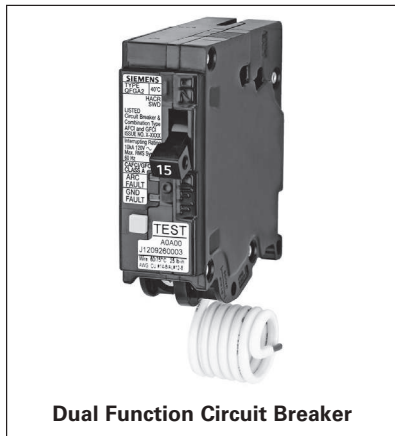
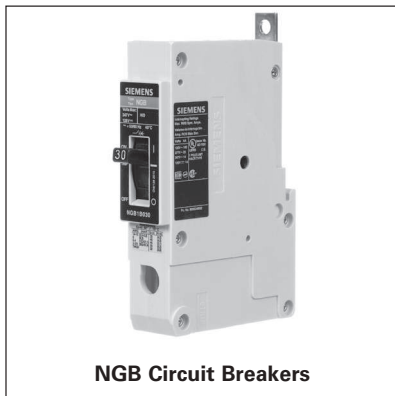


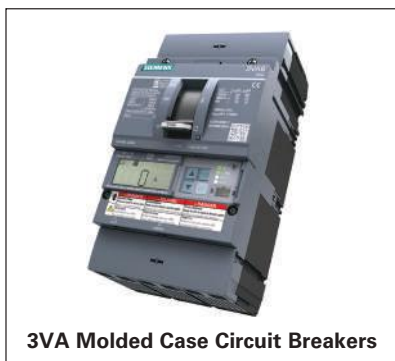
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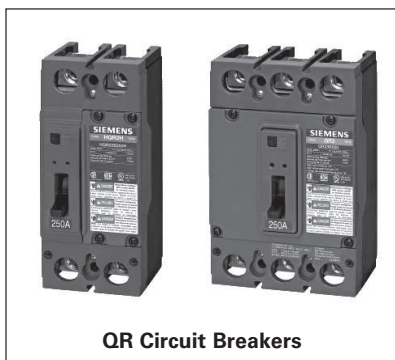
Dual Function Circuit Breaker



NGB Circuit Breakers



3VA Molded Case Circuit Breakers



QR Circuit Breakers

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Molded Case Circuit Breakers

Introduction

What's **NEW** in molded case circuit breakers:

New Sentron Sensitrip

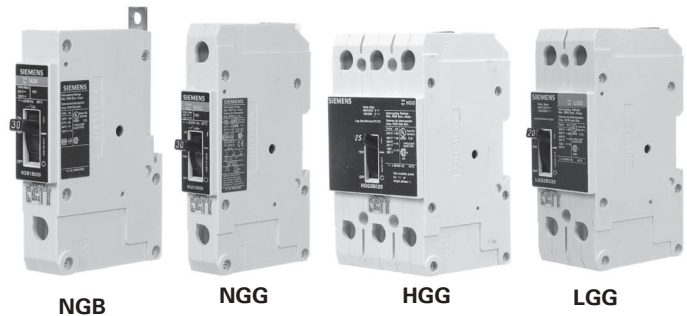
Sentron Sensitrip IV ETU Circuit Breakers with Integrated DAS / Maintenance Mode

Design enhancements include:

- Upgraded ETU
- Frame ratings from 400A to 1600A
- Identical footprint, kAIC ratings and accessory offering as legacy Sensitrip III ETU breakers to ease integration / retrofit
- Maintenance mode versions require customer-supplied 24V external power supply, maintenance switch and light



The Siemens GG, and xGB2 circuit breaker is a compact, industrial design thermal magnetic breaker with valuable features for the global markets. These features include a design that meets multi-national standards, is suitable for DIN rail or base mounting without the need for adapters, and includes CSA Certified / UL Listed field installable accessories. The GG, and xGB2 also has an over center toggle mechanism that is trip free and uses repulsion contact arm construction. Therefore, should a short circuit or tripping condition occur, the contacts are forced apart and the breaker cannot be held closed by means of the handle.



The New Siemens QR Circuit Breaker

Implemented in loadcentres, panelboards, switchboards, meter centres, and modular metering, the new QR breaker is the same form-factor/mounting as QJ breaker for easy retrofit.

Design enhancements include:

- Trip unit ratings from 100A to 250A.
- Field installable internal accessories – shunt trip, aux switch or shunt/aux combo.
- Two accessory pockets in 3-pole breakers. One accessory pocket in 2-pole breakers.
- High in-rush current capability (450%).
- Push-to-trip button.



The new Siemens 3VA Molded Case Circuit Breakers



- 125A and 250A Thermal Magnetic Trip Breakers
- 150A thru 600A Electronic Trip Circuit Breakers
- Extensive and flexible accessories
- Common internal accessories for the entire breaker family
- Power metering with the series-8 LCD electronic trip
- Illuminated rotary handles show switch position
- Smaller footprint than Sentron or VL breakers
- Enhanced Tools and Resources breakers.



BQD and NGB, HGB, LGB handle ties are now released for use where single pole breakers are using shared neutrals and must be locked out simultaneously.

Molded Case Circuit Breakers

Introduction

Ordering

In the FD through RD frames, you may order molded case circuit breakers three basic ways:

1. As separately ordered frames, trip units and lugs
2. As frame, trip unit and lugs ordered as one catalog number and shipped unassembled or assembled
3. As Frame and Trip Unit shipped assembled and with the trip unit made non-removable, in compliance with UL 489 / CSA C22.2 No. 5 requirements that to be reverse fed the circuit breaker must not have an interchangeable trip unit.

These two options are described in the following:

Components Ordered Separately

To get the components for a 3-pole, 400 Amp standard interrupting circuit breaker, you would order the frame (JD63F400), the trip unit (JD63T400) and six lugs (TA2J6500). This option is normally useful only if you stock and use large volumes of product and wish to reduce your inventory cost. You may stock, for example, a smaller number of frames (JD63F400) and a variety of trip units (JD63T300, JD63T350, etc.) and assemble breakers as you need them.

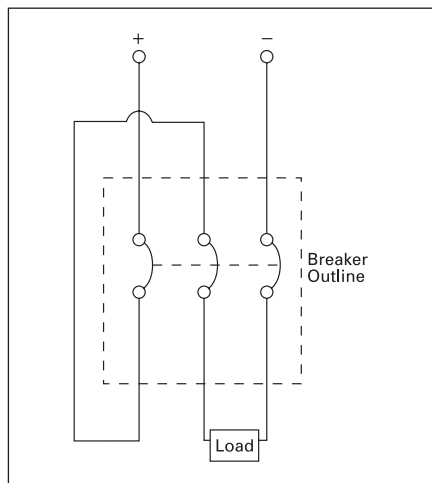
Frame, Trip Unit and Lugs Ordered Together

If you order the catalog number JD63B400, you will receive a frame, a trip unit and 6 lugs in separate packages. By suffixing this number with "L" (e.g. JD63B400L), you will receive frame, trip unit and lugs assembled in one container. Pursuant to CSA C22.2 No. 5-13 / UL 489, a product ordered thus will have the markings "LINE" and "LOAD", and may not be "reverse fed" (with power flowing from the "OFF" end of the breaker toward the "ON" end).

Non-Interchangeable Trip Breakers

If you place an "X" after the frame size designator (e.g. JXD63B400), you will receive a frame and trip unit assembled, with the trip unit made non-removable. If you suffix an "L" to this catalog number (e.g. JXD63B400L), you will receive the breaker, non-removable trip unit and lugs assembled. Unless you anticipate a specific need to change the breaker's ampere rating in the future, this is the preferred ordering method, as the products are assembled to Siemens' specifications in our factories. These breakers are suitable for use reverse fed according to CSA C22.2 No. 5-13 / UL 489, since the trip unit is not removable.

The smaller frames (QJ, ED and below) do not have removable trip units, and consequently are shipped only as assembled products. To add lugs, see the ordering instructions on each product's catalog page.

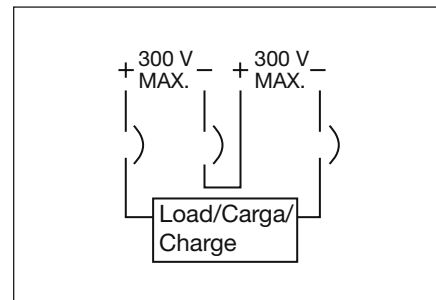


500V DC Wiring Configuration

Connecting Breakers for DC Application

Most Siemens thermal magnetic trip MCCBs are applicable on direct current (dc) systems. Generally, for 250 V dc systems a two pole breaker is used, with one pole on each leg of the supply circuit. For three pole breakers applied on 500 V undergrounded DC systems, it is important to connect the power supply "zig-zag" through the breaker as shown in the figure below. This assures that the Voltage between phases on the breaker terminals is uniformly distributed.

See below for an alternative connection diagram. For a list of Sentron breakers with the DC ratings, please refer to pages 5-11 - 5-16.



Molded Case Circuit Breakers

Catalogue Numbering System

Selection/Application

If used on 250A frame and above means non-interchangeable trip breaker with factory assembled frame and trip. Solid state trip and current limiting (S or C in first character) are non-interchangeable only, and the "X" is omitted.

Trip Unit Type

☐ — Omitted — Thermal-Magnetic
S — Sensitrip® Electronic Trip

Sentron Series Type/Interrupting Range

☐ — Omitted — Standard Rating
H — High IC Rating
HH — Extra High IC Rating
C — Highest IC Rating and Current Limiting

Frame Identifier

E — Type ED M — Type MD
F — Type FD N — Type ND
J — Type JD P — Type PD
L — Type LD R — Type RD
LM — Type LMD

Maximum Voltage

2 — 240 Vac
4 — 480 Vac
6 — 600 Vac

Number of Poles

1
2
3
9 used to indicate the max. functions for an electronic trip circuit breaker (always 3 poles)

(Specific Application Type)

B — Standard 40°C Breaker
M — Calibrated for 50°C Application
F — Frame Only
T — 40°C Trip Unit Only
W — 50°C Trip Unit Only
S — Molded Case Switch
L — Low Instantaneous Range ETI Breaker
A — Standard Range ETI Breaker
H — High Instantaneous Range ETI Breaker

Maximum Continuous Current Rating

ED Frame — 015, 020, 025, 030, 035, 040, 045, 050, 060, 070, 080, 090, 100, 110, 125
FD Frame — 070, 080, 090, 100, 110, 125, 150, 175, 200, 225, 250
JD Frame — 200, 225, 250, 300, 350, 400
LD Frame — 250, 300, 350, 400, 450, 500, 600
LMD Frame — 500, 600, 700, 800
MD Frame — 500, 600, 700, 800
ND Frame — 900, 100 (1000A), 120 (1200A)
PD Frame — 120 (1200A), 140 (1400A), 160 (1600A)
RD Frame — 160 (1600A), 180 (1800A), 200 (2000A)

Suffix

L — where applicable indicates a breaker shipped with line/loads lugs installed
A — used with a switch to show automatic self protection
Y — 400 Hertz
H — 100% rated
P — Load side lugs only
NAV — Navel Ratings

NOTE: ☐ — Position omitted if not used.

Applicable Standards

CSA-C22.2 No. 5, C22.2 No. 14
UL489 — Molded Case Circuit Breakers and Circuit Breaker Enclosures.
UL486A — Wire Connectors and

Solderless Lugs for use with copper wire
UL486B — Wire Connectors and Solderless Lugs for use with aluminum wire
UL943 — Ground Fault Interrupters (for personnel protectors)

UL1087 — Molded Case Switches
UL50 — Cabinets and Boxes
UL869 — Service Equipment
NEMA AB-1 — Molded Case Circuit Breakers and Molded Case Switches

NOTE:

(A) Molded case circuit breakers are designed and tested in accordance to applicable portions of UL 489 and CSA22.2 No. 5 and meet application requirements of the National Electric Code. Unless marked otherwise, circuit breakers are 80% duty rated.

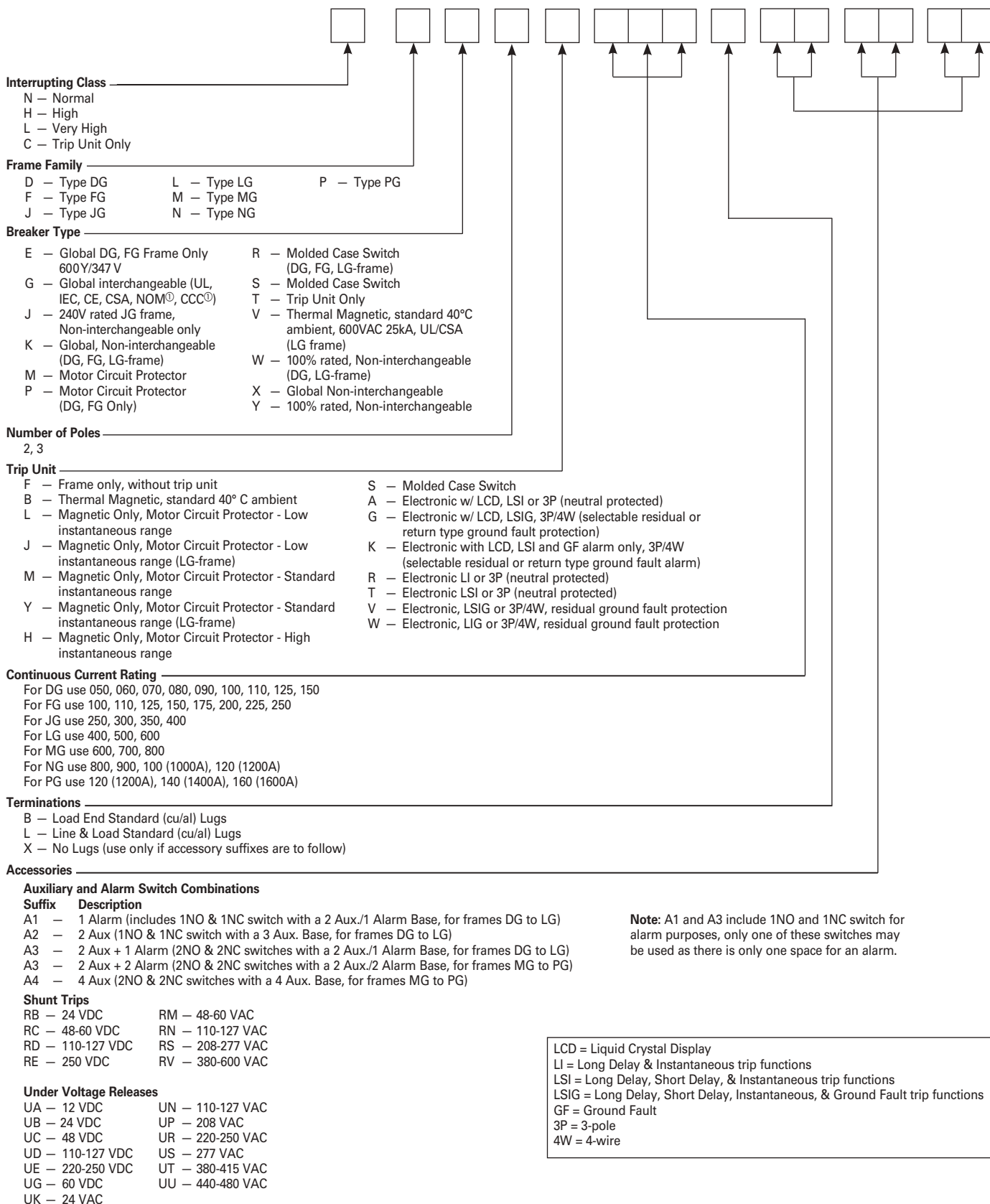
(B) Molded case circuit breakers are to be connected with 60 or 75°C wire for circuit breakers having a rated ampacity of 100 amperes or less. Circuit breakers having a rated ampacity greater than 100 amperes shall only be cabled with 75°C cable unless otherwise indicated on the circuit breaker label. Exceptions to this rule are outlined in the article 110-14 C(1)(2) of the 2005 National Electric Code and Canadian Electric Code.

① Interrupting ratings are not limited to the values or groups of values listed. However, the values listed are minimum values for the class specified.
② Single-unit or duplex construction must be specified.
③ Use minimum frame size for ampere rating.

Molded Case Circuit Breakers

Catalogue Numbering System

Selection/Application



① Select Frames

VL Circuit Breakers

Catalogue Numbering System

Selection

If ordering factory-installed accessories or special modifications, you must order a 15-digit catalog number. See the examples below for a detailed explanation. The 15 digit number is achieved by placing X's in positions not being occupied by an accessory/modification. Contact Siemens for circuit breakers configured with accessories.

Auxiliary Switch Example:

H F G 3 B 2 0 0 L	A 2	X X X X
Standard 9-digit	Aux. Switch	Completes Cat #

Shunt Trip / UVR Example:

H F G 3 B 2 0 0 L	X X	U N	X X
Standard 9-digit		UVR	
	Completes Cat #		

Shunt Trip / Auxiliary Switch Example:

H F G 3 B 2 0 0 L	A 2	R N	X X
Standard 9-digit	Aux. Switch	Shunt Trip	Completes Cat #

Non-Interchangeable Trip Breakers Example:

H F X 3 B 2 0 0 L
Standard 9-digit

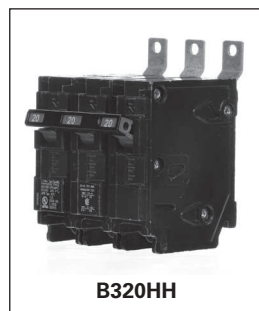
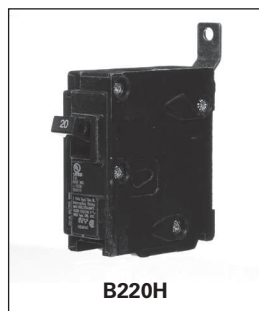
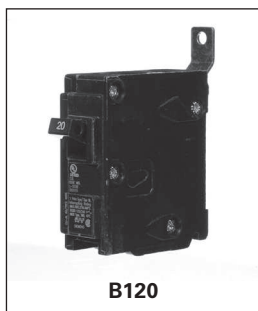
Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

					Plug-In Breakers						Panelboard Breakers									
					QT	QP	QPH	HQP	HQPPH	QPJ	BL [®]	BLH	HBL	BQD, BQD6	NGB, NGB2	HGB2	LGB2			
Page					5-21	5-22, 5-24	5-22, 5-24	5-20, 5-24	5-20, 5-24	5-24	5-29	5-29	5-29	5-32	5-33	5-33	5-33			
Ratings	AC	Poles			1, 2	1, 2, 3	1, 2, 3	1, 2, 3 ^②	2	2, 3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3	1,2,3			
		Amperes			15-50	10-125 ^{③④}	10-125 ^{③④}	10-125 ^{③②}	100-225	150-200	10-125	15-125	15-100	15-100	15-125	15-125	15-125			
		Volts (50/60 Hz)	1 Pole	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	120/240	277	347	347	347		
			2 Pole	—	240	240	240	240	240	240	240	240	240	240	480/277	600/347	600/347	600/347		
			3 Pole	—	240	240	240	240	240	240	240	240	240	240	480/277	600/347	600/347	600/347		
		Interrupt Ratings	CSA/UL	120V	10,000	10,000	22,000	65,000	—	—	10000	22000	65000	65000	—	—	—	—		
				240V	10,000	10,000	22,000	65,000	100,000	10,000	10000	22000	65000	65000	100000	100000	100000	100000		
				277V	—	—	—	—	—	—	—	—	—	—	14000	—	—	—		
				347V	—	—	—	—	—	—	—	—	—	—	10000	—	—	—		
				480/277V	—	—	—	—	—	—	—	—	—	—	14000	25000	35000	65000		
				480V	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
				600/347V	—	—	—	—	—	—	—	—	—	—	10000	14000	22000	25000		
				600V	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
				IEC 947-2 50/60 Hz	220/240V	I _{CU}	—	—	—	—	—	—	—	—	—	—	—	—	—	—
						I _{CS}	—	—	—	—	—	—	—	—	—	—	—	—	—	—
			380/415V		I _{CU}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
					I _{CS}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
			500V	I _{CU}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
					I _{CS}	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	DC	125/250 V DC Interrupting Rating	2-Pole	—	—	—	—	—	—	—	—	—	—	14000	14000	14000	14000			
			3-Pole	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
Dimensions in Inches	Height	10-50A	—	2.87	2.87	—	—	—	—	3.56	3.56	3.75	4.50	5.00	5.00	5.00				
		10-60A	3.12	—	—	—	—	—	—	—	—	—	—	—	—	—				
		55-125A	—	3.12	3.12	3.12	3.12	3 [®]	3.75	3.75	3.75	4.50	5.00	5.50	5.50					
	Width	1-Pole	1.00	1.00	1.00	1.00	—	—	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00				
		2-Pole	2.00 ^①	2.00	2.00	2.00	4.00	®	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00				
		3-Pole	2.00 ^①	3.00	3.00	3.00	3.00	—	3.00 ^⑤	3.00	3.00	3.00	3.00	3.00	3.00	3.00				
Depth			2.06	2.37	2.37	2.37	2.37	2.34	2.37	2.37	2.37	2.69	2.71	2.71	2.71					
Overcurrent Devices	Thermal and Fixed magnetic Trip			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
	Thermal and Adjustable Magnetic trip			—	—	—	—	—	—	—	—	—	—	—	—	—				
	Adjustable Magnetic trip only			—	—	—	—	—	—	—	—	—	—	—	—	—				
	Motor Circuit Protector			—	—	—	—	—	—	—	—	—	—	—	—	—				
	Molded Case Switch			—	✓ ^⑥	—	—	—	—	—	—	—	—	—	—	—				
Accessories & Modifications	Undervoltage Trip			—	—	—	—	—	—	—	—	—	✓	—	✓	✓				
	Shunt Trip			—	✓ ^⑥	✓ ^⑥	✓	✓ ^⑧	—	✓	✓	✓	✓	✓	✓	✓				
	Auxiliary Switch			—	—	—	—	✓ ^⑧	—	✓	✓	✓	✓	✓	✓	✓				
	Alarm Switch			—	—	—	—	—	—	—	—	—	✓	✓	✓	✓				
	Mechanical Interlock			—	—	—	—	—	—	—	—	—	—	—	—	—				
	Fungus Proofing (ref. page 5-89)			—	—	—	—	—	—	✓	✓	✓	✓	✓	✓	✓				



For inches / millimeters conversion, see Technical section.
For Plug-in Breakers, see Loadcentres section.

① BQD6 CSA certified 10,000A @ 600Y/347V 15-70A only.
② Single pole breakers available in ratings 10-70A only.
③ 125A, 2-pole 120/240V AC only.

④ Single pole circuit breakers available in ratings 15-70A only, 125A available as a 2-pole only.
⑤ 10A, 1-pole & 2-pole 120/240V AC only.

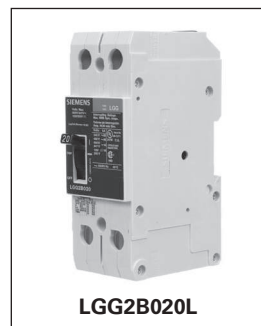
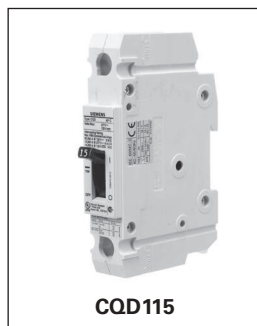
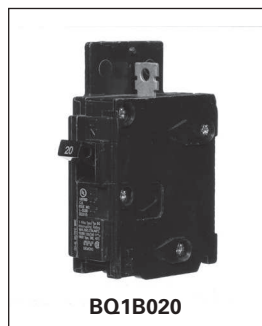
Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

				General Purpose Breakers								
				BQ	BQH	HBQ	QR2	QRH2	HQR2	HQR2H	CQD	NGG
Page				5-35	5-35	5-35	5-37	5-37	5-37	5-37	5-38	5-39
Ratings	AC	Poles		1, 2, 3	1, 2, 3	1, 2, 3	2, 3	2, 3	2, 3	2, 3	1, 2, 3	1, 2, 3
		Amperes, Continuous	1-Pole	15–70	15–70	15–50	—	—	—	—	15–100	15–125
			2-Pole	15–125	15–100	15–70	100–250	100–250	100–250	100–250	15–100	15–125
			3-Pole	15–100	15–100	15–100					15–100	15–125
		Volts (50/60 Hertz)	1-Pole	120/240	120/240	120/240	—	—	—	—	277	347
			2-Pole	120/240	120/240	120/240	240	240	240	240	480/277	600/347
			3-Pole	240	240	240						
		CSA/UL Interrupting Rating — Symmetrical RMS Amperes	120V	10,000	22,000	65,000	—	—	—	—	65,000	65,000
			240V	10,000	22,000	65,000	10,000	25,000	65,000	100,000	65,000	65,000
			480V	—	—	—	—	—	—	—	14,000 ^①	25,000
			600/347V	—	—	—	—	—	—	—	10,000	14,000
		DC	Volts — 2-Pole		—	—	—	—	—	—	—	125/250
	Interrupting Rating — DC Amperes		—	—	—	—	—	—	—	14,000	14,000	
Dimensions in Inches	Height	15–50A	3.75	3.75	4.00	—	—	—	—	4.50	5.40	
		55–125A	4.00	4.00	4.00	—	—	—	—	4.50	5.40	
		60–225A	—	—	—	7.00	7.00	7.00	7.00	—	—	
	Width	1-Pole	1.00	1.00	1.00	—	—	—	—	1.00	1.00	
		2-Pole	2.00	2.00	2.00	3.00	3.00	3.00	3.00	2.00	2.00	
		3-Pole	3.00	3.00	3.00	4.50	4.50	4.50	4.50	3.00	3.00	
	Depth		2.37	2.37	2.37	2.53	2.53	2.53	2.53	2.87	2.90	
Overcurrent Devices	Thermal and Fixed Magnetic Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Molded Case Switch		✓	—	—	✓	—	—	✓ ^③	—	—	
Accessories & Modifications	Undervoltage Trip		—	—	—	—	—	—	—	—	—	
	Shunt Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Auxiliary Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓	
	Alarm Switch		—	—	—	—	—	—	—	✓	✓	
	Mechanical Interlock		—	—	—	✓	✓	✓	✓	—	—	
	Fungus Proofing (ref. page 5-89)		✓	✓	✓	✓	✓	✓	✓	✓	✓	
Individual Enclosures	Type 1 — Indoor Surface		✓	✓	✓	—	—	—	—	—	—	
	Type 1 — Indoor, Flush		✓	✓	✓	—	—	—	—	—	—	
	Type 3R — Outdoor-Rainproof		✓	✓	✓	—	—	—	—	—	—	



For inches / millimeters conversion, see Technical section.

① CQD breakers are rated 14,000 KAIC at 480/277V.

③ 3-pole only.

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

Thermal-Magnetic Trip Breakers					General Purpose Breakers										
					HGG	LGG	ED2	ED4	ED6	HED4	CED6				
Page					5-41	5-41	5-43	5-43	5-43	5-44	5-44				
Ratings	AC	Poles			1, 2, 3	1, 2, 3	1, 2, 3	1, 2, 3	1 [ⓐ] , 2, 3	1, 2, 3	2, 3				
		Amperes, Continuous			15–125	15–125	15–100	15–125	15–125 [ⓑ]	15–125	15–125				
		Volts 50/60HZ			1-Pole	347	347	120	277	347	277	—			
					2-Pole	600/347	600/347	240	480	600	480	600			
					3-Pole	600/347	600/347	240	480	600	480	600			
		Interrupt Rating Symmetrical RMS Amperes			CSA/UL	120V	—	—	10,000	—	—	100,000	—		
						240V	85,000	100,000	10,000	65,000	65,000	100,000 [ⓒ]	200,000		
						277V	—	—	—	22,000 [ⓓ]	—	65,000 [ⓔ]	—		
						347V	—	—	—	—	30,000	—	—		
						480V	35,000	65,000	—	18,000	25,000	42,000	200,000		
						600V	14,000	14,000	—	—	18,000	—	100,000		
						IEC 947-2 50/60HZ	220/240V	lcu	—	—	—	—	65,000	—	—
								lcs	—	—	—	—	17,000	—	—
		380/415V	lcu	—	—		—	—	35,000	—	—				
			lcs	—	—		—	—	9,000	—	—				
		500V	lcu	—	—		—	—	18,000	—	—				
			lcs	—	—		—	—	5,000	—	—				
		DC	2-Pole, 250V DC Interrupting Ratings			35,000	42,000	5,000	30,000	30,000	30,000	30,000			
	3-Pole, 500V DC Interrupting Ratings [ⓖ]			—	—	—	—	18,000	—	50,000					
	Dimensions in inches		Height		1-Pole	5.40 1.00	5.40 1.00	6.34 1.00	6.34 1.00	6.34 1.00	6.34 1.00	9.26 —			
Width			2-Pole	2.00	2.00	2.00	2.00	2.00	2.00	2.00					
			3-Pole	3.00	3.00	3.00	3.00	3.00	3.00	3.00					
			4-Pole	4.00	4.00	—	—	—	—	—					
		Depth			2.90	2.90	4.00	4.00	4.00	4.00					
Overcurrent Devices		Thermal and Fixed Magnetic Trip			✓	✓	✓	✓	✓	✓	✓				
		Thermal and Adjustable Magnetic Trip			—	—	—	—	—	—	—				
		Adjustable Magnetic Trip only			—	—	—	—	✓	—	✓				
		Motor Circuit Protector			—	—	—	—	—	—	—				
Accessories & Modifications		Molded Case Switch			—	—	✓	✓	✓	✓	✓				
		Undervoltage Trip			—	—	✓	✓	✓	✓	✓	✓			
		Shunt Trip			✓	✓	✓	✓	✓	✓	✓	✓			
		Auxiliary Switch			✓	✓	✓	✓	✓	✓	✓	✓			
		Alarm Switch			✓	✓	✓	✓	✓	✓	✓	✓			
		Mechanical Interlock			—	—	—	—	—	—	—	—			
		Rear Connection Studs			—	—	✓	✓	✓	✓	✓	✓			
		Electric Motor Operator			—	—	✓	✓	✓	✓	✓	✓			
		Plug-In Mounting Assembly (3 Pole Only)			—	—	✓	✓	✓	✓	✓	✓			
		Fungus Proofing (ref. page 5-89)			✓	✓	✓	✓	✓	✓	✓	✓			
Individual Enclosures		Type 1 — Indoor Surface			✓	✓	✓	✓	✓	✓	✓				
		Type 1 — Indoor, Flush			✓	✓	✓	✓	✓	✓	✓				
		Type 3R — Outdoor-Rainproof			✓	✓	✓	✓	✓	✓	✓				
		Type 12 — Lint, Fine Dust, Oils, Coolants			—	—	✓	✓	✓	✓	✓				

For inches / millimeters conversion, see Technical section.

① 1-pole only.

② 35-100A: 25,000 AIR at 277V AC/15-30A:
65,000 AIR at 277V AC.

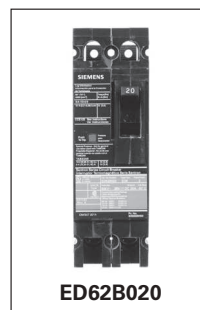
③ For DC UPS system application.

④ Single pole ED6 (15-30A) 30kA, (35-100A) 18 kA. CSA Only.

⑤ Single pole HED4, 15-30A: 65,000 AIR at 240V AC; single
pole HED4, 35-100A: 25,000 AIR at 240V AC.

⑥ HGG and LGG breakers are rated at 600/347V.

⑦ ED6, 2-pole available 15-125 amps only.



Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

Thermal-Magnetic Trip Breakers				General Purpose Breakers										
				FD6A, FXD6A	HFD6, HFXD6	HHFD6, HHFXD6	CFD6	JXD2-A	JD6-A, JXD6-A	HJD6-A, HJXD6-A	HHJD6-A, HHJXD6-A	CJD6-A		
Page				5-46	5-47	5-47	5-47	5-49	5-49	5-50	5-50	5-50		
Ratings	AC	Poles		2, 3	2, 3	2, 3	3	2, 3	2, 3	2, 3	2, 3	3		
		Amperes, Continuous		70–250	70-250	70-250	70–250	200-400	200-400	200-400	200-400	200-400		
		Volts 50/60HZ		2-Pole 3-Pole	600	600	600	600	240	600	600	600	600	
		Interrupt Rating Symmetrical RMS Amperes	CSA/UL	240V	65,000	100,000	200,000	200,000	65,000	65,000	100,000	200,000	200,000	
				480V	35,000	65,000	100,000	200,000	—	35,000	65,000	100,000	150,000	
				600V	22,000	25,000	25,000	100,000	—	25,000	35,000	50,000	100,000	
			IEC60947-2 50/60HZ	220/240V	Icu	65,000	100,000	—	—	—	65,000	100,000	—	—
					Ics	33,000	50,000	—	—	—	33,000	50,000	—	—
				380/415V	Icu	35,000	65,000	—	—	—	40,000	65,000	—	—
		Ics	18,000		33,000	—	—	—	20,000	33,000	—	—		
	500V	Icu	—	—	—	—	—	—	—	—	—	—		
		Ics	—	—	—	—	—	—	—	—	—	—		
DC	2-Pole 250V DC Interrupting Ratings		30,000	30,000	—	50,000	30,000	30,000	30,000	—	—			
	3-Pole, 500V DC Interrupting Ratings ^①		18,000	25,000	—	50,000	—	25,000	35,000	—	50,000			
Dimensions in inches	Height		9.50	9.50	14.12	14.12	11.00	11.00	11.00	11.00	17.86			
	Width		2-Pole 3-Pole	4.50	4.50	4.50	4.50	7.50	7.50	7.50	7.50	7.50		
	Depth		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00		
Overcurrent Devices	Thermal and Fixed Magnetic Trip		—	—	—	—	—	—	—	—	—			
	Thermal and Adjustable Magnetic Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Adjustable Magnetic Trip Only Motor Circuit Protector		✓	—	—	✓	—	—	✓	✓	—			
	Molded Case Switch		✓	—	—	✓	✓	✓	—	—	✓			
Accessories & Modifica- tions	Undervoltage Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Shunt Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Auxiliary Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Auxiliary Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Mechanical Interlock		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Rear Connection Studs		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Electric Motor Operator		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Plug-In Mounting Assembly		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Fungus Proofing (ref. page 5-89)		✓	✓	✓	✓	—	✓	✓	✓	✓			
Individual Enclosures	Type 1 — Indoor Surface		✓	✓	✓	✓	✓	✓	✓	✓	✓			
	Type 1 — Indoor, Flush		—	✓	—	✓	—	—	—	—	—			
	Type 3R — Outdoor-Rainproof		✓	✓	✓	✓	✓	✓	✓	✓	—			
	Type 12 — Lint, Fine Dust, Oils, Coolants		✓	✓	✓	✓	✓	✓	✓	✓	✓			

For inches / millimeters conversion, see Technical section.

① For DC UPS application.

