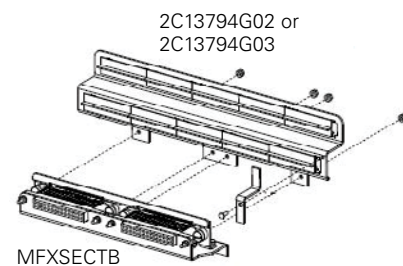
 Hardware Included

Breaker pop-out
trip indicator

Description	Contacts	20th digit in breaker catalog number	Catalog/ style number
Bell alarm/OTS with pop-out visual indicator for overcurrent trip (no switches)	None	N	MDTRIND
Bell alarm/OTS with pop-out visual indicator for overcurrent trip (with switches)	2 Form C	Y	MDTRINDBA
Bell alarm/OTS with interlocked trip indicator kit—remote reset 230 Vac/250 Vdc (with switches)	2 Form C	K	MRRTS230AD
Bell alarm/OTS with interlocked trip indicator kit—remote reset 120 Vac/125 Vdc (with switches)	2 Form C	J	MRRTS120AD
Bell alarm/OTS with interlocked trip indicator kit—remote reset 24 Vdc (with switches)	2 Form C	I	MRRTS24AD
Bell alarm/OTS with interlocked trip indicator kit—manual reset (no switches)	-	M	2A11897G11
Bell alarm/OTS with interlocked trip indicator kit—manual reset (with switches)	2 Form C	L	2A11897G12
Bell alarm/OTS only (2 Form C alarm switches)	2 Form C	—	MOTS ①
White hole plug	—	—	76260FAB02

① Requires breaker to be equipped with pop-out visual trip indicator assembly.

Table 20. Fixed breaker secondary disconnect block

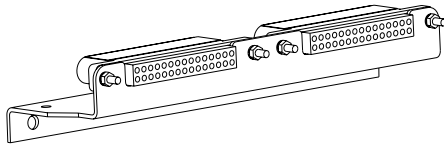


 Hardware Included

MFXSECTB

Description	Catalog/ style number
2–30 position connectors labeled and assembled to mounting tray	MFXSECTB
Secondary contacts terminal mounting kit for standard	2C13794G02
Secondary contacts terminal mounting kit for narrow	2C13794G03

Table 21. Breaker terminal block bracket



Description	Catalog number
2–30 position connectors labeled for external wiring	MDOACBSECTB

Table 22. Secondary repair kit ①



Description	Catalog/ style number
(1) Ampere pin removal tool	MSECTOOL
(1) 6-point terminal block	
(1) 6-point blank label	
(1) Female 30-point ampere connector	
(1) Male 30-point ampere connector	
(10) Wire assembly	
Cassette terminal block label (standard)	1B92660G04
Terminal block labels frame with leg (narrow)	1B92660G05

① Wires and pins can be found on **Table 24** (page 13).

Table 23. Current sensors (CTs) and rating plugs



Frame size amperes	Sensor and RP ampere rating	Sensors	Rating plugs	Number of poles	Frame size	Catalog number
Up to 1600	200	3	1	3	Narrow	M3NRG0200
Up to 1600	250	3	1	3	Narrow	M3NRG0250
Up to 1600	300	3	1	3	Narrow	M3NRG0300
Up to 1600	400	3	1	3	Narrow	M3NRG0400
Up to 1600	600	3	1	3	Narrow	M3NRG0600
Up to 1600	630	3	1	3	Narrow	M3NRG0630
Up to 1600	800	3	1	3	Narrow	M3NRG0800
Up to 1600	1000	3	1	3	Narrow	M3NRG1000
Up to 1600	1200	3	1	3	Narrow	M3NRG1200
Up to 1600	1250	3	1	3	Narrow	M3NRG1250
Up to 1600	1600	3	1	3	Narrow	M3NRG1600
Up to 1600	200	4	1	4	Narrow	M4NRG0200
Up to 1600	250	4	1	4	Narrow	M4NRG0250
Up to 1600	300	4	1	4	Narrow	M4NRG0300
Up to 1600	400	4	1	4	Narrow	M4NRG0400
Up to 1600	600	4	1	4	Narrow	M4NRG0600
Up to 1600	630	4	1	4	Narrow	M4NRG0630
Up to 1600	800	4	1	4	Narrow	M4NRG0800
Up to 1600	1000	4	1	4	Narrow	M4NRG1000
Up to 1600	1200	4	1	4	Narrow	M4NRG1200
Up to 1600	1250	4	1	4	Narrow	M4NRG1250
Up to 1600	1600	4	1	4	Narrow	M4NRG1600
Up to 3200	200	3	1	3	Standard	M3SRG0200
Up to 3200	250	3	1	3	Standard	M3SRG0250
Up to 3200	300	3	1	3	Standard	M3SRG0300
Up to 3200	400	3	1	3	Standard	M3SRG0400
Up to 3200	600	3	1	3	Standard	M3SRG0600
Up to 3200	630	3	1	3	Standard	M3SRG0630
Up to 3200	800	3	1	3	Standard	M3SRG0800
Up to 3200	1000	3	1	3	Standard	M3SRG1000
Up to 3200	1200	3	1	3	Standard	M3SRG1200
Up to 3200	1250	3	1	3	Standard	M3SRG1250
Up to 3200	1600	3	1	3	Standard	M3SRG1600
Up to 3200	2000	3	1	3	Standard	M3SRG2000
Up to 3200	2500	3	1	3	Standard	M3SRG2500
Up to 3200	3000	3	1	3	Standard	M3SRG3000
Up to 3200	3200	3	1	3	Standard	M3SRG3200
Up to 3200	200	4	1	4	Standard	M4SRG0200
Up to 3200	250	4	1	4	Standard	M4SRG0250
Up to 3200	300	4	1	4	Standard	M4SRG0300
Up to 3200	400	4	1	4	Standard	M4SRG0400
Up to 3200	600	4	1	4	Standard	M4SRG0600
Up to 3200	630	4	1	4	Standard	M4SRG0630

Table 23. Current sensors (CTs) and rating plugs (continued)

