

# Section 5

## Switchboards



Power-Style™ Commercial Multi-Metering Switchboard Lineup

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### Frequently Asked Questions

#### FAQs

Visit the online FAQs page to find additional technical information covering all products including discontinued and obsolete products.  
<https://www.se.com/us/en/faqs/home/>



EUSERC UCT,  
Single Main Circuit Breaker  
with I-Line Distribution Panel



EUSERC UCT,  
Fusible Multiple Mains

Speed-D™ Switchboards

### Power-Style Commercial Multi-Metering Switchboards (UL Listed)

- Designed, built, and listed to UL 891
- Lever bypass and EUSERC non-lever bypass
- Hot or cold sequence metering—EUSERC, NEMA, LOCAL
- Front and rear alignment standard
- Switchboard ratings through 4000 A, 100 kA
- Meter sections in either three- or six-socket section configuration
- Tenant mains either circuit breaker or fusible
- 60–200 A without lever bypass with self-contained meter sockets, 5- or 7-jaw, ring type and test block where required
- 60–200 A lever bypass with self-contained meter sockets, 7-jaw, ringless
- Factory-installed devices with completely wired from meter socket to disconnect
- Provisions for adding future tenants available, as well as future sections
- Sections in either NEMA 1 or NEMA 3R construction
- For use on 120/240 V, 120/208 V, and 277/480 V systems
- Integrated, front-accessible wireway for top exiting load cables
- Customer access area for top exiting load cables



Lever Bypass  
Class 2755



EUSERC  
Class 2756

Class **2755, 2756** / Refer to Catalog **2756CT9601**

**Meter Sockets, Covers, Hardware Kits**

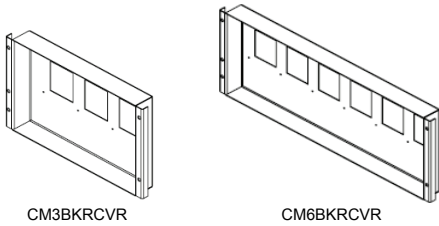
Meter socket kits include meter socket (ringless type or ring type—see tables below) and instruction bulletin. The connection cables from the line bus to the meter socket and from the meter socket to the tenant main disconnect are not included. These should be provided by the contractor.

**Table 5.1: EUSERC Meter Socket with Test Block Kit (Ring Type; Class 2756)**

Voltage System	Poles	Description	Catalog No.	
			Single-Phase	Phase
120/240 V, 208Y/120 V, or 240/120 V Delta	AB	Old design: plug on to line side bus	CM522ABE	—
	AC		CM522ACE	—
	BC		CM522BCE	—
208Y/120 V, 240/120 V Delta, or 480Y/277 V	AC	New design: lugs on line side	CMLL522E	—
	ABC	Old design: plug on to line side bus	—	CM732E
		New design: lugs on line side	—	CMLL732E

**Table 5.2: Lever Bypass Meter Socket (Ringless Type; Class 2755)**

Voltage System	Poles	Description	Catalog No.	
			Single-Phase	Phase
480Y/277 V	ABC	Old design: plug on to line side bus	—	8024878850
		New design: lugs on line side	—	CMLL732



**Table 5.3: Cover and Hardware Kits**

Description	Tenant Main Structure	Catalog No.
<b>CMM Circuit Breaker Cover Kit [1]</b>		
Allows PowerPact™ H, J, and Q circuit breakers to be installed in legacy design CMM structures.	3-Socket	CM3BKRCVR
	6-Socket	CM6BKRCVR
<b>CMM Meter Cover Kit for EUSERC Applications</b>		
Includes meter cover, test block cover, and hardware.	3-Socket	CM7CR20ER
	6-Socket	CM7CR32ER
<b>CMM Meter Cover Kit for Lever Bypass Applications</b>		
Meter socket cover		CM7CR20R [2]
Blank cover		CM20BLK [2]
<b>CMM Universal Hardware Kit</b>		
Required to add any tenant main disconnect.		CMUHWKIT
For additional information or for custom applications, please contact your local Schneider Electric representative. Or, visit us on the web at <a href="http://www.se.com/us/en/">www.se.com/us/en/</a> .		