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

Thermal-Magnetic Trip Breakers				General Purpose Breakers										
				LD6, LXD6	HLD6, HLXD6	HHLD6, HHLXD6	CLD6-A	LMD6, LMXD6	HLMD6, HLMXD6	MD6, MXD6	HMD6, HMXD6	CMD6		
Page				5-53	5-54	5-54	5-54	5-57	5-58	5-60	5-61	5-61		
Ratings	AC	Poles		2, 3	2, 3	2, 3	3	2, 3	2, 3	2, 3	2, 3	3		
		Amperes, Continuous		250-600	250-600	250-600	450-600	500-800	500-800	500-800	500-800	400-800		
		Volts 50/60 HZ		2-Pole 3-Pole	600	600	600	600	600	600	600	600	600	
		Interrupt Rating Symmetrical RMS Amperes	CSA/UL	240V	65,000	100,000	200,000	200,000	65,000	100,000	65,000	100,000	200,000	
				480V	35,000	65,000	100,000	150,000	50,000	65,000	50,000	65,000	100,000	
				600V	25,000	35,000	50,000	100,000	25,000	50,000	25,000	50,000	65,000	
			IEC 947-2 50/60HZ	220/240V	Icu	65,000	100,000	—	—	65,000	100,000	65,000	100,000	—
					Ics	33,000	50,000	—	—	33,000	50,000	33,000	50,000	—
				380/415V	Icu	40,000	65,000	—	—	40,000	65,000	40,000	65,000	—
					Ics	20,000	33,000	—	—	20,000	33,000	20,000	33,000	—
				500V	Icu	—	—	—	—	—	—	—	—	—
					Ics	—	—	—	—	—	—	—	—	—
		DC	2-Pole 250V DC Interrupting Ratings		30,000	30,000	—	—	30,000	30,000	30,000	30,000	30,000	
	3-Pole, 500V DC Interrupting Ratings®		35,000	—	—	50,000	25,000	50,000	25,000	50,000	50,000			
	Dimensions in inches		Height		11.00	11.00	11.00	17.86	16.00	16.00	16.00	16.00	16.00	
Width			7.50	7.50	7.50	7.50	7.50	7.50	9.00	9.00	9.00			
Depth			4.00	4.00	4.00	4.00	4.59	4.59	6.19	6.19	6.19			
Overcurrent Devices		Thermal and Adjustable Magnetic Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Adjustable Magnetic Trip Only Motor Circuit Protector		✓	—	—	✓	✓	✓	✓	—	✓		
		Molded Case Switch		✓	—	—	✓	✓	—	✓	—	✓		
Accessories & Modifications		Undervoltage Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Shunt Trip		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Auxiliary Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Alarm Switch		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Mechanical Interlock		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Rear Connection Studs		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Electric Motor Operator		✓	✓	✓	✓	✓	✓	✓	✓	✓		
		Plug-In Mounting Assembly		✓	✓	✓	✓	—	—	✓	✓	✓		
		Fungus Proofing (ref. page 5-89)		✓	✓	✓	✓	✓	✓	✓	✓	✓		
Individual Enclosures		Type 1 — Indoor Surface		✓	✓	✓	✓	—	—	✓	✓	✓		
		Type 1 — Indoor, Flush		—	—	—	—	—	—	—	—	—		
		Type 3R — Outdoor-Rainproof		✓	✓	✓	—	—	—	✓	✓	✓		
		Type 12 — Lint, Fine Dust, Oils, Coolants		—	—	—	—	—	—	✓	✓	✓		

For inches / millimeters conversion, see Technical section.

① For DC UPS application.

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers

					General Purpose Breakers						
					ND6, NXD6		HND6, HNXD6		CND6		PD6, PDXD6 ^④
Page					5-64	5-65	5-65	5-68	5-68	5-68	
Ratings	AC	Poles			2, 3	2, 3	3	3	3	3	
		Amperes, Continuous			800-1200	800-1200	800-1200	1200-1600	1200-1600	1200-1600	
		Volts 50/60 HZ		3-Pole	600	600	600	600	600	600	
		Interrupt Rating Symmetrical RMS Amperes	CSA/UL	240V	65,000	100,000	200,000	65,000	100,000	200,000	
				480V	50,000	65,000	100,000	50,000	65,000	100,000	
				600V	25,000	50,000	65,000	25,000	50,000	65,000	
			IEC 947-2 50/60HZ	220/240V	Icu	65,000	100,000	—	—	—	—
					Ics	33,000	50,000	—	—	—	—
				380/415V	Icu	40,000	65,000	—	—	—	—
					Ics	20,000	33,000	—	—	—	—
				500V	Icu	—	—	—	—	—	—
					Ics	—	—	—	—	—	—
	DC	2-Pole 250V DC Interrupting Ratings			30,000	30,000	30,000	30,000	30,000	30,000	
		3-Pole, 500V DC Interrupting Ratings ^①			25,000	50,000	50,000	25,000	50,000	50,000	
Dimensions in inches		Circuit breakers require Connect-all mounting block. Dimensions shown are for circuit breaker only.		Height	16.00	16.00	16.00	16.0	16.00	16.00	
				Width	9.00	9.00	9.00	9.00	9.00	9.00	
				Depth	6.19	6.19	6.19	6.19	6.19	6.19	
Overcurrent Devices		Thermal and Adjustable Magnetic Trip		✓	✓	✓	✓	✓	✓		
		Adjustable Magnetic Trip Only		—	—	—	—	—	—		
		Motor Circuit Protector		—	—	—	—	—	—		
Accessories & Modifications		Molded Case Switch		✓	—	✓	✓	—	—		
		Undervoltage Trip		✓	✓	✓	✓	✓	✓		
		Shunt Trip		✓	✓	✓	✓	✓	✓		
		Auxiliary Switch		✓	✓	✓	✓	✓	✓		
		Alarm Switch		✓	✓	✓	✓	✓	✓		
		Mechanical Interlock		✓	✓	✓	✓	✓	✓		
		Rear Connections Studs		✓	✓	✓	—	—	—		
		Electric Motor Operator		✓	✓	✓	✓	✓	✓		
		Plug-in Mounting Assembly		✓	✓	✓	—	—	—		
		Fungus Proofing (ref. page 5-89)		✓	✓	✓	✓	✓	✓		
Individual Enclosures		Mounting Block (required)		—	—	—	✓	✓	✓		
		Type 1 — Indoor Surface		✓	✓	✓	—	—	—		
		Type 1 — Indoor, Flush		—	—	—	—	—	—		
		Type 3R — Outdoor-Rainproof		✓	✓	✓	—	—	—		
		Type 12 — Lint, Fine Dust, Oils, Coolants		—	—	—	—	—	—		

For inches / millimeters conversion, see Technical section.

① For DC UPS application.

② 2-pole design.

③ 3-pole design.

④ Requires Connect-all mounting assembly. Dimensions shown are for circuit breaker only.

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Thermal-Magnetic Trip Breakers & Electronic Trip Breakers						General Purpose Breakers		Solid State Trip Circuit Breakers						
						RD6 ^① , RXD6 ^①	HRD6 ^① , HRXD6 ^①	SJD6	SHJD6	SCJD6	SLD6	SHLD6	SCLD6	
Page						5-71	5-71	5-51	5-51	5-51	5-55	5-55	5-55	
Ratings	AC	Poles				3	3	3	3	3	3	3	3	3
		Amperes, Continuous				1600-2000	1600-2000	200-400	200-400	200-400	300-600	300-600	300-600	
		Volts 50/60 HZ			3-Pole	600	600	600	600	600	600	600	600	
		Interrupt Rating Symmetrical RMS Amperes	CSA/UL	240V	65,000	100,000	65,000	100,000	200,000	65,000	100,000	200,000		
				480V	50,000	65,000	35,000	65,000	150,000	35,000	65,000	150,000		
				600V	25,000	50,000	25,000	35,000	100,000	25,000	35,000	100,000		
			IEC60947-2 50/60HZ	220/240V	Icu	—	—	—	—	—	—	—	—	
					Ics	—	—	—	—	—	—	—	—	
				380/415V	Icu	—	—	—	—	—	—	—	—	
					Ics	—	—	—	—	—	—	—	—	
				500V	Icu	—	—	—	—	—	—	—	—	
					Ics	—	—	—	—	—	—	—	—	
	DC	2-Pole 250V DC Interrupting Ratings				30,000	30,000	—	—	—	—	—		
		3-Pole, 500V DC Interrupting Ratings ^①				25,000	50,000	—	—	—	—	—		
Dimensions in inches	Height				16.00	16.00	11.00	11.00	17.86	11.0	11.00	17.86		
	Width			3-Pole	9.00	9.00	7.50	7.50	7.50	7.50	7.50			
	Depth				6.19	6.19	4.00	4.00	4.00	4.00	4.00			
Overcurrent Devices	Solid State Trip				—	—	✓	✓	✓	✓	✓	✓		
	Thermal and Adjustable Magnetic Trip				✓	✓	—	—	—	—	—			
	Adjustable Magnetic Trip Only				—	—	—	—	—	—	—			
	Motor Circuit Protector				—	—	—	—	—	—	—			
Accessories & Modifications	Molded Case Switch				✓	—	—	—	—	—	—	—		
	Undervoltage Trip				✓	✓	✓	✓	✓	✓	✓	✓		
	Shunt Trip				✓	✓	✓	✓	✓	✓	✓	✓		
	Auxiliary Switch				✓	✓	✓	✓	✓	✓	✓	✓		
	Alarm Switch				✓	✓	✓	✓	✓	✓	✓	✓		
	Mechanical Interlock				✓	✓	✓	✓	✓	✓	✓	✓		
	Rear Connections Studs				—	—	✓	✓	✓	✓	✓	✓		
	Electric Motor Operator				✓	✓	✓	✓	✓	✓	✓	✓		
	Plug-In Mounting Assembly				—	—	✓	✓	✓	✓	✓	✓		
	Fungus Proofing (ref. page 5-89)				✓	✓	✓	✓	✓	✓	✓	✓		
	Mounting Block (required)				✓	✓	—	—	—	—	—	—		
Individual Enclosures	Type 1 — Indoor Surface				—	—	✓	✓	✓	✓	✓	✓		
	Type 1 — Indoor, Flush				—	—	—	—	—	—	—	—		
	Type 3R — Outdoor-Rainproof				—	—	✓	✓	—	✓	✓	—		
	Type 12 — Lint, Fine Dust, Oils, Coolants				—	—	✓	✓	✓	—	—	—		

For inches / millimeters conversion, see Technical section.

① Requires Connect-all mounting assembly. Dimensions shown are for circuit breaker only.

Molded Case Circuit Breakers

Reference Guide

Selection

Electronic Trip Breakers

Electronic Trip Breakers					Solid State Trip Circuit Breakers							
					SMD6	SHMD6	SCMD6	SND6	SHND6	SCND6	SPD6 ^①	SHPD6 ^①
Page					5-62	5-62	5-62	5-66	5-66	5-66	5-69	5-69
Ratings	AC	Poles			3	3	3	3	3	3	3	3
		Amperes, Continuous			600-800	600-800	600-800	800-1200	800-1200	800-1200	1200-600	1200-1600
		Volts 50/60HZ		3-Pole	600	600	600	600	600	600	600	600
		Interrupt Rating Symmetrical RMS Amperes	CSA/UL	240V	65,000	100,000	200,000	65,000	100,000	200,000	65,000	100,000
				480V	50,000	65,000	100,000	50,000	65,000	100,000	50,000	65,000
				600V	25,000	50,000	65,000	25,000	50,000	65,000	25,000	50,000
		IEC60947-2 50/60HZ	380/415V	Icu	—	—	—	—	—	—	—	—
				Ics	—	—	—	—	—	—	—	—
			690V	Icu	—	—	—	—	—	—	—	—
					Ics	—	—	—	—	—	—	—
Dimensions in inches	Height			10.00	16.00	16.00	16.00	16.00	16.00	16.00	16.00	
	Width			9.00	9.00	9.00	9.00	9.00	9.00	9.00	9.00	
	Depth			6.19	6.19	6.19	6.19	6.19	6.19	6.19	6.19	
Overcurrent Devices	Solid State Trip			✓	✓	✓	✓	✓	✓	✓	✓	
Accessories & Modifications	Undervoltage Trip			✓	✓	✓	✓	✓	✓	✓	✓	
	Shunt Trip			✓	✓	✓	✓	✓	✓	✓	✓	
	Auxiliary Switch			✓	✓	✓	✓	✓	✓	✓	✓	
	Alarm Switch			✓	✓	✓	✓	✓	✓	✓	✓	
	Mechanical Interlock			✓	✓	✓	✓	✓	✓	✓	✓	
	Rear Connection Studs			✓	✓	✓	✓	✓	✓	—	—	
	Electric Motor Operator			✓	✓	✓	✓	✓	✓	✓	✓	
	Plug-In Mounting Assembly			✓	✓	✓	✓	✓	✓	—	—	
	Fungus Proofing (ref. page 5-89)			✓	✓	✓	✓	✓	✓	✓	✓	
Individual Enclosures	Type 1 — Indoor Surface			✓	✓	✓	✓	✓	✓	—	—	
	Type 1 — Indoor, Flush			—	—	—	—	—	—	—	—	
	Type 3R — Outdoor-Rainproof			✓	✓	✓	✓	✓	✓	—	—	
	Type 12 — Lint, Fine Dust, Oils, Coolants			✓	✓	✓	✓	✓	—	—	—	

For inches / millimeters conversion, see Technical section.

① Requires connect-all mounting block assembly. Dimensions shown are for circuit breaker.

② Breaker has rating plugs which can be changed within each frame rating.

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Page				5-96			5-100			5-104		
Breaker Frame Family				DG			FG			JG		
	Continuous Amps			30–150A			40–250A			70–400A		
	Poles			2, 3			2, 3			2, 3		
	Max. Volts AC			600Y/347V			600Y/347V			600V		
Breaker Type				NDGA	HDGA	LDGA	NFGA	HFGA	LFGA	NJGA	HJGA	LJGA
Ratings	Interrupting Class			N	H	L	N	H	L	N	H	L
	Interrupting Rating RMS Symmetrical Amperes AC 50/60Hz	CSA/UL	240Vac	65	100	200	65	100	200	65	100	200
			480Vac	35	65	100	35	65	100	35	65	100
		600Vac	18	18	18	18	18	18	25	25	25	
		220/240Vac	65/65	100/75	200/150	65/65	100/75	200/150	65/65	100/75	200/150	
		I _{cs} /I _{cs}	380/415Vac	40/40	70/70	100/75	40/40	70/70	100/75	45/45	70/70	100/75
	690Vac	12/6	12/6	12/6	12/6	12/6	12/6	12/6	12/6	15/8	15/8	
	DC Interrupting Ratings (UL) [®]	250Vdc (2-Pole)		30	30	30	30	30	30	30	30	30
500Vdc (3-Pole) ^①		18	18	18	18	18	30	25	35	35		
Dimensions in Inches	1-Pole			—						—		
	2-Pole			6.9H x 4.1W x 3.4D						11H x 5.5W x 4.2D		
	3-Pole			6.9H x 4.1W x 3.4D						11H x 5.5W x 4.2D		
	4-Pole			—						—		
Trip Unit Information	Thermal-Magnetic			◆			◆			◆		
	Electronic			◆			◆			◆		
	Electronic with LCD			◆			◆			◆		
	Interchangeable Trip Unit			—			—			◆		
	Reverse Feed (w/Non-Interchangeable Trip)			◆			◆			◆		
	Communications Capability ^③			◆			◆			◆		
Specific Application Breakers	Molded Case Switch			◆			◆			◆		
	Motor Circuit Protector			◆			◆			◆		
	100% Rated			◆						◆		
	50°C Calibrated ^④											
Accessories & Modifications	Auxiliary Switch			◆			◆			◆		
	Alarm Switch			◆			◆			◆		
	Shunt Trip			◆			◆			◆		
	Undervoltage Release			◆			◆			◆		
	Mechanical Interlocks			◆			◆			◆		
	Electric Motor or Stored Energy Operator			◆			◆			◆		
	Rear Connecting Studs			◆			◆			◆		
	Plug-In Mounting Assy. w/Trip Interlock			◆			◆			◆		
	Draw-Out Assembly			◆			◆			◆		
	Handle Mechanism Options			◆			◆			◆		
	Terminal Shields			◆			◆			◆		
	Distribution Lugs			◆			◆			◆		
	Ground Sensor (Neutral Transformer)			◆			◆			◆		

① 500Vdc nominal, for ungrounded DC UPS systems.

② DC Interrupting Ratings are not applicable to electronic circuit breakers.

③ Communications available via a COMPRO or COMMODO modules using Profibus or Modbus protocols.

④ Consult Siemens for availability.

⑤ Special version, see page 5-124.

GG are not VL family breakers and do not share common VL accessories.

⑥ 304 and 316 Stainless Steel

Molded Case Circuit Breakers

Reference Guide

Selection/Application

Page				5-108			5-112			5-116			5-120		
Breaker Frame Family				LG			MG			NG			PG		
	Continuous Amps			150–600A			200–800A			300–1200A			400–1600A		
	Poles			2, 3			2, 3			2, 3			3		
	Max. Volts AC			600V			600V			600V			600V		
Breaker Type				NLGB	HLGB	LLGB	NMG	HMG	LMG	NNG	HNG	LNG	NPG	HPG	LPG
Ratings	Interrupting Class			N	H	L	N	H	L	N	H	L	N	H	L
	Interrupting Rating RMS Symmetrical Amperes AC 50/60Hz	CSA/UL	240Vac	65	100	200	65	100	200	65	100	200	65	100	200
			480Vac	35	65	100	35	65	100	35	65	100	35	65	100
			600Vac	18 [Ⓢ]	18	18	25	35	65	25	35	65	25	35	65
		I _{cu} /I _{cs}	220/240Vac	65/65	100/75	200/150	65/35	100/50	200/150	65/65	100/75	200/100	65/35	100/50	200/100
			380/415Vac	45/45	70/70	100/75	50/50	70/70	100/75	50/25	70/35	100/50	50/25	70/35	100/50
	DC Interrupting Ratings (CSA/UL) [Ⓢ]	690Vac	12/6	15/8	15/8	20/10	30/15	35/17	20/10	30/15	35/17	20/10	30/15	35/15	
		250Vdc (2-Pole)	30	30	30	22	25	42	22	25	42	22	25	42	
			500Vdc (3-Pole) [Ⓢ]	25	35	35	35	50	65	35	50	65	35	50	65
Dimensions in Inches	2-Pole			11H x 5.5W x 4.2D			16H x 7.5W x 4.7D			16H x 9W x 6.2D			—		
	3-Pole			11H x 5.5W x 4.2D			16H x 7.5W x 4.7D			16H x 9W x 6.2D					
Trip Unit Information	Thermal-Magnetic			◆			◆			◆			◆		
	Electronic			◆			◆			◆			◆		
	Electronic with LCD			◆			◆			◆			◆		
	Interchangeable Trip Unit			◆			◆			◆			◆		
	Reverse Feed (w/Non-Interchangeable Trip)			◆			◆			◆			◆		
	Communications Capability [Ⓢ]			◆			◆			◆			◆		
Specific Application Breakers	Molded Case Switch			◆			◆			◆			◆		
	Motor Circuit Protector			◆			◆			◆					
	100% Rated [Ⓢ]			◆			◆			◆			◆		
Accessories and Modifications	Auxiliary Switch			◆			◆			◆			◆		
	Alarm Switch			◆			◆			◆			◆		
	Shunt Trip			◆			◆			◆			◆		
	Undervoltage Release			◆			◆			◆			◆		
	Mechanical Interlocks			◆			◆			◆			◆		
	Electric Motor or Stored Energy Operator			◆			◆			◆			◆		
	Rear Connecting Studs			◆			◆			◆			◆		
	Plug-In Mounting Assy. w/Trip Interlock			◆											
	Draw-Out Assembly			◆			◆								
	Handle Mechanism Options			◆			◆			◆			◆		
	Terminal Shields			◆			◆			◆			◆		
	Distribution Lugs														
	Ground Sensor (Neutral Transformer)			◆			◆			◆			◆		

① Communications available via COMPRO or COMMOD modules using Profibus or Modbus protocol.

② 500Vdc nominal, for ungrounded DC UPS systems.

③ DC Interrupting Ratings are not applicable to electronic circuit breakers.

④ LG frame maximum 500A.

⑤ Special version, see page 5-124.

⑥ Special 600Vac 25kA version available, see page 5-124.

Molded Case Circuit Breakers

Panelboard Mounting Circuit Breakers

Selection

Arc-Fault Circuit Interrupters (AFCI)

AFCI's detect arcing faults (an unintentional arcing condition in a circuit) that standard circuit breakers are unable to detect. The device is intended to mitigate the effects of arcing faults by functioning to de-energize the circuit when an arc-fault is detected.

Combination Type AFCI

Detects all three possible types of arc fault: line-to-ground, line-to-neutral, and series.

Breaker Type	Ampere Rating	10,000 A IR Catalog Number	22,000 A IR Catalog Number	65,000 A IR Catalog Number
BAF2/BAFH2/HBAF2 1-Pole 120V AC	15 20	BA115AFC ^① BA120AFC ^①	BA115AFCH BA120AFCH	BA115AFCHH BA120AFCHH
BAF/BAFH 2-Pole 120/240V AC	15 20	B215AFC ^① B220AFC ^①	B215AFCH B220AFCH	— —

Branch-Feeder AFCI

Detects line-to-ground and line-to neutral arcs.

BAF2/BAFH2/HBAF2 1-Pole 120V AC	15 20	BA115AF ^① BA120AF ^①	BA115AFH ^① BA120AFH ^①	BA115AFHH [■] BA120AFHH [■]
---	----------	--	--	--

NEW Dual Function AFCI/GFCI

The Dual Function Circuit Breaker combines Combination Type AFCI and GFCI, protecting against both Arc Faults and (5mA) Ground Faults. The device includes the Self Test feature, making it the first in class in electrical safety for homeowners.

BFGA2/BFGAH2/HBFGA2 1-Pole 120V AC	15 20	B115DF B120DF	B115DFH [■] B120DFH [■]	B115DFHH [■] B120DFHH [■]
--	----------	------------------	--	--

Ground-Fault Circuit Interrupters (GFCI)

Provides Class A (5mA) ground fault protection. Intended for personnel protection. De-energizes the circuit for all ungrounded conductors of the circuit.

Breaker Type	Amp Rating	10k A IR Cat. No.	22k A IR Cat. No.	65k A IR Cat. No.
BLF/BLHF 1-Pole 120V AC Bolt-On	15 20 25 30	BF115A ^① BF120A ^① BF125A BF130A	BF115AH ^① BF120AH ^① BF125AH BF130AH	BF115AHH BF120AHH — BF130AHH
BLF/BLHF 2-Pole 120/240V AC Bolt-On	15 20 30 40 50 60	BF215A BF220A BF230A BF240A BF250A BF260A	BF215AH BF220AH BF230AH BF240AH BF250AH BF260AH	— — — — — —

Ground Fault Equipment Protection (30mA)

Provides protection of equipment from damaging line-to-ground faults currents. De-energizes the circuit for all ungrounded conductors of the circuit.

Breaker Type	Amp Rating	10k A IR Cat. No.	22k A IR Cat. No.
BLE/BLEH 1-Pole, 120V AC Bolt-On	15 20 30	BE115 ^① BE120 ^① BE130	BE115H ^① BE120H ^① BE130H [■]
BLE/BLEH 2-Pole 120/240V AC Bolt-On	15 20 30 40 50 60	BE215 BE220 BE230 BE240 BE250 BE260	BE215H [■] BE220H [■] BE230H [■] BE240H [■] BE250H [■] BE260H [■]

QAF2/QPF/QE Accessories

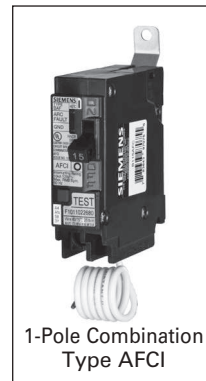
Description	Catalog Number
Padlocking Device 1-Pole	ECPLD1
Padlocking Device 2-Pole	ECPLD2
Handle Block	ECBX231M

■ Built to order. Allow 8-10 weeks for delivery.

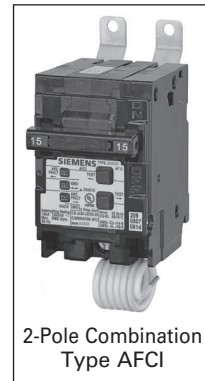
① UL Listed as SWD (Switching Duty) Rated, suitable for 120V AC Fluorescent Lighting.

• UL Listed

• HACR Rated



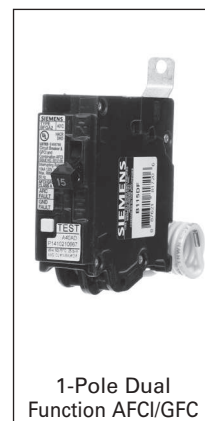
1-Pole Combination Type AFCI



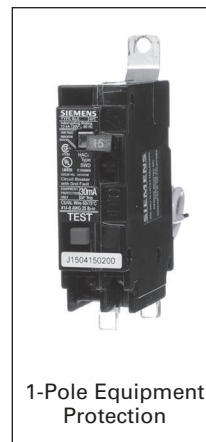
2-Pole Combination Type AFCI



1-Pole Branch Feeder AFCI



1-Pole Dual Function AFCI/GFCI

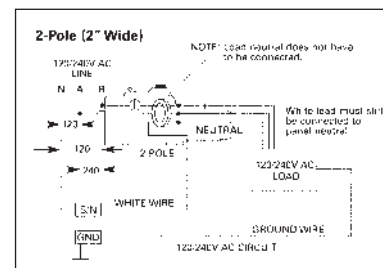
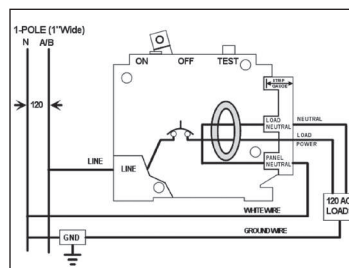


1-Pole Equipment Protection



2-Pole Equipment Protection

Wiring Diagrams



Molded Case Circuit Breakers

Panelboard Mounting with INSTA-WIRE

Selection

1-Pole Bolt-On (120V AC)^⑤

Continuous Current Rating @ 40° C	Type BL ^{①②}	Type BLH ^{①②}	Type HBL ^{①③}
	10,000A IR	22,000A IR	65,000A IR
	Catalogue Number	Catalogue Number	Catalogue Number
15	B115 ^④	B115H ^④	B115HH ^④
20	B12 ^④	B120H ^④	B120HH ^④
25	B125	B125H	B125HH■
30	B130	B130H	B130HH
35	B135	B135H■	B135HH■
40	B140	B140H	B140HH
45	B145■	B145H■	B145HH■
50	B150	B150H	B150HH■
60	B160	B160H■	B160HH■
70	B170	B170H■	B170HH■

2-Pole Bolt-On (Common-Trip 120/240V AC)^④

15	B215	B215H	B215HH
20	B220	B220H	B220HH
25	B225	B225H■	B225HH■
30	B230	B230H	B230HH
35	B235	B235H■	B235HH■
40	B240	B240H	B240HH
45	B245	B245H■	B245HH■
50	B250	B250H	B250HH
60	B260	B260H	B260HH
70	B270	B270H■	B270HH■
80	B280	B280H■	B280HH■
90	B290	B290H■	B290HH■
100	B2100	B2100H	B2100HH
110	B2110■	B2110H■	B2110HH■
125	B2125	B2125H	B2125HH■

2-Pole Bolt-On (Common-Trip 240V AC)^{③⑥⑦}

15	B215R	—	—
20	B220R	—	—
30	B230R	—	—
40	B240R■	—	—
50	B250R	—	—

3-Pole Bolt-On (Common-Trip 240V AC)^⑦

15	B315	B315H	B315HH
20	B320	B320H	B320HH
25	B325	B325H	B325HH■
30	B330	B330H	B330HH
35	B335	B335H■	B335HH■
40	B340	B340H	B340HH
45	B345	B345H■	B345HH■
50	B350	B350H	B350HH
60	B360	B360H	B360HH
70	B370	B370H	B370HH
80	B380	B380H■	B380HH
90	B390	B390H■	B390HH
100	B3100	B3100H	B3100HH

BL/BLH/HBL Internal Accessories

Description	Catalogue Number	Field/Factory Installed
120VAC Shunt Trip	add suffix...00S01■	Factory
24VAC Shunt Trip	add suffix...00S07■	Factory
120V Auxiliary Switch	add suffix...01■ ^②	Factory

■ Built to order. Allow 2-3 weeks for delivery

① UL Listed for use with 60/75° wire through 40 amps, CSA Certified / UL Listed for use with 75° wire only for 50 amps and above, HACR rated. 120V AC Fluorescent Lighting.

② 1A and 1B contacts.

③ UL Listed for use on 3-phase grounded "B" systems — 10,000 for this application.

④ UL Listed for frequent switching applications (SWD).

⑤ Shipped 12 per sleeve.

⑥ Shipped 6 per sleeve.

⑦ Shipped 4 per sleeve.

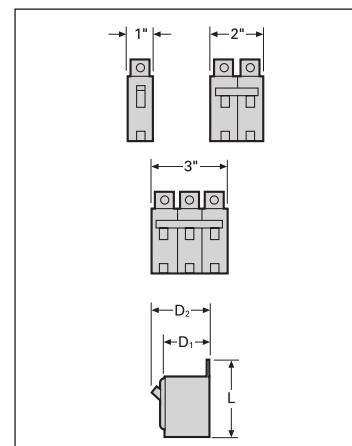
⑧ UL Listed 5KA IR.

⑨ 10 Amp breaker does not have INSTA-WIRE.

⑩ For 3 Phase Applications.

⑪ UL Listed for reverse feed."

⑫ CSA Certified for frequent switching applications (SWD)



Breaker Type	Amperes	Dimensions		
		L	D1	D2
BL, BLH	15-50	3 ³ / ₁₆	2 ³ / ₁₆	3
BL, BLH	55-125	3 ³ / ₁₆	2 ³ / ₁₆	3
HBL	15-125	3 ³ / ₁₆	2 ³ / ₁₆	3

For external accessories, please refer to page 5-83 - 5-89

Molded Case Circuit Breakers

BQD 100A Frame Panelboard Mounting Circuit Breakers

BQD^④

Continuous Current Rating @ 40°C	1-Pole	2-Pole ^①	3-Pole ^③
	277V AC–125V DC Catalog Number	480Y/277V AC– 125/250V DC Catalog Number	480Y/277V AC Catalog Number
15	BQD115 ^{①②}	BQD215 ^⑤	BQD315 ^⑤
20	BQD120 ^{①②}	BQD220 ^⑤	BQD320 ^⑤
25	BQD125 ^②	BQD225 ^⑤	BQD325 ^⑤
30	BQD130 ^②	BQD230 ^⑤	BQD330 ^⑤
35	BQD135 ^②	BQD235 ^⑤	BQD335 ^⑤
40	BQD140 ^②	BQD240 ^⑤	BQD340 ^⑤
45	BQD145 ^{②■}	BQD245 ^⑤	BQD345 ^⑤
50	BQD150 ^②	BQD250 ^⑤	BQD350 ^⑤
60	BQD160	BQD260	BQD360
70	BQD170■	BQD270	BQD370
80	BQD180■	BQD280	BQD380
90	BQD190■	BQD290	BQD390
100	BQD1100■	BQD2100	BQD3100

BQD6 CSA Certified

Continuous Current Rating @ 40°C	1-Pole	2-Pole ^①	3-Pole ^③
	347V AC Catalog Number	600/347V AC Catalog Number	600/347V AC Catalog Number
15	BQD6115 ^①	BQD6215	BQD6315
20	BQD6120 ^①	BQD6220	BQD6320
25	BQD6125■	BQD6225■	BQD6325■
30	BQD6130	BQD6230	BQD6330
35	BQD6135■	BQD6235■	BQD6335■
40	BQD6140■	BQD6240■	BQD6340
45	BQD6145■	BQD6245■	BQD6345■
50	BQD6150■	BQD6250■	BQD6350
60	BQD6160■	BQD6260■	BQD6360
70	BQD6170■	BQD6270■	BQD6370

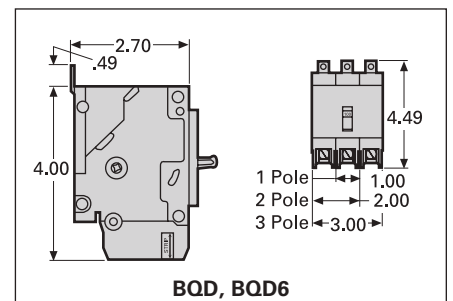
Interrupting Ratings

Breaker Type	Number of Poles	RMS Symmetrical Amperes (KA)							
		Volts AC						Volts DC	
		120	240	277	480/277	347	600/277	125	125/250
BQD (CSA/UL)	1	65	—	14	—	—	—	14	—
	2	—	65	—	14	—	—	—	14
	3	—	65	—	14	—	—	—	—
BQD6 (CSA)	1	65	—	—	—	10	—	14	—
	2	—	65	—	—	—	10	—	14
	3	—	65	—	—	—	10	—	—

For inches / millimeters conversion, see Technical section.
■ Built to order. Allow 2–3 weeks for delivery.

①UL Rated SWD rated for switching fluorescent lighting.
②HID rated at 277V AC.
③Not suitable for 3-phase delta 480V applications.
④HACR rated.
⑤HID rated at 480Y/277V AC.

Selection/Dimensions



Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.) (ea.)
1	1/12/48	0.6
2	1/6/24	1.2
3	1/4/16	2.0

Lugs For 60/75°C Wire

BQD – Load End Only	
15–40	#14–#6 AWG Cu #12–#6 AWG Al
45–100	#9–#1 AWG Cu #6–#1/0 AWG Al

For external accessories, please refer to pages 5-83 - 5-89
For internal accessories, please refer to page 5-24

Molded Case Circuit Breakers

GB2 Frame

Selection

Type NGB2[®] (Panelboard Mount)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalogue Number	Catalogue Number	Catalogue Number
15	NGB1K015B ^{①②}	NGB2K015B ^②	NGB3K015B ^②
20	NGB1K020B ^{①②}	NGB2K020B ^②	NGB3K020B ^②
25	NGB1K025B ^②	NGB2K025B ^②	NGB3K025B ^②
30	NGB1K030B ^②	NGB2K030B ^②	NGB3K030B ^②
35	NGB1K035B ^②	NGB2K035B ^②	NGB3K035B ^②
40	NGB1K040B ^②	NGB2K040B ^②	NGB3K040B ^②
45	NGB1K045B ^②	NGB2K045B ^②	NGB3K045B ^②
50	NGB1K050B ^②	NGB2K050B ^②	NGB3K050B ^②
60	NGB1K060B	NGB2K060B	NGB3K060B
70	NGB1K070B	NGB2K070B	NGB3K070B
80	NGB1K080B	NGB2K080B	NGB3K080B
90	NGB1K090B	NGB2K090B	NGB3K090B
100	NGB1K100B	NGB2K100B	NGB3K100B
110	NGB1K110B	NGB2K110B	NGB3K110B
125	NGB1K125B	NGB2K125B	NGB3K125B

Load lugs are included as standard. HACR rated.



Type HGB2[®] (Panelboard Mount)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalogue Number	Catalogue Number	Catalogue Number
15	HGB1K015B ^{①②}	HGB2K015B ^②	HGB3K015B ^②
20	HGB1K020B ^{①②}	HGB2K020B ^②	HGB3K020B ^②
25	HGB1K025B ^②	HGB2K025B ^②	HGB3K025B ^②
30	HGB1K030B ^②	HGB2K030B ^②	HGB3K030B ^②
35	HGB1K035B ^②	HGB2K035B ^②	HGB3K035B ^②
40	HGB1K040B ^②	HGB2K040B ^②	HGB3K040B ^②
45	HGB1K045B ^②	HGB2K045B ^②	HGB3K045B ^②
50	HGB1K050B ^②	HGB2K050B ^②	HGB3K050B ^②
60	HGB1K060B	HGB2K060B	HGB3K060B
70	HGB1K070B	HGB2K070B	HGB3K070B
80	HGB1K080B	HGB2K080B	HGB3K080B
90	HGB1K090B	HGB2K090B	HGB3K090B
100	HGB1K100B	HGB2K100B	HGB3K100B
110	HGB1K110B	HGB2K110B	HGB3K110B
125	HGB1K125B	HGB2K125B	HGB3K125B

Type LGB2[®] (Panelboard Mount)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalogue Number	Catalogue Number	Catalogue Number
15	LGB1K015B ^{①②}	LGB2K015B ^②	LGB3K015B ^②
20	LGB1K020B ^{①②}	LGB2K020B ^②	LGB3K020B ^②
25	LGB1K025B ^②	LGB2K025B ^②	LGB3K025B ^②
30	LGB1K030B ^②	LGB2K030B ^②	LGB3K030B ^②
35	LGB1K035B ^②	LGB2K035B ^②	LGB3K035B ^②
40	LGB1K040B ^②	LGB2K040B ^②	LGB3K040B ^②
45	LGB1K045B ^②	LGB2K045B ^②	LGB3K045B ^②
50	LGB1K050B ^②	LGB2K050B ^②	LGB3K050B ^②
60	LGB1K060B	LGB2K060B	LGB3K060B
70	LGB1K070B	LGB2K070B	LGB3K070B
80	LGB1K080B	LGB2K080B	LGB3K080B
90	LGB1K090B	LGB2K090B	LGB3K090B
100	LGB1K100B	LGB2K100B	LGB3K100B
110	LGB1K110B	LGB2K110B	LGB3K110B
125	LGB1K125B	LGB2K125B	LGB3K125B

5
MOLDED CASE
CIRCUIT BREAKERS

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight lbs. (kg)
1	1	.75 (.34)
2	1	1.3 (.59)
3	1	2.0 (.98)

Lugs for 60/75°C Wire

Type	Ampere Rating	Wire Size	Catalog Number
NGB2 HGB2 LGB2	15-30A	#14-#6 AWG Cu	TC1Q1 (qty. 1)
		#12-#6 AWG Al	3TC1Q1 (qty. 3)
	35-125A	#8-1/0 AWG Cu #8-2/0 AWG Al	3TC1GG20

Interrupting Ratings (max. RMS symmetrical amperes kA)

Type	Poles	UL 489							Volts DC	
		Volts AC								
		120	240	277	480	347	600Y/347	125	125/250	
NGB2	1	100	—	25	—	14	—	14	—	
	2, 3	—	100	—	25	—	14	—	14 ^④	
HGB2	1	100	—	35	—	22	—	14	—	
	2, 3	—	100	—	35	—	22	—	14 ^④	
LGB2	1	100	—	65	—	25	—	14	—	
	2, 3	—	100	—	65	—	25	—	14 ^④	

① 2-pole only.