Frame size amperes	Sensor and RP ampere rating	Sensors	Rating plugs	Number of poles	Frame size	Catalog number
Up to 3200	800	4	1	4	Standard	M4SRG0800
Up to 3200	1000	4	1	4	Standard	M4SRG1000
Up to 3200	1200	4	1	4	Standard	M4SRG1200
Up to 3200	1250	4	1	4	Standard	M4SRG1250
Up to 3200	1000	4	1	4	Standard	M4SRG1600
Up to 3200	2000	4	1	4	Standard	M4SRG2000
Up to 3200	2500	4	1	4	Standard	M4SRG2500
Up to 3200	3000	4	1	4	Standard	M4SRG3000
Up to 3200	3200	4	1	4	Standard	M4SRG3200
4000–6000	2000	6	1	6	Double	M3RRG2000
4000–6000	2500	6	1	6	Double	M3RRG2500
4000–6000	3200	6	1	6	Double	M3RRG3200
4000–6000	4000	6	1	6	Double	M3RRG4000
4000–6000	5000	6	1	6	Double	M3RRG5000
4000–6000	6000	6	1	6	Double	M3RRG6000
4000–6000	2000	8	1	8	Double	M4RRG2000
4000–6000	2500	8	1	8	Double	M4RRG2500
4000–6000	3200	8	1	8	Double	M4RRG3200
4000–6000	4000	8	1	8	Double	M4RRG4000
4000–6000	5000	8	1	8	Double	M4RRG5000
4000–6000	6000	8	1	8	Double	M4RRG6000
Up to 4000	2000	3	1	-	①	M3DNG2000
Up to 4000	2500	6	1	3	①	M3DNG2500
Up to 4000	3200	6	1	3	①	M3DNG3200
Up to 4000	4000	6	1	3	①	M3DNG4000
Up to 4000	5000	6	1	3	①	M3DNG5000
Up to 4000	2000	3	1	3	External	M3ERG2000
Up to 4000	2500	3	1	3	External	M3ERG2500
Up to 4000	3000	3	1	3	External	M3ERG3000
Up to 4000	3200	3	1	3	External	M3ERG3200
Up to 4000	4000	3	1	3	External	M3ERG4000
Up to 2000	2000	3	1	3	Narrow	M3NRG2000
4000 to 6300 (IEC only)	6300	3	1	3	Double	M3RRG6300
Up to 4000	2000	8	1	4	①	M4DNG2000
Up to 4000	2500	8	1	4	①	M4DNG2500
Up to 4000	3200	8	1	4	①	M4DNG3200
Up to 4000	4000	8	1	4	①	M4DNG4000
Up to 4000	5000	8	1	4	①	M4DNG5000
Up to 4000	2000	4	1	4	External	M4ERG2000
Up to 4000	2500	4	1	4	External	M4ERG2500
Up to 4000	3000	4	1	4	External	M4ERG3000
Up to 4000	3200	4	1	4	External	M4ERG3200
2000 A current transformers/ sensors kit	—	—	1	—	External	M4ERG4000
2000 A current sensors/ rating plug kit	2000	4	1	4	Narrow	M4NRG2000
6300 A current transformers/ sensors kit	—	—	1	—	Double	M4RRG6300

① Double narrow.

Table 24. Rating plugs only



RP ampere rating	Frame size	Style number
200	Narrow and standard	2A11891G01
250	Narrow and standard	2A11891G02
300	Narrow and standard	2A11891G03
400	Narrow and standard	2A11891G04
600	Narrow and standard	2A11891G05
630	Narrow and standard	2A11891G06
800	Narrow and standard	2A11891G07
1000	Narrow and standard	2A11891G08
1200	Narrow and standard	2A11891G09
1250	Narrow and standard	2A11891G10
1600	Narrow and standard	2A11891G11
2000	Narrow and standard ①	2A11891G12
2500	Standard	2A11891G13
3000	Standard	2A11891G14
3200	Standard	2A11891G15
2000	Double	2A11891G16
2500	Double	2A11891G17
3200	Double	2A11891G18
4000	Double	2A11891G19
5000	Double	2A11891G20
6000	Double	2A11891G23

① Narrow frame fixed mounted only.

Table 25. Earth fault alarm/power relay module
(automatic trip relay)



Description	Voltage	Catalog/ style number
520M/520MC trip unit	24/48 Vdc	MPRMH
520M/520MC trip unit	120 Vac	MPRMA
520M/520MC trip unit	240 Vac	MPRMR
520M/520MC trip unit	125 Vdc	70C1081G04

Table 26. Auxiliary power module



Description	Catalog number
120–240 Vac input 50/60 Hz—32 Vdc output	PRTBAPMDV

**Table 27. Power relay module (automatic trip relay)—
standard frame only**



Description	Voltage	Style number
1150/1150+ trip unit	24/48 Vdc	2A11772G11
1150/1150+ trip unit	120 Vac	2A11772G12
1150/1150+ trip unit	230 Vac	2A11772G13
1150/1150+ trip unit	125 Vdc	2A11772G14

Table 28. Neutral current sensors (required for ground fault)



Ampere rating	Style number
200	9253C03H01
250	9253C03H02
300	9253C03H03
400	9253C03H04
600	9253C03H05
630	9253C03H14
800	9253C03H06
1000	9253C03H07
1200	9253C03H08
1250	9253C03H15
1600	9253C03H09
2000	9253C03H10
2500	9253C03H11
3000	9253C03H12
3200	9253C03H13
4000 ①	9253C03H10
5000 ①	9253C03H11

① Quantity of two required.

Table 29. Auxiliary current transformer kit

Ampere rating	Number of poles	Style number
800–3200	3	2A11892G01
800–3200	4	2A11892G02
4000–5000	3	2A11892G03
Auxiliary current transformer 10:1	—	5720B25G01
Auxiliary current transformer 20:1	—	5720B25G02

Table 30. Current limiting fuse kit ①

Description	Style number
MA250	2A10395G02
MA300	2A10395G03
MA400	2A10395G04
MA600	2A10395G05
MA800	2A10395G06
MB1200	2A10395G07
MB1600	2A10395G08
MB2000	2A10395G09
MD2500	2A10395G15
MD3000	2A10395G16
MD3000 with heat sinks	2A10395G17
Magnum blown fuse and trip indicator	70C1273G01

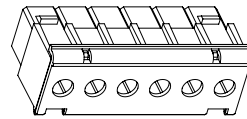
① Fuse kit includes 3 fuses and mounting hardware.

Table 31. PT modules

Description	Style number
EFA Magnum breaker, PT module replacement	2A11772G01
PT module dielectric plug	70C1067G41

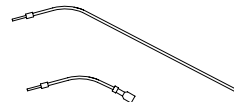
Cassette (cell) attachments

Table 32. Second terminal block kit



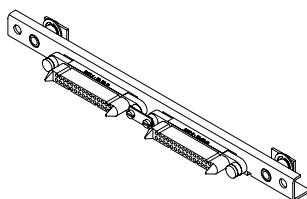
Description	Catalog number
15 (6 point) terminal blocks and labels	MSECBK

Table 33. Secondary terminal wire kit



Description	Catalog/ style number
90 wires with terminal connectors (ampere and fasten on opposite ends)	MSECBK
30 wires—40 inch long (ampere pin—one end only)	MWK40
Secondary connection PIN (male)	73479CJ11G
Secondary connection PIN (female)	73479CK11G
Fast-on terminal	73479EIA06

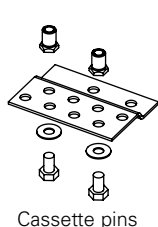
Table 34. Cassette secondary disconnect block



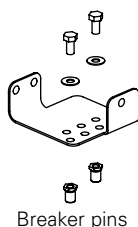
 **Hardware Included**

Description	Frame size	Catalog number
2–30 position connectors to wire to customer secondary terminals	Standard	MDOCASSECTB
	Narrow	MDNCASSECTB

