

## Protective Devices for Power Modules PM240-2

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## General Notes

- The voltage rating of any protection device must be at least the voltage rating of the supply circuit.
- Protective devices of the same type with lower current ratings may be used.
- Protection devices of the same type with a lower SCCR / Icc rating may be used.
- The branch circuit protection information given in this document for the PM240-2 Frame Size A (FSA) applies only to FSA hardware versions A08 or higher. The hardware version number can be found on the Power Module rating label.
- The converters must be mounted in a suitable enclosure, while ensuring the minimum enclosure sizes are observed.

## Overview of the approved protection devices according to UL/CSA standards

- JDDZ/JDDZ7: Fuses of any manufacturer.
- DIVQ/DIVQ7: Siemens circuit breaker
- NKJH/NKJH7: SIEMENS Type E combination motor controllers

## ICC conditional short circuit current Icc:

The maximum RMS value of a prospective short circuit current, available from a supply source.

## Short-Circuit Current Rating (SCCR):

The Short-Circuit Current Rating (SCCR) is the prospective symmetrical fault current at a nominal voltage to which an apparatus or system is able to be connected without sustaining damage exceeding defined acceptance criteria.

## UL Certificates:

FSA, FSB, FSC:	200 V	UL-File E121068, Vol. 2 Sec. 29
FSA, FSB, FSC:	400 V	UL-File E121068, Vol. 2 Sec. 27
FSD, FSE, FSF, FSG:	200 V / 400 V / 690 V	UL-File E192450, Vol. 13 Sec. 4

# 1 Protective devices for IEC applications

## 1.1 IEC Fuses

### 1.1.1 IEC 3NA Fuses, 200 V ... 240 V

Power Module Frame size	Rated Power, (LO)	Article no.	Fuse			Min. enclosure	
			Max. rated current	Article no.	ICC @ 240 V AC	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PB13-0...	16 A	3NA3805	100 kA	-	-
	0,75 kW	6SL3210-1PB13-8...	16 A	3NA3805	100 kA		
		6SL3211-1PB13-8...	16 A	3NA3805	100 kA		
FSB	1,1 kW	6SL3210-1PB15-5...	32 A	3NA3812	100 kA	-	-
	1,5 kW	6SL3210-1PB17-4...	32 A	3NA3812	100 kA		
		6SL3210-1PB21-0...	32 A	3NA3812	100 kA		
	2,2 kW	6SL3211-1PB21-0...	32 A	3NA3812	100 kA		
FSC	3,0 kW	6SL3210-1PB21-4...	50 A	3NA3820	100 kA	-	-
		6SL3210-1PB21-8...	50 A	3NA3820	100 kA		
	6SL3211-1PB21-8...	50 A	3NA3820	100 kA			
	5,5 kW	6SL3210-1PC22-2...	50 A	3NA3820	100 kA		
		6SL3211-1PC22-2...	50 A	3NA3820	100 kA		
	7,5 kW	6SL3210-1PC22-8...	50 A	3NA3820	100 kA		
6SL3211-1PC22-8...	50 A	3NA3820	100 kA				
FSD	11,0 kW	6SL3210-1PC24-2...	63 A	3NA3822	100 kA	-	-
	15,0 kW	6SL3210-1PC25-4...	80 A	3NA3824	100 kA		
	18,5 kW	6SL3210-1PC26-8...	100 A	3NA3830	100 kA		
FSE	22,0 kW	6SL3210-1PC28-0...	100 A	3NA3830	100 kA	0,2 m³ 1)	7,06 ft³ 1)
	30,0 kW	6SL3210-1PC31-1...	160 A	3NA3836	100 kA		
			160 A	3NA3836-8	100 kA		
FSF	37,0 kW	6SL3210-1PC31-3...	200 A	3NA3140	100 kA	0,6 m³ 1)	21,19 ft³ 1)
	45,0 kW	6SL3210-1PC31-6...	200 A	3NA3140	100 kA		
	55,0 kW	6SL3210-1PC31-8...	224 A	3NA3142	100 kA		

1) No enclosure size restrictions apply for 65 kA ICC rating

**Note:**

Siemens 3NA low-voltage fuses are recommended.