② 2-pole only or two outer poles of 3-pole breaker

③ Suitable for reverse feed applications

④ 3 pole breakers suitable for single phase applications

For external accessories, please refer to pages 5-83 - 5-89
For internal accessories, please refer to page 5-23

Molded Case Circuit Breakers

GB Frame

Selection

Type NGB Frame^⑤ (Panelboard Mount)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalog Number	Catalog Number	Catalog Number
15	NGB1B015B ^{①②}	NGB2B015B ^②	NGB3B015B ^②
20	NGB1B020B ^{①②}	NGB2B020B ^②	NGB3B020B ^②
25	NGB1B025B ^②	NGB2B025B ^②	NGB3B025B ^②
30	NGB1B030B ^②	NGB2B030B ^②	NGB3B030B ^②
35	NGB1B035B ^②	NGB2B035B ^②	NGB3B035B ^②
40	NGB1B040B ^②	NGB2B040B ^②	NGB3B040B ^②
45	NGB1B045B ^②	NGB2B045B ^②	NGB3B045B ^②
50	NGB1B050B ^②	NGB2B050B ^②	NGB3B050B ^②
60	NGB1B060B	NGB2B060B	NGB3B060B
70	NGB1B070B	NGB2B070B	NGB3B070B
80	NGB1B080B	NGB2B080B	NGB3B080B
90	NGB1B090B	NGB2B090B	NGB3B090B
100	NGB1B100B	NGB2B100B	NGB3B100B
110	NGB1B110B	NGB2B110B	NGB3B110B
125	NGB1B125B	NGB2B125B	NGB3B125B



NGB1B030B

Load lugs are included as standard. HACR rated.

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.) (ea.)
1	1	0.9 (0.4)
2	1	1.9 (0.9)
3	1	2.9 (1.2)

Lugs For 60/75°C Wire

NGB		
Ampere Rating	Wire Size	Catalogue Number
15–30A	#14–#6 AWG Cu	Integral with breaker
	#12–#6 AWG Al	
35–125A	#8–1/0 AWG Cu	Integral with breaker
	#8–2/0 AWG Al	

Interrupting Ratings (max. RMS symmetrical amperes kA)

Breaker Type	Number of Poles	UL489							
		Volts AC						Volts DC	
		120	240	277	480Y/277	347	600Y/277	125	125/250
NGB	1	100	—	25	14	—	—	14	—
	2,3	—	100	—	—	25	14	—	14 ^④

① SWD rated.

② HID rated.

③ 2-pole only.

④ 2-pole only or two outer poles of 3-pole breaker

⑤ Suitable for reverse feed applications

For external accessories, please refer to pages 5-83 - 5-89

For internal accessories, please refer to page 5-23

Molded Case Circuit Breakers

Accessories

Selection

Shunt Trip

Control Voltage		BQD, BQD6, CQD, CQD6, NGG, HGG, LGG, NGB, NGB2, HGB, HGB2, LGB2 and LGB2
V AC	V DC	
120	—	CQDST120
240	—	CQDST240
277	—	CQDST277
480	—	CQDST480
600	—	CQDST600
—	12	CQDST12
—	24	CQDST24
—	48	CQDST48
—	125	CQDST125



Auxiliary Switch

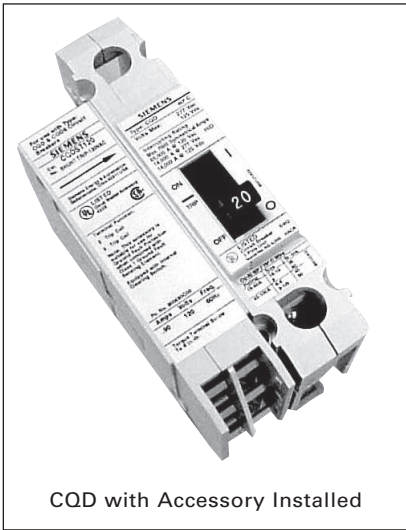
Maximum Voltage		Number of Contacts	BQD, BQD6, CQD, CQD6, NGG, HGG, LGG, NGB, NGB2, HGB, HGB2, LGB2 and LGB2
AC	DC		
240	125	1A-1B	CQDA1
240	125	2A-2B	CQDA2

Alarm Switch

Maximum Voltage		BQD, BQD6, CQD, CQD6, NGG, HGG, LGG, NGB, NGB2, HGB, HGB2, LGB2 and LGB2
AC	DC	
240	125	CQDBA

Shunt Trip and Auxiliary Switch Combinations

Shunt Trip Voltage		BQD, BQD6, CQD, CQD6, NGG, HGG, LGG, NGB, NGB2, HGB, HGB2, LGB2 and LGB2
AC	DC	
24	—	CQDST24AAS
120	—	CQDST120AAS
240	—	CQDST240AAS
277	—	CQDST277AAS
480	—	CQDST480AAS
600	—	CQDST600AAS
—	12	CQDST12DAS
—	24	CQDST24DAS
—	48	CQDST48DAS
—	125	CQDST125DAS



Alarm and Auxiliary Switch Combinations

For Breaker	Catalog Number
BQD, BQD6, CQD, NGG, HGG, LGG, NGB, HGB and LGB	CQDA1BA

①Adds 1-pole space for accessory.

Circuit Breakers

Lug-In/Lug-Out with INSTA-WIRE

Selection

All BQ/BQH/HBQ circuit breakers are supplied with load side lugs. If line side lugs are required, add suffix "L" to catalog number. Consult Siemens for any additional charge. All standard circuit breakers are calibrated for 40°C maximum ambient application.

Continuous Current Rating @ 40° C	Type BQ ^①	Type BQH	Type HBQ
	10,000A IR	22,000A IR	65,000A IR
	Catalogue Number	Catalogue Number	Catalogue Number

1-Pole (120V AC)^②

15	BQ1B015 ^{④⑤}	BQ1B015H ^④	HB1B015 ^④
20	BQ1B020 ^{④⑤}	BQ1B020H ^④	HB1B020 ^④
25	BQ1B025	BQ1B025H	HB1B025
30	BQ1B030	BQ1B030H	HB1B030
35	BQ1B035	BQ1B035H	HB1B035
40	BQ1B040	BQ1B040H	HB1B040
45	BQ1B045	—	HB1B045
50	BQ1B050	BQ1B050H	HB1B050
60	BQ1B060 ^⑥	BQ1B060H	HB1B060
70	BQ1B070	BQ1B070H	HB1B070

2-Pole (Common-Trip 120/240V AC)^②

15	BQ2B015	BQ2B015H	HB2B015
20	BQ2B020	BQ2B020H	HB2B020
25	BQ2B025	BQ2B025H	HB2B025
30	BQ2B030	BQ2B030H	HB2B030
35	BQ2B035	BQ2B035H	HB2B035
40	BQ2B040	BQ2B040H	HB2B040
45	BQ2B045	—	HB2B045
50	BQ2B050	BQ2B050H	HB2B050
60	BQ2B060 ^⑥	BQ2B060H	HB2B060
70	BQ2B070	BQ2B070H	HB2B070
80	BQ2B080	BQ2B080H	HB2B080
90	BQ2B090	BQ2B090H	HB2B090
100	BQ2B100	BQ2B100H	HB2B100
110	BQ2B110	—	HB2B110
125	BQ2B125	BQ2B125H	HB2B125

2-Pole (Common-Trip 240V AC)^{③⑥}

15	BQ2H015	—	—
20	BQ2H020	—	—
30	BQ2H030	—	—
40	BQ2H040	—	—
50	BQ2H050	—	—
60	BQ2H060	—	—
70	BQ2H070	—	—
80	BQ2H080	—	—
90	BQ2H090	—	—
100	BQ2H100	—	—

3-Pole (Common-Trip 240V AC)^②

15	BQ3B015	BQ3B015H	HB3B015
20	BQ3B020	BQ3B020H	HB3B020
25	BQ3B025	BQ3B025H	HB3B025
30	BQ3B030	BQ3B030H	HB3B030
35	BQ3B035	BQ3B035H	HB3B035
40	BQ3B040	BQ3B040H	HB3B040
45	BQ3B045	BQ3B045H	HB3B045
50	BQ3B050	BQ3B050H	HB3B050
60	BQ3B060	BQ3B060H	HB3B060
70	BQ3B070	BQ3B070H	HB3B070
80	BQ3B080	BQ3B080H	HB3B080
90	BQ3B090	BQ3B090H	HB3B090
100	BQ3B100	BQ3B100H	HB3B100

BQ / BQH / HBQ Internal Accessories

Description	Catalogue Number	Field/Factory Installed
120VAC Shunt Trip	add suffix...00S01	Factory
24VAC Shunt Trip	add suffix...00S07	Factory
120V Auxiliary Switch	add suffix...01 ^⑦	Factory

■ Built to order. Allow 2-3 weeks for delivery

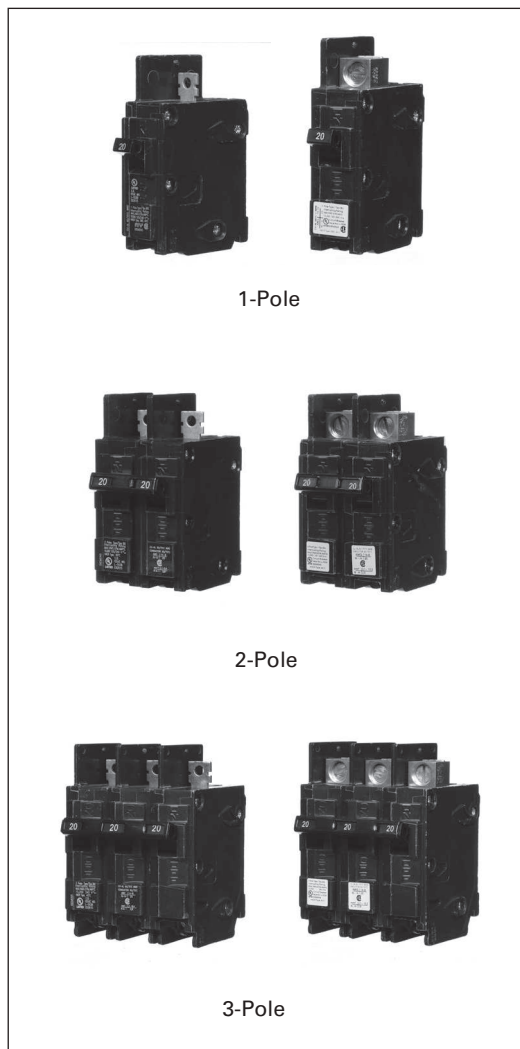
① UL Listed for use with 60/75° wire through 40 amps, CSA Certified / UL Listed for use with 75° wire only for 50 amps and above, HACR rated.
② 1A and 1B contacts.

③ UL Listed for use on 3-phase grounded "B" systems — 10,000 for this application.
④ UL Listed for frequent switching applications (SWD). 120V AC Fluorescent Lighting.
⑤ Shipped 12 per sleeve.
⑥ Shipped 6 per sleeve.
⑦ Shipped 4 per sleeve.

⑧ UL Listed 5KA IR.

⑨ Refer to Table A on page 5-86

⑩ CSA Certified for frequent switching applications (SWD)



Factory Modifications

Description	Catalogue Number
Line Side Lugs	add suffix...L
Quick Connect Lug	add suffix...QX
400Hz Calibration	add suffix...Y ^⑧
Marine 50° C Ambient Calibration	add suffix...M
Fungus Proofing	add suffix...F

For external accessories, please refer to page 5-83 - 5-89

Molded Case Circuit Breakers

DIN Rail Mounted Circuit Breakers

Selection/Dimensions

Breaker Type	Ampere Rating	Catalog Number	Line Side Connector	Load Side Connector	Interrupting Ratings (KA) (RMS Symmetrical Amperes) Volts AC	
					120	120/240

1-Pole DIN Rail (120V AC)

BQLD 1-Pole 120V DIN Rail	10	BQ1B010QLD	TC1Q1	TC1Q1	10	
	15	BQ1B015QLD	TC1Q1	TC1Q1	10	
	20	BQ1B020QLD	TC1Q1	TC1Q1	10	
	25	BQ1B025QLD	TC1Q1	TC1Q1	10	
	30	BQ1B030QLD	TC1Q1	TC1Q1	10	
	35	BQ1B035QLD	TC1Q1	TC1Q1	10	
	40	BQ1B040QLD	TC1Q1	TC1Q1	10	
	45	BQ1B045QLD	TA1Q1	TA1Q1	10	
BOXD 1-Pole 120V DIN Rail	50	BQ1B050QLD	TA1Q1	TA1Q1	10	
	60	BQ1B060QLD	TA1Q1	TA1Q1	10	
	10	BQ1B010QXD	TC1Q1	Quick-Connect	10	
	15	BQ1B015QXD	TC1Q1	Quick-Connect	10	
	20	BQ1B020QXD	TC1Q1	Quick-Connect	10	
	25	BQ1B025QXD	TC1Q1	Quick-Connect	10	
	30	BQ1B030QXD	TC1Q1	Quick-Connect	10	
	35	BQ1B035QXD	TC1Q1	Quick-Connect	10	
BOXD 1-Pole 120V DIN Rail	40	BQ1B040QXD	TC1Q1	Quick-Connect	10	
	45	BQ1B045QXD	TA1Q1	Quick-Connect	10	
	50	BQ1B050QXD	TA1Q1	Quick-Connect	10	
	60	BQ1B060QXD	TA1Q1	Quick-Connect	10	

2-Pole DIN Rail (120/240V AC)

BQLD 2-Pole 120/240V DIN Rail	10	BQ2B010QLD	TC1Q1	TC1Q1		10
	15	BQ2B015QLD	TC1Q1	TC1Q1		10
	20	BQ2B020QLD	TC1Q1	TC1Q1		10
	25	BQ2B025QLD	TC1Q1	TC1Q1		10
	30	BQ2B030QLD	TC1Q1	TC1Q1		10
	35	BQ2B035QLD	TC1Q1	TC1Q1		10
	40	BQ2B040QLD	TC1Q1	TC1Q1		10
	45	BQ2B045QLD	TA1Q1	TA1Q1		10
BOXD 2-Pole 120/240V DIN Rail	50	BQ2B050QLD	TA1Q1	TA1Q1		10
	60	BQ2B060QLD	TA1Q1	TA1Q1		10
	10	BQ2B010QXD	TC1Q1	Quick-Connect		10
	15	BQ2B015QXD	TC1Q1	Quick-Connect		10
	20	BQ2B020QXD	TC1Q1	Quick-Connect		10
	25	BQ2B025QXD	TC1Q1	Quick-Connect		10
	30	BQ2B030QXD	TC1Q1	Quick-Connect		10
	35	BQ2B035QXD	TC1Q1	Quick-Connect		10
BOXD 2-Pole 120/240V DIN Rail	40	BQ2B040QXD	TC1Q1	Quick-Connect		10
	45	BQ2B045QXD	TA1Q1	Quick-Connect		10
	50	BQ2B050QXD	TA1Q1	Quick-Connect		10
	60	BQ2B060QXD	TA1Q1	Quick-Connect		10

Lugs-For Use with BOXD^⑥

Circuit Breaker Amp. Rtg.	Cab. Per Lug	Lug Wire Range AWG	Catalogue Number
Line Side			
10-40	1	#16-#6 Cu #12-#6 Al	TC1Q1 ^{①②}
45-125	1000	#8-#1 Cu #6-#1/0 Al	TA1Q1

Finger Safe Terminal Shield

Protects against accidental contact with lugs-1 per lug. Fits line and load end.

Catalogue Number	Qty
BQFS2	2
BQFS1K	1000

For inches / millimeters conversion, see Technical section.

■ Built to order. Allow 2-3 weeks for delivery.

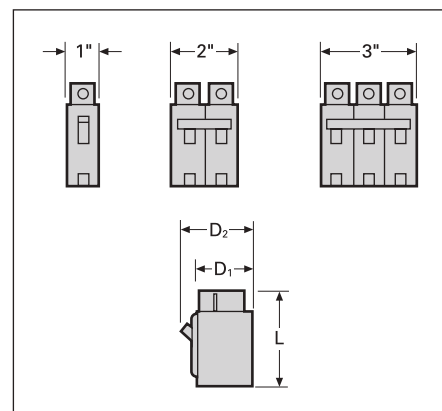
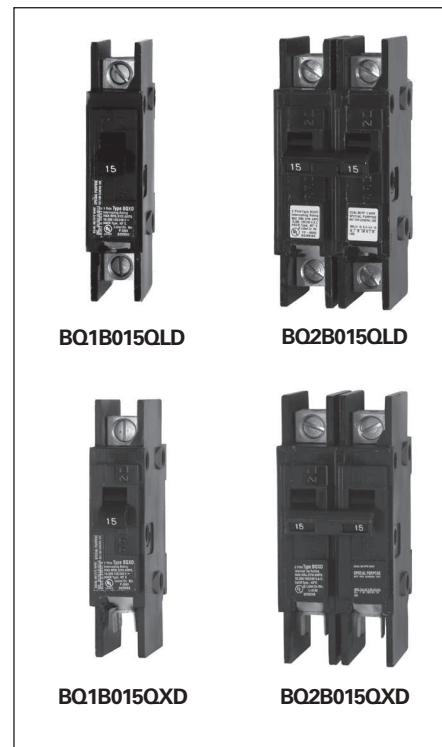
① UL Listed for use with 60/75° wire through 40 amperes, UL listed for use with 75° wire only for 50 amperes and above, HACR rated.

② Connector has steel construction.

③ Surface mounted indoor. If flush mounting is required, replace suffix "S" in catalog number with suffix "F".

④ Neutral included in enclosure.

⑤ Enclosure will not accept circuit breakers with shunt trips or auxiliary switches installed.



Breaker Type	Amperes	Dimensions (inches)		
		L	D1	D2
BQ, BQH	15-50	3 3/4	2 3/4	3
BQ, BQH	55-125	4	2 3/4	3
HBQ	15-125	4	2 3/4	3
BQXD	15-60	4 1/2	2 3/4	3

Enclosures, see page 5-68

For external accessories, please refer to pages 5-83 - 5-89

⑥ Type BOXD uses TA1Q1 or TC1Q1 lugs on line side of circuit breaker.

Molded Case Circuit Breakers

QR 250A Frame

Selection/Dimensions

Continuous Current Rating @ 40°C	2-Pole 240V AC Catalog Number	3-Pole 240V AC Catalog Number
--	-------------------------------------	-------------------------------------

Type QR2^②

100	QR22B100	QR23B100
125	QR22B125	QR23B125
150	QR22B150	QR23B150
175	QR22B175	QR23B175
200	QR22B200	QR23B200
225	QR22B225	QR23B225
250	QR22B250	QR23B250

Type QRH2^②

100	QRH22B100■	QRH23B100
125	QRH22B125	QRH23B125
150	QRH22B150	QRH23B150
175	QRH22B175■	QRH23B175
200	QRH22B200	QRH23B200
225	QRH22B225	QRH23B225
250	QRH22B250	QRH23B250

Type HQR2^②

100	HQR22B100■	HQR23B100
125	HQR22B125	HQR23B125
150	HQR22B150	HQR23B150
175	HQR22B175■	HQR23B175
200	HQR22B200	HQR23B200
225	HQR22B225	HQR23B225
250	HQR22B250	HQR23B250

Type HQR2H^②

100	HQR22B100H	HQR23B100H
125	HQR22B125H	HQR23B125H
150	HQR22B150H	HQR23B150H
175	HQR22B175H	HQR23B175H
200	HQR22B200H	HQR23B200H
225	HQR22B225H	HQR23B225H
250	HQR22B250H	HQR23B250H

Ordering Information

Load side 3TA1QR300 lugs are mounted and included when circuit breaker is ordered. For line and load lugs (3TA1QR300) installed at no additional charge, add suffix "L" to catalog number.

50°C Calibration - See page 5-79.

400HZ. - See page 5-79.

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight (lbs.)
2	1	3.2
3	1	4.5

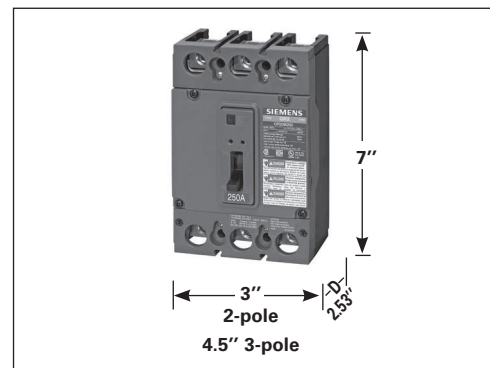
Lugs For 75°C Wire^①

Catalog Number	Lug Body	Lug Wire Range
3TA1QR300	Al	#3 - 300 Kcmil Al/Cu
3TC1QR250	Cu	#3 - 300 Kcmil Cu ONLY

CSA C22.2 No. 5 / UL 489

Interrupting Ratings

Breaker Type	RMS Symmetrical Amperes (kA) Volts AC (50/60 Hz)
QR2	240
QRH2	25
HQR2	65
HQR2H	100



■ Built to order. Allow 2-3 weeks for delivery.

① See **Note: A** page 5-76.

② HACR rated.

Note: Suitable for reverse feed applications

For external accessories, please refer to pages 5-83 - 5-89. For internal accessories, please refer to page 5-79.

Molded Case Circuit Breakers

CQD 100A Frame

Selection/Dimensions

Type CQD (Cable In - Cable Out) DIN Rail Mount^③

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	277V AC 125V DC	480Y/277V AC 125/250V DC	480Y/277V AC
	Catalog Number	Catalog Number	Catalog Number
15	CQD115 ^{①②}	CQD215 ^②	CQD315 ^②
20	CQD120 ^{①②}	CQD220 ^②	CQD320 ^②
25	CQD125 ^②	CQD225 ^②	CQD325 ^②
30	CQD130 ^②	CQD230 ^②	CQD330 ^②
35	CQD135 ^② ■	CQD235 ^② ■	CQD335 ^②
40	CQD140 ^② ■	CQD240 ^②	CQD340 ^②
45	CQD145 ^② ■	CQD245 ^② ■	CQD345 ^② ■
50	CQD150 ^② ■	CQD250 ^②	CQD350 ^②
60	CQD160■	CQD260	CQD360
70	CQD170■	CQD270	CQD370
80	CQD180■	CQD280	CQD380
90	CQD190■	CQD290■	CQD390
100	CQD1100■	CQD2100	CQD3100

Shipping Weights

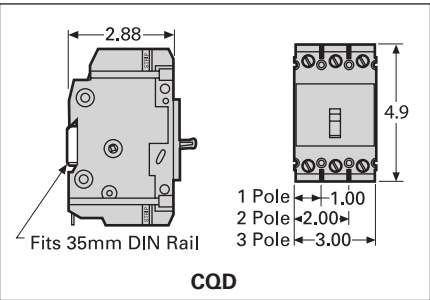
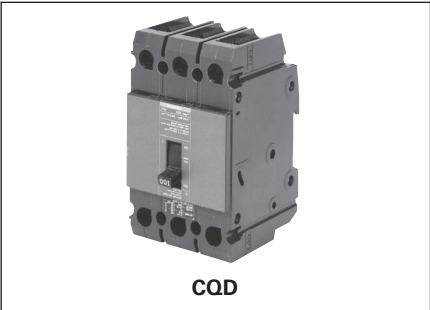
Number of Poles	Number per Carton	Shipping Weight lbs. (kg)
1	1	0.5 (0)
2	1	1.0 (0)
3	1	1.5 (1)

Lugs For 60/75°C Wire

Amps	Wire Size
15-40	#14-#6 AWG Cu #12-#6 AWG Al
45-100	#8-#1 AWG Cu #8-#1/0 AWG Al

Interrupting Ratings

Breaker Type	Number of Poles	RMS Symmetrical Amperes (KA)						
		Volts AC					Volts DC	
		120	240	277	480/277	600/277	125	125/250
CQD (CSA/UL)	1	65	—	14	—	—	14	—
	2	—	65	—	14	—	—	14
	3	—	65	—	14	—	—	—



For inches / millimeters conversion, see Technical section.

■ Built to order. Allow 2-3 weeks for delivery.

① SWD rated.

Note: Suitable for reverse feed applications

② HID rated.

③ HACR rated.

Enclosures page 5-68
Accessories pages 5-80 - 5-89.

Molded Case Circuit Breakers

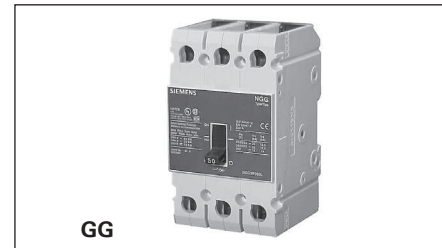
GG 125A Frame

Selection/Dimensions

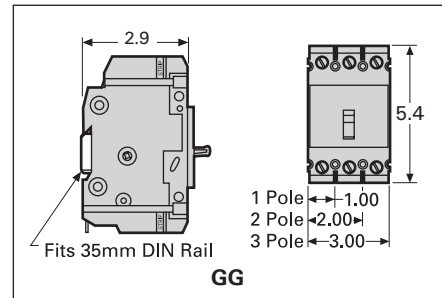
GG 125A Frame (Cable In - Cable Out)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalog Number	Catalog Number	Catalog Number
15	NGG1B015L ^{①②}	NGG2B015L ^②	NGG3B015L ^②
20	NGG1B020L ^{①②}	NGG2B020L ^②	NGG3B020L ^②
25	NGG1B025L ^②	NGG2B025L ^②	NGG3B025L ^②
30	NGG1B030L ^②	NGG2B030L ^②	NGG3B030L ^②
35	NGG1B035L ^②	NGG2B035L ^②	NGG3B035L ^②
40	NGG1B040L ^②	NGG2B040L ^②	NGG3B040L ^②
45	NGG1B045L ^②	NGG2B045L ^②	NGG3B045L ^②
50	NGG1B050L ^②	NGG2B050L ^②	NGG3B050L ^②
60	NGG1B060L	NGG2B060L	NGG3B060L
70	NGG1B070L	NGG2B070L	NGG3B070L
80	NGG1B080L	NGG2B080L	NGG3B080L
90	NGG1B090L	NGG2B090L	NGG3B090L
100	NGG1B100L	NGG2B100L	NGG3B100L
110	NGG1B110L	NGG2B110L	NGG3B110L
125	NGG1B125L	NGG2B125L	NGG3B125L

Line and load lugs are included as standard. If no lugs are required, remove the "L" suffix.
HACR rated.
Suitable for screws or DIN rail mounting.



GG



GG

Type HGG (Cable In - Cable Out)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalog Number	Catalog Number	Catalog Number
15	HGG1B015L ^{①②}	HGG2B015L ^②	HGG3B015L ^②
20	HGG1B020L ^{①②}	HGG2B020L ^②	HGG3B020L ^②
25	HGG1B025L ^②	HGG2B025L ^②	HGG3B025L ^②
30	HGG1B030L ^②	HGG2B030L ^②	HGG3B030L ^②
35	HGG1B035L ^②	HGG2B035L ^②	HGG3B035L ^②
40	HGG1B040L ^②	HGG2B040L ^②	HGG3B040L ^②
45	HGG1B045L ^②	HGG2B045L ^②	HGG3B045L ^②
50	HGG1B050L ^②	HGG2B050L ^②	HGG3B050L ^②
60	HGG1B060L	HGG2B060L	HGG3B060L
70	HGG1B070L	HGG2B070L	HGG3B070L
80	HGG1B080L	HGG2B080L	HGG3B080L
90	HGG1B090L	HGG2B090L	HGG3B090L
100	HGG1B100L	HGG2B100L	HGG3B100L
110	HGG1B110L	HGG2B110L	HGG3B110L
125	HGG1B125L	HGG2B125L	HGG3B125L

Type LGG (Cable In - Cable Out)

Continuous Current Rating @ 40°C	1-Pole	2-Pole	3-Pole
	Catalog Number	Catalog Number	Catalog Number
15	LGG1B015L ^{①②}	LGG2B015L ^②	LGG3B015L ^②
20	LGG1B020L ^{①②}	LGG2B020L ^②	LGG3B020L ^②
25	LGG1B025L ^②	LGG2B025L ^②	LGG3B025L ^②
30	LGG1B030L ^②	LGG2B030L ^②	LGG3B030L ^②
35	LGG1B035L ^②	LGG2B035L ^②	LGG3B035L ^②
40	LGG1B040L ^②	LGG2B040L ^②	LGG3B040L ^②
45	LGG1B045L ^②	LGG2B045L ^②	LGG3B045L ^②
50	LGG1B050L ^②	LGG2B050L ^②	LGG3B050L ^②
60	LGG1B060L	LGG2B060L	LGG3B060L
70	LGG1B070L	LGG2B070L	LGG3B070L
80	LGG1B080L	LGG2B080L	LGG3B080L
90	LGG1B090L	LGG2B090L	LGG3B090L
100	LGG1B100L	LGG2B100L	LGG3B100L
110	LGG1B110L	LGG2B110L	LGG3B110L
125	LGG1B125L	LGG2B125L	LGG3B125L

Shipping Weights

Number of Poles	Number per Carton	Shipping Weight lbs. (kg)
1	1	0.75 (0.34)
2	1	1.3 (0.59)
3	1	2.0 (0.98)

Lugs For 60/75°C Wire

NGG		
Ampere Rating	Wire Size	Catalogue Number
15-30A	#14-#6 AWG Cu	TC1Q1 (qty. 1)
	#12-#6 AWG Al	3TC1Q1 (qty. 3)
35-125A	#8-1/0 AWG Cu #8-2/0 AWG Al	3TC1GG20 (qty. 3)
15-125A	Nut Keeper plate w/ screw (for crimp terminals)	TNKG3 (qty. 3)

Interrupting Ratings (max. RMS symmetrical amperes kA)

Breaker Type	Poles	UL489								IEC 60947-2 (Ics = 50%Icu)		
		Volts AC						Volts DC		Volts AC		Volts DC
		120	240	277	347	480	600Y/347	125	125/250	240	415	125/250
NGG	1	65	—	25	14	—	—	14	—	25	—	—
	2,3	—	65	—	—	25	14	—	14 ^①	65	—	14
HGG	1	85	—	35	14	—	—	14	—	—	—	—
	2,3	—	85	—	—	35	14	—	14 ^①	—	—	—
LGG	1	100	—	65	14	—	—	14	—	—	—	—
	2,3	—	100	—	—	65	14	—	14 ^①	—	—	—

For inches / millimeters conversion, see Technical section.

① HID rated at 15-50A 1-pole @ 277 VAC; 2 & 3-pole @

480 VAC

Enclosures page 5-68

Accessories pages 5-80 - 5-68

Molded Case Circuit Breakers

Accessories

Selection

Shunt Trip

Control Voltage		Catalog Number
V AC	V DC	
120	—	CQDST120
240	—	CQDST240▲
277	—	CQDST277▲
480	—	CQDST480▲
600	—	CQDST600
—	12	CQDST12
—	24	CQDST24
—	48	CQDST48
—	125	CQDST125

Auxiliary Switch

Maximum Voltage		Number of Contacts	Catalog Number
AC	DC		
240	125	1A-1B	CQDA1
240	125	2A-2B	CQDA2

Alarm Switch

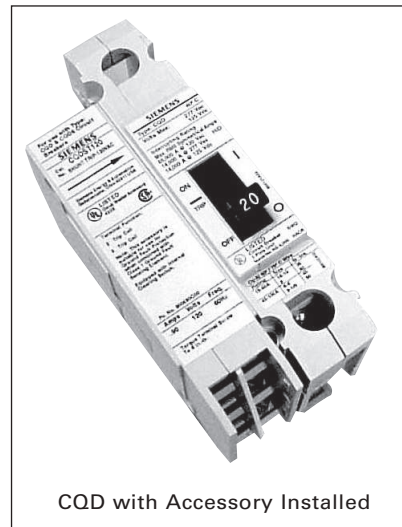
Maximum Voltage		Catalog Number
AC	DC	
240	125	CQDBA

Shunt Trip and Auxiliary Switch Combinations

Shunt Trip Voltage		Catalog Number
AC	DC	
24	—	CQDST24AAS▲
120	—	CQDST120AAS▲
240	—	CQDST240AAS▲
277	—	CQDST277AAS▲
480	—	CQDST480AAS▲
600	—	CQDST600AAS▲
—	12	CQDST12DAS▲
—	24	CQDST24DAS▲
—	48	CQDST48DAS▲
—	125	CQDST125DAS▲

Alarm and Auxiliary Switch Combinations

For Breaker	Catalog Number
BQD, BQD6, CQD, NGG, HGG, LGG, NGB, HGB and LGB	CQDA1BA▲



▲ Built to order. Allow 6-8 weeks for delivery.

① Adds 1-pole space for accessory.