Table 35. Rejection bracket replacement parts



Cassette pins

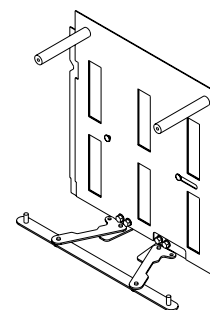


Breaker pins

 **Hardware Included**

Description	Frame size	Catalog/ style number
Breaker rejection bracket kit	Standard/double	2A11893G01
Breaker rejection bracket kit	Narrow	2A11893G92
Rejection stop nut	—	2A10141H02
Cassette rejection bracket kit	Narrow	2C13863G01
Cassette rejection bracket kit	Double narrow	2C13863G02
Cassette cell rejection kit	Standard	MCELLREJBK
Cassette cell rejection kit	Double	MCELLREJBKDF

Table 36. Cassette shutters

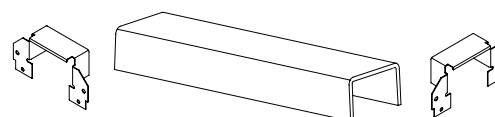


 **Hardware Included**

Three-pole
3200 A shown

Ampere rating	Magnum circuit breaker	Number of poles	Catalog number
800–1600	Narrow	3	MDNSHTR3P
800–1600	Narrow	4	MDNSHTR4P
800–3200	Standard	3	MDSHTR332WL
800–3200	Standard	4	MDSHTR432WL
4000–5000	Double	3	MDSHTR350WL
4000–5000	Double	4	MDSHTR450WL
4000	Double narrow (IEC)	6	MINSHTR340
4000	Double narrow (IEC)	8	MINSHTR440
Up to 3200	Standard (IEC)	3	MISHTR332
4000–6300	Standard (IEC)	3	MISHTR363
3200	Standard (IEC)	4	MISHTR432
4000–6300	Standard (IEC)	4	MISHTR463

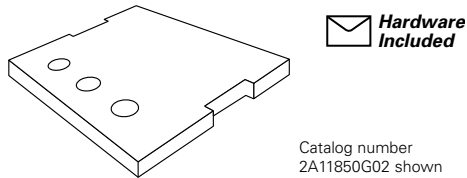
Table 37. Cassette arc hood kit



 **Hardware Included**

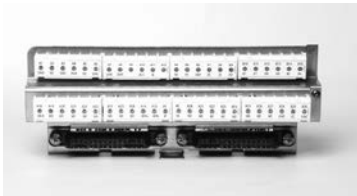
Description	Standard	Number of poles	Frame size	Style number
Up to 3200 A	ANSI	3	Standard	2A11853G01
Up to 3200 A	ANSI	4	Standard	2A11853G02
4000 A and above	ANSI	3	Standard	2A11853G03
4000 A and above	ANSI	4	Standard	2A11853G04
Up to 1600 A	ANSI	3	Narrow	2A11853G11
Up to 1600 A	ANSI	4	Narrow	2A11853G01
Up to 3200 A	IEC	3	Standard	2A11853G05
Up to 3200 A	IEC	4	Standard	2A11853G06
4000 A and above	IEC	3	Standard	2A11853G07
Up to 2000 A	IEC	3	Narrow	2A11853G15
Up to 2000 A	IEC	4	Narrow	2A11853G05
Arc hood kit 3200 A, 4000 A, and above	-	6	Double narrow	2A11853G16
Arc hood kit 4000 A and above	ANSI	8	Double narrow	2A11853G17
Arc hood kit 4000 A and above	IEC	6	Double narrow	2A11853G18
Arc hood kit 4000 A and above	IEC	8	Double narrow	2A11853G19
4000 A and above	IEC	4	Standard	2A11853G08
Cassette dc arc hood	ANSI	3	—	2A12691G01
Cassette dc arc hood	IEC	3	—	2A12691G02

Table 38. Copper line and load stabs kit



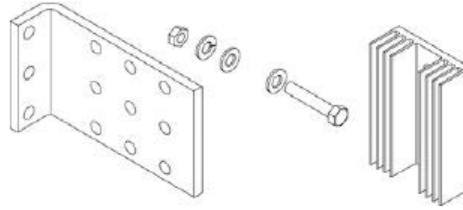
Description	Frame size	Stab thickness inches (mm)	Style number
IEC standard frame MWI stabs kit (2 per kit)	Standard	1	2A10857G02
IEC Narrow frame MWI stabs kit (2 per kit)	Narrow	—	2A10857G03
MDS stabs kit (2 per kit)	Standard	1/2	2A11850G01
MDS stabs kit (2 per kit)	Standard	3/8	2A11850G02
Rear stab housing	—	—	6D32610H06
Stab and housing assembly	—	—	2C13695G05

Table 39. Secondary terminal replacement parts



Description	Wiring type	Number of poles	Frame size	Catalog number
Cassette secondary contact assembly	Not wired	3	Standard	2C13694G07
Cassette secondary contact subassembly	Prewired	3	Standard	2C13694G11
Cassette secondary contact subassembly	Prewired	4	Standard	2C13694G12
Cassette secondary contact subassembly	Prewired	3	Double	2C13694G13
Cassette secondary contact subassembly	Prewired	4	Double	2C13694G14
Cassette secondary contact assembly	Not wired	6	Double	2C13694G09
Cassette secondary contact assembly	Not wired	3	Narrow	2C13694G31
Cassette secondary contact subassembly	Prewired	3	Narrow	2C13694G33
Cassette secondary contact subassembly	Prewired	4	Narrow	2C13694G34
Cassette secondary contact assembly	Not wired	6	Double narrow	2C13694G41
Cassette secondary contact assembly	Not wired	6	Double narrow	2C13694G43

Table 40. Universal cassette bus adapter kit



Description	Ampere rating	Number of poles	Catalog number
Cassette bus adapter kit	800–1600	3	MUBADP316
Cassette bus adapter kit	2000–3000	3	MUBADP330 ①
Cassette bus adapter kit	3200	3	MUBADP332 ②
Cassette bus adapter kit	800–1600	4	MUBADP416
Cassette bus adapter kit	2000–3000	4	MUBADP430 ①
Cassette bus adapter kit	3200	4	MUBADP432 ②
Heat sink kit	—	3	MUBHS332
Heat sink kit	—	4	MUBHS432

① Heat sinks not included.
For 4000 A three-pole supply quantity (2) **MUBADP330**.
For 4000 A four-pole supply quantity (2) **MUBADP430**.