## 1.1.2 IEC 3NA Fuses, 380 V ... 480 V

Power Module		Article no.	Fuse			Min. enclosure volume	
Frame size	Rated Power, (LO)		Max. rated current	Article no.	ICC @ 400 V AC	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PE11-8...	10 A	3NA3803	100 kA	-	-
	0,75 kW	6SL3210-1PE12-3...	10 A	3NA3803	100 kA		
	1,1 kW	6SL3210-1PE13-2...	16 A	3NA3805	100 kA		
	1,5 kW	6SL3210-1PE14-3...	16 A	3NA3805	100 kA		
	2,2 kW	6SL3210-1PE16-1...	16 A	3NA3805	100 kA		
	3,0 kW	6SL3210-1PE18-0... 6SL3211-1PE18-0...	16 A 16 A	3NA3805 3NA3805	100 kA 100 kA		
FSB	4,0 kW	6SL3210-1PE21-1...	32 A	3NA3812	100 kA	-	-
	5,5 kW	6SL3210-1PE21-4...	32 A	3NA3812	100 kA		
	7,5 kW	6SL3210-1PE21-8...	32 A	3NA3812	100 kA		
		6SL3211-1PE21-8...	32 A	3NA3812	100 kA		
FSC	11,0 kW	6SL3210-1PE22-7...	50 A	3NA3820	100 kA	-	-
	15,0 kW	6SL3210-1PE23-3...	50 A	3NA3820	100 kA		
		6SL3211-1PE23-3...	50 A	3NA3820	100 kA		
FSD	18,5 kW	6SL3210-1PE23-8...	63 A	3NA3822	100 kA	-	-
	22,0 kW	6SL3210-1PE24-5...	80 A	3NA3824	100 kA		
	30,0 kW	6SL3210-1PE26-0...	100 A	3NA3830	100 kA		
	37,0 kW	6SL3210-1PE27-5...	100 A	3NA3830	100 kA		
FSE	45,0 kW	6SL3210-1PE28-8...	125 A	3NA3832	100 kA	0,2 m³ 1)	7,06 ft³ 1)
	55,0 kW	6SL3210-1PE31-1...	160 A	3NA3836	100 kA		
FSF	75,0 kW	6SL3210-1PE31-5...	200 A	3NA3140	100 kA	0,6 m³ 1)	21,19 ft³ 1)
	90,0 kW	6SL3210-1PE31-8...	224 A	3NA3142	100 kA		
	110,0 kW	6SL3210-1PE32-1...	300 A	3NA3250	100 kA		
	132,0 kW	6SL3210-1PE32-5...	315 A	3NA3252	100 kA		
FSG	160,0 kW	6SL3210-1PE33-0...	355 A	3NA3254	100 kA	-	-
	200,0 kW	6SL3210-1PE33-7...	400 A	3NA3260	100 kA		
	250,0 kW	6SL3210-1PE34-8...	630 A	3NA3372	100 kA		

1) No enclosure size restrictions apply for 65 kA ICC rating

**Note:**

Siemens 3NA low-voltage fuses are recommended.