[1] A new circuit breaker cover is required when adding a PowerPact Q, H, or J circuit breaker to a legacy design tenant metering structure. The new cover has larger openings to accommodate the padlock attachment for these circuit breakers.  
 [2] Order point: PDS

Class 2755, 2756 / Refer to Catalog 2756CT9601

Tenant Main Disconnects

Table 5.4: Circuit Breakers

Ampacity	Catalog No.	SCCR		Load Lug Information
		240 V	480 V	
<b>100 A F-frame Circuit Breaker</b>				
60 A	FAL34060	25 kA	18 kA	#12 - 1/0 AWG Al or Cu
70–100 A	FAL34___[3]			
60 A	FHL36060	65 kA	25 kA	
70–100 A	FHL36___[3]			
Padlock Attachment	HPAFK	—	—	—
<b>PowerPact™ Q-frame 250 A Circuit Breaker (240 Vac) [4] [5]</b>				
110–200 A	QDL32___[6]	25 kA	N/A	#4 - 300 kcmil Al or Cu
110–200 A	QGL32___[6]	65 kA	N/A	
110–200 A	QJL32___[6]	100 kA	N/A	
Padlock Attachment	QBPAF	—	—	—
<b>PowerPact H-frame 150 A Circuit Breaker (600 Vac, 250 Vdc)</b>				
60 A	HDL36060	25 kA	18 kA	#4 - 3/0 kcmil Al or Cu
70–100 A	HDL36___[7]			
110–150 A	HDL36___[7]			
60 A	HGL36060	65 kA	35 kA	
70–100 A	HGL36___[7]			
110–150 A	HGL36___[7]			
60 A	HJL36060	100 kA	65 kA	
70–100 A	HJL36___[7]			
110–150 A	HJL36___[7]			
60 A	HLL36060	100 kA	100 kA	
70–100 A	HLL36___[7]			
110–150 A	HLL36___[7]			
Padlock Attachment	S37422	—	—	—
<b>PowerPact J-frame 250 A Circuit Breaker (600 Vac, 250 Vdc)</b>				
175–200 A	JDL36___[8]	25 kA	18 kA	#4 - 300 kcmil Al or Cu
175–200 A	JGL36___[8]	65 kA	35 kA	
175–200 A	JLL36___[8]	100 kA	65 kA	
175–200 A	JLL36___[8]	100 kA	100 kA	
Padlock Attachment	S37422	—	—	—

Class T Fusible Pullouts, CMM Pullout Heads

Table 5.5: Class T Fusible Pullouts (Universal Hardware Kit CMUHWKIT Required)

Ampacity	Catalog No. [9]	SCCR		Wire Size Al or Cu
		240 V [10]	480 V	
100 A	FTL3100	100 kA	N/A	#14 - 1/0 AWG
200 A	FTL3200	100 kA	N/A	#4 - 250 kcmil
60 A	FTL43060	N/A	100 kA	#14 - #2
100 A	FTL43100	N/A	100 kA	#14 - 1/0 AWG
200 A	FTL43200	N/A	100 kA	1/0 AWG - 300 kcmil

Table 5.6: CMM Pullout Heads

Voltage System	Mains		Catalog No. [11] (Pullout Head — No Base)
	Rating (A)	Poles	
1Ø3W 120/240 V 3Ø4W 240/120 V Delta 3Ø4W 208Y/120 V	100	3	4050707050 [12]
	200	3	4050705950 [12]
3Ø4W 480Y/277 V	60	3	—
	100	3	—
	200	3	—

[3] To complete the catalog number for these PowerPact F-frame circuit breakers, replace \_\_\_ with the required ampacity (070, 080, 090, or 100).

[4] A shunt trip is not available on PowerPact Q-frame circuit breakers.