② Heat sinks included.
For 5000–6000 A three-pole supply quantity (2) **MUBADP332**.
For 5000–6000 A four-pole supply quantity (2) **MUBADP432**

Table 41. Secondary terminal replacement parts, blocks, and kits

Description	Style number
Cassette terminal block label	1B92660G04
Terminal block labels, narrow frame with leg	1B92660G05
6-point terminal block	2A97852H01
Terminal bracket	2C12725H01
By frame, standard	2C13794G02
By frame, narrow	2C13794G03
Terminal block spacer	9252C24H01
Cassette terminal block label	1B92660G02
Cassette terminal block label	1B92660G06
Cassette terminal block label	1B92660H06
Cassette terminal block label	1B92660H12
Main bracket assembly—three-pole	2C14690G05
Main bracket assembly—six-pole narrow	2C14690G23
Connector, housing	73477JAA01
Secondary receptacle housing	73477JAB01

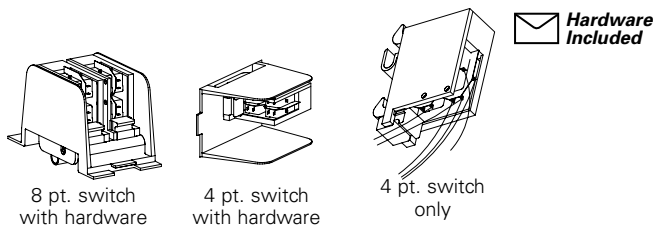
Table 42. Shutter replacement kits



Description	Number of poles	Style number
IEC narrow shutter kit	3	1B93098G11
IEC narrow shutter kit	4	1B93098G12
ANSI backplane for 1/2-inch stabs, 800–2000 A	3	2A10859G01
ANSI backplane for 3/4-inch stabs, 3200 A	3	2A10859G02
Backplane molding, 1/2-inch	3	N/A
ANSI backplane for 1/2-inch stabs, 4000 A standard frame	6	2A10859G03
ANSI backplane for 3/4-inch stabs, 5000 A standard frame	6	2A10859G04

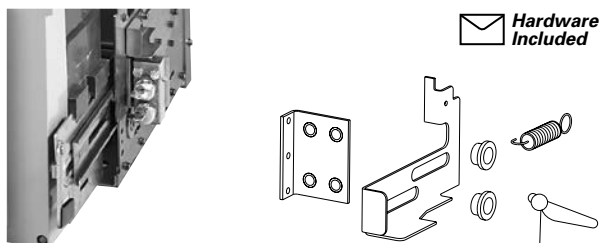
Internal accessories

Table 43. Cell switch kit



Description	Breaker frame	Frame size	Catalog number
4-point switch + hardware	MDS	Standard	MD4CS
8-point switch + hardware	MDS	Standard	MD8CS
4-point switch only	MDS	Standard	MDCELLSW1
4-point switch + hardware	MDN	Narrow	M4CS
3 12-point switches + hardware	IEC	Standard	M12CS
2 12-point switches + hardware	IEC	Standard	M8CS
12-point switch only	ANSI	Standard	MICELLSW1

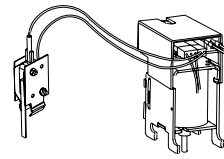
Table 44. Cassette lock provision ①



Lock type	Mounting position	Catalog/style number
Kirk or Castell	Right side	MCASSPRR
Kirk or Castell	Left side	MCASSPRL
Kirk	Retainer lock rail	2C13044H03
Ronis	Mounting plate	2C12823H24

① Eaton does not supply lock or key, only the provision, for Kirk, use lock catalog number KFL000021 for two cylinder and KFL000010H for one cylinder. For Castell, use lock catalog number F080000.

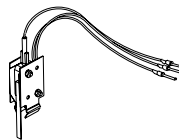
Table 45. Latch check switch for use with spring release ①



Breaker frame	Catalog/style number
MDS	MLCS1

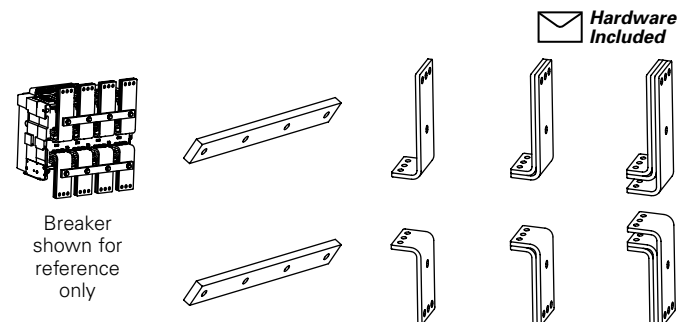
① Spring release sold separately.

Table 46. Latch check switch with one Form C contact for remote indication



Breaker frame	Catalog number
MDS	MLCS2

Table 47. Front-mounted terminals (breaker)

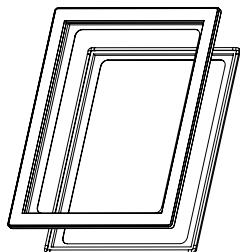


Continuous current (A)	Terminal adapter kit type	Number of poles	Fixed Magnum frame size	Short circuit rating (kA)	Catalog number
800–1200	Front mount	3	Narrow	Up to 65	NFC312KT
1600–2000	Front	3	Narrow	Up to 65	NFC320KT
800–1200	Front	3	Standard	Up to 100	SFNTC312
1600–2500	Front	3	Standard	Up to 100	SFNTC325
3200	Front	3	Standard	All	SFNTC332
4000	Front	3	Double	All	①
5000	Front	3	Double	All	①
800–1200	Front	4	Narrow	Up to 65	NFC412KT
1600–2000	Front	4	Narrow	Up to 65	NFC420KT
800–1200	Front mount	4	Standard	Up to 100	SFNTC412
1600–2500	Front mount	4	Standard	Up to 100	SFNTC425
3200	Front mount	4	Standard	All	SFNTC432
4000	Front mount	4	Double	All	①
5000	Front mount	4	Double	All	①

① Contact Eaton.

External accessories

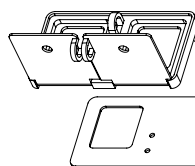
Table 48. Door escutcheon with gasket



 **Hardware Included**

Description	Catalog number
Provides protection against dust (IP31)	MDES
Provides protection against dust and dripping water (IP41)	MDES2

Table 49. Padlockable pushbutton cover



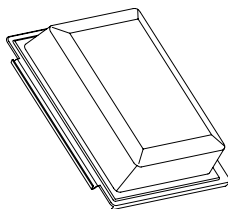
Frame

"CLOSED"
button cover

 **Hardware Included**

Description	Catalog/ style number
Metal frame with blocked close button cover	MC0VC
Plastic frame with blocked close button cover	MC0VH
Padlockable pushbutton cover—lockoff, metal	MC0VCOFF
Pushbutton cover base only—plastic	2C12810H01
Pushbutton cover base only—metal	2C12810H02
Pushbutton cover door only—right, plastic	2C12811H01
Pushbutton cover door only—left, plastic	2C12811H02
Pushbutton cover parts kit—plastic	2C12890G11
Pushbutton cover parts kit—plastic close blocked	2C12890G12
Pushbutton cover parts kit—metal	2C12890G13
Pushbutton cover parts kit—metal close blocked	2C12890G14
Pushbutton cover parts kit—metal cover with metal frame	2C12890G21

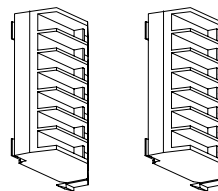
Table 50. IP55 cover kit (translucent)



 **Hardware Included**

Description	Catalog number
Provides protection against dust and dripping water (IP55)	MDESC

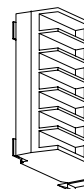
Table 51. CT shorting and jumper block kit