Molded Case Circuit Breakers

3VA UL Circuit Breakers

Catalog Numbering System

5
MOLDED CASE
CIRCUIT BREAKERS

														3VA	6	1	40	–	5	HL	3	1	–	0	A	A0
Breaker Designation																										
Thermal magnetic panelboard breakers														4												
Thermal magnetic (Cable-in Cable-out) breakers														5												
Electronic trip breakers														6												
Frame Size																										
125/150A														1												
250A														2												
400A														3												
600A														4												
Rated Current																										
3VA51	3VA52	3VA53	3VA54	3VA61	3VA62	3VA63	3VA64																			
15A								95																		
20A	200A	200A						20																		
	225A	225A						22																		
25A	250A	250A			250A	250A		25																		
30A		300A						30																		
35A		350A						35																		
40A		400A				400A	400A	40																		
45A			450A	40A				45																		
50A			500A					50																		
60A			600A				600A	60																		
70A								70																		
80A								80																		
90A								90																		
100A	100A			100A	100A			10																		
110A	110A							11																		
125A	125A							12																		
	150A			150A				15																		
	175A							17																		
Interrupting Capacity @ 480V																										
3VA5	3VA6																									
MCP/MCS														0												
MCP/MCS	MCP/MCS													1												
25K														4												
35K	35K													5												
65K	65K													6												
100K	100K													7												
	150K													8												
Trip Unit Protection Functions																										
3VA5		L	I	N																						
TM230	MCCB	fix	adj											EC												
TM210	MCCB	fix	fix											ED												
TM240	MCCB	adj	adj											EF												
TM230	MCCB	fix	adj	100%										GC												
TM210	MCCB	fix	fix	100%										GD												
TM240	MCCB	adj	adj	100%										GF												
TM110M	MSP		fix											MG												
TM120M	MSP		adj											MH												
TM120M	MSP		adj											MU												
MCS110	MSP		fix											BB												
3VA6		L	S	I	G	N	LCD	com.	measurement values																	
ETU230 LI	MCCB	adj		adj		0%/50%/100%				HL																
ETU330 LIG	MCCB	adj		adj	adj	0%/50%/100%				HM																
ETU350 LSI	MCCB	adj	adj	fix		0%/50%/100%				HN																
ETU550 LSI	MCCB	adj	adj	adj		20/40%...100/160%	yes	yes	standard	JP																
ETU556 LSI(G)	MCCB	adj	adj	adj	alarm	20/40%...100/160%	yes	yes	standard	JT																
ETU560 LSIG	MCCB	adj	adj	adj	adj	20/40%...100/160%	yes	yes	standard	JQ																
ETU820 LI	MCCB	adj		adj		20/40%...100/160%	yes	yes	advanced	KL																
ETU830 LIG	MCCB	adj		adj	adj	20/40%...100/160%	yes	yes	advanced	KM																
ETU850LSI	MCCB	adj	adj	adj		20/40%...100/160%	yes	yes	advanced	KP																
ETU856 LSI(G)	MCCB	adj	adj	adj	alarm	20/40%...100/160%	yes	yes	advanced	KT																
ETU860 LSIG	MCCB	adj	adj	adj	adj	20/40%...100/160%	yes	yes	advanced	KQ																
ETU310M	MCP			adj						MS																
MCS110	MCS			fix						BB																
Number of Poles																										
1 pole																								1		
2 pole																								2		
3 pole																								3		
4 pole																								4		
1-in-2 pole																								5		
2-in-3 pole																								6		
Connection Technology																										
blank, punched copper bar without any lugs																								1		
Regional Specifics (as applicable)																										
Standard																								0		
NAVAL/50C																								1		
100% Rated (3VA6)																								2		
Auxiliary Releases														Without										A		
Auxiliary/Alarm Switches														Without										A0		

Molded Case Circuit Breakers

3VA51 125A Thermal-magnetic Trip Circuit Breakers

Selection

3VA51 125A Frame, 1-Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	S-Interrupting Class (SEAS)	M-Interrupting Class (MEAS)	H-Interrupting Class (HEAS)
	Catalog Number	Catalog Number	Catalog Number
TM210 FTFM			
15	3VA5195-4ED11-0AA0	3VA5195-5ED11-0AA0	3VA5195-6ED11-0AA0
20	3VA5120-4ED11-0AA0	3VA5120-5ED11-0AA0	3VA5120-6ED11-0AA0
25	3VA5125-4ED11-0AA0	3VA5125-5ED11-0AA0	3VA5125-6ED11-0AA0
30	3VA5130-4ED11-0AA0	3VA5130-5ED11-0AA0	3VA5130-6ED11-0AA0
35	3VA5135-4ED11-0AA0	3VA5135-5ED11-0AA0	3VA5135-6ED11-0AA0
40	3VA5140-4ED11-0AA0	3VA5140-5ED11-0AA0	3VA5140-6ED11-0AA0
45	3VA5145-4ED11-0AA0	3VA5145-5ED11-0AA0	3VA5145-6ED11-0AA0
50	3VA5150-4ED11-0AA0	3VA5150-5ED11-0AA0	3VA5150-6ED11-0AA0
60	3VA5160-4ED11-0AA0	3VA5160-5ED11-0AA0	3VA5160-6ED11-0AA0
70	3VA5170-4ED11-0AA0	3VA5170-5ED11-0AA0	3VA5170-6ED11-0AA0
80	3VA5180-4ED11-0AA0	3VA5180-5ED11-0AA0	3VA5180-6ED11-0AA0
90	3VA5190-4ED11-0AA0	3VA5190-5ED11-0AA0	3VA5190-6ED11-0AA0
100	3VA5110-4ED11-0AA0	3VA5110-5ED11-0AA0	3VA5110-6ED11-0AA0
110	3VA5111-4ED11-0AA0	3VA5111-5ED11-0AA0	3VA5111-6ED11-0AA0
125	3VA5112-4ED11-0AA0	3VA5112-5ED11-0AA0	3VA5112-6ED11-0AA0



3VA51 125A Frame, 2-Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	S-Interrupting Class (SEAS)	M-Interrupting Class (MEAS)	H-Interrupting Class (HEAS)
	Catalog Number	Catalog Number	Catalog Number
TM210 FTFM [Ⓢ]			
15	3VA5195-4ED21-0AA0	3VA5195-5ED21-0AA0	3VA5195-6ED21-0AA0
20	3VA5120-4ED21-0AA0	3VA5120-5ED21-0AA0	3VA5120-6ED21-0AA0
25	3VA5125-4ED21-0AA0	3VA5125-5ED21-0AA0	3VA5125-6ED21-0AA0
30	3VA5130-4ED21-0AA0	3VA5130-5ED21-0AA0	3VA5130-6ED21-0AA0
35	3VA5135-4ED21-0AA0	3VA5135-5ED21-0AA0	3VA5135-6ED21-0AA0
40	3VA5140-4ED21-0AA0	3VA5140-5ED21-0AA0	3VA5140-6ED21-0AA0
45	3VA5145-4ED21-0AA0	3VA5145-5ED21-0AA0	3VA5145-6ED21-0AA0
50	3VA5150-4ED21-0AA0	3VA5150-5ED21-0AA0	3VA5150-6ED21-0AA0
60	3VA5160-4ED21-0AA0	3VA5160-5ED21-0AA0	3VA5160-6ED21-0AA0
70	3VA5170-4ED21-0AA0	3VA5170-5ED21-0AA0	3VA5170-6ED21-0AA0
80	3VA5180-4ED21-0AA0	3VA5180-5ED21-0AA0	3VA5180-6ED21-0AA0
90	3VA5190-4ED21-0AA0	3VA5190-5ED21-0AA0	3VA5190-6ED21-0AA0
100	3VA5110-4ED21-0AA0	3VA5110-5ED21-0AA0	3VA5110-6ED21-0AA0
110	3VA5111-4ED21-0AA0	3VA5111-5ED21-0AA0	3VA5111-6ED21-0AA0
125	3VA5112-4ED21-0AA0	3VA5112-5ED21-0AA0	3VA5112-6ED21-0AA0



Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA51 thermal-magnetic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

For NAVAL-rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA @480VAC, 40A, 3-pole, NAVAL rated 3VA51 would be catalog number 3VA5140-5ED31-1AA0)

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA51	1	1 (25.4)	5.5 (140)	3 (76.5)	0.84	0.38
3VA51	2	2 (50.8)	5.5 (140)	3 (76.5)	1.37	0.62
3VA51	3	3 (76.2)	5.5 (140)	3 (76.5)	1.73	0.78
3VA51	4	4 (101.6)	5.5 (140)	3 (76.5)	2.09	0.95

Shipping Weight

[Ⓢ] Available with NAVAL/50C ratings.

Molded Case Circuit Breakers

3VA51 125A Thermal-magnetic Trip Circuit Breakers

Selection

3VA51 125A Frame, 3-Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	S-Interrupting Class (SEAS)	M-Interrupting Class (MEAS)	H-Interrupting Class (HEAS)
	Catalog Number	Catalog Number	Catalog Number

TM210 FTFM[Ⓢ]

15	3VA5195-4ED31-0AA0	3VA5195-5ED31-0AA0	3VA5195-6ED31-0AA0
20	3VA5120-4ED31-0AA0	3VA5120-5ED31-0AA0	3VA5120-6ED31-0AA0
25	3VA5125-4ED31-0AA0	3VA5125-5ED31-0AA0	3VA5125-6ED31-0AA0
30	3VA5130-4ED31-0AA0	3VA5130-5ED31-0AA0	3VA5130-6ED31-0AA0
35	3VA5135-4ED31-0AA0	3VA5135-5ED31-0AA0	3VA5135-6ED31-0AA0
40	3VA5140-4ED31-0AA0	3VA5140-5ED31-0AA0	3VA5140-6ED31-0AA0
45	3VA5145-4ED31-0AA0	3VA5145-5ED31-0AA0	3VA5145-6ED31-0AA0
50	3VA5150-4ED31-0AA0	3VA5150-5ED31-0AA0	3VA5150-6ED31-0AA0
60	3VA5160-4ED31-0AA0	3VA5160-5ED31-0AA0	3VA5160-6ED31-0AA0
70	3VA5170-4ED31-0AA0	3VA5170-5ED31-0AA0	3VA5170-6ED31-0AA0
80	3VA5180-4ED31-0AA0	3VA5180-5ED31-0AA0	3VA5180-6ED31-0AA0
90	3VA5190-4ED31-0AA0	3VA5190-5ED31-0AA0	3VA5190-6ED31-0AA0
100	3VA5110-4ED31-0AA0	3VA5110-5ED31-0AA0	3VA5110-6ED31-0AA0
110	3VA5111-4ED31-0AA0	3VA5111-5ED31-0AA0	3VA5111-6ED31-0AA0
125	3VA5112-4ED31-0AA0	3VA5112-5ED31-0AA0	3VA5112-6ED31-0AA0

TM230 FTAM[Ⓢ]

15	3VA5195-4EC31-0AA0	3VA5195-6EC31-0AA0	3VA5195-6EC31-0AA0
20	3VA5120-4EC31-0AA0	3VA5120-5EC31-0AA0	3VA5120-6EC31-0AA0
25	3VA5125-4EC31-0AA0	3VA5125-5EC31-0AA0	3VA5125-6EC31-0AA0
30	3VA5130-4EC31-0AA0	3VA5130-5EC31-0AA0	3VA5130-6EC31-0AA0
35	3VA5135-4EC31-0AA0	3VA5135-5EC31-0AA0	3VA5135-6EC31-0AA0
40	3VA5140-4EC31-0AA0	3VA5140-5EC31-0AA0	3VA5140-6EC31-0AA0
45	3VA5145-4EC31-0AA0	3VA5145-5EC31-0AA0	3VA5145-6EC31-0AA0
50	3VA5150-4EC31-0AA0	3VA5150-5EC31-0AA0	3VA5150-6EC31-0AA0
60	3VA5160-4EC31-0AA0	3VA5160-5EC31-0AA0	3VA5160-6EC31-0AA0
70	3VA5170-4EC31-0AA0	3VA5170-5EC31-0AA0	3VA5170-6EC31-0AA0
80	3VA5180-4EC31-0AA0	3VA5180-5EC31-0AA0	3VA5180-6EC31-0AA0
90	3VA5190-4EC31-0AA0	3VA5190-5EC31-0AA0	3VA5190-6EC31-0AA0
100	3VA5110-4EC31-0AA0	3VA5110-5EC31-0AA0	3VA5110-6EC31-0AA0
110	3VA5111-4EC31-0AA0	3VA5111-5EC31-0AA0	3VA5111-6EC31-0AA0
125	3VA5112-4EC31-0AA0	3VA5112-5EC31-0AA0	3VA5112-6EC31-0AA0

TM240 ATAM

15	3VA5195-4EF31-0AA0	3VA5195-5EF31-0AA0	3VA5195-6EF31-0AA0
20	3VA5120-4EF31-0AA0	3VA5120-5EF31-0AA0	3VA5120-6EF31-0AA0
30	3VA5130-4EF31-0AA0	3VA5130-5EF31-0AA0	3VA5130-6EF31-0AA0
40	3VA5140-4EF31-0AA0	3VA5140-5EF31-0AA0	3VA5140-6EF31-0AA0
50	3VA5150-4EF31-0AA0	3VA5150-5EF31-0AA0	3VA5150-6EF31-0AA0
60	3VA5160-4EF31-0AA0	3VA5160-5EF31-0AA0	3VA5160-6EF31-0AA0
70	3VA5170-4EF31-0AA0	3VA5170-5EF31-0AA0	3VA5170-6EF31-0AA0
80	3VA5180-4EF31-0AA0	3VA5180-5EF31-0AA0	3VA5180-6EF31-0AA0
100	3VA5110-4EF31-0AA0	3VA5110-5EF31-0AA0	3VA5110-6EF31-0AA0



3VA51 125A 3-Pole

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA51 thermal-magnetic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

For NAVAL-rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA @480VAC, 40A, 3-pole, NAVAL rated 3VA51 would be catalog number 3VA5140-5ED31-**1**AA0)

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA51	1	1 (25.4)	5.5 (140)	3 (76.5)	0.84	0.38
3VA51	2	2 (50.8)	5.5 (140)	3 (76.5)	1.37	0.62
3VA51	3	3 (76.2)	5.5 (140)	3 (76.5)	1.73	0.78
3VA51	4	4 (101.6)	5.5 (140)	3 (76.5)	2.09	0.95

Shipping Weight

Ⓢ Available with NAVAL/50C ratings.

Molded Case Circuit Breakers

3VA51 125A Thermal-magnetic Trip Circuit Breakers

Selection

3VA51 125A Frame, 4-Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	S-Interrupting Class (SEAS)	M-Interrupting Class (MEAS)	H-Interrupting Class (HEAS)
	Catalog Number	Catalog Number	Catalog Number

TM210 FTFM Unprotected Neutral

15	3VA5195-4ED41-0AA0	3VA5195-5ED41-0AA0	3VA5195-6ED41-0AA0
20	3VA5120-4ED41-0AA0	3VA5120-5ED41-0AA0	3VA5120-6ED41-0AA0
25	3VA5125-4ED41-0AA0	3VA5125-5ED41-0AA0	3VA5125-6ED41-0AA0
30	3VA5130-4ED41-0AA0	3VA5130-5ED41-0AA0	3VA5130-6ED41-0AA0
35	3VA5135-4ED41-0AA0	3VA5135-5ED41-0AA0	3VA5135-6ED41-0AA0
40	3VA5140-4ED41-0AA0	3VA5140-5ED41-0AA0	3VA5140-6ED41-0AA0
45	3VA5145-4ED41-0AA0	3VA5145-5ED41-0AA0	3VA5145-6ED41-0AA0
50	3VA5150-4ED41-0AA0	3VA5150-5ED41-0AA0	3VA5150-6ED41-0AA0
60	3VA5160-4ED41-0AA0	3VA5160-5ED41-0AA0	3VA5160-6ED41-0AA0
70	3VA5170-4ED41-0AA0	3VA5170-5ED41-0AA0	3VA5170-6ED41-0AA0
80	3VA5180-4ED41-0AA0	3VA5180-5ED41-0AA0	3VA5180-6ED41-0AA0
90	3VA5190-4ED41-0AA0	3VA5190-5ED41-0AA0	3VA5190-6ED41-0AA0
100	3VA5110-4ED41-0AA0	3VA5110-5ED41-0AA0	3VA5110-6ED41-0AA0
110	3VA5111-4ED41-0AA0	3VA5111-5ED41-0AA0	3VA5111-6ED41-0AA0
125	3VA5112-4ED41-0AA0	3VA5112-5ED41-0AA0	3VA5112-6ED41-0AA0

TM210 FTFM 100% Neutral

90	3VA5190-4GD41-0AA0	3VA5190-5GD41-0AA0	3VA5190-6GD41-0AA0
100	3VA5110-4GD41-0AA0	3VA5110-5GD41-0AA0	3VA5110-6GD41-0AA0
110	3VA5111-4GD41-0AA0	3VA5111-5GD41-0AA0	3VA5111-6GD41-0AA0
125	3VA5112-4GD41-0AA0	3VA5112-5GD41-0AA0	3VA5112-6GD41-0AA0

TM230 FTAM Unprotected Neutral

15	3VA5195-4EC41-0AA0	3VA5195-5EC41-0AA0	3VA5195-6EC41-0AA0
20	3VA5120-4EC41-0AA0	3VA5120-5EC41-0AA0	3VA5120-6EC41-0AA0
25	3VA5125-4EC41-0AA0	3VA5125-5EC41-0AA0	3VA5125-6EC41-0AA0
30	3VA5130-4EC41-0AA0	3VA5130-5EC41-0AA0	3VA5130-6EC41-0AA0
35	3VA5135-4EC41-0AA0	3VA5135-5EC41-0AA0	3VA5135-6EC41-0AA0
40	3VA5140-4EC41-0AA0	3VA5140-5EC41-0AA0	3VA5140-6EC41-0AA0
45	3VA5145-4EC41-0AA0	3VA5145-5EC41-0AA0	3VA5145-6EC41-0AA0
50	3VA5150-4EC41-0AA0	3VA5150-5EC41-0AA0	3VA5150-6EC41-0AA0
60	3VA5160-4EC41-0AA0	3VA5160-5EC41-0AA0	3VA5160-6EC41-0AA0
70	3VA5170-4EC41-0AA0	3VA5170-5EC41-0AA0	3VA5170-6EC41-0AA0
80	3VA5180-4EC41-0AA0	3VA5180-5EC41-0AA0	3VA5180-6EC41-0AA0
90	3VA5190-4EC41-0AA0	3VA5190-5EC41-0AA0	3VA5190-6EC41-0AA0
100	3VA5110-4EC41-0AA0	3VA5110-5EC41-0AA0	3VA5110-6EC41-0AA0
110	3VA5111-4EC41-0AA0	3VA5111-5EC41-0AA0	3VA5111-6EC41-0AA0
125	3VA5112-4EC41-0AA0	3VA5112-5EC41-0AA0	3VA5112-6EC41-0AA0

TM230 FTFM 100% Neutral

90	3VA5190-4GC41-0AA0	3VA5190-5GC41-0AA0	3VA5190-6GC41-0AA0
100	3VA5110-4GC41-0AA0	3VA5110-5GC41-0AA0	3VA5110-6GC41-0AA0
110	3VA5111-4GC41-0AA0	3VA5111-5GC41-0AA0	3VA5111-6GC41-0AA0
125	3VA5112-4GC41-0AA0	3VA5112-5GC41-0AA0	3VA5112-6GC41-0AA0

TM240 ATAM Unprotected Neutral

15	3VA5195-4EF41-0AA0	3VA5195-5EF41-0AA0	3VA5195-6EF41-0AA0
20	3VA5120-4EF41-0AA0	3VA5120-5EF41-0AA0	3VA5120-6EF41-0AA0
30	3VA5130-4EF41-0AA0	3VA5130-5EF41-0AA0	3VA5130-6EF41-0AA0
40	3VA5140-4EF41-0AA0	3VA5140-5EF41-0AA0	3VA5140-6EF41-0AA0
50	3VA5150-4EF41-0AA0	3VA5150-5EF41-0AA0	3VA5150-6EF41-0AA0
60	3VA5160-4EF41-0AA0	3VA5160-5EF41-0AA0	3VA5160-6EF41-0AA0
70	3VA5170-4EF41-0AA0	3VA5170-5EF41-0AA0	3VA5170-6EF41-0AA0
80	3VA5180-4EF41-0AA0	3VA5180-5EF41-0AA0	3VA5180-6EF41-0AA0
100	3VA5110-4EF41-0AA0	3VA5110-5EF41-0AA0	3VA5110-6EF41-0AA0

TM240 ATAM 100% Neutral

100	3VA5110-4GF41-0AA0	3VA5110-5GF41-0AA0	3VA5110-6GF41-0AA0
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3VA51 125A 4-Pole

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA51 thermal-magnetic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

For NAVAL-rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA @480VAC, 40A, 3-pole, NAVAL rated 3VA51 would be catalog number 3VA5140-5ED31-1AA0)

Molded Case Circuit Breakers

3VA51 125A Thermal-magnetic Trip Circuit Breakers

Technical information

Interrupting Ratings for 3VA51

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)										
		Volts AC (50/60 Hz)							Volts DC			
		120	240	277	347	480Y/277V	480	600Y/347V	125	250	500 ^①	600 ^①
S	SEAS	1	65		25	14			14			
		2, 3, 4		65			25	25	14	50	50	50
M	MEAS	1	85		35	18			25			
		2, 3, 4		85			35	35	18	25	85	85
H	HEAS	1	150		50	18			30			
		2, 3, 4		150			65	65	25	30	100	100

① Applies to 3VA51 3-Pole

Trip Settings for 3VA51

TM210 - FTFM		
I _n (A)	I _n (A)	I _n (A)
15	15	300
20	20	300
25	25	300
30	30	300
35	35	350
40	40	400
45	45	450
50	50	500
60	60	600
70	70	700
80	80	800
90	90	900
100	100	1000
110	110	1100
125	125	1250

TM230 - FTAM								
I _n (A)	I _n (A)	I _n (A)						
15	15	150	180	210	240	270	300	
20	20	150	180	210	240	270	300	
25	25	150	180	210	240	270	300	
30	30	150	180	210	240	270	300	
35	35	175	210	245	280	315	350	
40	40	200	240	280	320	360	400	
45	45	225	270	315	360	405	450	
50	50	250	300	350	400	450	500	
60	60	300	360	420	480	540	600	
70	70	350	420	490	560	630	700	
80	80	400	480	560	640	720	800	
90	90	450	540	630	720	810	900	
100	100	500	600	700	800	900	1000	
110	110	550	660	770	880	990	1100	
125	125	625	750	875	1000	1125	1250	

TM240 - ATAM								
I _n (A)	I _n (A)	I _n (A)						
15	12	150	180	210	240	270	300	
20	16	150	180	210	240	270	300	
30	24	150	180	210	240	270	300	
40	32	200	240	280	320	360	400	
50	40	250	300	350	400	450	500	
60	48	300	360	420	480	540	600	
70	56	350	420	490	560	630	700	
80	64	400	480	560	640	720	800	
100	80	500	600	700	800	900	1000	

Connectors for 75C Wire for 3VA51

Type	Min. cable size	Max. cable size	Catalog No. (kit of 3 lugs)	Catalog No. (kit of 4 lugs)
Steel wrap around (Cu cable only), 1 cable lugs	AWG 14	3/0	3VA9133-0JA11	3VA9134-0JA11
Aluminum body lug small (Cu/Al cable), 1 cable lug	AWG 14	AWG 10	3VA9133-0JB10	3VA9134-0JB10
Aluminum body lug (Cu/Al cable), 1 cable lugs	AWG 14	3/0	3VA9133-0JB11	3VA9134-0JB11
Aluminum body lug small with control wire tap (Cu/Al cable), 1 cable lug	AWG 14	AWG 10	3VA9133-0JG10	3VA9134-0JG10
Aluminum body lug with control wire tap (Cu/Al cable), 1 cable lugs	AWG 14	3/0	3VA9133-0JG11	3VA9134-0JG11
Aluminum body lug large (Cu/Al cable), 1 cable lugs with 1 extended terminal cover	AWG 4	300 kcmil	3VA9133-0JJ12	
Aluminum body lug large with control wire tap (Cu/Al cable), 1 cable lug and 1 extended terminal cover	AWG 4	300 kcmil	3VA9133-0JC12	
Distribution lug, 6 cables (Cu/Al cable), 1 cable lugs with 1 extended terminal cover	AWG 14	AWG 2	3VA9133-0JF60	3VA9134-0JF60
Copper body lug small (Cu cable only), 1 cable lugs	AWG 14	AWG 10	3VA9133-0JD10	3VA9134-0JD10
Copper body lug (Cu cable only), 1 cable lugs	AWG 14	2/0	3VA9133-0JD11	3VA9134-0JD11
Copper body lug small with control wire tap (Cu cable only), 1 cable lugs	AWG 14	AWG 10	3VA9133-0JK10	3VA9134-0JK10
Copper body lug with control wire tap (Cu cable only), 1 cable lugs	AWG 14	2/0	3VA9133-0JK11	3VA9134-0JK11

Internal accessories configuration		3VA4/3VA5 125 A 1 in 2-pole /2-pole	3VA5 125 A 3 & 4-pole
Slot No.:		23 22 21 125 A	23 22 21 125 A 11 12 13
Auxiliary switch	AUX_HQ	x x x	x x x x x x x
	AUX_HQ_el	x x x	x x x x x x x
	AUX_HP	x	x x x
Leading changeover switch	LCS_HQ		
	LCS_HQ_el		
	LCS_HP		
Trip alarm switch	TAS_HQ	x x	x x x x
	TAS_HQ_el	x x	x x x x
	TAS_HP	x	x x
Short circuit alarm switch	SAS_HQ		
	SAS_HQ_el		
Shunt trip flexible	STF	x	x
	STL	x	x
	STL_el		
Residual current release	RCR		
Undervoltage release	UVR	x	x
Universal release	UVI	x	x
Other			
Cylinder lock (type Ronis)			x

Molded Case Circuit Breakers

3VA61 150A Electronic Trip Circuit Breakers

Selection



3VA61 150A 3-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA61 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

All 3VA61 electronic trip circuit breakers are available with 100% ratings.

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 40A, 3-pole, 100% rated 3VA61 would be catalog number 3VA6140-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No. 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA61 150A Frame 3-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MDAE) Catalog Number	H-Interrupting Class (HDAE) Catalog Number	C-Interrupting Class (CDAE) Catalog Number	L-Interrupting Class (LDAE) Catalog Number
ETU320 LI with dials				
40	3VA6140-5HL31-0AA0	3VA6140-6HL31-0AA0	3VA6140-7HL31-0AA0	3VA6140-8HL31-0AA0
100	3VA6110-5HL31-0AA0	3VA6110-6HL31-0AA0	3VA6110-7HL31-0AA0	3VA6110-8HL31-0AA0
150	3VA6115-5HL31-0AA0	3VA6115-6HL31-0AA0	3VA6115-7HL31-0AA0	3VA6115-8HL31-0AA0
ETU330 LIG with dials				
40	3VA6140-5HM31-0AA0	3VA6140-6HM31-0AA0	3VA6140-7HM31-0AA0	3VA6140-8HM31-0AA0
100	3VA6110-5HM31-0AA0	3VA6110-6HM31-0AA0	3VA6110-7HM31-0AA0	3VA6110-8HM31-0AA0
150	3VA6115-5HM31-0AA0	3VA6115-6HM31-0AA0	3VA6115-7HM31-0AA0	3VA6115-8HM31-0AA0
ETU350 LSI with dials				
40	3VA6140-5HN31-0AA0	3VA6140-6HN31-0AA0	3VA6140-7HN31-0AA0	3VA6140-8HN31-0AA0
100	3VA6110-5HN31-0AA0	3VA6110-6HN31-0AA0	3VA6110-7HN31-0AA0	3VA6110-8HN31-0AA0
150	3VA6115-5HN31-0AA0	3VA6115-6HN31-0AA0	3VA6115-7HN31-0AA0	3VA6115-8HN31-0AA0
ETU550 LSI with LCD				
40	3VA6140-5JP31-0AA0	3VA6140-6JP31-0AA0	3VA6140-7JP31-0AA0	3VA6140-8JP31-0AA0
100	3VA6110-5JP31-0AA0	3VA6110-6JP31-0AA0	3VA6110-7JP31-0AA0	3VA6110-8JP31-0AA0
150	3VA6115-5JP31-0AA0	3VA6115-6JP31-0AA0	3VA6115-7JP31-0AA0	3VA6115-8JP31-0AA0
ETU556 LSI(G Alarm) with LCD				
40	3VA6140-5JT31-0AA0	3VA6140-6JT31-0AA0	3VA6140-7JT31-0AA0	3VA6140-8JT31-0AA0
100	3VA6110-5JT31-0AA0	3VA6110-6JT31-0AA0	3VA6110-7JT31-0AA0	3VA6110-8JT31-0AA0
150	3VA6115-5JT31-0AA0	3VA6115-6JT31-0AA0	3VA6115-7JT31-0AA0	3VA6115-8JT31-0AA0
ETU560 LSI(G) with LCD				
40	3VA6140-5JQ31-0AA0	3VA6140-6JQ31-0AA0	3VA6140-7JQ31-0AA0	3VA6140-8JQ31-0AA0
100	3VA6110-5JQ31-0AA0	3VA6110-6JQ31-0AA0	3VA6110-7JQ31-0AA0	3VA6110-8JQ31-0AA0
150	3VA6115-5JQ31-0AA0	3VA6115-6JQ31-0AA0	3VA6115-7JQ31-0AA0	3VA6115-8JQ31-0AA0
ETU820 LI LCD with Metering				
40	3VA6140-5KL31-0AA0	3VA6140-6KL31-0AA0	3VA6140-7KL31-0AA0	3VA6140-8KL31-0AA0
100	3VA6110-5KL31-0AA0	3VA6110-6KL31-0AA0	3VA6110-7KL31-0AA0	3VA6110-8KL31-0AA0
150	3VA6115-5KL31-0AA0	3VA6115-6KL31-0AA0	3VA6115-7KL31-0AA0	3VA6115-8KL31-0AA0
ETU830 LIG with LCD and Metering				
40	3VA6140-5KM31-0AA0	3VA6140-6KM31-0AA0	3VA6140-7KM31-0AA0	3VA6140-8KM31-0AA0
100	3VA6110-5KM31-0AA0	3VA6110-6KM31-0AA0	3VA6110-7KM31-0AA0	3VA6110-8KM31-0AA0
150	3VA6115-5KM31-0AA0	3VA6115-6KM31-0AA0	3VA6115-7KM31-0AA0	3VA6115-8KM31-0AA0
ETU850 LSI with LCD and Metering				
40	3VA6140-5KP31-0AA0	3VA6140-6KP31-0AA0	3VA6140-7KP31-0AA0	3VA6140-8KP31-0AA0
100	3VA6110-5KP31-0AA0	3VA6110-6KP31-0AA0	3VA6110-7KP31-0AA0	3VA6110-8KP31-0AA0
150	3VA6115-5KP31-0AA0	3VA6115-6KP31-0AA0	3VA6115-7KP31-0AA0	3VA6115-8KP31-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
40	3VA6140-5KT31-0AA0	3VA6140-6KT31-0AA0	3VA6140-7KT31-0AA0	3VA6140-8KT31-0AA0
100	3VA6110-5KT31-0AA0	3VA6110-6KT31-0AA0	3VA6110-7KT31-0AA0	3VA6110-8KT31-0AA0
150	3VA6115-5KT31-0AA0	3VA6115-6KT31-0AA0	3VA6115-7KT31-0AA0	3VA6115-8KT31-0AA0
ETU860 LSI(G) with LCD and Metering				
40	3VA6140-5KQ31-0AA0	3VA6140-6KQ31-0AA0	3VA6140-7KQ31-0AA0	3VA6140-8KQ31-0AA0
100	3VA6110-5KQ31-0AA0	3VA6110-6KQ31-0AA0	3VA6110-7KQ31-0AA0	3VA6110-8KQ31-0AA0
150	3VA6115-5KQ31-0AA0	3VA6115-6KQ31-0AA0	3VA6115-7KQ31-0AA0	3VA6115-8KQ31-0AA0

Molded Case Circuit Breakers

3VA61 150A Electronic Trip Circuit Breakers

Selection



3VA61 150A 4-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA61 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

All 3VA61 electronic trip circuit breakers are available with 100% ratings.

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 40A, 3-pole, 100% rated 3VA61 would be catalog number 3VA6140-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 listed Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA61 150A Frame 4-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MDAE) Catalog Number	H-Interrupting Class (HDAE) Catalog Number	C-Interrupting Class (CDAE) Catalog Number	L-Interrupting Class (LDAE) Catalog Number
ETU320 LI with dials				
40	3VA6140-5HL41-0AA0	3VA6140-6HL41-0AA0	3VA6140-7HL41-0AA0	3VA6140-8HL41-0AA0
100	3VA6110-5HL41-0AA0	3VA6110-6HL41-0AA0	3VA6110-7HL41-0AA0	3VA6110-8HL41-0AA0
150	3VA6115-5HL41-0AA0	3VA6115-6HL41-0AA0	3VA6115-7HL41-0AA0	3VA6115-8HL41-0AA0
ETU330 LIG with dials				
40	3VA6140-5HM41-0AA0	3VA6140-6HM41-0AA0	3VA6140-7HM41-0AA0	3VA6140-8HM41-0AA0
100	3VA6110-5HM41-0AA0	3VA6110-6HM41-0AA0	3VA6110-7HM41-0AA0	3VA6110-8HM41-0AA0
150	3VA6115-5HM41-0AA0	3VA6115-6HM41-0AA0	3VA6115-7HM41-0AA0	3VA6115-8HM41-0AA0
ETU350 LSI with dials				
40	3VA6140-5HN41-0AA0	3VA6140-6HN41-0AA0	3VA6140-7HN41-0AA0	3VA6140-8HN41-0AA0
100	3VA6110-5HN41-0AA0	3VA6110-6HN41-0AA0	3VA6110-7HN41-0AA0	3VA6110-8HN41-0AA0
150	3VA6115-5HN41-0AA0	3VA6115-6HN41-0AA0	3VA6115-7HN41-0AA0	3VA6115-8HN41-0AA0
ETU550 LSI with LCD				
40	3VA6140-5JP41-0AA0	3VA6140-6JP41-0AA0	3VA6140-7JP41-0AA0	3VA6140-8JP41-0AA0
100	3VA6110-5JP41-0AA0	3VA6110-6JP41-0AA0	3VA6110-7JP41-0AA0	3VA6110-8JP41-0AA0
150	3VA6115-5JP41-0AA0	3VA6115-6JP41-0AA0	3VA6115-7JP41-0AA0	3VA6115-8JP41-0AA0
ETU556 LSI(G Alarm) with LCD				
40	3VA6140-5JT41-0AA0	3VA6140-6JT41-0AA0	3VA6140-7JT41-0AA0	3VA6140-8JT41-0AA0
100	3VA6110-5JT41-0AA0	3VA6110-6JT41-0AA0	3VA6110-7JT41-0AA0	3VA6110-8JT41-0AA0
150	3VA6115-5JT41-0AA0	3VA6115-6JT41-0AA0	3VA6115-7JT41-0AA0	3VA6115-8JT41-0AA0
ETU560 LSI(G) with LCD				
40	3VA6140-5JQ41-0AA0	3VA6140-6JQ41-0AA0	3VA6140-7JQ41-0AA0	3VA6140-8JQ41-0AA0
100	3VA6110-5JQ41-0AA0	3VA6110-6JQ41-0AA0	3VA6110-7JQ41-0AA0	3VA6110-8JQ41-0AA0
150	3VA6115-5JQ41-0AA0	3VA6115-6JQ41-0AA0	3VA6115-7JQ41-0AA0	3VA6115-8JQ41-0AA0
ETU820 LI LCD with Metering				
40	3VA6140-5KL41-0AA0	3VA6140-6KL41-0AA0	3VA6140-7KL41-0AA0	3VA6140-8KL41-0AA0
100	3VA6110-5KL41-0AA0	3VA6110-6KL41-0AA0	3VA6110-7KL41-0AA0	3VA6110-8KL41-0AA0
150	3VA6115-5KL41-0AA0	3VA6115-6KL41-0AA0	3VA6115-7KL41-0AA0	3VA6115-8KL41-0AA0
ETU830 LIG with LCD and Metering				
40	3VA6140-5KM41-0AA0	3VA6140-6KM41-0AA0	3VA6140-7KM41-0AA0	3VA6140-8KM41-0AA0
100	3VA6110-5KM41-0AA0	3VA6110-6KM41-0AA0	3VA6110-7KM41-0AA0	3VA6110-8KM41-0AA0
150	3VA6115-5KM41-0AA0	3VA6115-6KM41-0AA0	3VA6115-7KM41-0AA0	3VA6115-8KM41-0AA0
ETU850 LSI with LCD and Metering				
40	3VA6140-5KP41-0AA0	3VA6140-6KP41-0AA0	3VA6140-7KP41-0AA0	3VA6140-8KP41-0AA0
100	3VA6110-5KP41-0AA0	3VA6110-6KP41-0AA0	3VA6110-7KP41-0AA0	3VA6110-8KP41-0AA0
150	3VA6115-5KP41-0AA0	3VA6115-6KP41-0AA0	3VA6115-7KP41-0AA0	3VA6115-8KP41-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
40	3VA6140-5KT41-0AA0	3VA6140-6KT41-0AA0	3VA6140-7KT41-0AA0	3VA6140-8KT41-0AA0
100	3VA6110-5KT41-0AA0	3VA6110-6KT41-0AA0	3VA6110-7KT41-0AA0	3VA6110-8KT41-0AA0
150	3VA6115-5KT41-0AA0	3VA6115-6KT41-0AA0	3VA6115-7KT41-0AA0	3VA6115-8KT41-0AA0
ETU860 LSI(G) with LCD and Metering				
40	3VA6140-5KQ41-0AA0	3VA6140-6KQ41-0AA0	3VA6140-7KQ41-0AA0	3VA6140-8KQ41-0AA0
100	3VA6110-5KQ41-0AA0	3VA6110-6KQ41-0AA0	3VA6110-7KQ41-0AA0	3VA6110-8KQ41-0AA0
150	3VA6115-5KQ41-0AA0	3VA6115-6KQ41-0AA0	3VA6115-7KQ41-0AA0	3VA6115-8KQ41-0AA0

Molded Case Circuit Breakers

3VA61 150A Electronic Trip Circuit Breakers

Technical information

Connectors for 75C wire for 3VA61

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)	Part Number (kit of 4 lugs)
Steel Wrap around (Cu cable only) single cable lugs	AWG 10	3/0	3VA9143-0JA12	3VA9144-0JA12
	AWG 4	350 kcmil	3VA9243-0JA12	3VA9244-0JA12
Aluminum Body Lug (Cu/Al cable) single cable lugs	AWG 14	1/0	3VA9143-0JB11	3VA9144-0JB11
	AWG 6	350 kcmil	3VA9243-0JB12	3VA9244-0JB12
Aluminum body lug with control wire tap (Cu/Al cable) single cable lugs	AWG 14	1/0	3VA9143-0JG11	3VA9144-0JG11
	AWG 6	350 kcmil	3VA9243-0JG12	3VA9244-0JG12
Aluminum body lug large (Cu/Al cable) single cable lugs and 1 ext'd terminal cover	AWG 2	350 kcmil	3VA9243-0JJ13	3VA9244-0JJ13
Aluminum body lug large with control wire tap (Cu/Al cable) single cable lugs and 1 extended terminal cover	AWG 2	350 kcmil	3VA9243-0JC13	3VA9244-0JC13
Aluminum body lug, 2 cables (Cu/Al cable) with 1 extended terminal cover	AWG 4	300 kcmil	3VA9243-0JJ22	3VA9244-0JJ22
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	AWG 4	300 kcmil	3VA9243-0JC22	3VA9244-0JC22
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9243-0JF60	3VA9244-0JF60
Copper body lug (Cu cable only) single cable lugs kit of 3 single lugs (meets requirements for 100% rated breakers)	AWG 14	1/0	3VA9143-0JD11	3VA9144-0JD11
	AWG 6	350 kcmil	3VA9243-0JD12	3VA9244-0JD12
Copper body lug (Cu cable only) with control wire tap single cable lugs	AWG 14	1/0	3VA9143-0JK11	3VA9144-0JK11
	AWG 6	350 kcmil	3VA9243-0JK12	3VA9244-0JK12

Interrupting Ratings for 3VA61

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)			
		Volts AC (50/60 Hz)			
		240	480Y/277V	480	600
M	MDAE	100	35	35	18
H	HDAE	100	65	65	22
C	CDAE	200	100	100	35
L	LDAE	200	150	150	50

Dimensions

Shipping Weight

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA61	3	4.1 (105)	7.8 (198)	3.4 (86)	5.5	2.5
3VA61	4	5.5 (140)	7.8 (198)	3.4 (86)	7.1	3.2

Molded Case Circuit Breakers

3VA61 150A Electronic Trip Circuit Breakers

Technical information

Trip Settings for 3VA61

ETU320-LI, ETU330-LIG, ETU350-LSI

Continuous Amperage	LI, LIG, LSI			LSI		LIG	LI, LIG, LSI 4P only
I_n (Amp)	I_n (Amp) (L)	t_{td} (sec) (L)	I_n (Amp) (I)①	$I_{ad} = xI_n$ (Amp) (S)	t_{ad} (sec) (S)	I_n (Amp) (G)	$I_n = xI_n$ (Amp)
40	15 - 40	0.5 - 17	60-480	1.5 - 10	0.08 - 0.4	15 - 40	1 / OFF
100	40 - 100	0.5 - 17	150-1200	1.5 - 10		20 - 100	0.5 - 1 / OFF
150	60 - 150	0.5 - 17	225-1500	1.5 - 10		30 - 150	0.5 - 1 / OFF

① I_n for ETU350 is fixed at 12X I_n

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

Continuous Amperage	LI, LIG, LSI, LSIG, LSI(G)			LSI, LSIG, LSI(G)		LIG, LSIG, LSI(G)		LSI 3P with External CT	LI, LIG, LSI, LSIG, LSI(G) 4P only
I _n (Amp)	I _n (Amp) (L)	t _{ad} (sec) (L)	I _n (Amp) (I)	I _{ad} (Amp) (S)	t _{ad} (sec) (S)	I _n (Amp) (G)	t _n (G)	I _n =xI _n (Amp)	I _n (Amp)
40	15 - 40	0.5 - 25	60-480	24 - 400	0.05 - 0.5	15 - 40	0.05 - 0.8	15 - 64 / OFF	15 - 64 / OFF
100	40 - 100	0.5 - 25	150-1200	60 - 1000		20 - 100		20 - 160 / OFF	20 - 150 / OFF
150	60 - 150	0.5 - 20	225-1500	90 - 1500		30 - 150		30 - 240 / OFF	30 - 150 / OFF

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://www.siemens.com/download?BTLV_50412.