[5] A new circuit breaker cover is required when adding a PowerPact Q-, H-, or J-frame circuit breaker to an old-design tenant metering structure. This new cover has larger openings to accommodate the padlock attachment for these circuit breakers. See Table 5.3 Cover and Hardware Kits, page 5-3 for ordering information.

[6] To complete the catalog number for PowerPact Q-frame circuit breakers, replace \_\_\_ with the required ampacity (110, 125, 150, 175, or 200).

[7] To complete the catalog number for PowerPact H-frame circuit breakers, replace \_\_\_ with the required ampacity (070, 080, 090, 100, 110, 125, or 150).

[8] To complete the catalog number for PowerPact J-frame circuit breakers, replace \_\_\_ with the required ampacity (175 or 200).

[9] Discount schedules: FTL3100 and FTL3200 = DE5; FTL43060, FTL43100, and FTL43200 = PE1A.

[10] 240 V fusible pullouts cannot be used on a Lever Bypass CMM. Only 480 V pullouts can be used.

[11] Discount schedule: DE5.

[12] Order point: Lexington, KY.

**Merchandised Speed-D Switchboards**
**Table 5.7: Subfeed Circuit Breakers** [1] [2]

Description	Rating (A)	2-Pole [3]		3-Pole	
		Catalog No.		Catalog No.	
		Left	Right	Left	Right
<b>Subfeed Circuit Breaker Kits—</b> Includes circuit breaker, connectors and mounting hardware.	100	SASFB100L()	SASFB100R()	SASFB100L	SASFB100R
	110	SASFB110L()	SASFB110R()	SASFB110L	SASFB110R
	125	SASFB125L()	SASFB100R()	SASFB125L	SASFB125R
	150	SASFB150L()	SASFB150R()	SASFB150L	SASFB150R
	175	SASFB175L()	SASFB175R()	SASFB175L	SASFB175R
	200	SASFB200L()	SASFB200R()	SASFB200L	SASFB200R
	225	SASFB225L()	SASFB225R()	SASFB225L	SASFB225R

[1] Cannot use subfeed circuit breaker kit with multiple mains service section switchboards.

[2] For use on all Speed-D switchboards except Series E4.

[3] Two pole circuit breaker catalog numbers are completed by adding required phase connection letters as suffix (for example, SASFB100LAC).



Speed-D Switchboard shown with optional underground pull section

## Speed-D SB/SF Switchboards (UL Listed)

- UL Listed
- California Energy Commission (CEC) Title 24 compliant configurations available for California installations
- Hot sequence utility compartment per EUSERC requirements
- Single service disconnect rated 400, 600, or 800 A with either type of distribution interiors, NQ up to 240 Vac, I-Line™ through 480 Vac
- Meter doors can be 15 inches high with one meter socket and test block, or 30 inches high with two meter sockets and test block
- Meter sockets can be 6-, 8-, 13-, or 15-jaw meter sockets with test block, based on application
- Solar ready configurations are now available, using a back-fed circuit breaker on the I-Line stack
- Accessories include:
  - Underground pull sections with and without lug landing
  - Loadside wireway
  - Bus links for donut-type current transformers
  - Double padlock hasp attachments
  - Plug-on distribution panel
  - Subfeed circuit breakers
- Full height add-on I-Line distribution section
- Stand-alone I-Line distribution section

### Application

Suitable for use as service entrance equipment on ac systems. Sections contain metering compartment, barriers, main disconnects, distribution panel, neutral bus, and grounding provisions.

### Metering

C/T compartment with two 15-inch blank meter doors. (Order doors with meter socket from [Table 5.12 Meter Door Selection, page 5-8.](#)) Incoming cable lugs are for top feed with one twin conductor 2 AWG–600 kcmil lug per phase and neutral, suitable for aluminum or copper cables. Optional single conductor lug is available. Refer to [Table 5.13 Accessories, page 5-8.](#)

### Mains

Main breaker can be LH, MJ, PowerPact L, or PowerPact P. Standard and advanced electronic trip units available for PowerPact breakers. Main breakers with Energy or Power trip units comply with CEC Title 24 metering requirements.