 **Hardware Included**

Description	Catalog number
Interstructure wiring terminations	MSJB

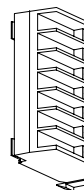
Table 52. CT jumper block kit



 **Hardware Included**

Description	Catalog number
Cell to cell wiring terminations	MJB

Table 53. CT shorting block



 **Hardware Included**

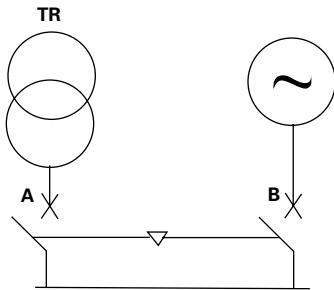
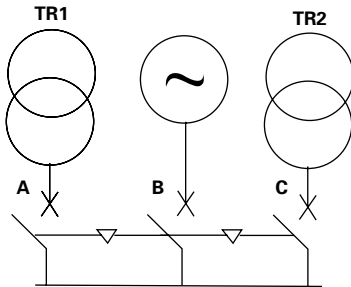
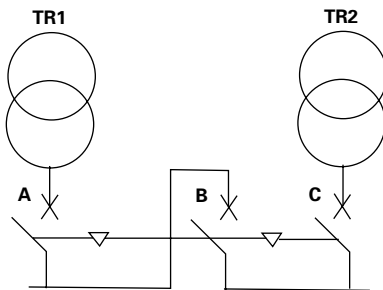
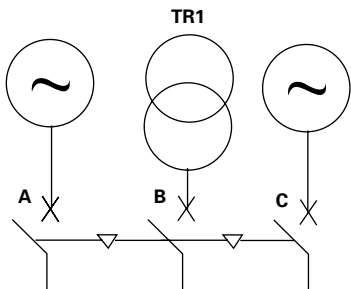
Description	Catalog number
Metering CT wire termination	MSB

Table 54. Anti-rock upgrade kit

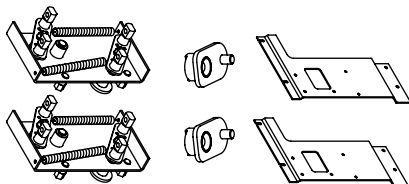
Description	Style number
IEC, standard and narrow	2A12886G01
IEC, double and double narrow	2A12886G02
ANSI, standard and narrow	2A12886G03
ANSI, double and double narrow	2A12886G04

Mechanical interlock configurations

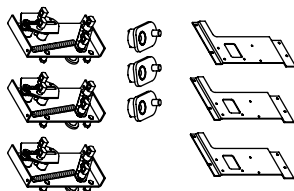
Table 55. Mechanical interlock configurations—some assembly required

Type of interlock	Typical circuit	Interlocks possible																								
Type 2 Across two circuit breakers One normal power supply and one emergency power supply.		Circuit breaker A can only be closed if B is open and vice versa. A = Normal power supply. B = Emergency power supply. <table><tr><th>A</th><th>B</th></tr><tr><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td></tr><tr><td>0</td><td>1</td></tr></table>	A	B	0	0	1	0	0	1																
A	B																									
0	0																									
1	0																									
0	1																									
Type 31 Across three circuit breakers Two normal power supplies and one emergency power supply.		Circuit breaker A and C can only be closed if B is open. B can only be closed when A and C are open. <table><tr><th>A</th><th>B</th><th>C</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td></tr></table>	A	B	C	0	0	0	1	0	0	0	1	0	0	0	1									
A	B	C																								
0	0	0																								
1	0	0																								
0	1	0																								
0	0	1																								
Type 32 Across three circuit breakers The two half-busbars can be powered by a single transformer (bus-tie closed) or by both at the same time (bus-tie open).		One or two circuit breakers out of three can be closed at the same time. <table><tr><th>A</th><th>B</th><th>C</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td></tr><tr><td>1</td><td>1</td><td>0</td></tr><tr><td>0</td><td>1</td><td>1</td></tr><tr><td>1</td><td>0</td><td>1</td></tr></table>	A	B	C	0	0	0	1	0	0	0	1	0	0	0	1	1	1	0	0	1	1	1	0	1
A	B	C																								
0	0	0																								
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0	1	0																								
0	0	1																								
1	1	0																								
0	1	1																								
1	0	1																								
Type 33 Across three circuit breakers Three power supplies (generators or transformers) on the same bus bar, making operation in parallel impossible.		Only one of three circuit breakers can be closed. <table><tr><th>A</th><th>B</th><th>C</th></tr><tr><td>0</td><td>0</td><td>0</td></tr><tr><td>1</td><td>0</td><td>0</td></tr><tr><td>0</td><td>1</td><td>0</td></tr><tr><td>0</td><td>0</td><td>1</td></tr></table>	A	B	C	0	0	0	1	0	0	0	1	0	0	0	1									
A	B	C																								
0	0	0																								
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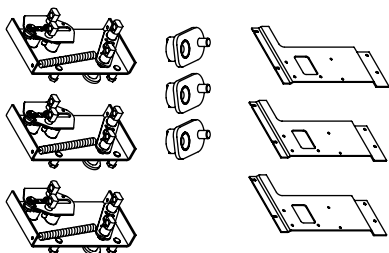
Mechanical interlock accessories

Table 56. 2-way fixed breakers


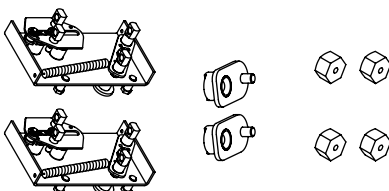
Type	Catalog number
Rod (requires 1 rod kit)	MI2FR
Cable (requires 1 cable kit)	MI2FC

Table 57. 3-way fixed breakers


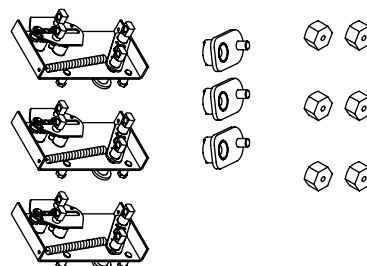
Type	Catalog number
Cable Type 31 (requires 2 cable kits)	MI31FC
Cable Type 33 (requires 3 cable kits)	MI33FC

Table 58. 3-way fixed breakers


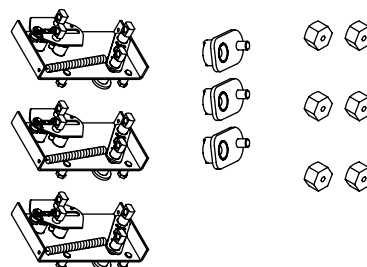
Type	Catalog number
Cable Type 32 (requires 3 cable kits)	MI32FC

Table 59. 2-way drawout breakers


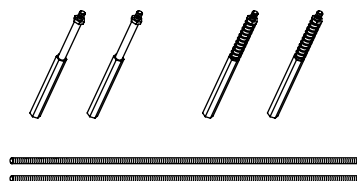
Type	Catalog number
Rod (requires 1 rod kit)	MI2DR
Cable (requires 1 cable kit)	MI2DC

Table 60. 3-way drawout breakers


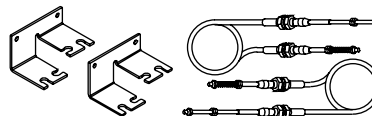
Type	Catalog number
Cable Type 31 (requires 2 cable kits)	MI31DC
Cable Type 33 (requires 3 cable kits)	MI33DC