### 1.1.3 IEC 3NA Fuses, 500 V ... 690 V

Power Module		Article no.	Fuse			Min. enclosure volume	
Frame size	Rated Power, (LO)		Max. rated current	Article no.	ICC @ 500 V	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	3NA3807-6	100 kA	-	-
	15,0 kW	6SL3210-1PH22-0...	25 A	3NA3810-6	100 kA		
	18,5 kW	6SL3210-1PH22-3...	32 A	3NA3812-6	100 kA		
	22,0 kW	6SL3210-1PH22-7...	40 A	3NA3817-6KJ	100 kA		
	30,0 kW	6SL3210-1PH23-5...	50 A	3NA3820-6KJ	100 kA		
FSE	37,0 kW	6SL3210-1PH24-2...	63 A	3NA3822-6	100 kA	0,2 m <sup>3</sup> 1)	7,06 ft <sup>3</sup> 1)
	45,0 kW	6SL3210-1PH25-2...	80 A	3NA3824-6	100 kA		
FSF	55,0 kW	6SL3210-1PH26-2...	80 A	3NA3824-6	100 kA	0,6 m <sup>3</sup> 1)	21,19 ft <sup>3</sup> 1)
	75,0 kW	6SL3210-1PH28-0...	100 A	3NA3830-6	100 kA		
	90,0 kW	6SL3210-1PH31-0...	125 A	3NA3132-6	100 kA		
	110,0 kW	6SL3210-1PH31-2...	160 A	3NA3136-6	100 kA		
FSG	132,0 kW	6SL3210-1PH31-4...	200 A	3NA3140-6	100 kA	-	-
	160,0 kW	6SL3210-1PH31-7...	250 A	3NE1 227-0	100 kA		
	200,0 kW	6SL3210-1PH32-1...	315 A	3NE1 230-0	100 kA		
	250,0 kW	6SL3210-1PH32-5...	350 A	3NE1 331-0	100 kA		

1) No enclosure size restrictions apply for 65 kA ICC rating

**Note:**

Siemens 3NA low-voltage fuses are recommended.

## 1.2 IEC Motor Starter Protectors

### 1.2.1 IEC Motor Starter Protectors, 200 V ... 240 V

Power Module		Article no.	MSP			Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Article no.	ICC @ 240 V AC	Metric	Imperial
FSA	0,55 kW	6SL3210-1PB13-0...	16 A	3RV1031-4AA..	65 kA	0,03 m <sup>3</sup>	1,06 ft <sup>3</sup>
			14 A	3RV2031-4SA..	65 kA		
			16 A	3RV2011-4AA..	65 kA		
			16 A	3RV2021-4AA..	65 kA		
	0,75 kW	6SL3210-1PB13-8... 6SL3211-1PB13-8...	16 A	3RV1031-4AA..	65 kA		
			14 A	3RV2031-4SA..	65 kA		
			16 A	3RV2011-4AA..	65 kA		
			16 A	3RV2021-4AA..	65 kA		
FSB	1,1 kW	6SL3210-1PB15-5...	32 A	3RV1031-4EA..	65 kA	0,06 m <sup>3</sup>	2,12 ft <sup>3</sup>
			32 A	3RV2021-4EA..	65 kA		
			32 A	3RV2031-4EA..	65 kA		
	1,5 kW	6SL3210-1PB17-4...	32 A	3RV1031-4EA..	65 kA		
			32 A	3RV2021-4EA..	65 kA		
			32 A	3RV2031-4EA..	65 kA		
	2,2 kW	6SL3210-1PB21-0... 6SL3211-1PB21-0...	32 A	3RV1031-4EA..	65 kA		
			32 A	3RV2021-4EA..	65 kA		
			32 A	3RV2031-4EA..	65 kA		
FSC	3,0 kW	6SL3210-1PB21-4...	50 A	3RV1031-4HA..	65 kA	0,14 m <sup>3</sup>	4,94 ft <sup>3</sup>
			50 A	3RV1041-4HA..	65 kA		
			45 A	3RV2031-4VA..	65 kA		
			50 A	3RV2041-4HA..	65 kA		
	4,0 kW	6SL3210-1PB21-8... 6SL3211-1PB21-8...	50 A	3RV1031-4HA..	65 kA		
			50 A	3RV1041-4HA..	65 kA		
			45 A	3RV2031-4VA..	65 kA		
	5,5 kW	6SL3210-1PC22-2... 6SL3211-1PC22-2...	50 A	3RV1031-4HA..	65 kA		
			50 A	3RV1041-4HA..	65 kA		
			45 A	3RV2031-4VA..	65 kA		
	7,5 kW	6SL3210-1PC22-8... 6SL3211-1PC22-8...	50 A	3RV1031-4HA..	65 kA		
			50 A	3RV1041-4HA..	65 kA		
			45 A	3RV2031-4VA..	65 kA		
			50 A	3RV2041-4HA..	65 kA		
	FSD	11,0 kW	6SL3210-1PC24-2...	50 A	3RV1031-4HA..		
65 A				3RV2031-4JA..	65 kA		
65 A				3RV2032-4JA..	65 kA		
63 A				3RV1041-4JA..	65 kA		
63 A				3RV1042-4JA..	65 kA		
63 A				3RV2041-4JA*	65 kA		
63 A				3RV2042-4JA*	65 kA		
15,0 kW		6SL3210-1PC25-4...	73 A	3RV2031-4KA..	65 kA		
			73 A	3RV2032-4KA..	65 kA		
			75 A	3RV1041-4KA..	65 kA		
			75 A	3RV1042-4KA..	65 kA		
			75 A	3RV2041-4KA*	65 kA		
			75 A	3RV2042-4KA*	65 kA		
18,5 kW		6SL3210-1PC26-8...	73 A	3RV2031-4KA..	65 kA		
			73 A	3RV2032-4KA..	65 kA		
			90 A	3RV1042-4LA..	65 kA		
			90 A	3RV1041-4LA..	65 kA		
			93 A	3RV2041-4YA*	65 kA		
93 A	3RV2042-4YA*	65 kA					