### Branches

NQ distribution bus is rated 400 A and provides mounting space for QO™/QOB Type (150 A maximum) circuit breakers. Panel provides space for mounting 42 single pole circuit breakers. One or two individually mounted 225 A maximum circuit breakers can be added with bus connectors. (Order subfeed circuit breakers from [Table 5.14 Subfeed Circuit Breakers \(Series E4\), page 5-9.](#))

I-Line™ distribution bus is rated 400, 600, or 800 A and will accept 27 inches of I-Line circuit breakers on the left side with a maximum frame size of “J”. The right side will accept either a QO plug-on distribution panel (240 V only) or LA or LH I-Line circuit breaker, which allows for a back-fed solar power source.

### Enclosure

Totally enclosed front accessible with ANSI 49 gray baked enamel finish. Dimensions are 90 in. (H) x 36 in. (W) x 14 in. (D) for indoor and 90 in. (H) x 36 in. (W) x 24.5 in. (D) for outdoor enclosures.

**EUSERC Utility Metering, Main Disconnects and Distribution Panel (UL Listed)**

**Table 5.8: Single Main Circuit Breaker with Distribution (Series E4)**

System	Service Voltage	Mains Ratings (A)	Main Breaker Trip Unit	SCCR 240 V Max.	SCCR 480 V Max.	Distribution Interior	Circuit Breaker Catalog No.								
							Indoor	Outdoor							
1Ø3W	120/240	400	Thermal Magnetic	65	—	None	NQ	SB124QS	SB124QR						
							I-Line	SB124IS	SB124IR						
							None	SB124WS	SB124WR						
			LSI Standard Electronic	100			NQ	SB124QSJS	SB124QRJS						
							I-Line	SB124ISJS	SB124IRJS						
							None	SB124WSJS	SB124WRJS						
		LSI Energy Electronic	100	NQ	SB124QSJE	SB124QRJE									
				I-Line	SB124ISJE	SB124IRJE									
				None	SB124WSJE	SB124WRJE									
		600	LI Basic Electronic	65	65	—	None	I-Line	SB126IS	SB126IR					
								None	SB126WS	SB126WR					
								3Ø4W [4]	208Y/120 240/120	400	Thermal Magnetic	65	—	None	NQ
I-Line	SB324IS														SB324IR
None	SB324WS														SB324WR
LSI Standard Electronic	100										NQ				SB324QSJS
		I-Line	SB324ISJS	SB324IRJS											
		None	SB324WSJS	SB324WRJS											
LSI Energy Electronic	100	NQ	SB324QSJE	SB324QRJE											
		I-Line	SB324ISJE	SB324IRJE											
		None	SB324WSJE	SB324WRJE											
208Y/120 240/120 480Y/277	400	Thermal Magnetic	65	35	—	None	I-Line		SB344IS	SB344IR					
							None		SB344WS	SB344WR					
							LSI Standard Electronic		100	65	I-Line	SB344ISJS	SB344IRJS		
		None						SB344WSJS			SB344WRJS				
		I-Line						SB344ISJE			SB344IRJE				
		600					LI Basic Electronic	65	65	—	None	None	I-Line	SB346IS	SB346IR
	None		SB346WS	SB346WR											
	LSI Standard Electronic		100	65	I-Line	SB348IS							SB348IR		
					None	SB348WS	SB348WR								
					LSI Power Electronic	100	65						I-Line	SB348ISJS	SB348IRJS
	None		SB348WSJS	SB348WRJS											
	I-Line	SB348ISJP	SB348IRJP												
800	LI Basic Electronic	65	65	—	None	None	I-Line	SB348IS	SB348IR						
							None	SB348WS	SB348WR						
							LSI Standard Electronic	100	65	I-Line	SB348ISJS	SB348IRJS			
										None	SB348WSJS	SB348WRJS			
										I-Line	SB348ISJP	SB348IRJP			
							800	LSI Power Electronic	100	65	—	None	None	I-Line	SB348ISJP
None	SB348WSJP	SB348WRJP													