Table 61. 3-way drawout breakers


Type	Catalog number
Cable Type 32 (requires 3 cable kits)	MI32DC

Table 62. Rod kit


Rod type in feet (m)	Catalog number
2 rods—3 (0.9) each	MIR

Table 63. Cable kits


Cable type in feet (m)	Catalog number
2 cables—5 (1.5) each	MIC5
2 cables—6 (1.8) each	MIC6
2 cables—8 (2.4) each	MIC8
2 cables—10 (3.0) each	MIC10

Standard breaker replacement parts

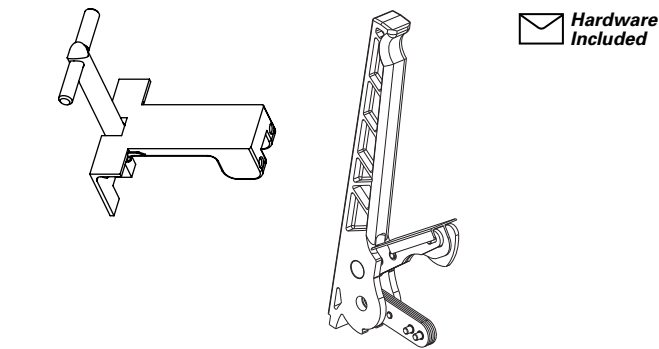
Table 64. Breaker front cover ①



Breaker frame	Ampere rating	Standard	Color	Number of poles	Frame size	Style number
MDS	Up to 3200	ANSI	Medium gray	4	Standard	2A11894G05
MDS	Up to 3200	ANSI	Medium gray	3	Standard	2A11894G06
MDS	4000–5000	ANSI	Medium gray	8	Double	2A11894G07
MDS	4000–5000	ANSI	Medium gray	6	Double	2A11894G08
MDN	Up to 2000	ANSI	Medium gray	4	Narrow	2A11894G15
MDN	Up to 2000	ANSI	Medium gray	3	Narrow	2A11894G16
MDN	4000–5000	ANSI	Medium gray	8	Double narrow	2A11894G28
MDN	4000–5000	ANSI	Medium gray	6	Double narrow	2A11894G27
MDSL	Up to 2000	ANSI	Medium gray	3	Standard	2A11894G33
MDSX	1200–2000	ANSI	Medium gray	3	Standard	2A11894G29
MDSX-MDSE-MDDX	2500–5000	ANSI	Medium gray	3	Double	2A11894G30
MDE	Up to 2500	ANSI	Medium gray	3	Standard	2A11894G06
DAS	1600, 2000, 3200	ANSI	Medium gray	3	Standard	2A11894G06
DBS	Up to 3200	ANSI/UL	Light gray	3	Standard	2A11894G20
SBS	Up to 3000	ANSI	Light gray	4	Standard	2A11894G20
SBS	Up to 3000	ANSI	Light gray	3	Standard	2A11894G19
SBS	4000–5000	ANSI	Light gray	8	Double	2A11894G24
SBS	4000–5000	ANSI	Light gray	6	Double	2A11894G23
SBSE	1200–2000	ANSI	Light gray	3	Standard	2A11894G31
SBSE	2500–5000	ANSI	Light gray	3	Double	2A11894G32
SBN	Up to 2000	ANSI	Light gray	4	Narrow	2A11894G22
SBN	Up to 2000	ANSI	Light gray	3	Narrow	2A11894G21
SBN	4000–5000	ANSI	Light gray	8	Double narrow	2A11894G26
SBN	4000–5000	ANSI	Light gray	6	Double narrow	2A11894G25
MWI	Up to 4000	IEC	Dark gray	4	Standard	2A11894G01
MWI	Up to 4000	IEC	Dark gray	3	Standard	2A11894G02
MWI-DEK-DGK	4000–5000	IEC	Dark gray	8	Double	2A11894G03
MWI-DEK-DGK	4000–5000	IEC	Dark gray	6	Double	2A11894G04
MWN	Up to 2000	IEC	Dark gray	4	Narrow	2A11894G11
MWN-DEM-DGM	Up to 2000	IEC	Dark gray	3	Narrow	2A11894G12
MWN	4000	IEC	Dark gray	8	Double narrow	2A11894G17
MWN	4000	IEC	Dark gray	6	Double narrow	2A11894G18
DEK-DGK	2500, 3200	IEC	Dark gray	3	Standard	2A11894G02

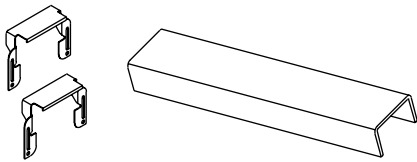
① General order, item, and sequence number must be supplied in order for the proper nameplate to be applied. Includes mounting screws.

Table 65. Center pull and charging handle assemblies



Description	Style number
Pull-out breaker handle 4000 A and above	2A11851G02
Charging handle with stop pawls assembly	2A10802G01

Table 66. Fixed breaker arc hood



Frame ampere rating	Number of poles	Breaker frame	Catalog/style number
Up to 3200	3	Standard	MKBKF3
Up to 3200	4	Standard	MKBKF4
4000–5000	3	Double	MKBKF6
4000–5000	4	Double	MKBKF8
Up to 1600	3	Narrow	2C12898G05
Up to 1600	4	Narrow	2C12898G01
Fixed breaker arc hood kit	6	Narrow	2C12898G06
Fixed breaker arc hood kit	8	Narrow	2C12898G07

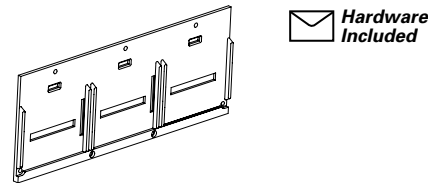
Table 67. IEC backplane kit

Description	Ampere rating	Number of poles	Breaker frame	Style number
IEC backplane kit 3/8-inch	800–2000	3	Standard	2A10858G01
IEC backplane kit 3/8-inch	800–2000	4	Standard	2A10858G02
IEC backplane kit 3/8-inch	4000	6	Standard	2A10858G03
IEC backplane kit 3/8-inch	4000	8	Standard	2A10858G04
IEC backplane kit 1-inch	3200	3	Standard	2A10858G05
IEC backplane kit 1-inch	3200	4	Standard	2A10858G06
IEC backplane kit 1-inch	5000–6300	3	Standard	2A10858G07
IEC backplane kit 1-inch	5000–6300	4	Standard	2A10858G08
IEC backplane kit 3/8-inch	800–2000	3	Narrow	2A10858G09
IEC backplane kit 3/8-inch	800–2000	4	Narrow	2A10858G10
IEC backplane kit 3/4-inch	4000	6	Narrow	2A10858G11
IEC backplane kit 3/4-inch	4000	8	Narrow	2A10858G12
IEC backplane kit, no copper	4000	6	Narrow	2A10858G13
IEC backplane kit, no copper	4000	8	Narrow	2A10858G14
IEC backplane kit 1-inch	4000	3	Standard	2A10858G15
IEC backplane kit 1-inch	4000	4	Standard	2A10858G16