**Note:**

ICC values are only valid for supply grids with grounded star point (solidly grounded wye TN or TT systems)

## 1.2.2 IEC Motor Starter Protectors, 380 V ... 480 V

Power Module			MSP			Min. enclosure volume	
Frame Size	Rated Power, (LO)	Article no.	Max. rated current	Article no.	ICC @ 400 V AC	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PE11-8...	10 A	3RV2011-1JA..	65 kA	0,03 m <sup>3</sup>	1,06 ft <sup>3</sup>
			10 A	3RV2021-1JA..	65 kA		
	0,75 kW	6SL3210-1PE12-3...	10 A	3RV2011-1JA..	65 kA		
			10 A	3RV2021-1JA..	65 kA		
	1,1 kW	6SL3210-1PE13-2...	16 A	3RV1031-4AA..	50 kA		
			16 A	3RV2011-4AA..	55 kA		
			16 A	3RV2021-4AA..	55 kA		
			14 A	3RV2031-4SA..	65 kA		
	1,5 kW	6SL3210-1PE14-3...	16 A	3RV1031-4AA..	50 kA		
			16 A	3RV2011-4AA..	55 kA		
			16 A	3RV2021-4AA..	55 kA		
			14 A	3RV2031-4SA..	65 kA		
	2,2 kW	6SL3210-1PE16-1...	16 A	3RV1031-4AA..	50 kA		
			16 A	3RV2011-4AA..	55 kA		
16 A			3RV2021-4AA..	55 kA			
14 A			3RV2031-4SA..	65 kA			
3,0 kW	6SL3210-1PE18-0... 6SL3211-1PE18-0...	16 A	3RV1031-4AA..	50 kA			
		16 A	3RV2011-4AA..	55 kA			
		16 A	3RV2021-4AA..	55 kA			
		14 A	3RV2031-4SA..	65 kA			
FSB	4,0 kW	6SL3210-1PE21-1...	32 A	3RV1031-4EA..	50 kA	0,06 m <sup>3</sup>	2,12 ft <sup>3</sup>
			32 A	3RV2021-4EA..	55 kA		
			32 A	3RV2031-4EA..	65 kA		
	5,5 kW	6SL3210-1PE21-4...	32 A	3RV1031-4EA..	50 kA		
			32 A	3RV2021-4EA..	55 kA		
			32 A	3RV2031-4EA..	65 kA		
	7,5 kW	6SL3210-1PE21-8... 6SL3211-1PE21-8...	32 A	3RV1031-4EA..	50 kA		
			32 A	3RV2021-4EA..	55 kA		
			32 A	3RV2031-4EA..	65 kA		
FSC	11,0 kW	6SL3210-1PE22-7...	50 A	3RV1031-4HA..	50 kA	0,14 m <sup>3</sup>	4,94 ft <sup>3</sup>
			45 A	3RV2031-4VA..	65 kA		
			50 A	3RV1041-4HA..	50 kA		
			50 A	3RV2041-4HA..	65 kA		
	15,0 kW	6SL3210-1PE23-3... 6SL3211-1PE23-3...	50 A	3RV1031-4HA..	50 kA		
			45 A	3RV2031-4VA..	65 kA		
			50 A	3RV1041-4HA..	50 kA		
			50 A	3RV2041-4HA..	65 kA		