**Table 5.9: Single Main Circuit Breaker with Solar Feed**

System	Service Voltage	I-Line Bus Rating (A)	Mains Ratings (A)	Main Breaker Trip Unit	Solar Feed Maximum (A)	SCCR 240 V Max.	SCCR 480 V Max.	Circuit Breaker Catalog No.						
								Indoor	Outdoor					
1Ø3W	120/240	1200	400	Thermal Magnetic	800	65	—	SB124IS8S	SB124IR8S					
								LSI Standard Electronic	100	SB124ISJS8S	SB124IRJS8S			
										LSI Energy Electronic	100	SB124ISJE8S	SB124IRJE8S	
			LI Basic Electronic	65								SB126IS6S	SB126IR6S	
400	Thermal Magnetic				800	35	65	65	SB344IS8S	SB344IR8S				
									LSI Standard Electronic	100	SB344ISJS8S	SB344IRJS8S		
			LSI Energy Electronic	100							SB344ISJE8S	SB344IRJE8S		
600	LI Basic Electronic								65	50	—	None	SB346IS6S	SB346IR6S
			800	LI Basic Electronic	65	50	—	None					SB348IS4S	SB348IR4S
													LSI Standard Electronic	100
LSI Power Electronic	100								65	SB348ISJP4S	SB348IRJP4S			

[4] Can be used on 3Ø3W Delta voltage systems (for example, 240 V Delta or 480 V Delta).

**Table 5.10: Single Main Fusible Disconnect with Distribution (Series E4)**

System	Service Voltage	Mains Ratings (A)	Distribution Interior	SCCR 240 V Max.	SCCR 480 V Max.	Fusible Disconnect Catalog No.	
						Indoor	Outdoor
1Ø3W	120/240	400	NQ	65	—	SF124QS	SF124QR
			I-Line	100	—	SF124IS	SF124IR
			None	200	—	SF124WS	SF124WR
		600	I-Line	100	—	SF126IS	SF126IR
			None	200	—	SF126WS	SF126WR
3Ø4W [5]	208Y/120 240/120	400	NQ	65	—	SF324QS	SF324QR
3Ø4W [5]	208Y/120 240/120	400	None	200	—	SF324WS	SF324WR
3Ø4W [5]	208Y/120 240/120	400	I-Line	100	65	SF344IS	SF344IR
	480Y/277						
3Ø4W [5]	208Y/120 240/120	400	None	200	200	SF344WS	SF344WR
	480Y/277						
3Ø4W [5]	208Y/120 240/120	600	I-Line	100	65	SF346IS	SF346IR
	480Y/277						
3Ø4W [5]	208Y/120 240/120	600	None	200	200	SF346WS	SF346WR
	480Y/277						
3Ø4W [5]	208Y/120 240/120	800	I-Line	100	65	SF348IS	SF348IR
	480Y/277						
3Ø4W [5]	208Y/120 240/120	800	None	200	200	SF348WS	SF348WR
	480Y/277						

**Merchandised Options**

**Table 5.11: I-Line Distribution Section (Series E4)**

System	Service Voltage	Mains Ratings (A)	Distribution Interior	SCCR 240 V Max.	SCCR 480 V Max.	Distribution Type	Catalog No.	
							Indoor	Outdoor
3Ø4W	208Y/120 240/120 480Y/277	800	I-Line	65 k	65 k	Add-on distribution section, must be connected to an SB UCT and main section without distribution panel, such as SB348WS. <b>An I-Line plug-on subfeed lug kit must be ordered to terminate the distribution section.</b>	SBAD800	SBAD800R
3Ø4W	208Y/120 240/120 480Y/277	800	I-Line	125 k	100 k	Stand-alone distribution section not connected to an SB section. <b>A back-fed main circuit breaker or I-Line plug-on subfeed lug kit must be ordered to terminate the distribution section.</b> (Non-ULSE)	SBSAD800	SBSAD800R