Internal accessories Optional equipment		3VA6 150/250 A 3-pole										3VA6 150/250 A 4-pole									
Slot No.:		24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5
Auxiliary switch	AUX_HQ	x	x	x	x																
	AUX_HQ_el	x	x	x	x																
	AUX_HP	x	x	x	x																
Leading changeover switch	LCS_HQ																				
	LCS_HQ_el																				
	LCS_HP																				
Trip alarm switch	TAS_HQ																				
	TAS_HQ_el																				
	TAS_HP																				
Electrical alarm switch	EAS_HQ																				
	EAS_HQ_el																				
Auxiliary switch	STF																				
	STL																				
	UVR																				
	UVI																				
	UVR																				
ETU/communication	COM060																				
	Breaker data server																				
	24 V module																				
Other																					
Cylinder lock (type Ronis)																					

See page 5-59 for internal accessory part numbers.

Molded Case Circuit Breakers

3VA52 250A Thermal-magnetic Trip Circuit Breakers

Selection

3VA52 250 A Frame, 2-(3)Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MFAS)	H-Interrupting Class (HFAS)	C-Interrupting Class (CFAS)
	Catalogue Number	Catalogue Number	Catalogue Number

TM210 FTFM

40	3VA5240-5ED61-0AA0	3VA5240-6ED61-0AA0	3VA5240-7ED61-0AA0
45	3VA5245-5ED61-0AA0	3VA5245-6ED61-0AA0	3VA5245-7ED61-0AA0
50	3VA5250-5ED61-0AA0	3VA5250-6ED61-0AA0	3VA5250-7ED61-0AA0
60	3VA5260-5ED61-0AA0	3VA5260-6ED61-0AA0	3VA5260-7ED61-0AA0
70	3VA5270-5ED61-0AA0	3VA5270-6ED61-0AA0	3VA5270-7ED61-0AA0
80	3VA5280-5ED61-0AA0	3VA5280-6ED61-0AA0	3VA5280-7ED61-0AA0
90	3VA5290-5ED61-0AA0	3VA5290-6ED61-0AA0	3VA5290-7ED61-0AA0
100	3VA5210-5ED61-0AA0	3VA5210-6ED61-0AA0	3VA5210-7ED61-0AA0
110	3VA5211-5ED61-0AA0	3VA5211-6ED61-0AA0	3VA5211-7ED61-0AA0
125	3VA5212-5ED61-0AA0	3VA5212-6ED61-0AA0	3VA5212-7ED61-0AA0
150	3VA5215-5ED61-0AA0	3VA5215-6ED61-0AA0	3VA5215-7ED61-0AA0
175	3VA5217-5ED61-0AA0	3VA5217-6ED61-0AA0	3VA5217-7ED61-0AA0
200	3VA5220-5ED61-0AA0	3VA5220-6ED61-0AA0	3VA5220-7ED61-0AA0
225	3VA5222-5ED61-0AA0	3VA5222-6ED61-0AA0	3VA5222-7ED61-0AA0
250	3VA5225-5ED61-0AA0	3VA5225-6ED61-0AA0	3VA5225-7ED61-0AA0

TM230 FTAM

70	3VA5270-5EC61-0AA0	3VA5270-6EC61-0AA0	3VA5270-7EC61-0AA0
80	3VA5280-5EC61-0AA0	3VA5280-6EC61-0AA0	3VA5280-7EC61-0AA0
90	3VA5290-5EC61-0AA0	3VA5290-6EC61-0AA0	3VA5290-7EC61-0AA0
100	3VA5210-5EC61-0AA0	3VA5210-6EC61-0AA0	3VA5210-7EC61-0AA0
110	3VA5211-5EC61-0AA0	3VA5211-6EC61-0AA0	3VA5211-7EC61-0AA0
125	3VA5212-5EC61-0AA0	3VA5212-6EC61-0AA0	3VA5212-7EC61-0AA0
150	3VA5215-5EC61-0AA0	3VA5215-6EC61-0AA0	3VA5215-7EC61-0AA0
175	3VA5217-5EC61-0AA0	3VA5217-6EC61-0AA0	3VA5217-7EC61-0AA0
200	3VA5220-5EC61-0AA0	3VA5220-6EC61-0AA0	3VA5220-7EC61-0AA0
225	3VA5222-5EC61-0AA0	3VA5222-6EC61-0AA0	3VA5222-7EC61-0AA0
250	3VA5225-5EC61-0AA0	3VA5225-6EC61-0AA0	3VA5225-7EC61-0AA0



3VA52 250A 3-Pole

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA52 thermal-magnetic trip circuit breakers are UL listed for reverse feed applications.

For NAVAL rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA @480VAC, 150A, 3-pole, NAVAL rated 3VA52 would be catalog number 3VA5215-5ED31-1AA0)

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA52	2(3-) pole	4.1 (105)	7.3 (185)	3.3 (83)	4.1	1.9
3VA52	3-pole	4.1 (105)	7.3 (185)	3.3 (83)	4.5	2.1

Shipping Weight

Enclosures (3-pole only)

Nema Type	Catalogue Number
1 surface	3VAE250N1S
1 flush	3VAE250N1F
3R	3VAE250N3R
12	3VAE250N12
4X (304)	3VAE250N4X
4X (316)	3VAE250N4X316
Neutral	N250X
200% Neutral	N2250X

Molded Case Circuit Breakers

3VA52 250A Thermal-magnetic Trip Circuit Breakers

Selection

3VA52 250 A Frame, 3-Pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MFAS)	H-Interrupting Class (HFAS)	C-Interrupting Class (CFAS)
	Catalog Number	Catalog Number	Catalog Number

TM210 FTFM[Ⓢ]

40	3VA5240-5ED31-0AA0	3VA5240-6ED31-0AA0	3VA5240-7ED31-0AA0
45	3VA5245-5ED31-0AA0	3VA5245-6ED31-0AA0	3VA5245-7ED31-0AA0
50	3VA5250-5ED31-0AA0	3VA5250-6ED31-0AA0	3VA5250-7ED31-0AA0
60	3VA5260-5ED31-0AA0	3VA5260-6ED31-0AA0	3VA5260-7ED31-0AA0
70	3VA5270-5ED31-0AA0	3VA5270-6ED31-0AA0	3VA5270-7ED31-0AA0
80	3VA5280-5ED31-0AA0	3VA5280-6ED31-0AA0	3VA5280-7ED31-0AA0
90	3VA5290-5ED31-0AA0	3VA5290-6ED31-0AA0	3VA5290-7ED31-0AA0
100	3VA5210-5ED31-0AA0	3VA5210-6ED31-0AA0	3VA5210-7ED31-0AA0
110	3VA5211-5ED31-0AA0	3VA5211-6ED31-0AA0	3VA5211-7ED31-0AA0
125	3VA5212-5ED31-0AA0	3VA5212-6ED31-0AA0	3VA5212-7ED31-0AA0
150	3VA5215-5ED31-0AA0	3VA5215-6ED31-0AA0	3VA5215-7ED31-0AA0
175	3VA5217-5ED31-0AA0	3VA5217-6ED31-0AA0	3VA5217-7ED31-0AA0
200	3VA5220-5ED31-0AA0	3VA5220-6ED31-0AA0	3VA5220-7ED31-0AA0
225	3VA5222-5ED31-0AA0	3VA5222-6ED31-0AA0	3VA5222-7ED31-0AA0
250	3VA5225-5ED31-0AA0	3VA5225-6ED31-0AA0	3VA5225-7ED31-0AA0

TM230 FTAM[Ⓢ]

70	3VA5270-5EC31-0AA0	3VA5270-6EC31-0AA0	3VA5270-7EC31-0AA0
80	3VA5280-5EC31-0AA0	3VA5280-6EC31-0AA0	3VA5280-7EC31-0AA0
90	3VA5290-5EC31-0AA0	3VA5290-6EC31-0AA0	3VA5290-7EC31-0AA0
100	3VA5210-5EC31-0AA0	3VA5210-6EC31-0AA0	3VA5210-7EC31-0AA0
110	3VA5211-5EC31-0AA0	3VA5211-6EC31-0AA0	3VA5211-7EC31-0AA0
125	3VA5212-5EC31-0AA0	3VA5212-6EC31-0AA0	3VA5212-7EC31-0AA0
150	3VA5215-5EC31-0AA0	3VA5215-6EC31-0AA0	3VA5215-7EC31-0AA0
175	3VA5217-5EC31-0AA0	3VA5217-6EC31-0AA0	3VA5217-7EC31-0AA0
200	3VA5220-5EC31-0AA0	3VA5220-6EC31-0AA0	3VA5220-7EC31-0AA0
225	3VA5222-5EC31-0AA0	3VA5222-6EC31-0AA0	3VA5222-7EC31-0AA0
250	3VA5225-5EC31-0AA0	3VA5225-6EC31-0AA0	3VA5225-7EC31-0AA0

TM240 ATAM

70	3VA5270-5EF31-0AA0	3VA5270-6EF31-0AA0	3VA5270-7EF31-0AA0
80	3VA5280-5EF31-0AA0	3VA5280-6EF31-0AA0	3VA5280-7EF31-0AA0
100	3VA5210-5EF31-0AA0	3VA5210-6EF31-0AA0	3VA5210-7EF31-0AA0
125	3VA5212-5EF31-0AA0	3VA5212-6EF31-0AA0	3VA5212-7EF31-0AA0
150	3VA5215-5EF31-0AA0	3VA5215-6EF31-0AA0	3VA5215-7EF31-0AA0
175	3VA5217-5EF31-0AA0	3VA5217-6EF31-0AA0	3VA5217-7EF31-0AA0
200	3VA5220-5EF31-0AA0	3VA5220-6EF31-0AA0	3VA5220-7EF31-0AA0
250	3VA5225-5EF31-0AA0	3VA5225-6EF31-0AA0	3VA5225-7EF31-0AA0

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA52 thermal-magnetic trip circuit breakers are UL listed for reverse feed applications.

For NAVAL rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA @480VAC, 150A, 3-pole, NAVAL rated 3VA52 would be catalog number 3VA5215-5ED31-**1**AA0)

Enclosures (3-pole only)

Nema Type	Catalog Number
1 surface	3VAE250N1S
1 flush	3VAE250N1F
3R	3VAE250N3R
12	3VAE250N12
4X (304)	3VAE250N4X
4X (316)	3VAE250N4X316
Neutral	N250X
200% Neutral	N2250X

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA52	2(3-) pole	4.1 (105)	7.3 (185)	3.3 (83)	4.1	1.9
3VA52	3-pole	4.1 (105)	7.3 (185)	3.3 (83)	4.5	2.1

Shipping Weight

[Ⓢ] Available with NAVAL/50C ratings.

Molded Case Circuit Breakers

3VA52 250A Thermal-magnetic Trip Circuit Breakers

Selection

3VA52 250A Frame, 4-pole Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MFAS)	H-Interrupting Class (HFAS)	C-Interrupting Class (CFAS)
	Catalog Number	Catalog Number	Catalog Number
TM210 FTFM			
40	3VA5240-5ED41-0AA0	3VA5240-6ED41-0AA0	3VA5240-7ED41-0AA0
45	3VA5245-5ED41-0AA0	3VA5245-6ED41-0AA0	3VA5245-7ED41-0AA0
50	3VA5250-5ED41-0AA0	3VA5250-6ED41-0AA0	3VA5250-7ED41-0AA0
60	3VA5260-5ED41-0AA0	3VA5260-6ED41-0AA0	3VA5260-7ED41-0AA0
70	3VA5270-5ED41-0AA0	3VA5270-6ED41-0AA0	3VA5270-7ED41-0AA0
80	3VA5280-5ED41-0AA0	3VA5280-6ED41-0AA0	3VA5280-7ED41-0AA0
90	3VA5290-5ED41-0AA0	3VA5290-6ED41-0AA0	3VA5290-7ED41-0AA0
100	3VA5210-5ED41-0AA0	3VA5210-6ED41-0AA0	3VA5210-7ED41-0AA0
110	3VA5211-5ED41-0AA0	3VA5211-6ED41-0AA0	3VA5211-7ED41-0AA0
125	3VA5212-5ED41-0AA0	3VA5212-6ED41-0AA0	3VA5212-7ED41-0AA0
150	3VA5215-5ED41-0AA0	3VA5215-6ED41-0AA0	3VA5215-7ED41-0AA0
175	3VA5217-5ED41-0AA0	3VA5217-6ED41-0AA0	3VA5217-7ED41-0AA0
200	3VA5220-5ED41-0AA0	3VA5220-6ED41-0AA0	3VA5220-7ED41-0AA0
225	3VA5222-5ED41-0AA0	3VA5222-6ED41-0AA0	3VA5222-7ED41-0AA0
250	3VA5225-5ED41-0AA0	3VA5225-6ED41-0AA0	3VA5225-7ED41-0AA0
TM210 FTFM 100% Neutral			
90	3VA5290-5GD41-0AA0	3VA5290-6GD41-0AA0	3VA5290-7GD41-0AA0
100	3VA5210-5GD41-0AA0	3VA5210-6GD41-0AA0	3VA5210-7GD41-0AA0
110	3VA5211-5GD41-0AA0	3VA5211-6GD41-0AA0	3VA5211-7GD41-0AA0
125	3VA5212-5GD41-0AA0	3VA5212-6GD41-0AA0	3VA5212-7GD41-0AA0
150	3VA5215-5GD41-0AA0	3VA5215-6GD41-0AA0	3VA5215-7GD41-0AA0
175	3VA5217-5GD41-0AA0	3VA5217-6GD41-0AA0	3VA5217-7GD41-0AA0
200	3VA5220-5GD41-0AA0	3VA5220-6GD41-0AA0	3VA5220-7GD41-0AA0
225	3VA5222-5GD41-0AA0	3VA5222-6GD41-0AA0	3VA5222-7GD41-0AA0
250	3VA5225-5GD41-0AA0	3VA5225-6GD41-0AA0	3VA5225-7GD41-0AA0
TM230 FTAM			
70	3VA5270-5EC41-0AA0	3VA5270-6EC41-0AA0	3VA5270-7EC41-0AA0
80	3VA5280-5EC41-0AA0	3VA5280-6EC41-0AA0	3VA5280-7EC41-0AA0
90	3VA5290-5EC41-0AA0	3VA5290-6EC41-0AA0	3VA5290-7EC41-0AA0
100	3VA5210-5EC41-0AA0	3VA5210-6EC41-0AA0	3VA5210-7EC41-0AA0
110	3VA5211-5EC41-0AA0	3VA5211-6EC41-0AA0	3VA5211-7EC41-0AA0
125	3VA5212-5EC41-0AA0	3VA5212-6EC41-0AA0	3VA5212-7EC41-0AA0
150	3VA5215-5EC41-0AA0	3VA5215-6EC41-0AA0	3VA5215-7EC41-0AA0
175	3VA5217-5EC41-0AA0	3VA5217-6EC41-0AA0	3VA5217-7EC41-0AA0
200	3VA5220-5EC41-0AA0	3VA5220-6EC41-0AA0	3VA5220-7EC41-0AA0
225	3VA5222-5EC41-0AA0	3VA5222-6EC41-0AA0	3VA5222-7EC41-0AA0
250	3VA5225-5EC41-0AA0	3VA5225-6EC41-0AA0	3VA5225-7EC41-0AA0
TM230 FTAM 100% Neutral			
90	3VA5290-5GC41-0AA0	3VA5290-6GC41-0AA0	3VA5290-7GC41-0AA0
100	3VA5210-5GC41-0AA0	3VA5210-6GC41-0AA0	3VA5210-7GC41-0AA0
110	3VA5211-5GC41-0AA0	3VA5211-6GC41-0AA0	3VA5211-7GC41-0AA0
125	3VA5212-5GC41-0AA0	3VA5212-6GC41-0AA0	3VA5212-7GC41-0AA0
150	3VA5215-5GC41-0AA0	3VA5215-6GC41-0AA0	3VA5215-7GC41-0AA0
175	3VA5217-5GC41-0AA0	3VA5217-6GC41-0AA0	3VA5217-7GC41-0AA0
200	3VA5220-5GC41-0AA0	3VA5220-6GC41-0AA0	3VA5220-7GC41-0AA0
225	3VA5222-5GC41-0AA0	3VA5222-6GC41-0AA0	3VA5222-7GC41-0AA0
250	3VA5225-5GC41-0AA0	3VA5225-6GC41-0AA0	3VA5225-7GC41-0AA0
TM240 ATAM			
70	3VA5270-5EF41-0AA0	3VA5270-6EF41-0AA0	3VA5270-7EF41-0AA0
80	3VA5280-5EF41-0AA0	3VA5280-6EF41-0AA0	3VA5280-7EF41-0AA0
100	3VA5210-5EF41-0AA0	3VA5210-6EF41-0AA0	3VA5210-7EF41-0AA0
125	3VA5212-5EF41-0AA0	3VA5212-6EF41-0AA0	3VA5212-7EF41-0AA0
150	3VA5215-5EF41-0AA0	3VA5215-6EF41-0AA0	3VA5215-7EF41-0AA0
175	3VA5217-5EF41-0AA0	3VA5217-6EF41-0AA0	3VA5217-7EF41-0AA0
200	3VA5220-5EF41-0AA0	3VA5220-6EF41-0AA0	3VA5220-7EF41-0AA0
250	3VA5225-5EF41-0AA0	3VA5225-6EF41-0AA0	3VA5225-7EF41-0AA0
TM240 ATAM 100% Neutral			
100	3VA5210-5GF41-0AA0	3VA5210-6GF41-0AA0	3VA5210-7GF41-0AA0
125	3VA5212-5GF41-0AA0	3VA5212-6GF41-0AA0	3VA5212-7GF41-0AA0
150	3VA5215-5GF41-0AA0	3VA5215-6GF41-0AA0	3VA5215-7GF41-0AA0
175	3VA5217-5GF41-0AA0	3VA5217-6GF41-0AA0	3VA5217-7GF41-0AA0
200	3VA5220-5GF41-0AA0	3VA5220-6GF41-0AA0	3VA5220-7GF41-0AA0
250	3VA5225-5GF41-0AA0	3VA5225-6GF41-0AA0	3VA5225-7GF41-0AA0

Interrupting Ratings for 3VA52

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)							
		Volts AC (50/60 Hz)					Volts DC		
		240	480Y/277V	480	600Y/347V	600	250	500	600 (3P)
M	MFAS	85	35	35	18	18	50	50	50
H	HFAS	100	65	65	25	25	85	85	85
C	CFAS	200	100	100	35	35	100	100	100

Trip Settings for 3VA52

TM210 - FTFM		
I _n (A)	I _i (A)	I _l (A)
100	100	1000
110	110	1100
125	125	1250
150	150	1500
175	175	1750
200	200	2000
225	225	2250
250	250	2500

TM230 - FTAM							
I _n (A)	I _i (A)	I _i (A)					
100	100	500	600	700	800	900	1000
110	110	550	660	770	880	990	1100
125	125	625	750	875	1000	1125	1125
150	150	750	900	1050	1200	1350	1500
175	175	875	1050	1225	1400	1575	1750
200	200	1000	1200	1400	1600	1800	2000
225	225	1125	1350	1575	1800	2025	2250
250	250	1250	1500	1750	2000	2250	2500

Connectors for 75C Wire for 3VA52

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)
Steel wrap around (Cu cable only), single cable lugs	AWG 10	3/0	3VA9233-0JA11
	AWG 4	350 kcmil	3VA9233-0JA12
Aluminum body lug (Cu/Al cable), single cable lugs	AWG 6	350 kcmil	3VA9233-0JB12
Aluminum body lug (Cu/Al cable) with control wire tap, single cable lugs	AWG 6	350 kcmil	3VA9233-0JG12
Aluminum body lug large (Cu/Al cable) single cable lugs with 1 extended terminal cover	AWG 2	350 kcmil	3VA9233-0JJ13
Aluminum body lug large with control wire tap (Cu/Al cable) single cable lugs and 1 extended terminal cover	AWG 2	350 kcmil	3VA9233-0JC13
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	AWG 4	300 kcmil	3VA9233-0JJ22
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9233-0JF60
Copper body lug (Cu cable only) single cable lugs	AWG 6	350 kcmil	3VA9233-0JD12
Copper body lug with control wire tap (Cu cable only) single cable lugs	AWG 6	350 kcmil	3VA9233-0JK12

Internal accessories		Optional equipment	
		Slot No.:	
Auxiliary switch	Type		
Auxiliary switch	AUX_HQ		
	AUX_HQ_el		
	AUX_HP		
Leading changeover switch	LCS_HQ		
	LCS_HQ_el		
	LCS_HP		
Auxiliary switch	Type		
Trip alarm switch	TAS_HQ		
	TAS_HQ_el		
	TAS_HP		
Auxiliary switch	Type		
Shunt trip flexible	STF		
Shunt trip left	STL		
Undervoltage release	UVR		
Universal release	UVI		
Other			
Cylinder lock (type Ronis)			

See page 5-59 for internal accessory part numbers.

Molded Case Circuit Breakers

3VA62 250A Electronic Trip Circuit Breakers

Selection



3VA62 250A 3-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA62 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

All 3VA62 electronic trip circuit breakers are available with 100% ratings.

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 100A, 3-pole, 100% rated 3VA62 would be catalog number 3VA6210-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA62 250A Frame 3-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MFAE-Y)	H-Interrupting Class (HFAE-Y)	C-Interrupting Class (CFAE-Y)	L-Interrupting Class (LFAE-Y)
	Catalogue Number	Catalogue Number	Catalogue Number	Catalogue Number
ETU320 LI with dials				
100	3VA6210-5HL31-0AA0	3VA6210-6HL31-0AA0	3VA6210-7HL31-0AA0	3VA6210-8HL31-0AA0
250	3VA6225-5HL31-0AA0	3VA6225-6HL31-0AA0	3VA6225-7HL31-0AA0	3VA6225-8HL31-0AA0
ETU330 LIG with dials				
100	3VA6210-5HM31-0AA0	3VA6210-6HM31-0AA0	3VA6210-7HM31-0AA0	3VA6210-8HM31-0AA0
250	3VA6225-5HM31-0AA0	3VA6225-6HM31-0AA0	3VA6225-7HM31-0AA0	3VA6225-8HM31-0AA0
ETU350 LSI with dials				
100	3VA6210-5HN31-0AA0	3VA6210-6HN31-0AA0	3VA6210-7HN31-0AA0	3VA6210-8HN31-0AA0
250	3VA6225-5HN31-0AA0	3VA6225-6HN31-0AA0	3VA6225-7HN31-0AA0	3VA6225-8HN31-0AA0
ETU550 LSI with LCD				
100	3VA6210-5JP31-0AA0	3VA6210-6JP31-0AA0	3VA6210-7JP31-0AA0	3VA6210-8JP31-0AA0
250	3VA6225-5JP31-0AA0	3VA6225-6JP31-0AA0	3VA6225-7JP31-0AA0	3VA6225-8JP31-0AA0
ETU556 LSI(G Alarm) with LCD				
100	3VA6210-5JT31-0AA0	3VA6210-6JT31-0AA0	3VA6210-7JT31-0AA0	3VA6210-8JT31-0AA0
250	3VA6225-5JT31-0AA0	3VA6225-6JT31-0AA0	3VA6225-7JT31-0AA0	3VA6225-8JT31-0AA0
ETU560 LSI(G) with LCD				
100	3VA6210-5JQ31-0AA0	3VA6210-6JQ31-0AA0	3VA6210-7JQ31-0AA0	3VA6210-8JQ31-0AA0
250	3VA6225-5JQ31-0AA0	3VA6225-6JQ31-0AA0	3VA6225-7JQ31-0AA0	3VA6225-8JQ31-0AA0
ETU820 LI with LCD and Metering				
100	3VA6210-5KL31-0AA0	3VA6210-6KL31-0AA0	3VA6210-7KL31-0AA0	3VA6210-8KL31-0AA0
250	3VA6225-5KL31-0AA0	3VA6225-6KL31-0AA0	3VA6225-7KL31-0AA0	3VA6225-8KL31-0AA0
ETU830 LIG with LCD and Metering				
100	3VA6210-5KM31-0AA0	3VA6210-6KM31-0AA0	3VA6210-7KM31-0AA0	3VA6210-8KM31-0AA0
250	3VA6225-5KM31-0AA0	3VA6225-6KM31-0AA0	3VA6225-7KM31-0AA0	3VA6225-8KM31-0AA0
ETU850 LSI with LCD and Metering				
100	3VA6210-5KP31-0AA0	3VA6210-6KP31-0AA0	3VA6210-7KP31-0AA0	3VA6210-8KP31-0AA0
250	3VA6225-5KP31-0AA0	3VA6225-6KP31-0AA0	3VA6225-7KP31-0AA0	3VA6225-8KP31-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
100	3VA6210-5KT31-0AA0	3VA6210-6KT31-0AA0	3VA6210-7KT31-0AA0	3VA6210-8KT31-0AA0
250	3VA6225-5KT31-0AA0	3VA6225-6KT31-0AA0	3VA6225-7KT31-0AA0	3VA6225-8KT31-0AA0
ETU860 LSI(G) with LCD and Metering				
100	3VA6210-5KQ31-0AA0	3VA6210-6KQ31-0AA0	3VA6210-7KQ31-0AA0	3VA6210-8KQ31-0AA0
250	3VA6225-5KQ31-0AA0	3VA6225-6KQ31-0AA0	3VA6225-7KQ31-0AA0	3VA6225-8KQ31-0AA0

Molded Case Circuit Breakers

3VA62 250A Electronic Trip Circuit Breakers

Selection



3VA62 250A 4-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA62 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

All 3VA62 electronic trip circuit breakers are available with 100% ratings.

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 100A, 3-pole, 100% rated 3VA62 would be catalog number 3VA6210-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA62 250A Frame 4-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MFAE-Y)	H-Interrupting Class (HFAE-Y)	C-Interrupting Class (CFAE-Y)	L-Interrupting Class (LFAE-Y)
	Catalog Number	Catalog Number	Catalog Number	Catalog Number
ETU320 LI with dials				
100	3VA6210-5HL41-0AA0	3VA6210-6HL41-0AA0	3VA6210-7HL41-0AA0	3VA6210-8HL41-0AA0
250	3VA6225-5HL41-0AA0	3VA6225-6HL41-0AA0	3VA6225-7HL41-0AA0	3VA6225-8HL41-0AA0
ETU330 LIG with dials				
100	3VA6210-5HM41-0AA0	3VA6210-6HM41-0AA0	3VA6210-7HM41-0AA0	3VA6210-8HM41-0AA0
250	3VA6225-5HM41-0AA0	3VA6225-6HM41-0AA0	3VA6225-7HM41-0AA0	3VA6225-8HM41-0AA0
ETU350 LSI with dials				
100	3VA6210-5HN41-0AA0	3VA6210-6HN41-0AA0	3VA6210-7HN41-0AA0	3VA6210-8HN41-0AA0
250	3VA6225-5HN41-0AA0	3VA6225-6HN41-0AA0	3VA6225-7HN41-0AA0	3VA6225-8HN41-0AA0
ETU550 LSI with LCD				
100	3VA6210-5JP41-0AA0	3VA6210-6JP41-0AA0	3VA6210-7JP41-0AA0	3VA6210-8JP41-0AA0
250	3VA6225-5JP41-0AA0	3VA6225-6JP41-0AA0	3VA6225-7JP41-0AA0	3VA6225-8JP41-0AA0
ETU556 LSI(G Alarm) with LCD				
100	3VA6210-5JT41-0AA0	3VA6210-6JT41-0AA0	3VA6210-7JT41-0AA0	3VA6210-8JT41-0AA0
250	3VA6225-5JT41-0AA0	3VA6225-6JT41-0AA0	3VA6225-7JT41-0AA0	3VA6225-8JT41-0AA0
ETU560 LSI(G) with LCD				
100	3VA6210-5JQ41-0AA0	3VA6210-6JQ41-0AA0	3VA6210-7JQ41-0AA0	3VA6210-8JQ41-0AA0
250	3VA6225-5JQ41-0AA0	3VA6225-6JQ41-0AA0	3VA6225-7JQ41-0AA0	3VA6225-8JQ41-0AA0
ETU820 LI with LCD and Metering				
100	3VA6210-5KL41-0AA0	3VA6210-6KL41-0AA0	3VA6210-7KL41-0AA0	3VA6210-8KL41-0AA0
250	3VA6225-5KL41-0AA0	3VA6225-6KL41-0AA0	3VA6225-7KL41-0AA0	3VA6225-8KL41-0AA0
ETU830 LIG with LCD and Metering				
100	3VA6210-5KM41-0AA0	3VA6210-6KM41-0AA0	3VA6210-7KM41-0AA0	3VA6210-8KM41-0AA0
250	3VA6225-5KM41-0AA0	3VA6225-6KM41-0AA0	3VA6225-7KM41-0AA0	3VA6225-8KM41-0AA0
ETU850 LSI with LCD and Metering				
100	3VA6210-5KP41-0AA0	3VA6210-6KP41-0AA0	3VA6210-7KP41-0AA0	3VA6210-8KP41-0AA0
250	3VA6225-5KP41-0AA0	3VA6225-6KP41-0AA0	3VA6225-7KP41-0AA0	3VA6225-8KP41-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
100	3VA6210-5KT41-0AA0	3VA6210-6KT41-0AA0	3VA6210-7KT41-0AA0	3VA6210-8KT41-0AA0
250	3VA6225-5KT41-0AA0	3VA6225-6KT41-0AA0	3VA6225-7KT41-0AA0	3VA6225-8KT41-0AA0
ETU860 LSI(G) with LCD and Metering				
100	3VA6210-5KQ41-0AA0	3VA6210-6KQ41-0AA0	3VA6210-7KQ41-0AA0	3VA6210-8KQ41-0AA0
250	3VA6225-5KQ41-0AA0	3VA6225-6KQ41-0AA0	3VA6225-7KQ41-0AA0	3VA6225-8KQ41-0AA0

Molded Case Circuit Breakers

3VA62 250A Electronic Trip Circuit Breakers

Technical information

Connectors for 75C wire for 3VA62

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)	Part Number (kit of 4 lugs)
Steel Wrap around (Cu cable only) single cable lugs	AWG 10	3/0	3VA9143-0JA12	3VA9144-0JA12
	AWG 4	350 kcmil	3VA9243-0JA12	3VA9244-0JA12
Aluminum Body Lug (Cu/Al cable) single cable lugs	AWG 14	1/0	3VA9143-0JB11	3VA9144-0JB11
	AWG 6	350 kcmil	3VA9243-0JB12	3VA9244-0JB12
Aluminum body lug with control wire tap (Cu/Al cable) single cable lugs	AWG 14	1/0	3VA9143-0JG11	3VA9144-0JG11
	AWG 6	350 kcmil	3VA9243-0JG12	3VA9244-0JG12
Aluminum body lug large (Cu/Al cable) single cable lugs and 1 ext'd terminal cover	AWG 2	350 kcmil	3VA9243-0JJ13	3VA9244-0JJ13
Aluminum body lug large with control wire tap (Cu/Al cable) single cable lugs and 1 extended terminal cover	AWG 2	350 kcmil	3VA9243-0JC13	3VA9244-0JC13
Aluminum body lug, 2 cables (Cu/Al cable) with 1 extended terminal cover	AWG 4	300 kcmil	3VA9243-0JJ22	3VA9244-0JJ22
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	AWG 4	300 kcmil	3VA9243-0JC22	3VA9244-0JC22
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9243-0JF60	3VA9244-0JF60
Copper body lug (Cu cable only) single cable lugs (meets requirements for 100% rated breakers)	AWG 14	1/0	3VA9143-0JD11	3VA9144-0JD11
	AWG 6	350 kcmil	3VA9243-0JD12	3VA9244-0JD12
Copper body lug (Cu cable only) with control wire tap single cable lugs	AWG 14	1/0	3VA9143-0JK11	3VA9144-0JK11
	AWG 6	350 kcmil	3VA9243-0JK12	3VA9244-0JK12

Interrupting Ratings for 3VA62

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)				
		Volts AC (50/60 Hz)				
		240	480Y/277V	480	600Y/347V	600
M	MFAE-Y	100	35	35	18	—
H	HFAE-Y	100	65	65	22	—
C	CFAE-Y	200	100	100	35	—
L	LFAE-Y	200	150	150	50	—

Dimensions

Shipping Weight

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA62	3	4.1 (105)	7.8 (198)	3.4 (86)	5.5	2.5
3VA62	4	5.5 (140)	7.8 (198)	3.4 (86)	7.1	3.2

5

MOLDED CASE
CIRCUIT BREAKERS

Molded Case Circuit Breakers

3VA62 250A Electronic Trip Circuit Breakers

Technical information

Trip Settings for 3VA62

ETU320-LI, ETU330-LIG, ETU350-LSI

Continuous Amperage	LI, LIG, LSI			LSI		LIG	LI, LIG, LSI 4P only
I _n (Amp)	I _n (Amp) (L)	t _{in} (sec) (L)	I _n (Amp) (I)①	I _{sc} = xI _n (Amp) (S)	t _{in} (sec) (S)	I _n (Amp) (G)	I _{sc} =xI _n (Amp)
100	40 - 100	0.5 - 17	150-1200	1.5 - 10	0.08 - 0.4	20 - 100	0.5 - 1 / OFF
250	100 - 250	0.5 - 13	375-2500	1.5 - 10		50 - 250	0.5 - 1 / OFF

① I_n for ETU350 is fixed at 12X I_n.