Table 68. Breaker replacement parts—miscellaneous

Description	Style number
Fixed breaker mounting feet	2A10851G01
Contact, levering-in ground	1B92611H01
Conductor voltage tap	1B92721H01
Finger cluster assembly	1B93395G01
Extension rail kit	2A11852G01
Heat sink phase barrier—ACB	2C12115H03
Rear mounting plate	2C12726H01
Micro switch lead OTS/bell alarm—1 connection	2C12793G11
Micro switch lead OTS/bell alarm—2 connections	2C12793G12
Micro switch cell C4-C6	2C12793G16
Close button cover	2C12813H01
Charge flag actuator	2C13212H10
Magnum primary disconnect contact spring	2C13329H08
Cassette stab housing support bracket Magnum	2C13622H31
Drive arm assembly	2C13891G02
Side position label	1B92661H01
Handle, ANSI extension rail	2C12620H06
Transformer sub assembly	2C15490G01
Indicator complete (MDSL)	7829C69G03
Spring clip—1150Dt	8167A65H02

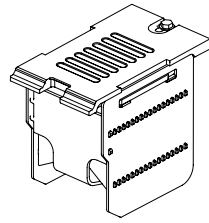
Table 69. Breaker current sensor door



Breaker continuous ampere rating	Number of poles	Breaker frame	Style number
800–2000	3	Standard	2A10853G04
800–2000	4	Standard	2A10853G03
2500–3200	3	Standard	2A10853G02
2500–3200	4	Standard	2A10853G01
4000	3	Double	2A10853G04 ①
4000	4	Double	2A10853G03 ①
5000–6000	3	Double	2A10853G02 ①
5000–6000	4	Double	2A10853G01 ①
800–1600	3	Narrow	2A10853G05
800–1600	4	Narrow	2A10853G06

① Order two kits.

Table 70. Arc chutes



Number of poles	Breaker frame	Catalog number ①
3	Standard	2A11895G01
4	Standard	2A11895G02
3	Narrow	2A11895G03
4	Narrow	2A11895G04
3	dc standard	2A11895G05
4	dc standard	2A11895G06
3	dc narrow	2A11895G07
4	dc narrow	2A11895G08
3	MDSX/MDSE/MDDX	2A11895G31

① For 4000 A and above, order two kits.

Table 71. Door latch interlock kits

Description	Catalog number
IEC door latch interlock kit	MDSDLKIT
IEC door shortlatch interlock kit	MDSDLKITSH

Table 72. Wire harnesses replacement parts

Description	Style number
Wire lead assembly, Red-P3	2C12794G83
Wire lead assembly, Yel-P5	2C12794G87
Wire lead assembly, Blu-P7	2C12794G91
Wire harness—trip unit 520M	2C12797G01
Wire harness—520M automatic trip relay	2C12797G05
Wire harness Wh5 (Incoming-520MC)	2C12797G09
Wire harness for 520MC TU	2C12797G10
Wire harness 8-520M/MC automatic trip relay-TU	2C12797G42
Magnum wire harness assembly—520MC Arcflash Reduction Maintenance System Incoming SB breakers	2C12797G70
Wire lead assembly, Red-P1	2C12794G81
Wire lead assembly, Yellow-P2	2C12794G84
Wire lead assembly, Blue-P3	2C12794G88

Table 73. Wiring harness

Description	Style number
1150+ breaker wiring harness and parts group	2A10493G01
520M and automatic trip relay breaker wiring harness and parts group	2A10493G11
Breaker wiring and parts—520MC	2A10493G16
Wiring harness for Digitrip 520 Arcflash Reduction Maintenance System for switchgear breakers	2A10493G17
Wiring harness for Digitrip 520 Arcflash Reduction Maintenance System for switchboard breakers	2A10493G18
Magnum air core trip PC board group	2A10493G81

Trip unit kits and trip unit replacement parts



Digitrip 520
(See Tables 74–76 and 78–80)



Digitrip 1150
(See Tables 77, 81 and 82)

Table 74. Digitrip 520

Description	Style number
520 LI	2A11799G09
520 LSI	2A11799G10
520 LSIG	2A11799G11

Table 75. Digitrip 520M

Description	Style number
520M LSI	2A11799G20
520M LSIA	2A11799G23
520M LSIG	2A11799G21

Table 76. Digitrip 520MC ①

Description	Style number
520MC LSI with Arcflash Reduction Maintenance System	2A11799G34
520MC LSIG with Arcflash Reduction Maintenance System	2A11799G35
520MC LSIA with Arcflash Reduction Maintenance System	2A11799G36

① Does not replace a Digitrip without Arcflash Reduction Maintenance System. Contact Eaton for upgrade kits.

Table 77. Digitrip 1150+ ①

Description	Style number
1150+ LSI with Arcflash Reduction Maintenance System	2A11799G51
1150+ LSIG with Arcflash Reduction Maintenance System	2A11799G52
1150+ LSIA with Arcflash Reduction Maintenance System	2A11799G53

① Does not replace a Digitrip without Arcflash Reduction Maintenance System. Contact Eaton for upgrade kits.

Table 78. IEC Digitrip 520i

Description	Style number
520i WLSIG	2A11799G12

Table 79. IEC Digitrip 520Mi

Description	Style number
520Mi MWLSIG	2A11799G22

Table 80. IEC Digitrip 520MCi

Description	Style number
520MCi LSiG	2A11799G32 ①

① Offered with and without Arcflash Reduction Maintenance System.

Table 81. IEC Digitrip 1150i

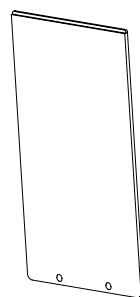
Description	Style number
1150i LSi	2A11799G43
1150i LSiG/LSiA	2A11799G44

Table 82. Digitrip 1150i with Arcflash Reduction Maintenance System ①

Description	Style number
1150i ARMIEC renewal parts kit	2A11799G54
1150i ARMIECEF renewal parts kit	2A11799G55

① Does not replace a Digitrip without Arcflash Reduction Maintenance System. Contact Eaton for upgrade kits.

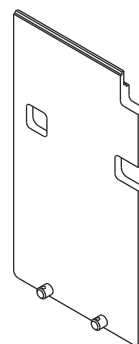
Table 83. Non-automatic trip unit covers



 **Hardware Included**

Breaker frame	Catalog Number
MDS (medium gray)	MTUNACA
IEC (dark gray)	MTUNACI

Table 84. Trip unit covers



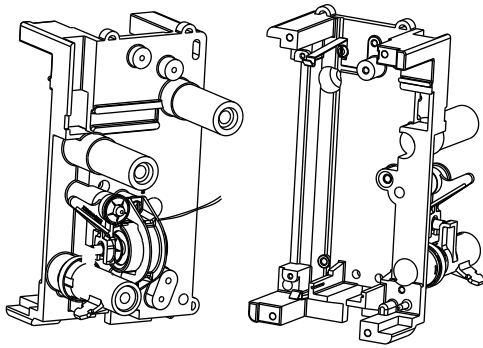
 **Hardware Included**

Trip unit cover type	Catalog number
220+/520+/520M/520MC	M220520CVR
1150①	M1150CVR

① Standard/Double frame only.