**Table 5.12: Meter Door Selection**

Meter Socket Jaws	15-inch High Door With One Meter Socket and Test Block	30-inch High Door With Two Meter Sockets and Test Blocks
	Catalog No.	Catalog No.
6 [6]	SBA15D6MS	—
8	SBA15D8MS	—
13	SBA15D13MS	SBA30D13MS
15	SBA15D15MS	SBA30D15MS
Blank	SBA15DBC	—
[7]	SBA15DMS	—

**NOTE:** To order structure with meter door factory-installed, add door catalog number as suffix to structure (for example, SF344IS-15D13MS).

**Table 5.13: Accessories**

Description	Catalog No.			
<b>Indoor underground pull section</b> (w/o lug landing)—26-in. (W) Order separate SA8LL lug kit below if required.	SA26PS			
<b>Outdoor (3R) underground pull section</b> (w/o lug landing)—26 in. (W) x 24.5 in. (D) Order separate SA8LL lug landing kit below when required.	SA26PSR			
<b>Lug landing kit</b> —800 A max. For terminating utility service cables in indoor or outdoor underground pull sections.	SA8LL			
<b>Single barrel lug kit</b> —Kit provides single barrel lugs and pad in lieu of twin barrel lug provided with service section. Mechanical lugs provided are sized to fit 1-3/0–750 kcmil cable. Two lugs per phase are supplied.	SA7PL			
<b>Loadside wireway</b> —11.5 in. (W) x 14 in. (D)—indoor only	SA10LW			
<b>Bus link kit</b> —800 A max.—Order one kit per phase for 400, 600, and 800 A.	SA10BL			
<b>Double padlock hasp attachment</b> —For mounting two padlocks on door handle of rainproof enclosure. Padlocks not included.	SS2PL			
<b>Plug-On Distribution Panel</b> —mounts on right side of I-Line interior. Cannot be used with LA/LH branch circuit breaker. Panel rated 225 A for 240 V applications. For QO™ type plug-on circuit breakers only.	System	Phase	Pole Spaces	
	1Ø	AC	12	SS212AC
	3Ø	ABC		SS312
3Ø	AB	SS212AB [8]		

[5] Can be used on 3Ø3W Delta voltage systems (for example, 240 V Delta or 480 V Delta).

[6] 6-jaw meter socket can also be used on 4- and 5-jaw applications.

[7] Door with provisions for mounting meter socket.

[8] To be used on 120/240 V, 3Ø4W delta applications.

**Table 5.14: Subfeed Circuit Breakers (Series E4)**

Description	Rating (A)	2-Pole Catalog No. [9]		3-Pole Catalog No.	
		Left	Right	Left	Right
<b>Subfeed Circuit Breaker Kit [10]</b> Includes circuit breaker, connectors and mounting hardware. The complete kit, mounting hardware, circuit breaker and connectors will be shipped direct from plant. Delivery is stock to three days.	100	SASFBH100L( )	SASFBH100R( )	SASFBH100L	SASFBH100R
	110	SASFBH110L( )	SASFBH110R( )	SASFBH110L	SASFBH110R
	125	SASFBH125L( )	SASFBH125R( )	SASFBH125L	SASFBH125R
	150	SASFBH150L( )	SASFBH150R( )	SASFBH150L	SASFBH150R
	175	SASFBJ175L( )	SASFBJ175R( )	SASFBJ175L	SASFBJ175R
	200	SASFBJ200L( )	SASFBJ200R( )	SASFBJ200L	SASFBJ200R
	225	SASFBJ225L( )	SASFBJ225R( )	SASFBJ225L	SASFBJ225R