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

Continuous Amperage	LI, LIG, LSI, LSIG, LSI(G)			LSI, LSIG, LSI(G)		LIG, LSIG, LSI(G)	LSI 3P with External CT	LI, LIG, LSI, LSIG, LSI(G) 4P only
I _n (Amp)	I _n (Amp) (L)	t _{in} (sec) (L)	I _n (Amp) (I)	I _{sc} (Amp) (S)	t _{in} (sec) (S)	I _n (Amp) (G)	t _{in} (G)	I _{sc} =xI _n (Amp)
100	40 - 100	0.5 - 25	150-1200	60 - 1000	0.05 - 0.5	20 - 100	0.05 - 0.8	20 - 160 / OFF
250	100 - 250	0.5 - 13	375-2500	150 - 2500		50 - 250		50 - 400 / OFF

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://www.siemens.com/download?BTLV_50412

Internal accessories Optional equipment		3VA6 150/250 A 3-pole										3VA6 150/250 A 4-pole									
Slot No.:		24	23	22	21	250 A	11	12	13	14	24	23	22	21	250 A	11	12	13	14		
Auxiliary switch		Type																			
Auxiliary switch	AUX_HQ	x	x	x	x		x	x	x	x	x	x	x	x		x	x	x	x		
	AUX_HQ_el	x	x	x	x		x	x	x	x	x	x	x	x		x	x	x	x		
	AUX_HP						x									x					
Leading changeover switch	LCS_HQ						x									x					
	LCS_HQ_el						x									x					
	LCS_HP						x									x					
Auxiliary switch		Type																			
Trip alarm switch	TAS_HQ			x	x		x	x						x	x		x	x			
	TAS_HQ_el			x	x		x	x						x	x		x	x			
	TAS_HP						x							x			x				
Electrical alarm switch	EAS_HQ									x									x		
	EAS_HQ_el									x									x		
Auxiliary switch		Type																			
Shunt trip flexible	STF			x				x						x							
Shunt trip left	STL			x										x							
Undervoltage release	UVR			x										x							
Universal release	UVI			x										x							
ETU/communication		Type																			
Communication module	COM060							x									x				
Breaker data server																					
24 V module								x										x			
Other																					
Cylinder lock (type Ronis)								x										x			

See page 59 for internal accessory part numbers.

Molded Case Circuit Breakers

3VA53 400A Thermal-magnetic Trip Circuit Breakers

Selection

3VA53 400A Frame, 2-(3)Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MJAS)	H-Interrupting Class (HJAS)	C-Interrupting Class (CJAS)
	Catalog Number	Catalog Number	Catalog Number
TM230 FTAM			
200	3VA5320-5EC61-0AA0	3VA5320-6EC61-0AA0	3VA5320-7EC61-0AA0
225	3VA5322-5EC61-0AA0	3VA5322-6EC61-0AA0	3VA5322-7EC61-0AA0
250	3VA5325-5EC61-0AA0	3VA5325-6EC61-0AA0	3VA5325-7EC61-0AA0
300	3VA5330-5EC61-0AA0	3VA5330-6EC61-0AA0	3VA5330-7EC61-0AA0
350	3VA5335-5EC61-0AA0	3VA5335-6EC61-0AA0	3VA5335-7EC61-0AA0
400	3VA5340-5EC61-0AA0	3VA5340-6EC61-0AA0	3VA5340-7EC61-0AA0

3VA53 400A Frame, 3-Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MJAS)	H-Interrupting Class (HJAS)	C-Interrupting Class (CJAS)
	Catalog Number	Catalog Number	Catalog Number
TM230 FTAM [Ⓢ]			
200	3VA5320-5EC31-0AA0	3VA5320-6EC31-0AA0	3VA5320-7EC31-0AA0
225	3VA5322-5EC31-0AA0	3VA5322-6EC31-0AA0	3VA5322-7EC31-0AA0
250	3VA5325-5EC31-0AA0	3VA5325-6EC31-0AA0	3VA5325-7EC31-0AA0
300	3VA5330-5EC31-0AA0	3VA5330-6EC31-0AA0	3VA5330-7EC31-0AA0
350	3VA5335-5EC31-0AA0	3VA5335-6EC31-0AA0	3VA5335-7EC31-0AA0
400	3VA5340-5EC31-0AA0	3VA5340-6EC31-0AA0	3VA5340-7EC31-0AA0

TM240 ATAM			
200	3VA5320-5EF31-0AA0	3VA5320-6EF31-0AA0	3VA5320-7EF31-0AA0
225	3VA5322-5EF31-0AA0	3VA5322-6EF31-0AA0	3VA5322-7EF31-0AA0
250	3VA5325-5EF31-0AA0	3VA5325-6EF31-0AA0	3VA5325-7EF31-0AA0
300	3VA5330-5EF31-0AA0	3VA5330-6EF31-0AA0	3VA5330-7EF31-0AA0
350	3VA5335-5EF31-0AA0	3VA5335-6EF31-0AA0	3VA5335-7EF31-0AA0
400	3VA5340-5EF31-0AA0	3VA5340-6EF31-0AA0	3VA5340-7EF31-0AA0

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA53	3	6.4 (162)	10.3 (262)	6.7 (170)	11.5	5.2
3VA53	4	8.2 (208)	10.3 (262)	6.7 (170)	15.0	6.8

Shipping Weight

Interrupting Ratings for 3VA53

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)									
		Volts AC (50/60 Hz)					Volts DC				
		240	480Y/ 277V	480	600Y/ 347V	600	250 (2P)	600 (3P)	750 (3P)	750 (4P)	1000 (4P)
M	MJAS	65	35	35	18	18	50	50	6	50	6
H	HJAS	100	65	65	25	25	85	85	6	85	6
C	CJAS	200	100	100	35	35	100	100	10	100	10



3VA53 400A 3-Pole

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA53 thermal-magnetic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

For NAVAL rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA@480VAC, 400A, 3-pole, rated 3VA53 would be catalog number 3VA5340-5EC31-1AA0)

Ⓢ Available with NAVAL/50C ratings.

Molded Case Circuit Breakers

3VA53 400A Thermal-magnetic Trip Circuit Breakers

Selection

3VA53 400A Frame, 4-Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MJAS)	H-Interrupting Class (HJAS)	C-Interrupting Class (CJAS)
	Catalog Number	Catalog Number	Catalog Number

TM230 FTAM Unprotected Neutral

200	3VA5320-5EC41-0AA0	3VA5320-6EC41-0AA0	3VA5320-7EC41-0AA0
225	3VA5322-5EC41-0AA0	3VA5322-6EC41-0AA0	3VA5322-7EC41-0AA0
250	3VA5325-5EC41-0AA0	3VA5325-6EC41-0AA0	3VA5325-7EC41-0AA0
300	3VA5330-5EC41-0AA0	3VA5330-6EC41-0AA0	3VA5330-7EC41-0AA0
350	3VA5335-5EC41-0AA0	3VA5335-6EC41-0AA0	3VA5335-7EC41-0AA0
400	3VA5340-5EC41-0AA0	3VA5340-6EC41-0AA0	3VA5340-7EC41-0AA0

TM240 ATAM Unprotected Neutral

200	3VA5320-5EF41-0AA0	3VA5320-6EF41-0AA0	3VA5320-7EF41-0AA0
225	3VA5322-5EF41-0AA0	3VA5322-6EF41-0AA0	3VA5322-7EF41-0AA0
250	3VA5325-5EF41-0AA0	3VA5325-6EF41-0AA0	3VA5325-7EF41-0AA0
300	3VA5330-5EF41-0AA0	3VA5330-6EF41-0AA0	3VA5330-7EF41-0AA0
350	3VA5335-5EF41-0AA0	3VA5335-6EF41-0AA0	3VA5335-7EF41-0AA0
400	3VA5340-5EF41-0AA0	3VA5340-6EF41-0AA0	3VA5340-7EF41-0AA0

TM230 FTAM 100% Neutral

200	3VA5320-5GC41-0AA0	3VA5320-6GC41-0AA0	3VA5320-7GC41-0AA0
225	3VA5322-5GC41-0AA0	3VA5322-6GC41-0AA0	3VA5322-7GC41-0AA0
250	3VA5325-5GC41-0AA0	3VA5325-6GC41-0AA0	3VA5325-7GC41-0AA0
300	3VA5330-5GC41-0AA0	3VA5330-6GC41-0AA0	3VA5330-7GC41-0AA0
350	3VA5335-5GC41-0AA0	3VA5335-6GC41-0AA0	3VA5335-7GC41-0AA0
400	3VA5340-5GC41-0AA0	3VA5340-6GC41-0AA0	3VA5340-7GC41-0AA0

TM240 ATAM 100% Neutral

200	3VA5320-5GF41-0AA0	3VA5320-6GF41-0AA0	3VA5320-7GF41-0AA0
225	3VA5322-5GF41-0AA0	3VA5322-6GF41-0AA0	3VA5322-7GF41-0AA0
250	3VA5325-5GF41-0AA0	3VA5325-6GF41-0AA0	3VA5325-7GF41-0AA0
300	3VA5330-5GF41-0AA0	3VA5330-6GF41-0AA0	3VA5330-7GF41-0AA0
350	3VA5335-5GF41-0AA0	3VA5335-6GF41-0AA0	3VA5335-7GF41-0AA0
400	3VA5340-5GF41-0AA0	3VA5340-6GF41-0AA0	3VA5340-7GF41-0AA0



3VA53 400A 4-Pole

5
MOLDED CASE
CIRCUIT BREAKERS

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA53	3	6.4 (162)	10.3 (262)	6.7 (170)	11.5	5.2
3VA53	4	8.2 (208)	10.3 (262)	6.7 (170)	15.0	6.8

Shipping Weight

Interrupting Ratings for 3VA53

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)							
		Volts AC (50/60 Hz)				Volts DC			
		240	480Y/ 277V	480	600Y/ 347V	600	250	500	600 (3P)
M	MJAS	65	35	35	18	18	50	50	50
H	HJAS	100	65	65	25	25	85	85	85
C	CJAS	200	100	100	35	35	100	100	100

Internal accessories Optional equipment	
Auxiliary switch	Type
Auxiliary switch	AUX_HQ
	AUX_HQ_el
	AUX_HP
Leading changeover switch	LCS_HQ
	LCS_HQ_el
	LCS_HP
Auxiliary switch	Type
Trip alarm switch	TAS_HQ
	TAS_HQ_el
	TAS_HP
Auxiliary switch	Type
Shunt trip flexible	STF
Shunt trip left	STL
Undervoltage release	UVR
Universal release	UVI
Other	
Cylinder lock (type Ronis)	

3VA5 400/600 A 3 & 4-pole														
Slot No.:	25	24	23	22	21	20	19	18	17	16	15	14	13	12
Auxiliary switch	x	x	x	x	x							x	x	x
Auxiliary switch	x	x	x	x	x							x	x	x
Auxiliary switch												x	x	x
Leading changeover switch												x	x	x
Auxiliary switch												x	x	x
Trip alarm switch												x	x	x
Auxiliary switch												x	x	x
Shunt trip flexible												x	x	x
Shunt trip left												x	x	x
Undervoltage release												x	x	x
Universal release												x	x	x
Other														
Cylinder lock (type Ronis)												x	x	x

Molded Case Circuit Breakers

3VA63 400A Electronic Trip Circuit Breakers

Selection



3VA63 400A 3-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA63 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

3VA63 electronic trip circuit breakers are available with 100% ratings (250A only).

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 250A, 3-pole, 100% rated 3VA63 would be catalog number 3VA6325-5HL31-2AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA63 400A Frame 3-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MJAE)	H-Interrupting Class (HJAE)	C-Interrupting Class (CJAE)	L-Interrupting Class (LJAE)
	Catalog Number	Catalog Number	Catalog Number	Catalog Number
ETU320 LI with dials				
250	3VA6325-5HL31-0AA0	3VA6325-6HL31-0AA0	3VA6325-7HL31-0AA0	3VA6325-8HL31-0AA0
400	3VA6340-5HL31-0AA0	3VA6340-6HL31-0AA0	3VA6340-7HL31-0AA0	3VA6340-8HL31-0AA0
ETU330 LIG with dials				
250	3VA6325-5HM31-0AA0	3VA6325-6HM31-0AA0	3VA6325-7HM31-0AA0	3VA6325-8HM31-0AA0
400	3VA6340-5HM31-0AA0	3VA6340-6HM31-0AA0	3VA6340-7HM31-0AA0	3VA6340-8HM31-0AA0
ETU350 LSI with dials				
250	3VA6325-5HN31-0AA0	3VA6325-6HN31-0AA0	3VA6325-7HN31-0AA0	3VA6325-8HN31-0AA0
400	3VA6340-5HN31-0AA0	3VA6340-6HN31-0AA0	3VA6340-7HN31-0AA0	3VA6340-8HN31-0AA0
ETU550 LSI with LCD				
250	3VA6325-5JP31-0AA0	3VA6325-6JP31-0AA0	3VA6325-7JP31-0AA0	3VA6325-8JP31-0AA0
400	3VA6340-5JP31-0AA0	3VA6340-6JP31-0AA0	3VA6340-7JP31-0AA0	3VA6340-8JP31-0AA0
ETU556 LSI(G Alarm) with LCD				
250	3VA6325-5JT31-0AA0	3VA6325-6JT31-0AA0	3VA6325-7JT31-0AA0	3VA6325-8JT31-0AA0
400	3VA6340-5JT31-0AA0	3VA6340-6JT31-0AA0	3VA6340-7JT31-0AA0	3VA6340-8JT31-0AA0
ETU560 LSI(G) with LCD				
250	3VA6325-5JQ31-0AA0	3VA6325-6JQ31-0AA0	3VA6325-7JQ31-0AA0	3VA6325-8JQ31-0AA0
400	3VA6340-5JQ31-0AA0	3VA6340-6JQ31-0AA0	3VA6340-7JQ31-0AA0	3VA6340-8JQ31-0AA0
ETU820 LI with LCD and Metering				
250	3VA6325-5KL31-0AA0	3VA6325-6KL31-0AA0	3VA6325-7KL31-0AA0	3VA6325-8KL31-0AA0
400	3VA6340-5KL31-0AA0	3VA6340-6KL31-0AA0	3VA6340-7KL31-0AA0	3VA6340-8KL31-0AA0
ETU830 LIG with LCD and Metering				
250	3VA6325-5KM31-0AA0	3VA6325-6KM31-0AA0	3VA6325-7KM31-0AA0	3VA6325-8KM31-0AA0
400	3VA6340-5KM31-0AA0	3VA6340-6KM31-0AA0	3VA6340-7KM31-0AA0	3VA6340-8KM31-0AA0
ETU850 LSI with LCD and Metering				
250	3VA6325-5KP31-0AA0	3VA6325-6KP31-0AA0	3VA6325-7KP31-0AA0	3VA6325-8KP31-0AA0
400	3VA6340-5KP31-0AA0	3VA6340-6KP31-0AA0	3VA6340-7KP31-0AA0	3VA6340-8KP31-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
250	3VA6325-5KT31-0AA0	3VA6325-6KT31-0AA0	3VA6325-7KT31-0AA0	3VA6325-8KT31-0AA0
400	3VA6340-5KT31-0AA0	3VA6340-6KT31-0AA0	3VA6340-7KT31-0AA0	3VA6340-8KT31-0AA0
ETU860 LSI(G) with LCD and Metering				
250	3VA6325-5KQ31-0AA0	3VA6325-6KQ31-0AA0	3VA6325-7KQ31-0AA0	3VA6325-8KQ31-0AA0
400	3VA6340-5KQ31-0AA0	3VA6340-6KQ31-0AA0	3VA6340-7KQ31-0AA0	3VA6340-8KQ31-0AA0

Molded Case Circuit Breakers

3VA63 400A Electronic Trip Circuit Breakers

Selection



3VA63 400A 4-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA63 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

3VA63 electronic trip circuit breakers are available with 100% ratings (250A only).

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 250A, 3-pole, 100% rated 3VA63 would be catalog number 3VA6325-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA63 400A Frame 4-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MJAE)	H-Interrupting Class (HJAE)	C-Interrupting Class (CJAE)	L-Interrupting Class (LJAE)
	Catalog Number	Catalog Number	Catalog Number	Catalog Number
ETU320 LI with dials				
250	3VA6325-5HL41-0AA0	3VA6325-6HL41-0AA0	3VA6325-7HL41-0AA0	3VA6325-8HL41-0AA0
400	3VA6340-5HL41-0AA0	3VA6340-6HL41-0AA0	3VA6340-7HL41-0AA0	3VA6340-8HL41-0AA0
ETU330 LIG with dials				
250	3VA6325-5HM41-0AA0	3VA6325-6HM41-0AA0	3VA6325-7HM41-0AA0	3VA6325-8HM41-0AA0
400	3VA6340-5HM41-0AA0	3VA6340-6HM41-0AA0	3VA6340-7HM41-0AA0	3VA6340-8HM41-0AA0
ETU350 LSI with dials				
250	3VA6325-5HN41-0AA0	3VA6325-6HN41-0AA0	3VA6325-7HN41-0AA0	3VA6325-8HN41-0AA0
400	3VA6340-5HN41-0AA0	3VA6340-6HN41-0AA0	3VA6340-7HN41-0AA0	3VA6340-8HN41-0AA0
ETU550 LSI with LCD				
250	3VA6325-5JP41-0AA0	3VA6325-6JP41-0AA0	3VA6325-7JP41-0AA0	3VA6325-8JP41-0AA0
400	3VA6340-5JP41-0AA0	3VA6340-6JP41-0AA0	3VA6340-7JP41-0AA0	3VA6340-8JP41-0AA0
ETU556 LSI(G Alarm) with LCD				
250	3VA6325-5JT41-0AA0	3VA6325-6JT41-0AA0	3VA6325-7JT41-0AA0	3VA6325-8JT41-0AA0
400	3VA6340-5JT41-0AA0	3VA6340-6JT41-0AA0	3VA6340-7JT41-0AA0	3VA6340-8JT41-0AA0
ETU560 LSI(G) with LCD				
250	3VA6325-5JQ41-0AA0	3VA6325-6JQ41-0AA0	3VA6325-7JQ41-0AA0	3VA6325-8JQ41-0AA0
400	3VA6340-5JQ41-0AA0	3VA6340-6JQ41-0AA0	3VA6340-7JQ41-0AA0	3VA6340-8JQ41-0AA0
ETU820 LI with LCD and Metering				
250	3VA6325-5KL41-0AA0	3VA6325-6KL41-0AA0	3VA6325-7KL41-0AA0	3VA6325-8KL41-0AA0
400	3VA6340-5KL41-0AA0	3VA6340-6KL41-0AA0	3VA6340-7KL41-0AA0	3VA6340-8KL41-0AA0
ETU830 LIG with LCD and Metering				
250	3VA6325-5KM41-0AA0	3VA6325-6KM41-0AA0	3VA6325-7KM41-0AA0	3VA6325-8KM41-0AA0
400	3VA6340-5KM41-0AA0	3VA6340-6KM41-0AA0	3VA6340-7KM41-0AA0	3VA6340-8KM41-0AA0
ETU850 LSI with LCD and Metering				
250	3VA6325-5KP41-0AA0	3VA6325-6KP41-0AA0	3VA6325-7KP41-0AA0	3VA6325-8KP41-0AA0
400	3VA6340-5KP41-0AA0	3VA6340-6KP41-0AA0	3VA6340-7KP41-0AA0	3VA6340-8KP41-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
250	3VA6325-5KT41-0AA0	3VA6325-6KT41-0AA0	3VA6325-7KT41-0AA0	3VA6325-8KT41-0AA0
400	3VA6340-5KT41-0AA0	3VA6340-6KT41-0AA0	3VA6340-7KT41-0AA0	3VA6340-8KT41-0AA0
ETU860 LSI(G) with LCD and Metering				
250	3VA6325-5KQ41-0AA0	3VA6325-6KQ41-0AA0	3VA6325-7KQ41-0AA0	3VA6325-8KQ41-0AA0
400	3VA6340-5KQ41-0AA0	3VA6340-6KQ41-0AA0	3VA6340-7KQ41-0AA0	3VA6340-8KQ41-0AA0

Molded Case Circuit Breakers

3VA63 400A Electronic Trip Circuit Breakers

Technical information

Connectors for 75C wire for 3VA63

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)	Part Number (kit of 4 lugs)
Steel wrap around (Cu cable only) single cable lugs	1/0	500 kcmil	3VA9473-0JA13	3VA9474-0JA13
Aluminum body lug (Cu/Al cable) single cable lugs	AWG 1	600 kcmil	3VA9373-0JB13	3VA9374-0JB13
Aluminum body lug with control wire tap (Cu/Al cable) single cable lugs	AWG 1	600 kcmil	3VA9373-0JG13	3VA9374-0JG13
Aluminum body lug, 2 cables (Cu/Al cable) with 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JJ23	3VA9474-0JJ23
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JC23	3VA9474-0JC23
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9373-0JF60	3VA9374-0JF60
Copper body lug (Cu cable only) single cable lugs (meets requirements for 100% rated breakers)	AWG 1	600 kcmil	3VA9373-0JD13	3VA9374-0JD13
Copper body lug (Cu cable only) with control wire tap single cable lugs	AWG 1	600 kcmil	3VA9373-0JK13	3VA9374-0JK13
Copper body lug, 2 cables (Cu cable only) with 1 extended terminal cover (meets requirements for 100% rated breakers)	2/0	600 kcmil	3VA9473-0JE23	3VA9474-0JE23
Copper body lug, 2 cables (Cu cable only) with control wire tap and 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JL23	3VA9474-0JL23

Interrupting Ratings for 3VA63

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)				
		Volts AC (50/60 Hz)				
		240	480Y/277V	480	600Y/347V	600
M	MJAE	100	35	35	18	18
H	HJAE	100	65	65	22	22
C	CJAE	200	100	100	35	35
L	LJAE	200	150	150	50	50

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA63	3	5.4 (138)	9.7 (248)	4.3 (110)	9.9	4.5
3VA63	4	7.2 (184)	9.7 (248)	4.3 (110)	15.2	6.9

Shipping Weight

Molded Case Circuit Breakers

3VA63 400A Electronic Trip Circuit Breakers

Technical information

Trip Settings for 3VA63

ETU320-LI, ETU330-LIG, ETU350-LSI

Continuous Amperage	LI, LIG, LSI			LSI		LIG	LI, LIG, LSI 4P only
I_n (Amp)	I_n (Amp) (L)	t_{sd} (sec) (L)	I_n (Amp) (I)Ⓢ	$I_{sd} = xI_n$ (Amp) (S)	t_{sd} (sec) (S)	I_n (Amp) (G)	$I_{n=xl}$ (Amp)
250	100 - 250	0.5 - 17	375-3000	1.5 - 10	0.08 - 0.4	50 - 250	0.5 - 1 / OFF
400	150 - 400	0.5 - 17	600-4000	1.5 - 10		80 - 400	0.5 - 1 / OFF

Ⓢ I_n for ETU350 is fixed at 12X I_n

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

Continuous Amperage	LI, LIG, LSI, LSIG, LSI(G)			LSI, LSIG, LSI(G)		LIG, LSIG, LSI(G)		LSI 3P with External CT	LI, LIG, LSI, LSIG, LSI(G) 4P only
I_n (Amp)	I_n (Amp) (L)	t_{sd} (sec) (L)	I_n (Amp) (I)	I_{sd} (Amp) (S)	t_{sd} (sec) (S)	I_n (Amp) (G)	t_n (G)	$I_{n=xl}$ (Amp)	I_n (Amp)
250	100 - 250	0.5 - 25	375-3000	150 - 2500	0.05 - 0.5	50 - 250	0.05 - 0.8	50 - 400 / OFF	50 - 400 / OFF
400	150 - 400	0.5 - 17	600-4000	240 - 4000		80 - 400		80 - 640 / OFF	80 - 400 / OFF

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://www.siemens.com/download?BTLV_50412

Molded Case Circuit Breakers

3VA54 600A Thermal-magnetic Trip Circuit Breakers

Selection

3VA54 600A Frame, 2-(3)Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MLAS)	H-Interrupting Class (HLAS)	C-Interrupting Class (CLAS)
	Catalog Number	Catalog Number	Catalog Number
TM230 FTAM			
450	—	3VA5445-6EC61-0AA0	3VA5445-7EC61-0AA0
500	3VA5450-5EC61-0AA0	3VA5450-6EC61-0AA0	3VA5450-7EC61-0AA0
600	3VA5460-5EC61-0AA0	3VA5460-6EC61-0AA0	3VA5460-7EC61-0AA0

3VA54 600A Frame, 3-Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MLAS)	H-Interrupting Class (HLAS)	C-Interrupting Class (CLAS)
	Catalog Number	Catalog Number	Catalog Number
TM230 FTAM [Ⓢ]			
450	3VA5445-5EC31-0AA0	3VA5445-6EC31-0AA0	3VA5445-7EC31-0AA0
500	3VA5450-5EC31-0AA0	3VA5450-6EC31-0AA0	3VA5450-7EC31-0AA0
600	3VA5460-5EC31-0AA0	3VA5460-6EC31-0AA0	3VA5460-7EC31-0AA0
TM240 ATAM			
450	3VA5445-5EF31-0AA0	3VA5445-6EF31-0AA0	3VA5445-7EF31-0AA0
500	3VA5450-5EF31-0AA0	3VA5450-6EF31-0AA0	3VA5450-7EF31-0AA0
600	3VA5460-5EF31-0AA0	3VA5460-6EF31-0AA0	3VA5460-7EF31-0AA0

3VA54 600A Frame, 4-Pole Frame,
Thermal-Magnetic Trip Unit

Cont. Ampere Rating	M-Interrupting Class (MLAS)	H-Interrupting Class (HLAS)	C-Interrupting Class (CLAS)
	Catalog Number	Catalog Number	Catalog Number
TM230 FTAM Unprotected Neutral			
450	3VA5445-5EC41-0AA0	3VA5445-6EC41-0AA0	3VA5445-7EC41-0AA0
500	3VA5450-5EC41-0AA0	3VA5450-6EC41-0AA0	3VA5450-7EC41-0AA0
600	3VA5460-5EC41-0AA0	3VA5460-6EC41-0AA0	3VA5460-7EC41-0AA0
TM240 ATAM Unprotected Neutral			
450	3VA5445-5EF41-0AA0	3VA5445-6EF41-0AA0	3VA5445-7EF41-0AA0
500	3VA5450-5EF41-0AA0	3VA5450-6EF41-0AA0	3VA5450-7EF41-0AA0
600	3VA5460-5EF41-0AA0	3VA5460-6EF41-0AA0	3VA5460-7EF41-0AA0
TM230 FTFM 100% Neutral			
450	3VA5445-5GC41-0AA0	3VA5445-6GC41-0AA0	3VA5445-7GC41-0AA0
500	3VA5450-5GC41-0AA0	3VA5450-6GC41-0AA0	3VA5450-7GC41-0AA0
600	3VA5460-5GC41-0AA0	3VA5460-6GC41-0AA0	3VA5460-7GC41-0AA0
TM240 ATAM 100% Neutral			
450	3VA5445-5GF41-0AA0	3VA5445-6GF41-0AA0	3VA5445-7GF41-0AA0
500	3VA5450-5GF41-0AA0	3VA5450-6GF41-0AA0	3VA5450-7GF41-0AA0
600	3VA5460-5GF41-0AA0	3VA5460-6GF41-0AA0	3VA5460-7GF41-0AA0



5
MOLDED CASE
CIRCUIT BREAKERS

Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA54 thermal-magnetic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

For NAVAL rated thermal-magnetic trip circuit breakers, change the 13th digit of the catalog number to the number "1". (For example, a 35KA@480VAC, 600A, 3-pole, rated 3VA54 would be catalog number 3VA5460-5EC31-1AA0)

[Ⓢ] Available with NAVAL/50C ratings.

Molded Case Circuit Breakers

3VA54 600A Thermal-magnetic Trip Circuit Breakers

Selection

Dimensions

Shipping Weight

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA54	3	6.4 (162)	10.3 (262)	6.7 (170)	11.5	5.2
3VA54	4	8.2 (208)	10.3 (262)	6.7 (170)	15.0	6.8

Interrupting Ratings for 3VA54

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)									
		Volts AC (50/60 Hz)					Volts DC				
		240	480Y/277V	480	600Y/347V	600	250 (2P)	600 (3P)	750 (3P)	750 (4P)	1000 (4P)
M	MLAS	65	35	35	20	20	50	50	6	50	6
H	HLAS	100	65	65	25	25	85	85	6	85	6
C	CLAS	200	100	100	35	35	100	100	10	100	10

Internal accessories Optional equipment		3VA5 400/600 A 3 & 4-pole													
Slot No.:		25	24	23	22	21	20	19	18	17	16	15	14	13	12
Auxiliary switch	Type														
	AUX_HQ	x	x	x	x	x				x	x	x	x	x	x
	AUX_HQ_el	x	x	x	x	x				x	x	x	x	x	x
Auxiliary switch	Type														
	AUX_HP														
	AUX_HP	x	x	x	x	x				x	x	x	x	x	x
Leading changeover switch	Type														
	LCS_HQ									x					
	LCS_HQ_el									x					
Auxiliary switch	Type														
	TAS_HQ														
	TAS_HQ_el														
Trip alarm switch	Type														
	TAS_HP														
	TAS_HP														
Auxiliary switch	Type														
	STF														
	STL														
Shunt trip left	Type														
	UVR														
	UVR														
Universal release	Type														
	UVI														
	UVI														
Other															
Cylinder lock (type Ronis)															

Molded Case Circuit Breakers

3VA64 600A Thermal-magnetic Trip Circuit Breakers

Selection



3VA64 600A 3-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA64 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

3VA64 electronic trip circuit breakers are available with 100% ratings (400A only).

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 400A, 3-pole, 100% rated 3VA64 would be catalog number 3VA6440-5HL31-**2**AA0)

Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA64 600A Frame 3-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MLAE) Catalog Number	H-Interrupting Class (HLAE) Catalog Number	C-Interrupting Class (CLAE) Catalog Number	L-Interrupting Class (LLAE) Catalog Number
ETU320 LI with dials				
400	3VA6440-5HL31-0AA0	3VA6440-6HL31-0AA0	3VA6440-7HL31-0AA0	3VA6440-8HL31-0AA0
600	3VA6460-5HL31-0AA0	3VA6460-6HL31-0AA0	3VA6460-7HL31-0AA0	3VA6460-8HL31-0AA0
ETU330 LIG with dials				
400	3VA6440-5HM31-0AA0	3VA6440-6HM31-0AA0	3VA6440-7HM31-0AA0	3VA6440-8HM31-0AA0
600	3VA6460-5HM31-0AA0	3VA6460-6HM31-0AA0	3VA6460-7HM31-0AA0	3VA6460-8HM31-0AA0
ETU350 LSI with dials				
400	3VA6440-5HN31-0AA0	3VA6440-6HN31-0AA0	3VA6440-7HN31-0AA0	3VA6440-8HN31-0AA0
600	3VA6460-5HN31-0AA0	3VA6460-6HN31-0AA0	3VA6460-7HN31-0AA0	3VA6460-8HN31-0AA0
ETU550 LSI with LCD				
400	3VA6440-5JP31-0AA0	3VA6440-6JP31-0AA0	3VA6440-7JP31-0AA0	3VA6440-8JP31-0AA0
600	3VA6460-5JP31-0AA0	3VA6460-6JP31-0AA0	3VA6460-7JP31-0AA0	3VA6460-8JP31-0AA0
ETU556 LSI(G Alarm) with LCD				
400	3VA6440-5JT31-0AA0	3VA6440-6JT31-0AA0	3VA6440-7JT31-0AA0	3VA6440-8JT31-0AA0
600	3VA6460-5JT31-0AA0	3VA6460-6JT31-0AA0	3VA6460-7JT31-0AA0	3VA6460-8JT31-0AA0
ETU560 LSI(G) with LCD				
400	3VA6440-5JQ31-0AA0	3VA6440-6JQ31-0AA0	3VA6440-7JQ31-0AA0	3VA6440-8JQ31-0AA0
600	3VA6460-5JQ31-0AA0	3VA6460-6JQ31-0AA0	3VA6460-7JQ31-0AA0	3VA6460-8JQ31-0AA0
ETU820 LI with LCD and Metering				
400	3VA6440-5KL31-0AA0	3VA6440-6KL31-0AA0	3VA6440-7KL31-0AA0	3VA6440-8KL31-0AA0
600	3VA6460-5KL31-0AA0	3VA6460-6KL31-0AA0	3VA6460-7KL31-0AA0	3VA6460-8KL31-0AA0
ETU830 LIG with LCD and Metering				
400	3VA6440-5KM31-0AA0	3VA6440-6KM31-0AA0	3VA6440-7KM31-0AA0	3VA6440-8KM31-0AA0
600	3VA6460-5KM31-0AA0	3VA6460-6KM31-0AA0	3VA6460-7KM31-0AA0	3VA6460-8KM31-0AA0
ETU850 LSI with LCD and Metering				
400	3VA6440-5KP31-0AA0	3VA6440-6KP31-0AA0	3VA6440-7KP31-0AA0	3VA6440-8KP31-0AA0
600	3VA6460-5KP31-0AA0	3VA6460-6KP31-0AA0	3VA6460-7KP31-0AA0	3VA6460-8KP31-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
400	3VA6440-5KT31-0AA0	3VA6440-6KT31-0AA0	3VA6440-7KT31-0AA0	3VA6440-8KT31-0AA0
600	3VA6460-5KT31-0AA0	3VA6460-6KT31-0AA0	3VA6460-7KT31-0AA0	3VA6460-8KT31-0AA0
ETU860 LSI(G) with LCD and Metering				
400	3VA6440-5KQ31-0AA0	3VA6440-6KQ31-0AA0	3VA6440-7KQ31-0AA0	3VA6440-8KQ31-0AA0
600	3VA6460-5KQ31-0AA0	3VA6460-6KQ31-0AA0	3VA6460-7KQ31-0AA0	3VA6460-8KQ31-0AA0

Molded Case Circuit Breakers

3VA64 600A Electronic Trip Circuit Breakers

Selection



3VA64 600A 4-Pole

Ordering Information

The catalog numbers listed below are for complete, non-interchangeable trip circuit breakers without lugs.