Note: Clear cover includes mounting screws.

Table 85. Trip unit mounting deck



Description	Ampere rating	Interrupting rating	Frame size	Trip unit	Style number
Trip unit mounting deck assembly	800–4000	Up to 85	Standard	520/520M/520MC	6D33491G06
Trip unit mounting deck assembly, –57 anti-freeze grease	800–4000	Up to 85	Standard	520/520M/520MC	6D33491W06
Trip unit mounting deck high override assembly	800–4000	100/130	Standard	520/520M/520MC	6D33491G09
Trip unit mounting deck high override assembly, –57 anti-freeze grease	800–4000	100/130	Standard	520/520M/520MC	6D33491W09
Trip unit mounting deck assembly 100 kA	800–2000	200	Standard	520/520M/520MC	6D33491G07
Trip unit mounting deck assembly 100 kA, –57 anti-freeze grease	800–2000	200	Standard	520/520M/520MC	6D33491W07
Trip unit mounting deck non auto assembly	800–4000	Up to 85	Standard	Non auto	6D33491G08
Trip unit mounting deck non auto assembly, –57 anti-freeze grease	800–4000	Up to 85	Standard	Non auto	6D33491W08
1150+ trip unit mounting deck assembly	800–4000	Up to 85	Standard	1150	6D33491G16
1150+ trip unit mounting deck assembly, –57 anti-freeze grease	800–4000	Up to 85	Standard	1150	6D33491W16
1150+ trip unit mounting deck high override assembly	800–4000	100/130	Standard	1150	6D33491G19
1150+ trip unit mounting deck high override assembly, –57 anti-freeze grease	800–4000	100/130	Standard	1150	6D33491W19
1150+ trip unit mounting deck high override assembly 100 kA	800–2000	200 (MDSL)	Standard	1150	6D33491G17
1150+ trip unit mounting deck high override assembly 100 kA, –57 anti-freeze grease	800–2000	200 (MDSL)	Standard	1150	6D33491W17
1150+ trip unit mounting deck high override assembly	1200–2000	200 (MDSX)	Standard	1150	6D33491G19
Trip unit mounting deck assembly	4000–5000	Up to 130	Double	520/520M/520MC	6D33491G06
Trip unit mounting deck assembly, –57 anti-freeze grease	4000–5000	Up to 130	Double	520/520M/520MC	6D33491W06
Trip unit mounting deck high override assembly	3200–4000	150 (MDSE)/200 (MDSX)/200 (MDDX)	Double	520/520M/520MC	6D33491G09
Trip unit mounting deck high override assembly, –57 anti-freeze grease	3200–4000	150 (MDSE)/200 (MDDX)	Double	520/520M/520MC	6D33491W09
Trip unit mounting deck non auto assembly	4000–6000	Up to 100	Double	Non auto	6D33491G08
Trip unit mounting deck non auto assembly, –57 anti-freeze grease	4000–6000	Up to 100	Double	Non auto	6D33491W08
1150+ trip unit mounting deck assembly	4000–5000	Up to 130	Double	1150	6D33491G16
1150+ trip unit mounting deck assembly, –57 anti-freeze grease	4000–5000	Up to 130	Double	1150	6D33491W16
1150+ trip unit mounting deck high override assembly	3200–5000	150 (MDSE)/200 (MDSX)/200 (MDDX)	Double	1150	6D33491G19
1150+ trip unit mounting deck high override assembly, –57 anti-freeze grease	4000–5000	200 (MDDX)	Double	1150	6D33491W19
Trip unit mounting deck air core MCR assembly	6000	100/130/200 (MDSE)/200 (MDDX)	Double	520/520M/520MC	6D33491G10
Trip unit mounting deck air core MCR assembly, –57 anti-freeze grease	6000	100/130/200 (MDDX)	Double	520/520M/520MC	6D33491W10
1150+ trip unit mounting deck air core mcr assembly	6000	100/130/200 (MDSE)/200 (MDDX)	Double	1150	6D33491G20
1150+ trip unit mounting deck air core MCR assembly, –57 anti-freeze grease	6000	100/130/200 (MDDX)	Double	1150	6D33491W20
Trip unit mounting deck assembly	800–2000	Up to 100	Narrow	520/520M/520MC	6D33491G06
Trip unit mounting deck assembly, –57 anti-freeze grease	800–2000	Up to 100	Narrow	520/520M/520MC	6D33491W06
Trip unit mounting deck non auto assembly	800–2000	Up to 65	Narrow	Non auto	6D33491G08
Trip unit mounting deck non auto assembly, –57 anti-freeze grease	800–2000	Up to 65	Narrow	Non auto	6D33491W08

Continued on next page.

Table 85. Trip unit mounting deck, continued

Description	Ampere rating	Interrupting rating	Frame size	Trip unit	Style number
1150+ trip unit mounting deck narrow assembly	800–2000	Up to 100	Narrow	1150	6D33491G66
1150+ trip unit mounting deck narrow assembly, –57 anti-freeze grease	800–2000	Up to 100	Narrow	1150	6D33491W66
Trip unit mounting deck assembly	4000–5000	Up to 100	Double narrow	520/520M/520MC	6D33491G06
Trip unit mounting deck assembly, –57 anti-freeze grease	4000–5000	Up to 100	Double narrow	520/520M/520MC	6D33491W06
Trip unit mounting deck non auto assembly	4000–5000	Up to 100	Double narrow	Non auto	6D33491G08
Trip unit mounting deck non auto assembly, –57 anti-freeze grease	4000–5000	Up to 100	Double narrow	Non auto	6D33491W08
1150+ trip unit mounting deck assembly	4000–5000	Up to 100	Double narrow	1150	6D33491G16
1150+ trip unit mounting deck assembly, –57 anti-freeze grease	4000–5000	Up to 100	Double narrow	1150	6D33491W16

Table 86. Trip unit—miscellaneous parts

Description	Style number
Trip actuator resetter: ACB	1B93415H03 ①
Direct trip actuator	2C12491G05

① Recommended to be installed by engineering services.

Table 87. Trip unit replacement parts

Description	Style number
Trip unit mtg. deck for standard Magnum frames with 520/520I/520M/520Mi trip unit	2A11898G01
Trip unit mounting deck for non-automatic / switch	2A11898G03
Trip unit mounting deck (includes actuator) 1150/1150i	2A11898G11
Trip actuator assembly	2C12491G04
Wire seal for Digitrip trip units	5108A03H01
Trip unit deck mounting assembly	6D33491G66

Table 88. Test accessories



Description	Catalog/ style number
Hand-held tester—Magnum functional test kit	MTST230V
Trip link cable	TRIPLINK
DSII portable tester kit—can be used on Magnum includes tester adapter cable	①
Digital relay module (used with DT 1150)	70C1142G51
Modbus mMINT translator module (translates to Modbus)	MMINT

① Contact Eaton LVA.

For more information, visit
Eaton.com/magnum

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