**Ordering Information**

1. **Service section:** Order service section from Table 5.9 Single Main Circuit Breaker with Distribution (Series E4), page 5-7, Table 5.10 Single Main Fusible Disconnect with Distribution (Series E4), page 5-8, as determined by mains rating, voltage, and system.
2. **Meter doors:** Order meter door from Table 5.12 Meter Door Selection, page 5-8 as determined by the height and utility metering requirements.
3. **Accessories and subfeeds:** Order as required from Table 5.13 Accessories, page 5-8 and/or Table 5.14 Subfeed Circuit Breakers (Series E4), page 5-9.
4. **Circuit breakers:** Order devices as determined by voltage, trip rating, AIR, and mounting space.
  - QO, QOB, QO-VH, QOB-VH: See Digest Section 1 or Section 7.
  - I-Line: See Digest Section 9.

[9] Two pole circuit breaker catalog numbers are completed by adding required phase connection letters as suffix (for example, SASFBH100LAC).

[10] Cannot use subfeed circuit breaker kit with multiple mains service section switchboards.

**Masterclad™ Medium Voltage Metalclad Switchgear (UL Listed)  
The Reliability of a Quality Design**

Masterclad™ offers a customizable solution for demanding medium voltage applications. Rugged construction is coupled with low maintenance 3-cycle vacuum circuit breaker.

A comprehensive design testing program has been performed by Schneider Electric. The switchgear and breakers are designed and tested in accordance with all applicable ANSI Standards C37.04, C37.06, C37.09, and C37.20.2. The switchgear and breakers meet the requirements of ANSI, IEEE, NEMA, and exceeds most IEC standards.



Two-high Masterclad 5–27 kV Indoor, Metalclad Switchgear



Vacuum VR Circuit Breaker for Masterclad Switchgear



Masterclad 27 kV, Outdoor Non Walk-in, Metalclad Switchgear

**Table 5.15: Ratings**

Nominal voltage (kV)	4.16	7.2	13.8	24.9						
Maximum voltage (kV)	4.76	8.25	15.0	27.0						
BIL (kV)	60	95	95	125						
Frequency (Hz)	50/60									
Continuous amperes (A)	1200–4000			1200–2000						
MVA (reference only)	250	350	500	500	500	750	1000	1500	1250	2000
Short-time rating (kA) 3 seconds	40	50	63	50	25	40	50	63	25	40
Close and latch rating (kA) (peak)	104	130	164	130	65	104	130	164	68	108

**Type VR Vacuum Circuit Breaker**

The VR breaker is a horizontal drawout type designed to provide long life, reduced maintenance, and ease of handling. The Type RI advanced design motor-charged stored energy mechanism is a model of reliability with simplicity-with an operating life exceeding ANSI requirements. The VR circuit breaker is UL labeled and includes a permanently mounted manual charging handle.

Standard features include:

- 3-cycle interrupting rating
- Rated per ANSI/IEEE C37.06, C37.09, C37.013, C37.54
- UL Listed
- Motor operated, spring-charged, stored-energy operating mechanism
- Permanently mounted manual charging handle
- Five normally open and normally closed auxiliary contacts
- Wheels that roll directly to floor level from lower cell

**Switchgear Construction**

- High-speed operation—3—cycles
- Removable (draw-out) circuit breaker
- Grounded metal barriers enclose all live parts
- Automatic shutters driven by breaker racking mechanism
- Closed door breaker position indication
- Closed door breaker racking mechanism
- Insulated main bus—aluminum or copper
- Standard glass polyester insulators or optional epoxy and porcelain insulators
- Mechanical interlocks
- Disconnect type CPT and VT trucks
- Grounded breaker truck in and between test/disconnected and connected positions
- Low voltage instrument/control compartment isolated from primary voltage areas
- Compliance to ANSI/IEEE standards C37.20.2 and C37.55 (designed and tested to comply with or exceed ANSI and IEEE standards)
- ISO 9001 Certification (Designed and manufactured in a facility that is Quality Systems Certified by Underwriters Laboratories, Inc.® to ISO 9001)
- Indoor NEMA 1 enclosure
- Outdoor NEMA 3R enclosure
  - Walk-in enclosure
  - Non walk-in enclosure