Order required lugs or connection technology separately for field installation.

All 3VA64 electronic trip circuit breakers are CSA approved and UL listed for reverse feed applications.

3VA64 electronic trip circuit breakers are available with 100% ratings (400A only).

For 100% rated electronic trip circuit breakers, change the 13th digit of the catalog number to the number "2". (For example, a 35KA @480VAC, 400A, 3-pole, 100% rated 3VA64 would be catalog number 3VA6440-5HL31-**2**AA0) Requires the use of copper lugs — see lug table below.

All 3VA6 circuit breakers are certified to CSA C22.2 No 5, and UL 489 Supplement SB, are marked "Naval", and are suitable for use at 50C.

3VA64 600A Frame 4-Pole Electronic Trip Unit

Continuous Ampere	M-Interrupting Class (MLAE)	H-Interrupting Class (HLAE)	C-Interrupting Class (CLAE)	L-Interrupting Class (LLAE)
	Catalog Number	Catalog Number	Catalog Number	Catalog Number
ETU320 LI with dials				
400	3VA6440-5HL41-0AA0	3VA6440-6HL41-0AA0	3VA6440-7HL41-0AA0	3VA6440-8HL41-0AA0
600	3VA6460-5HL41-0AA0	3VA6460-6HL41-0AA0	3VA6460-7HL41-0AA0	3VA6460-8HL41-0AA0
ETU330 LIG with dials				
400	3VA6440-5HM41-0AA0	3VA6440-6HM41-0AA0	3VA6440-7HM41-0AA0	3VA6440-8HM41-0AA0
600	3VA6460-5HM41-0AA0	3VA6460-6HM41-0AA0	3VA6460-7HM41-0AA0	3VA6460-8HM41-0AA0
ETU350 LSI with dials				
400	3VA6440-5HN41-0AA0	3VA6440-6HN41-0AA0	3VA6440-7HN41-0AA0	3VA6440-8HN41-0AA0
600	3VA6460-5HN41-0AA0	3VA6460-6HN41-0AA0	3VA6460-7HN41-0AA0	3VA6460-8HN41-0AA0
ETU550 LSI with LCD				
400	3VA6440-5JP41-0AA0	3VA6440-6JP41-0AA0	3VA6440-7JP41-0AA0	3VA6440-8JP41-0AA0
600	3VA6460-5JP41-0AA0	3VA6460-6JP41-0AA0	3VA6460-7JP41-0AA0	3VA6460-8JP41-0AA0
ETU556 LSI(G Alarm) with LCD				
400	3VA6440-5JT41-0AA0	3VA6440-6JT41-0AA0	3VA6440-7JT41-0AA0	3VA6440-8JT41-0AA0
600	3VA6460-5JT41-0AA0	3VA6460-6JT41-0AA0	3VA6460-7JT41-0AA0	3VA6460-8JT41-0AA0
ETU560 LSI(G) with LCD				
400	3VA6440-5JQ41-0AA0	3VA6440-6JQ41-0AA0	3VA6440-7JQ41-0AA0	3VA6440-8JQ41-0AA0
600	3VA6460-5JQ41-0AA0	3VA6460-6JQ41-0AA0	3VA6460-7JQ41-0AA0	3VA6460-8JQ41-0AA0
ETU820 LI with LCD and Metering				
400	3VA6440-5KL41-0AA0	3VA6440-6KL41-0AA0	3VA6440-7KL41-0AA0	3VA6440-8KL41-0AA0
600	3VA6460-5KL41-0AA0	3VA6460-6KL41-0AA0	3VA6460-7KL41-0AA0	3VA6460-8KL41-0AA0
ETU830 LIG with LCD and Metering				
400	3VA6440-5KM41-0AA0	3VA6440-6KM41-0AA0	3VA6440-7KM41-0AA0	3VA6440-8KM41-0AA0
600	3VA6460-5KM41-0AA0	3VA6460-6KM41-0AA0	3VA6460-7KM41-0AA0	3VA6460-8KM41-0AA0
ETU850 LSI with LCD and Metering				
400	3VA6440-5KP41-0AA0	3VA6440-6KP41-0AA0	3VA6440-7KP41-0AA0	3VA6440-8KP41-0AA0
600	3VA6460-5KP41-0AA0	3VA6460-6KP41-0AA0	3VA6460-7KP41-0AA0	3VA6460-8KP41-0AA0
ETU856 LSI(G Alarm) with LCD and Metering				
400	3VA6440-5KT41-0AA0	3VA6440-6KT41-0AA0	3VA6440-7KT41-0AA0	3VA6440-8KT41-0AA0
600	3VA6460-5KT41-0AA0	3VA6460-6KT41-0AA0	3VA6460-7KT41-0AA0	3VA6460-8KT41-0AA0
ETU860 LSI(G) with LCD and Metering				
400	3VA6440-5KQ41-0AA0	3VA6440-6KQ41-0AA0	3VA6440-7KQ41-0AA0	3VA6440-8KQ41-0AA0
600	3VA6460-5KQ41-0AA0	3VA6460-6KQ41-0AA0	3VA6460-7KQ41-0AA0	3VA6460-8KQ41-0AA0

Molded Case Circuit Breakers

3VA64 600A Electronic Trip Circuit Breakers

Technical information

Connectors for 75C wire for 3VA64

Type	Minimum cable size	Maximum cable size	Part Number (kit of 3 lugs)	Part Number (kit of 4 lugs)
Steel Wrap around (Cu cable only) single cable lugs	1/0	500 kcmil	3VA9473-0JA13	3VA9474-0JA13
Aluminum Body Lug (Cu/Al cable) single cable lugs	AWG 1	600 kcmil	3VA9373-0JB13	3VA9374-0JB13
Aluminum body lug with control wire tap (Cu/Al cable) single cable lugs	AWG 1	600 kcmil	3VA9373-0JG13	3VA9374-0JG13
Aluminum body lug, 2 cables (Cu/Al cable) with 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JJ23	3VA9474-0JJ23
Aluminum body lug, 2 cables (Cu/Al cable) with control wire tap and 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JC23	3VA9474-0JC23
Distribution lug, 6 Cables (Cu/Al cable) with 1 extended terminal cover	AWG 14	AWG 2	3VA9373-0JF60	3VA9374-0JF60
Copper body lug (Cu cable only) single cable lugs (meets requirements for 100% rated breakers)	AWG 1	600 kcmil	3VA9373-0JD13	3VA9374-0JD13
Copper body lug (Cu cable only) with control wire tap single cable lugs	AWG 1	600 kcmil	3VA9373-0JK13	3VA9374-0JK13
Copper body lug, 2 cables (Cu cable only) with 1 extended terminal cover (meets requirements for 100% rated breakers)	2/0	600 kcmil	3VA9473-0JE23	3VA9474-0JE23
Copper body lug, 2 cables (Cu cable only) with control wire tap and 1 extended terminal cover	2/0	600 kcmil	3VA9473-0JL23	3VA9474-0JL23

Interrupting Ratings for 3VA64

Interrupting Class	Breaker Type	RMS Symmetrical Amperes (kA)				
		Volts AC (50/60 Hz)				
		240	480Y/277V	480	600Y/347V	600
M	MLAE	100	35	35	18	18
H	HLAE	100	65	65	22	22
C	CLAE	200	100	100	35	35
L	LLAE	200	150	150	50	50

Dimensions

Breaker	Poles	W in. (mm)	H in. (mm)	D in. (mm)	lbs.	kg
3VA64	3	5.4 (138)	9.7 (248)	4.3 (110)	11.7	5.3
3VA64	4	7.2 (184)	9.7 (248)	4.3 (110)	15.2	6.9

Shipping Weight

Molded Case Circuit Breakers

3VA64 600A Electronic Trip Circuit Breakers

Technical information

Trip Settings for 3VA64

ETU320-LI, ETU330-LIG, ETU350-LSI

Continuous Amperage	LI, LIG, LSI			LSI		LIG	LI, LIG, LSI 4P only
I _n (Amp)	I _n (Amp) (L)	t _{sd} (sec) (L)	I _n (Amp) (I)Ⓢ	I _{cs} = xI _r (Amp) (S)	t _{sd} (sec) (S)	I _n (Amp) (G)	I _{cs} =xI _r (Amp)
400	150 - 400	0.5 - 17	600-4800	1.5 - 10	0.08 - 0.4	80 - 400	0.5 - 1 / OFF
600	250 - 600	0.5 - 15	900-5400	1.5 - 9		120 - 600	0.5 - 1 / OFF

Ⓢ I_n for ETU350 is fixed at 12X I_n

ETU550-LSI, ETU556 LSI(A), ETU560-LSIG, ETU820-LI, ETU830-LIG, ETU850-LSI, ETU856 LSI(A), ETU860-LSIG

Continuous Amperage	LI, LIG, LSI, LSIG, LSI(G)			LSI, LSIG, LSI(G)		LIG, LSIG, LSI(G)		LSI 3P with External CT	LI, LIG, LSI, LSIG, LSI(G) 4P only
I _n (Amp)	I _n (Amp) (L)	t _{sd} (sec) (L)	I _n (Amp) (I)	I _{cs} (Amp) (S)	t _{sd} (sec) (S)	I _n (Amp) (G)	t _{sd} (G)	I _{cs} =xI _r (Amp)	I _{cs} (Amp)
400	150 - 400	0.5 - 25	600-4800	240 - 4000	0.05 - 0.5	80 - 400	0.05 - 0.8	80 - 640 / OFF	80 - 600 / OFF
600	250 - 600	0.5 - 15	900-5400	360 - 5400		120 - 600		120 - 960 / OFF	120 - 600 / OFF

For specific trip settings refer to the Electronic Trip Unit section of the 3VA Systems Manual, which can be found in the document download center at https://www.siemens.com/download?BTLV_50412

Internal accessories Optional equipment		3VA6 400/600 A 3-pole										3VA6 400/600 A 4-pole									
Slot No.:		25	24	23	22	21	20	19	18	17	16	35	34	33	32	31	30	29	28	27	26
Auxiliary switch	AUX_HQ	x	x	x	x	x						x	x	x	x	x					
	AUX_HQ_el	x	x	x	x	x						x	x	x	x	x					
	AUX_HP																				
Leading changeover switch	LCS_HQ																				
	LCS_HQ_el																				
	LCS_HP																				
Auxiliary switch	TAS_HQ																				
	TAS_HQ_el																				
	TAS_HP																				
Electrical alarm switch	EAS_HQ																				
	EAS_HQ_el																				
Shunt trip flexible	STF																				
	STL																				
Undervoltage release	UVR																				
Universal release	UVI																				
ETU/communication	COM060																				
	Breaker data server																				
24 V module																					
Other																					
Cylinder lock (type Ronis)																					

See page 5-59 for internal accessory part numbers.

Molded Case Circuit Breakers

3VA Molded Case Switch and Motor Circuit Protector

Selection

Breaking capacity (the SCCR rating) is the maximum permissible short circuit current at the installation location of the MCS in combination with an appropriate overload protective device.

Molded Case Switch Magnetic

Frame (Breaker Type)	Max. Ampere Rating	2-Pole	3-Pole	Short-Circuit Current Rating			Instantaneous short circuit protection
		Catalog Number	Catalog Number	240V	480V	600V	
3VA51 (HEAS)	100	3VA5110-1BB21-0AA0	3VA5110-1BB31-0AA0	100k	65k	14k ^①	1600 A
3VA52 (HFAS)	150	3VA5215-0BB61-0AA0	3VA5215-0BB31-0AA0	100k	65k	25k	2400 A
	250	3VA5225-0BB61-0AA0	3VA5225-0BB31-0AA0	100k	65k	25k	2500 A

3VA52 (CFAS)	100	3VA5210-1BB61-0AA0	3VA5210-1BB31-0AA0	200k	100k	35k	2500 A
	150	3VA5215-1BB61-0AA0	3VA5215-1BB31-0AA0	200k	100k	35k	2400 A
	250	3VA5225-1BB61-0AA0	3VA5225-1BB31-0AA0	200k	100k	35k	2500 A

Molded Case Switch Electronic

Frame (Breaker Type)	Max. Ampere Rating	2-Pole	3-Pole	Short-Circuit Current Rating			Instantaneous short circuit protection
		Catalog Number	Catalog Number	240V	480V	600V	
3VA63 (CJAE)	400	—	3VA6340-1BB31-0AA0	200k	100k	35k	5600 A
3VA64 (CLAE)	600	—	3VA6460-1BB31-0AA0	200k	100k	35k	5400 A



Magnetic switch



Electronic Trip Unit switch

5
MOLDED CASE
CIRCUIT BREAKERS

① Rated at 600 Y/347 V AC.

Molded Case Circuit Breakers

3VA Molded Case Switch and Motor Circuit Protector

Selection

Motor circuit protector TM120M AM^③

Frame (Breaker Type)	Maximum Ampere Rating	3-Pole Catalog Number	Instantaneous short circuit protection
3VA51 (HEAP)	1	3VA5181-1MU31-0AA0	3 ... 7
		3VA5181-1MH31-0AA0	5 ... 12
	2	3VA5102-1MU31-0AA0	6 ... 14
		3VA5102-1MH31-0AA0	10 ... 24
	3	3VA5103-1MU31-0AA0	9 ... 21
		3VA5103-1MH31-0AA0	15 ... 36
	5	3VA5105-1MU31-0AA0	15 ... 35
		3VA5105-1MH31-0AA0	25 ... 60
	7	3VA5107-1MU31-0AA0	21 ... 49
		3VA5107-1MH31-0AA0	35 ... 84
	10	3VA5191-1MU31-0AA0	30 ... 70
		3VA5191-1MH31-0AA0	50 ... 120
	15	3VA5195-1MU31-0AA0	45 ... 105
		3VA5195-1MH31-0AA0	75 ... 180
	25	3VA5125-1MU31-0AA0	75 ... 175
		3VA5125-1MH31-0AA0	125 ... 300
	30	3VA5130-1MU31-0AA0	90 ... 210
		3VA5130-1MH31-0AA0	150 ... 360
	40	3VA5140-1MU31-0AA0	120 ... 280
		3VA5140-1MH31-0AA0	200 ... 480
	50	3VA5150-1MU31-0AA0	150 ... 350
		3VA5150-1MH31-0AA0	250 ... 600
	70	3VA5170-1MU31-0AA0	210 ... 490
		3VA5170-1MH31-0AA0	350 ... 840
	80	3VA5180-1MU31-0AA0	240 ... 560
		3VA5180-1MH31-0AA0	400 ... 960
3VA52 (HFAP)	150	3VA5190-1MU31-0AA0	270 ... 630
		3VA5190-1MH31-0AA0	450 ... 1080
	200	3VA5110-1MU31-0AA0	300 ... 700
		3VA5110-1MH31-0AA0	500 ... 1200
	110	3VA5111-1MU31-0AA0	330 ... 770
		3VA5111-1MH31-0AA0	550 ... 1320
	125	3VA5112-1MU31-0AA0	375 ... 875
		3VA5112-1MH31-0AA0	625 ... 1500
	150	3VA5215-0MU31-0AA0	450 ... 900
		3VA5215-0MH31-0AA0	900 ... 1800
	200	3VA5220-0MU31-0AA0	600 ... 1200
		3VA5220-0MH31-0AA0	1200 ... 2400



Motor Circuit Protector

Motor circuit protector ETU310M^②

Frame (Breaker Type)	Maximum Ampere Rating	3-Pole Catalog Number	Instantaneous short circuit protection
3VA61 (CDAR)	25	3VA6125-1MS31-0AA0	75 ... 375
	30	3VA6130-1MS31-0AA0	90 ... 450
	40	3VA6140-1MS31-0AA0	120 ... 600
	50	3VA6150-1MS31-0AA0	150 ... 750
	70	3VA6170-1MS31-0AA0	210 ... 1050
	80	3VA6180-1MS31-0AA0	240 ... 1200
	90	3VA6190-1MS31-0AA0	270 ... 1350
	100	3VA6110-1MS31-0AA0	300 ... 1500
3VA62 (CFAR-Y)	110	3VA6211-1MS31-0AA0	330 ... 1650
	125	3VA6212-1MS31-0AA0	375 ... 1875
	150	3VA6215-1MS31-0AA0	450 ... 2250
	200	3VA6220-1MS31-0AA0	600 ... 2400
3VA63 (CJAR)	200	3VA6320-1MS31-0AA0	600 ... 3000
	250	3VA6325-1MS31-0AA0	750 ... 3750
3VA64 (CLAR)	400	3VA6440-1MS31-0AA0	1200 ... 5200
	500	3VA6450-1MS31-0AA0	1500 ... 6000

Motor circuit protector TM120M AM^②

3VA52 (CFAP)	150	3VA5215-1MU31-0AA0	450 ... 900
		3VA5215-1MH31-0AA0	900 ... 1800
	200	3VA5220-1MU31-0AA0	600 ... 1200
		3VA5220-1MH31-0AA0	1200 ... 2400

Interrupting Ratings

Frame	Breaker Type	RMS Symmetrical Amperes (kA)							
		Volts AC (50/60 Hz)				Volts DC			
		240	480	600Y/347V	600	125 (1P)	250 (2P)	500 ^④ (3P)	600 (3P)
3VA51	HEAP	150	65	25	—	30	100	100	—
3VA52	HFAP	100	65	25	25			85	85
	CFAP	200	100	35	35			100	100
3VA61	CDAR	200	100	35	35	—	—	—	—
3VA62	CFAR	200	100	35	—	—	—	—	—
3VA63	CJAR	200	100	35	35	—	—	—	—
3VA64	CLAR	200	100	35	35	—	—	—	—

① Rated at 600 Y/347 V AC.

② SCCR is 100kA at 480 V. SCCR rating is the maximum permissible short circuit current of the MCP in combination with an appropriate overload protection device.

③ SCCR is 65kA at 480 V. SCCR rating is the maximum permissible short circuit current of the MCP in combination with an appropriate overload protection device.

④ 2 poles required for 500VDC for breaker types HFAP and CFAP.

Molded Case Circuit Breakers

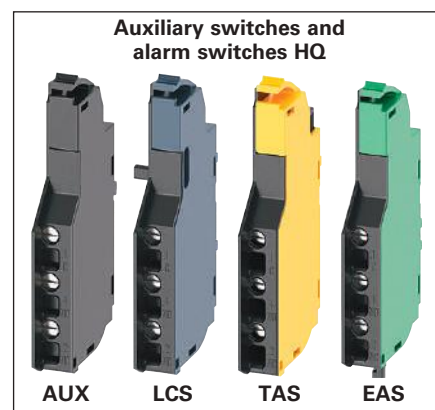
3VA Internal Accessories

Selection

Internal Accessories

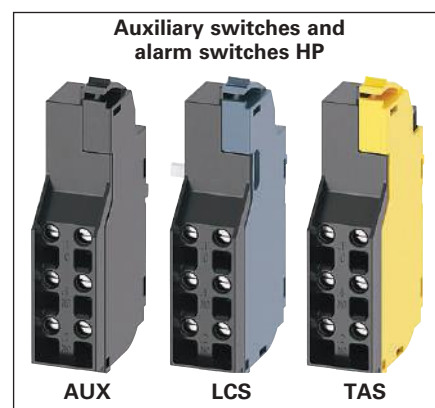
Auxiliary and Alarm Switches

Switch Type	Catalog Number		
	HP High Power (2 slots)	HQ Compact (1 slot)	HQ Electronic ^① (1 slot)
Auxiliary Switch (AUX)	3VA9978-0AA11	3VA9978-0AA12	3VA9978-0AA13
Leading Changeover Switch (LCS)	3VA9978-0AA21	3VA9978-0AA22	3VA9978-0AA23
Trip Alarm Switch (TAS)	3VA9978-0AB11	3VA9978-0AB12	3VA9978-0AB13
Electronic Alarm (EAS)	—	3VA9978-0AB22	3VA9978-0AB23



Shunt Trips

Type	VAC 50/60 Hz	VDC	Catalog Number (3 slots)
Shunt Trip Left (STL)	380 ... 600	—	3VA9978-0BL20
	—	12	3VA9978-0BL10
	24	24 ... 30	3VA9978-0BL30
	48 ... 60	—	3VA9978-0BL31
	110 ... 127	110 ... 127	3VA9978-0BL32
	208 ... 277	220 ... 250	3VA9978-0BL33
Shunt Trip Flexible (STF) ^②	24	—	3VA9978-0BA20
	48 ... 60	—	3VA9978-0BA21
	110 ... 127	—	3VA9978-0BA22
	208 ... 277	—	3VA9978-0BA23
	380 ... 500	—	3VA9978-0BA24
	600	—	3VA9978-0BA25



Undervoltage Release

Undervoltage Release (UVR)	—	12	3VA9978-0BB10
	—	24	3VA9978-0BB11
	—	48	3VA9978-0BB12
	—	125 ... 127	3VA9978-0BB14
	—	250	3VA9978-0BB16
	24	—	3VA9978-0BB20
	120 ... 127	—	3VA9978-0BB24
	208 ... 230	—	3VA9978-0BB25
	440 ... 480	—	3VA9978-0BB27

Universal Release (Undervoltage and Shunt trip)

Universal Release (UNI)	—	12	3VA9978-0BD11
	—	24	3VA9978-0BD12
	—	48	3VA9978-0BD13

Shunt trip left STL



Undervoltage releases UVR



Time-delay Device for Undervoltage Release

Type	VAC 50/60 Hz	VDC	Delay Time	Catalog Number
Time-delay Device	230	230	Fixed – 100ms minimum	3VA9978-0BF22
	—	24	Fixed – 100ms minimum	3VA9978-0BF23

Universal release UNI



Time-delay device for undervoltage releases



① Use only with 3VA6.

② Shunt trip flexible can be used in the left pocket of the 3VA5 breakers. They can be used in the left or right pocket of the 3VA6 breakers.

Molded Case Circuit Breakers

3VA Manual Operators

Selection

Front Mounted Rotary Operator



Degree of protection NEMA 1

Type	Color	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA6 400A 600A	Catalog Number
Standard without illumination kit	Gray	✓	—	—	—	3VA9137-0EK11
		—	✓	✓	—	3VA9277-0EK11
		—	—	—	✓	3VA9447-0EK11
Standard with illumination kit	Gray	✓	—	—	—	3VA9137-0EK13
		—	✓	✓	—	3VA9277-0EK13
		—	—	—	✓	3VA9447-0EK13
EMERGENCY-OFF without illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0EK15
		—	✓	✓	—	3VA9277-0EK15
		—	—	—	✓	3VA9447-0EK15
EMERGENCY-OFF with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0EK17
		—	✓	✓	—	3VA9277-0EK17
		—	—	—	✓	3VA9447-0EK17
Standard with door interlock	Gray	✓	—	—	—	3VA9137-0EK21
		—	✓	✓	—	3VA9277-0EK21
		—	—	—	✓	3VA9447-0EK21
Standard with door interlock, with illumination kit	Gray	✓	—	—	—	3VA9137-0EK23
		—	✓	✓	—	3VA9277-0EK23
		—	—	—	✓	3VA9447-0EK23
EMERGENCY-OFF with door interlock	Yellow-Red	✓	—	—	—	3VA9137-0EK25
		—	✓	✓	—	3VA9277-0EK25
		—	—	—	✓	3VA9447-0EK25
EMERGENCY-OFF with door interlock, with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0EK27
		—	✓	✓	—	3VA9277-0EK27
		—	—	—	✓	3VA9447-0EK27
Standard with door interlock, with door open function	Gray	✓	—	—	—	3VA9137-0EK31
		—	✓	✓	—	3VA9277-0EK31
		—	—	—	✓	3VA9447-0EK31
Standard with door interlock, with door open function, with illumination kit	Gray	✓	—	—	—	3VA9137-0EK33
		—	✓	✓	—	3VA9277-0EK33
		—	—	—	✓	3VA9447-0EK33
EMERGENCY-OFF with door interlock, with door open function	Yellow-Red	✓	—	—	—	3VA9137-0EK35
		—	✓	✓	—	3VA9277-0EK35
		—	—	—	✓	3VA9447-0EK35
EMERGENCY-OFF with door interlock, with door open function, with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0EK37
		—	✓	✓	—	3VA9277-0EK37
		—	—	—	✓	3VA9447-0EK37
Without handle, with shaft stub, without door interlock For retrofit with 3VL handle	Gray	✓	—	—	—	3VA9137-0GK00
		—	✓	✓	—	3VA9277-0GK00
		—	—	—	✓	3VA9447-0GK00



Molded Case Circuit Breakers

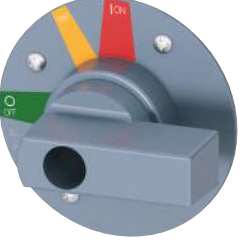
3VA Manual Operators

Selection

Door Mounted Rotary Operator^①

 Degree of protection Type 1, 12, 3R and 4X	Type	Color	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	Standard	Gray	✓	—	—	—	3VA9137-0FK21
			—	✓	✓	—	3VA9277-0FK21
			—	—	—	✓	3VA9447-0FK21
	Standard with illumination kit	Gray	✓	—	—	—	3VA9137-0FK23
			—	✓	✓	—	3VA9277-0FK23
			—	—	—	✓	3VA9447-0FK23
	EMERGENCY-OFF	Yellow-Red	✓	—	—	—	3VA9137-0FK25
			—	✓	✓	—	3VA9277-0FK25
			—	—	—	✓	3VA9447-0FK25
	EMERGENCY-OFF with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0FK27
			—	✓	✓	—	3VA9277-0FK27
			—	—	—	✓	3VA9447-0FK27
	Standard with door interlock, with open door function	Gray	✓	—	—	—	3VA9137-0FK31
			—	✓	✓	—	3VA9277-0FK31
			—	—	—	✓	3VA9447-0FK31
	Standard with door interlock, with open door function with illumination kit	Gray	✓	—	—	—	3VA9137-0FK33
			—	✓	✓	—	3VA9277-0FK33
			—	—	—	✓	3VA9447-0FK33
	EMERGENCY-OFF with door interlock, with open door function	Yellow-Red	✓	—	—	—	3VA9137-0FK35
			—	✓	✓	—	3VA9277-0FK35
			—	—	—	✓	3VA9447-0FK35
	EMERGENCY-OFF with door interlock, with open door function, with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0FK37
			—	✓	✓	—	3VA9277-0FK37
			—	—	—	✓	3VA9447-0FK37

Supplementary Handle for Door Mounted Rotary Operator (NFPA-79 compliant)

	Type	Color	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	Standard	Gray	✓	—	—	—	3VA9137-0GC01
			—	✓	✓	—	3VA9477-0GC01
			—	—	—	✓	3VA9477-0GC11
	EMERGENCY-OFF	Yellow-Red	✓	—	—	—	3VA9137-0GC05
			—	✓	✓	—	3VA9477-0GC05
			—	—	—	✓	3VA9477-0GC15

① Lockable with up to three padlock hasps.

Molded Case Circuit Breakers

3VA Manual Operators

Selection

Side Mounted Rotary Operator^①

 - Without mounting plate - Rotary operator with shaft 300 mm - Handle with masking plate 75 x 75 mm - Degree of protection Type 1, 12, 3R and 4X	Type	Color	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	Standard	Gray	✓	—	—	—	3VA9137-0PK11
 - With mounting plate - Rotary operator with short shaft - Handle with masking plate 75 x 75 mm - Degree of protection Type 1, 12, 3R and 4X	Standard with illumination kit	Gray	—	✓	✓	—	3VA9277-0PK11
			—	—	—	—	3VA9137-0PK13
	EMERGENCY-OFF	Yellow-Red	✓	—	—	—	3VA9137-0PK15
			—	✓	✓	—	3VA9277-0PK15
	EMERGENCY-OFF with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0PK17
			—	✓	✓	—	3VA9277-0PK17
	Standard with mounting plate	Gray	✓	—	—	—	3VA9137-0PK51
			—	✓	✓	—	3VA9277-0PK51
	Standard with mounting plate, with illumination kit	Gray	✓	—	—	—	3VA9137-0PK53
			—	✓	✓	—	3VA9277-0PK53
	EMERGENCY-OFF with mounting plate	Yellow-Red	✓	—	—	—	3VA9137-0PK55
			—	✓	✓	—	3VA9277-0PK55
	EMERGENCY-OFF with mounting plate, with illumination kit	Yellow-Red	✓	—	—	—	3VA9137-0PK57
			—	✓	✓	—	3VA9277-0PK57

Door Interlock Side Mounted Rotary Operator^①

	Type	Color	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	Standard for use with the side wall mounted rotary operators	Gray	✓	—	—	—	3VA9177-0VF40
Without mounting plate			—	✓	✓	—	3VA9277-0VF40
			—	—	—	—	

Motor Operator without Stored Energy Feature^①

	Type	3VA5 125 A	3VA5 250 A	3VA6 150 A 250 A	3VA5 3VA6 400A 600A	Part Number
	24 ... 60 V DC	✓	—	—	—	3VA9137-0HA10
110 ... 230 V AC 110 ... 250 V DC		—	✓	✓	—	3VA9277-0HA10
		—	—	—	✓	3VA9447-0HA10
		✓	—	—	—	3VA9137-0HA20
		—	✓	✓	—	3VA9277-0HA20
		—	—	—	✓	3VA9447-0HA20
		—	—	—	—	

^① Lockable with up to three padlock hasps.

Molded Case Circuit Breakers

3VA Manual Operators

Selection

Handles with Masking Plate

	Type	Color	Tolerance Compensation	Door Open Function	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
 ■ Degree of protection Type 1, 12, 3R and 4X	Standard	Gray	Without	Without	✓	✓	✓	—	8UD1721-0AB11
			With	Without	✓	✓	✓	—	8UD1721-0AB21
			Without	Without	—	—	—	✓	8UD1731-0AB11
			With	Without	—	—	—	✓	8UD1731-0AB21
			Without	With	✓	✓	✓	—	8UD1721-0AC11
			With	With	✓	✓	✓	—	8UD1721-0AC21
			Without	With	—	—	—	✓	8UD1731-0AC11
			With	With	—	—	—	✓	8UD1731-0AC21
	EMERGENCY-OFF	Yellow-Red	Without	Without	✓	✓	✓	—	8UD1721-0AB15
			With	Without	✓	✓	✓	—	8UD1721-0AB25
			Without	Without	—	—	—	✓	8UD1731-0AB15
			With	Without	—	—	—	✓	8UD1731-0AB25
			Without	With	✓	✓	✓	—	8UD1721-0AC15
			With	With	✓	✓	✓	—	8UD1721-0AC25
			Without	With	—	—	—	✓	8UD1731-0AC15
			With	With	—	—	—	✓	8UD1731-0AC25

Door Mounted Rotary Operator Accessories

	Type	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	8 mm Shaft 300 mm long	✓	✓	✓	✓	8UD1900-2WA00
	8 mm Shaft 600 mm long	✓	✓	✓	✓	8UD1900-2WB00
	Adapter for Shaft for door mounted operator	✓	✓	✓	✓	8UD1900-2DA00
	Door Coupling 8 mm x 8 mm	✓	✓	✓	✓	8UD1900-2HA00
	Fixing bracket for Shaft	✓	—	—	—	3VA9137-0GA80
		—	✓	✓	✓	3VA9477-0GA80
	Variable depth adapter 8 x 8 mm	✓	✓	✓	✓	3VA9487-0GB10
	Mounting tolerance compensation 8 x 8 mm	✓	✓	✓	✓	8UD1900-2GA00

Molded Case Circuit Breakers

3VA Manual Operators

Selection

General Accessories for Manual Operators

	Type	Details		Part Number
	Labeling plate for manual operators	—		3VA9087-0SX10
	Illumination kit for manual operators 24 V DC voltage	For Molded Case Circuit Breakers		
		3VA5, 125...250 A	Front mounted rotary operators	8UD1900-0KA10
		3VA6, 150...600 A	Front mounted rotary operators	8UD1900-0KA20
		3VA5, 3VA6, 125...600 A	Door mounted rotary operators	8UD1900-0KA20
	Cylinder Lock (type Kaba) ■ For door mounted rotary operator (in masking plate) ■ Standard masking plate	Key 1		8UD1900-0MB01
		Key 2		8UD1900-0NB01
		Key 3		8UD1900-0PB01
		Key 4		8UD1900-0QB01
	Cylinder Lock (type Kaba)Ⓢ ■ For door mounted rotary operator (in masking plate) ■ Standard masking plate	Key 1		8UD1900-0MC01
		Key 2		8UD1900-0NC01
		Key 3		8UD1900-0PC01
		Key 4		8UD1900-0QC01
	Cylinder Lock (type Kaba) ■ For door mounted rotary operator (in masking plate) ■ EMERGENCY-OFF masking plate	Key 1		8UD1900-0MB05
		Key 2		8UD1900-0NB05
		Key 3		8UD1900-0PB05
		Key 4		8UD1900-0QB05
	Cylinder Lock (type Kaba)Ⓢ ■ For door mounted rotary operator (in masking plate) ■ EMERGENCY-OFF masking plate	Key 1		8UD1900-0MC05
		Key 2		8UD1900-0NC05
		Key 3		8UD1900-0PC05
		Key 4		8UD1900-0QC05
	Cylinder Lock (type Ronis) ■ includes 2 keys ■ for locking or interlocking ■ installation in all rotary operators w/ shaft stub	Key 1		3VA9980-0VL10
		Key 3		3VA9980-0VL30
		Key 4		3VA9980-0VL40
	Cylinder lock adapter for rotary operator ■ to mount in rotary operator			3VA9980-0LF20

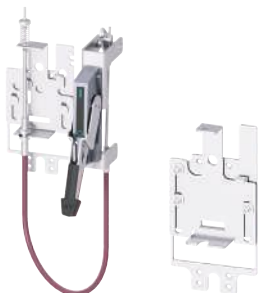
Ⓢ With door open function

Molded Case Circuit Breakers

3VA Manual Operators

Selection

Max Flex Operator

	Type	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
 Complete kit and spare mechanism	Complete Kit	✓	—	—	—	3VA9137-0CK12
	■ Switching mechanism	—	✓	✓	—	3VA9277-0CK12
	■ Plastic handle, NEMA 1/12, black=OFF, green=ON	—	—	—	✓	3VA9477-0CK12
	■ Bowden Cable 36 inches (0.9m) long	—	—	—	✓	3VA9477-0CK12
	Complete Kit	✓	—	—	—	3VA9137-0CK72
	■ Switching mechanism	—	✓	✓	—	3VA9277-0CK72
	■ Steel handle, epoxy coated NEMA 1/3R/12, black=OFF, red=ON,	—	—	—	✓	3VA9477-0CK72
	■ Bowden Cable 36 inches (0.9m) long	—	—	—	✓	3VA9477-0CK72
	Operating Mechanism (spare)	✓	—	—	—	3VA9137-0CB10
		—	✓	✓	—	3VA9277-0CB10
		—	—	—	✓	3VA9477-0CB10
		✓	✓	✓	✓	3VA9977-0CH12
	Handle - Plastic, NEMA 1/12, black = OFF, green = ON	✓	✓	✓	✓	3VA9977-0CH72
	Handle - Steel, Epoxy coated, NEMA 1/3R/12, black = OFF, red = ON	✓	✓	✓	✓	3VA9977-0CH74
	Handle - Steel, Epoxy coated, NEMA 1/3R/12, black = OFF, black = ON	✓	✓	✓	✓	3VA9977-0CH74
	Handle - Steel, chrome-plated, NEMA 4/4X, black = OFF, red = ON	✓	✓	✓	✓	3VA9977-0CH82
	Handle - Steel, chrome-plated, NEMA 4/4X, black = OFF, black = ON	✓	✓	✓	✓	3VA9977-0CH84
	Bowden Cable, 36 inches (0.9m)	✓	✓	✓	—	3VA9278-0CC10
	Bowden Cable, 48 inches (1.2m)	✓	✓	✓	—	3VA9278-0CC20
	Bowden Cable, 60 inches (1.5m)	✓	✓	✓	—	3VA9278-0CC30
	Bowden Cable, 72 inches (1.8m)	✓	✓	✓	—	3VA9278-0CC40
	Bowden Cable, 84 inches (2.1m)	✓	✓	✓	—	3VA9278-0CC50
	Bowden Cable, 96 inches (2.4m)	✓	✓	✓	—	3VA9278-0CC60
	Bowden Cable, 120 inches (3.0m)	✓	✓	✓	—	3VA9278-0CC70
	Bowden Cable, 144 inches (3.6m)	✓	✓	✓	—	3VA9278-0CC80
	Bowden Cable, 36 inches (0.9m)	—	—	—	✓	3VA9578-0CC10
	Bowden Cable, 48 inches (1.2m)	—	—	—	✓	3VA9578-0CC20
	Bowden Cable, 60 inches (1.5m)	—	—	—	✓	3VA9578-0CC30
	Bowden Cable, 72 inches (1.8m)	—	—	—	✓	3VA9578-0CC40
	Bowden Cable, 84 inches (2.1m)	—	—	—	✓	3VA9578-0CC50
	Bowden Cable, 96 inches (2.4m)	—	—	—	✓	3VA9578-0CC60
	Bowden Cable, 120 inches (3.0m)	—	—	—	✓	3VA9578-0CC70
	Bowden Cable, 144 inches (3.6m)	—	—	—	✓	3VA9578-0CC80
	MaxFlex Auxiliary switch (leading from On to Off)	✓	✓	✓	✓	3VA9478-0CX10
	■ 1 CO	—	—	—	—	—
	MaxFlex Auxiliary switch (leading from On to Off)	✓	✓	✓	✓	3VA9478-0CX20
	■ 2 CO	—	—	—	—	—

Variable depth flange mounted operator kit

	Type	3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	Catalog Number
	Complete kit comprising:	✓	—	—	—	3VA9138-0DK72
	■ Switching mechanism adjustable depth 200mm to 400mm	—	✓	✓	—	3VA9278-0DK72
	■ Epoxy coated steel handle, NEMA 1/3R/12, black = OFF, red = ON	—	—	—	✓	3VA9478-0DK72
	Complete kit comprising:	✓	—	—	—	3VA9138-0DK82
	■ Switching mechanism adjustable depth 200mm to 400mm	—	✓	✓	—	3VA9278-0DK82
	■ Stainless steel handle, chrome-plated NEMA 4/4X, black=OFF, red=ON	—	—	—	✓	3VA9478-0DK82
	Complete kit comprising:	✓	—	—	—	3VA9138-0DK84
	■ Switching mechanism adjustable depth 200mm to 400mm	—	✓	✓	—	3VA9278-0DK84
	■ Handle stainless steel, chrome-plated NEMA 4/4X, black=OFF, black=ON	—	—	—	✓	3VA9478-0DK84
		—	—	—	—	—
		—	—	—	—	—
		—	—	—	—	—

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Box Terminals

	Type	Minimum cable cross-section (standard) Class B	Maximum cable cross-section (standard) Class B	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Steel wrap-around lug (Cu cable only) kit of 3 single lugs	AWG 14	3/0	✓	—	—	—	3VA9133-0JA11
		AWG 10	3/0	—	✓	—	—	3VA9233-0JA11
		AWG 4	350 kcmil	—	✓	—	—	3VA9233-0JA12
		AWG 10	3/0	—	—	✓	—	3VA9143-0JA12
		AWG 4	350 kcmil	—	—	✓	—	3VA9243-0JA12
		1/0	500 kcmil	—	—	—	✓	3VA9473-0JA13
	Steel wrap-around lug (Cu cable only) kit of 4 single lugs	AWG 14	AWG 10	✓	—	—	—	3VA9134-0JA11
		AWG 10	3/0	—	—	✓	—	3VA9144-0JA12
		AWG 4	350 kcmil	—	—	✓	—	3VA9244-0JA12
		1/0	500 kcmil	—	—	—	✓	3VA9474-0JA13

Aluminum Wire Connectors

	Type	Minimum cable cross-section (standard) Class B	Maximum cable cross-section (standard) Class B	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Aluminum body lug small (Cu/Al cable) kit of 3 single lugs	AWG 14	AWG 10	✓	—	—	—	3VA9133-0JB10
	Aluminum body lug (Cu/Al cable) kit of 3 single lugs	AWG 14	3/0	✓	—	—	—	3VA9133-0JB11
		AWG 6	350 kcmil	—	✓	—	—	3VA9233-0JB12
		AWG 14	1/0	—	—	✓	—	3VA9143-0JB11
		AWG 6	350 kcmil	—	—	✓	—	3VA9243-0JB12
		AWG 1	600 kcmil	—	—	—	✓	3VA9373-0JB13 ^①
	Aluminum body lug small (Cu/Al cable) kit of 4 single lugs	AWG 14	AWG 10	✓	—	—	—	3VA9134-0JB10
	Aluminum body lug (Cu/Al cable) kit of 4 single lugs	AWG 14	AWG 10	✓	—	—	—	3VA9134-0JB11
		AWG 14	1/0	—	—	✓	—	3VA9144-0JB11
		AWG 6	350 kcmil	—	—	✓	—	3VA9244-0JB12
		AWG 1	600 kcmil	—	—	—	✓	3VA9374-0JB13 ^①
	Aluminum body lug small with control wire tap (Cu/Al cable)	AWG 14	AWG 10	✓	—	—	—	3VA9133-0JG10
	Aluminum body lug with control wire tap (Cu/Al cable) kit of 3 single lugs	AWG 14	3/0	✓	—	—	—	3VA9133-0JG11
		AWG 6	350 kcmil	—	✓	—	—	3VA9233-0JG12
		AWG 14	1/0	—	—	✓	—	3VA9143-0JG11
		AWG 6	350 kcmil	—	—	✓	—	3VA9243-0JG12
		AWG 1	600 kcmil	—	—	—	✓	3VA9373-0JG13 ^①
	Aluminum body lug small with control wire tap (Cu/Al cable)	AWG 14	AWG 10	✓	—	—	—	3VA9134-0JG10
	Aluminum body lug with control wire tap (Cu/Al cable) kit of 4 single lugs	AWG 14	AWG 10	✓	—	—	—	3VA9134-0JG11
		AWG 14	1/0	—	—	✓	—	3VA9144-0JG11
		AWG 6	350 kcmil	—	—	✓	—	3VA9244-0JG12
		AWG 1	600 kcmil	—	—	—	✓	3VA9374-0JG13 ^①

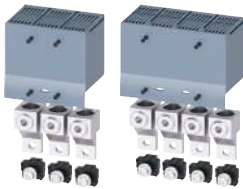
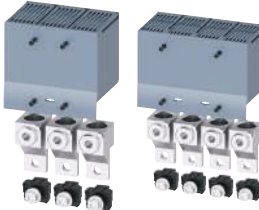
^①This conductor is ampere-rated at 380A with copper wire and 310A with aluminum wire.

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Aluminum Wire Connectors (cont.)

	Type	Minimum cable cross-section (standard) Class B	Maximum cable cross-section (standard) Class B	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
 3 lug 4 lug	Aluminum body lug large (Cu/Al cable) kit of 3 single lugs and 1 extended terminal cover	AWG 4	350 kcmil	✓	—	—	—	3VA9133-0JJ12
		AWG 2	350 kcmil	—	✓	—	—	3VA9233-0JJ13
		AWG 2	350 kcmil	—	—	—	✓	3VA9243-0JJ13
	Aluminum body lug large (Cu/Al cable) kit of 4 single lugs and 1 extended terminal cover	AWG 2	350 kcmil	—	—	✓	—	3VA9244-0JJ13
 3 lug 4 lug	Aluminum body lug large with control wire tap (Cu/Al cable) kit of 3 single lugs and 1 extended terminal cover	AWG 4	350 kcmil	✓	—	—	—	3VA9133-0JC12
		AWG 2	350 kcmil	—	✓	—	—	3VA9233-0JC13
		AWG 2	350 kcmil	—	—	✓	—	3VA9243-0JC13
	Aluminum body lug large with control wire tap (Cu/Al cable) kit of 4 single lugs and 1 extended terminal cover	AWG 4	300 kcmil	✓	—	—	—	3VA9134-0JC12
 3 lug 4 lug		AWG 2	350 kcmil	—	—	✓	—	3VA9244-0JC13
	Aluminum body lug, 2 Cables (Cu/Al cable) kit of 3 single lugs and 1 extended terminal cover	AWG 4	300 kcmil	—	✓	—	—	3VA9233-0JJ22
		AWG 4	300 kcmil	—	—	✓	—	3VA9243-0JJ22
		2/0	600 kcmil	—	—	—	✓	3VA9473-0JJ23
 3 lug 4 lug	Aluminum body lug, 2 Cables (Cu/Al cable) kit of 4 single lugs and 1 extended terminal cover	AWG 4	300 kcmil	—	—	✓	—	3VA9244-0JJ22
		2/0	600 kcmil	—	—	—	✓	3VA9474-0JJ23
	Aluminum body lug, 2 Cables with control wire tap (Cu/Al cable) kit of 3 single lugs and 1 extended terminal cover	AWG 4	300 kcmil	—	✓	—	—	3VA9233-0JC22
		AWG 4	300 kcmil	—	—	✓	—	3VA9243-0JC22
 3 lug 4 lug		2/0	600 kcmil	—	—	—	✓	3VA9473-0JC23
	Aluminum body lug, 2 Cables with control wire tap (Cu/Al cable) kit of 4 single lugs and 1 extended terminal cover	AWG 4	300 kcmil	—	—	✓	—	3VA9244-0JC22
		2/0	600 kcmil	—	—	—	✓	3VA9474-0JC23
	Distribution lug, 6 Cables (Cu/Al cable) kit of 3 single lugs and 1 extended terminal cover	AWG 14	AWG 2	✓	—	—	—	3VA9133-0JF60
 3 lug 4 lug			AWG 2	—	✓	—	—	3VA9233-0JF60
			AWG 2	—	—	✓	—	3VA9243-0JF60
			AWG 2	—	—	—	✓	3VA9373-0JF60
	Distribution lug, 6 Cables (Cu/Al cable) kit of 4 single lugs and 1 extended terminal cover	AWG 14	AWG 2	✓	—	—	—	3VA9134-0JF60
			AWG 2	—	—	✓	—	3VA9244-0JF60
			AWG 2	—	—	—	✓	3VA9374-0JF60

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Copper Wire Connectors

	Type	Minimum cable cross-section (standard) Class B	Maximum cable cross-section (standard) Class B	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Copper body lug small (Cu cable only) kit of 3 single lugs	AWG 14	AWG 10	✓		—	—	3VA9133-0JD10
	Copper body lug (Cu cable only) kit of 3 single lugs	AWG 14	2/0	✓		—	—	3VA9133-0JD11
		AWG 6	350 kcmil	—	✓	—	—	3VA9233-0JD12
		AWG 14	1/0	—	—	✓	—	3VA9143-0JD11
		AWG 6	350 kcmil	—	—	✓	—	3VA9243-0JD12
	Copper body lug small (Cu cable only) kit of 4 single lugs	AWG 1	600 kcmil	—	—	—	✓	3VA9373-0JD13
		AWG 14	AWG 10	✓		—	—	3VA9134-0JD10
	Copper body lug (Cu cable only) kit of 4 single lugs	AWG 14	AWG 10	✓		—	—	3VA9134-0JD11
		AWG 14	1/0	—	—	✓	—	3VA9144-0JD11
		AWG 6	350 kcmil	—	—	✓	—	3VA9244-0JD12
		AWG 1	600 kcmil	—	—	—	✓	3VA9374-0JD13
	Copper body lug small with control wire tap (Cu cable only) kit of 3 single lugs	AWG 14	AWG 10	✓		—	—	3VA9133-0JK10
	Copper body lug with control wire tap (Cu cable only) kit of 3 single lugs	AWG 14	2/0	✓		—	—	3VA9133-0JK11
		AWG 6	350 kcmil	—	✓	—	—	3VA9233-0JK12
		AWG 14	1/0	—	—	✓	—	3VA9143-0JK11
		AWG 6	350 kcmil	—	—	✓	—	3VA9243-0JK12
	Copper body lug small with control wire tap (Cu cable only) kit of 4 single lugs	AWG 1	600 kcmil	—	—	—	✓	3VA9373-0JK13
		AWG 14	AWG 10	✓		—	—	3VA9134-0JK10
	Copper body lug with control wire tap (Cu cable only) kit of 4 single lugs	AWG 14	AWG 10	✓		—	—	3VA9134-0JK11
		AWG 14	1/0	—	—	✓	—	3VA9144-0JK11
		AWG 6	350 kcmil	—	—	✓	—	3VA9244-0JK12
		AWG 1	600 kcmil	—	—	—	✓	3VA9374-0JK13
	Copper body lug 2 Cables (Cu cable only) kit of 3 single lugs and 1 extended terminal cover	2/0	600 kcmil	—	—	—	✓	3VA9473-0JE23
	Copper body lug 2 Cables (Cu cable only) kit of 4 single lugs and 1 extended terminal cover	2/0	600 kcmil	—	—	—	✓	3VA9474-0JE23
	Copper body lug 2 Cables with control wire tap (Cu cable only) kit of 3 single lugs and 1 extended terminal cover	2/0	600 kcmil	—	—	—	✓	3VA9473-0JL23
	Copper body lug 2 Cables with control wire tap (Cu cable only) kit of 4 single lugs and 1 extended terminal cover	2/0	600 kcmil	—	—	—	✓	3VA9474-0JL23

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Nut Keeper Kits

	Type	Maximum terminal width	Maximum terminal thickness	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Nut keeper kit kit of 3 single lugs	6.5 mm / 0.25 inch	17 mm / 0.7 inch	✓	—	—	—	3VA9133-0QA00
		8 mm / 0.3 inch	25 mm / 1 inch	—	✓	—	—	3VA9233-0QA00
		8 mm / 0.3 inch	25 mm / 1 inch	—	—	✓	—	3VA9243-0QA00
		10 mm / 0.4 inch	35 mm / 1.4 inch	—	—	—	✓	3VA9473-0QA00
	Nut keeper kit kit of 4 single lugs	6.5 mm / 0.25 inch	17 mm / 0.7 inch	✓	—	—	—	3VA9134-0QA00
		8 mm / 0.3 inch	25 mm / 1 inch	—	—	✓	—	3VA9244-0QA00
		10 mm / 0.4 inch	35 mm / 1.4 inch	—	—	—	✓	3VA9474-0QA00

Bus Connector Extensions

	Type	Maximum terminal width	Maximum terminal thickness	For molded case circuit breakers/ rated current				Part Number
				3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Front bus connectors extended 1 single connector	22 mm / 0.9 inch	8 mm / 0.3 inch	✓	—	—	—	3VA9131-0QB00
	Front bus connectors extended kit of 3 single connectors, 2 phase barriers, and 1 insulating plate	22 mm / 0.9 inch	8 mm / 0.3 inch	✓	—	—	—	3VA9133-0QB00
	Front bus connectors extended kit of 4 single connectors, 3 phase barriers, and 1 insulating plate	22 mm / 0.9 inch	8 mm / 0.3 inch	✓	—	—	—	3VA9133-0QB00
	Front bus connectors extended kit of 3 single connectors and 1 insulating plate	32 mm / 1.3 inch	10 mm / 0.4 inch	—	✓	✓	—	3VA9273-0QB00
		40 mm / 1.6 inch	12.5 mm / 0.5 inch	—	—	—	✓	3VA9473-0QB00
	Front bus connectors extended kit of 4 single connectors and 1 insulating plate	32 mm / 1.3 inch	10 mm / 0.4 inch	—	—	✓	—	3VA9274-0QB00
		40 mm / 1.6 inch	12.5 mm / 0.5 inch	—	—	—	✓	3VA9474-0QB00
	Front bus connectors offset kit of 3 single connectors 1 insulating plate Distance between pole centers: 400/600 A = 70 mm / 2.76 inches	60 mm / 2.4 inch	12.5 mm / 0.5 inch	—	—	—	✓	3VA9473-0QC00
	Front bus connectors offset kit of 4 single connectors 1 insulating plate Distance between pole centers: 400/600 A = 70 mm / 2.76 inches	60 mm / 2.4 inch	12.5 mm / 0.5 inch	—	—	—	✓	3VA9474-0QC00

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Rear connection studs flat

	Type	For molded case circuit breakers / rated current				Part Number
		3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Rear connection studs flat kit of 2 short flat studs and 1 long flat stud	✓	—	—	—	3VA9133-0QE00
		—	✓	—	—	3VA9233-0QE00
		—	—	✓	—	3VA9243-0QE00
		—	—	—	✓	3VA9473-0QE00
	Rear connection studs flat kit of 2 short flat studs and 2 long flat studs	✓	—	—	—	3VA9134-0QE00
		—	—	✓	—	3VA9244-0QE00
		—	—	—	✓	3VA9474-0QE00
	Rear connection studs flat 1 short flat stud	✓	—	—	—	3VA9131-0QE10
		—	✓	—	—	3VA9231-0QE10
		—	—	✓	—	3VA9241-0QE10
		—	—	—	✓	3VA9471-0QE10
	Rear connection studs flat 1 long flat stud	✓	—	—	—	3VA9131-0QE20
		—	✓	—	—	3VA9231-0QE20
		—	—	✓	—	3VA9241-0QE20
		—	—	—	✓	3VA9471-0QE20

Rear connection studs round

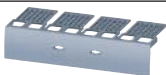
	Rear connection studs round kit of 1 long round stud and 2 short round studs	✓	—	—	—	3VA9133-0QF00
		—	✓	—	—	3VA9233-0QF00
		—	—	✓	—	3VA9243-0QF00
		—	—	—	✓	3VA9473-0QF00
	Rear connection studs round kit of 2 long round studs and 2 short round studs	✓	—	—	—	3VA9134-0QF00
		—	—	✓	—	3VA9244-0QF00
		—	—	—	✓	3VA9474-0QF00
	Rear connection studs round 1 short round studs	✓	—	—	—	3VA9131-0QF10
		—	✓	—	—	3VA9231-0QF10
		—	—	✓	—	3VA9241-0QF10
		—	—	—	✓	3VA9471-0QF10
	Rear connection studs round 1 long round stud	✓	—	—	—	3VA9131-0QF20
		—	✓	—	—	3VA9231-0QF20
		—	—	✓	—	3VA9241-0QF20
		—	—	—	✓	3VA9471-0QF20

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Phase barriers, terminal covers, and insulating plates

	Type	For molded case circuit breakers / rated current				Part Number
		3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Phase barriers kit of 2 phase barriers	✓	—	—	—	3VA9132-0WA00
		—	✓	✓	—	3VA9272-0WA00
		—	—	—	✓	3VA9472-0WA00
	Terminal cover for 1-pole breakers	✓	—	—	—	3VA9131-0WD10
	Terminal cover for 2-pole breakers	✓	—	—	—	3VA9131-0WD20
	Terminal cover for 3-pole breakers	✓	—	—	—	3VA9131-0WD30
		—	✓	✓	—	3VA9271-0WD30
		—	—	—	✓	3VA9471-0WD30
	Terminal cover for 4-pole breakers	✓	—	—	—	3VA9131-0WD40
		—	—	✓	—	3VA9271-0WD40
		—	—	—	✓	3VA9471-0WD40
	Terminal cover extended for 2-pole breakers	✓	—	—	—	3VA9131-0WF20
	Terminal cover extended for 3-pole breakers	✓	—	—	—	3VA9131-0WF30
		—	✓	✓	—	3VA9271-0WF30
		—	—	—	✓	3VA9471-0WF30
	Terminal cover extended for 4-pole breakers	✓	—	—	—	3VA9131-0WF40
		—	—	✓	—	3VA9271-0WF40
		—	—	—	✓	3VA9471-0WF40
	Terminal cover offset for 3-pole breakers	—	—	—	✓	3VA9471-0WG30
	Terminal cover offset for 4-pole breakers	—	—	—	✓	3VA9471-0WG40

Molded Case Circuit Breakers

3VA Connection Technology

Selection

Phase barriers, terminal covers, and insulating plates

	Type	For molded case circuit breakers / rated current				Part Number
		3VA5 125A	3VA5 250A	3VA6 150A 250A	3VA5 3VA6 400A 600A	
	Rear insulating plate extended for 2-pole breakers	✓	—	—	—	3VA9131-0WJ20
	Rear insulating plate extended for 3-pole breakers	✓	—	—	—	3VA9131-0WJ30
		—	✓	✓	—	3VA9271-0WJ30
		—	—	—	✓	3VA9471-0WJ30
	Rear insulating plate extended for 4-pole breakers	✓	—	—	—	3VA9131-0WJ40
		—	—	✓	—	3VA9271-0WJ40
		—	—	—	✓	3VA9471-0WJ40
	Rear insulating plate offset for 3-pole breakers	—	—	—	✓	3VA9471-0WK30
	Rear insulating plate offset for 4-pole breakers	—	—	—	✓	3VA9471-0WK40
		—	—	—	—	—
	Control wire tap for busbar (for fixed mounting)	—	✓	✓	—	3VA9270-0WC00
		—	—	—	✓	3VA9470-0WC00

Molded Case Circuit Breakers

3VA Plug-in and Draw-out Technology

Selection

Plug-in socket

	Type	For molded case circuit breakers / rated current			Part Number
		3VA61/62 150A/250A	3VA63 400A	3VA64 600A	
 3 pole	Plug-in unit, 3-pole, complete kit Consists of: Plug-in socket, Plug-in unit, conversion kit, Mounting screw kit	✓	—	—	3VA9143-0KP00
		—	✓	—	3VA9343-0KP00
		—	—	✓	3VA9443-0KP00
 4 pole	Plug-in unit, 4-pole, complete kit Consists of: Plug-in socket, Plug-in unit, conversion kit, Mounting screw kit	✓	—	—	3VA9144-0KP00
		—	✓	—	3VA9344-0KP00
		—	—	✓	3VA9444-0KP00
 3 pole	Plug-in unit, 3-pole, conversion kit Consists of: Screw-fastened terminal covers for molded case circuit breakers, Plug-in contacts, Cable cage, Autotrip plunger	✓	—	—	3VA9143-0KP10
		—	✓	✓	3VA9343-0KP10
	Plug-in unit, 4-pole, conversion kit Consists of: Screw-fastened terminal covers for molded case circuit breakers, Plug-in contacts, Cable cage, Autotrip plunger	✓	—	—	3VA9144-0KP10
 4 pole		—	✓	✓	3VA9344-0KP10

Draw-out units

	Type	For molded case circuit breakers / rated current			Part Number
		3VA61/62 150A/250A	3VA63 400A	3VA64 600A	
 3 pole	Draw-out unit, 3-pole, complete kit Consists of: Draw-out socket, Draw-out unit, conversion kit, Mounting screw kit	✓	—	—	3VA9143-0KD00
		—	✓	—	3VA9343-0KD00
		—	—	✓	3VA9443-0KD00
 4 pole	Draw-out unit, 4-pole, complete kit Consists of: Draw-out socket, Draw-out unit, conversion kit, Mounting screw kit	✓	—	—	3VA9144-0KD00
		—	✓	—	3VA9344-0KD00
		—	—	✓	3VA9444-0KD00
 3 pole	Draw-out unit, 3-pole, conversion kit Consists of: Screw-fastened terminal covers, Side wall, Plug-in contacts, Cable cage, Autotrip plunger	✓	—	—	3VA9143-0KD10
		—	✓	✓	3VA9343-0KD10
	Draw-out unit, 4-pole, conversion kit Consists of: Screw-fastened terminal covers, Side wall, Plug-in contacts, Cable cage, Autotrip plunger	✓	—	—	3VA9144-0KD10
 4 pole		—	✓	✓	3VA9344-0KD10

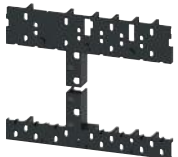
Note: Crank handle for the drawout unit must be ordered separately.

Molded Case Circuit Breakers

3VA Plug-in and Draw-out Technology

Selection

Accessories

	Type	For molded case circuit breakers / rated current		Part Number
		3VA61/62 150A/250A	3VA63/64 400A/600A	
	Cable cage for plug-in/draw-out unit 3-/4-pole (spare part) Cable duct for routing of the required cables from the internal acc. on the back of the breaker.	✓	—	3VA9167-0KB02
		—	✓	3VA9367-0KB02
	Door feedthrough	✓	—	3VA9147-0KT00
		—	✓	3VA9347-0KT00
	Autotrip plunger Plug-in unit	✓	—	3VA9267-0KP81
		—	✓	3VA9457-0KP81
	Autotrip plunger Draw-out unit	✓	—	3VA9267-0KD81
		—	✓	3VA9457-0KD81
	Terminal cover for plug-in/draw-out unit, 3-pole (spare part) To provide circuit breaker touch protection, for mounting on the molded case circuit breaker	✓	—	3VA9143-0KB01
		—	✓	3VA9343-0KB01
	Terminal cover for plug-in/draw-out unit, 4-pole (spare part) To provide circuit breaker touch protection, for mounting on the molded case circuit breaker	✓	—	3VA9144-0KB01
		—	✓	3VA9344-0KB01
	Crank handle for draw-out unit Insulated, including crank holder			3VA9987-0KD81

Molded Case Circuit Breakers

3VA Plug-in and Draw-out Technology

Selection

Other Accessories

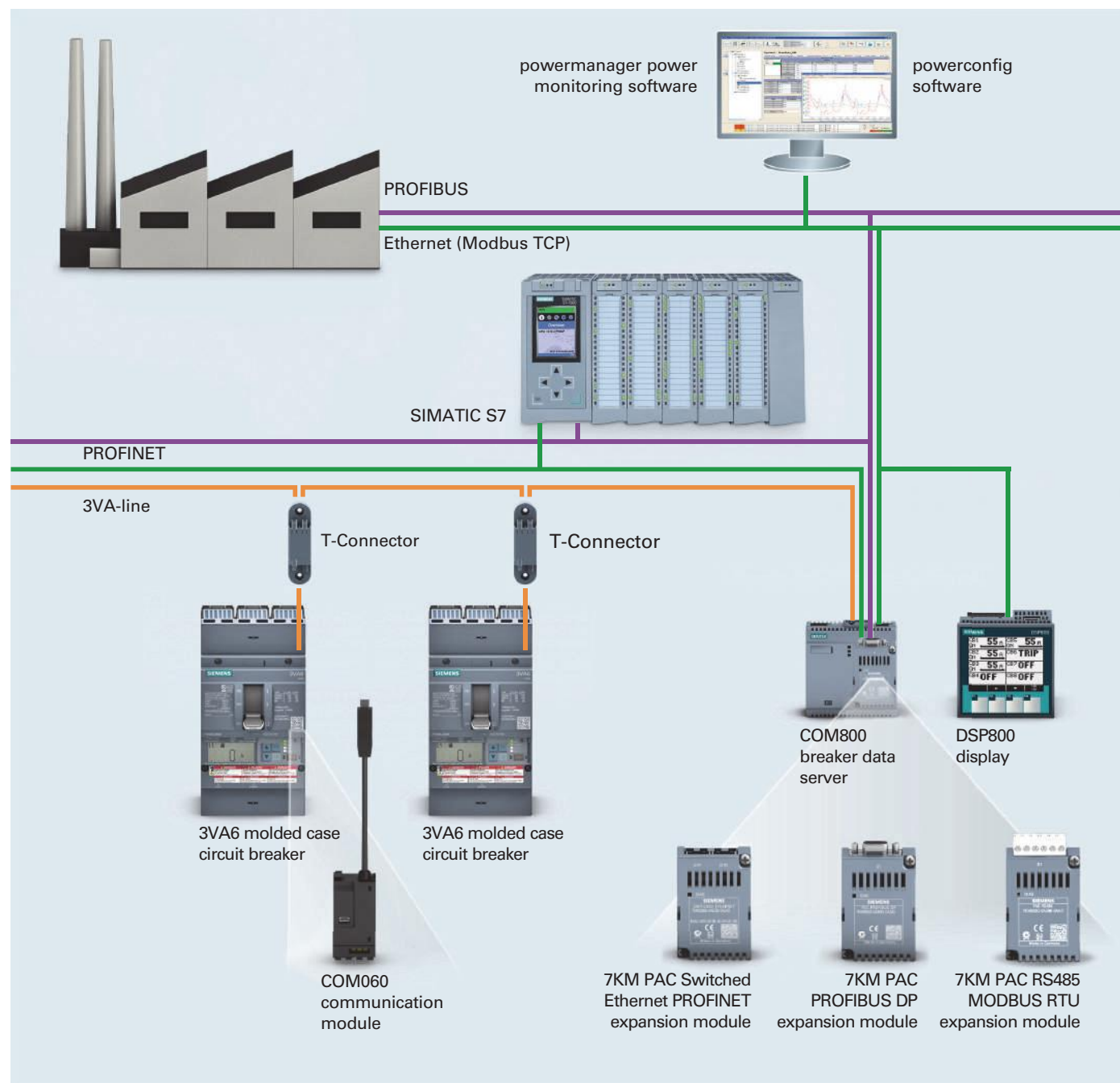
	Type Communication link for draw-out unit Consists of: Cable kit with 3 special position signaling switches, connecting cable 3VA9987-0KC10	Part Number 3VA9977-0KC00
	Position signaling switches For draw-out unit	3VA9977-0KB00
	Spare connecting cable To connect the position signaling switches for communication with the COM060	3VA9987-0KC10
	Auxiliary circuit connector ■ For draw-out units	3VA9977-0KD80
	Auxiliary circuit connector ■ For plug-in units	3VA9977-0KP80
	Cylinder lock (type Ronis) ■ Includes a lock with 2 keys ■ For locking ■ For installation in all rotary operators with shaft stub ■ For mounting in the adapter kit for the accessories component	3VA9980-0VL10
		3VA9980-0VL30
		3VA9980-0VL40
	Cylinder lock adapter for draw-out unit ■ For fitting a cylinder lock in the right-hand side wall of the draw-out unit ■ To prevent unauthorized withdrawal or insertion of the circuit breaker; ■ Circuit breaker can be locked in the CONNECT, TEST, or DISCONNECT position	3VA9970-0LF40

Molded Case Circuit Breakers

3VA Communication and Testing/Commissioning Devices

Selection

Communications overview



Molded Case Circuit Breakers

3VA Communication and Testing/Commissioning Devices

Selection

Modules

	Type	For molded case circuit breakers / rated current		Part Number
		3VA61/62 150A/250 A	3VA63/64 400A/600A	
	24 V Module ■ 24 V DC ■ For mounting in the right-hand accessories compartment of the 3VA6 ■ Optional energy supply for the ETU, also includes continuous operation of the ETU display and the metering function of the ETU 8-series	✓	—	3VA9177-0TB50
		—	✓	3VA9377-0TB50
	COM060 communication module ■ For mounting in the right-hand accessories compartment of the 3VA6 molded case circuit breaker (including ETU power supply) ■ Communication with the COM800/COM100 breaker data server via the 3VA-line ■ Including a T-Connector	✓	—	3VA9177-0TB10
		—	✓	3VA9377-0TB10
	Spare SLC adapter COM060, 24 V module accessory for: ■ 3VA61/62 100/150/250	✓	—	3VA9187-0TB60
	Spare SLC adapter COM060, 24 V module accessory for: ■ 3VA63/64 400/600	—	✓	3VA9387-0TB60

Breaker data server

	Type	Part Number
	COM800 breaker data server ■ 2 terminating resistors ■ Central communication module for connecting up to eight 3VA6 molded case circuit breakers via the 3VA-line ■ Ethernet 10/100 Mbit/s interface ■ Module slot for plugging on an optional PROFIBUS DP, PROFINET or RS485 module	3VA9977-0TA10
	COM100 breaker data server ■ 2 terminating resistors ■ Central communication module for connecting one 3VA6 molded case circuit breaker ■ Ethernet 10/100 Mbit/s interface ■ Module slot for plugging on an optional PROFIBUS DP, PROFINET or RS485 module	3VA9977-0TA20
	7KM PAC PROFIBUS DP expansion module ■ The 7KM PAC PROFIBUS DP expansion module is used for connecting the COM800/COM100 breaker data server, and the 3VA molded case circuit breakers connected to it, to PROFIBUS DPV1 ■ The 7KM PAC PROFIBUS DP expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the PROFIBUS DP master. It receives information (e.g. commands) from the PROFIBUS DP master, and forwards this information to the 3VA molded case circuit breaker	7KM9300-0AB01-0AA0
	7KM PAC Switched Ethernet PROFINET expansion module ■ The 7KM PAC Switched Ethernet PROFINET expansion module is used to connect the COM800/COM100 breaker data server, and the connected 3VA molded case circuit breaker, to PROFINET via two Ethernet interfaces ■ The 7KM PAC Switched Ethernet PROFINET expansion module provides the status and measured quantities of the 3VA molded case circuit breaker to PROFINET via the PROFINET IO, PROFINET and Modbus TCP protocols	7KM9300-0AE01-0AA0
	7KM PAC RS485 Modbus RTU expansion module ■ The 7KM PAC RS485 Modbus expansion module is used to connect the COM800/COM100 breaker data server, and the 3VA molded case circuit breaker connected to it, to Modbus RTU ■ The 7KM PAC RS485 Modbus expansion module provides the status and measured quantities of the 3VA molded case circuit breaker for the Modbus RTU master. It receives information (e.g. commands) from the Modbus RTU master, and forwards this information to the 3VA molded case circuit breaker	7KM9300-0AM00-0AA0

Molded Case Circuit Breakers

3VA Communication and Testing/Commissioning Devices

Selection

Accessories for Communication

5 MOLDED CASE CIRCUIT BREAKERS		Type	Part Number
		T-Connector ■ Spare part ■ Provides spur line feeder to COM060 and loops to the next circuit breaker ■ Includes a connection adapter for mounting on the 3VA6 breaker enclosure	3VA9987-0TG10
		DIN rail adapter For snapping the T-Connector onto a DIN rail	3VA9987-0TG11
		Preassembled T-Connector-to-T-Connector or T-Connector-to-COM800/ COM100 connecting cable ■ 0.4 m long ■ 1 m long ■ 2 m long ■ 4 m long	3VA9987-0TC10
			3VA9987-0TC20
			3VA9987-0TC30
			3VA9987-0TC40
		Preassembled connecting cable for extending the COM060-to-T-Connector spur line connection ■ 0.4 m long ■ 0.8 m long	3VA9987-0TF20
			3VA9987-0TF10
		Additional bus terminating resistors	3VA9987-0TE10
		Voltage tap to external N conductor Cable for connecting the neutral point for the metering function of the 8-Series ETU, length 1.5 m	3VA9987-0UC10
		External current transformer as straight-through transformer. Connection of an external current transformer for the N conductor for 3-pole 3VA6 molded case circuit breakers for 5-series and 8-series ETUs (ETU850, ETU856, ETU860), including connecting cable	
		■ In = 25 ... 150A	3VA9077-0NA10
		■ In = 160 ... 350 A	3VA9177-0NA10
		DSP800 display ■ For displaying the status, measured values and parameters of up to 8 3VA6 molded cases circuit breakers ■ Connection to the COM800/COM100 via Ethernet for displaying information of the COM800/COM100 and the connected 3VA6 molded case circuit breaker	3VA9977-0TD10
		EFB300 ■ External function box for connection to the ETU of the 3VA6 molded case circuit breaker ■ 4 digital outputs for information output, 1 digital input ■ ZSI functionality ■ S0 interface ■ Including cable 1.5 m in length	3VA9977-0UA10
		Connecting cable for EFB300 and MMB300. Spare part	
		■ 1.5 m long ■ 3.0 m long ■ 3.0 m long for 3VA with EFB and RCD820	3VA9987-0UB10 3VA9987-0UB20 3VA9987-0UB30