**Note:**

ICC values are only valid for supply grids with grounded star point (solidly grounded wye TN or TT systems)

Power Module		Article no.	MSP			Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Article no.	ICC @ 400 V AC	Metric	Imperial (USA)
FSD	18,5 kW	6SL3210-1PE23-8...	63 A	3RV1041-4JA..	50 kA	no restriction	no restriction
			63 A	3RV1042-4JA..	65 kA		
			65 A	3RV2031-4JA..	65 kA		
			65 A	3RV2032-4JA..	65 kA		
			63 A	3RV2041-4JA*	65 kA		
			63 A	3RV2042-4JA*	65 kA		
	22,0 kW	6SL3210-1PE24-5...	75 A	3RV1041-4KA..	50 kA		
			75 A	3RV1042-4KA..	65 kA		
			73 A	3RV2031-4KA..	65 kA		
			73 A	3RV2032-4KA..	65 kA		
			75 A	3RV2041-4KA..	65 kA		
			75 A	3RV2042-4KA..	65 kA		
	30,0 kW	6SL3210-1PE26-0...	90 A	3RV1041-4LA..	50 kA		
			90 A	3RV1042-4LA..	65 kA		
			93 A	3RV2041-4YA..	65 kA		
			93 A	3RV2042-4YA..	65 kA		
	37,0 kW	6SL3210-1PE27-5...	100 A	3RV1041-4MA..	50 kA		
			100 A	3RV1042-4MA..	65 kA		
			100 A	3RV2041-4MA..	65 kA		
			100 A	3RV2042-4MA..	65 kA		

**Note:**

ICC values are only valid for supply grids with grounded star point (solidly grounded wye TN or TT systems)



### 1.2.3 IEC Motor Starter Protectors, 500 V ... 690 V

Power Module		Article no.	MSP			Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Article no.	ICC @ 500 V AC	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	3RV1031-4BA..	12 kA	no restriction	no restriction
			20 A	3RV2031-4BA..	12 kA		
			20 A	3RV2032-4BA..	18 kA		
	15,0 kW	6SL3210-1PH22-0...	32 A	3RV1031-4EA..	10 kA		
			32 A	3RV2031-4EA..	10 kA		
			32 A	3RV2032-4EA..	15 kA		
	18,5 kW	6SL3210-1PH22-3...	32 A	3RV1031-4EA..	10 kA		
			32 A	3RV2031-4EA..	10 kA		
			32 A	3RV2032-4EA..	15 kA		
	22,0 kW	6SL3210-1PH22-7...	40 A	3RV1031-4FA..	10 kA		
			40 A	3RV1041-4FA..	12 kA		
			40 A	3RV1042-4FA..	18 kA		
			40 A	3RV2031-4UA..	10 kA		
			40 A	3RV2032-4UA..	15 kA		
			40 A	3RV2041-4FA..	12 kA		
			40 A	3RV2042-4FA..	18 kA		
	30,0 kW	6SL3210-1PH23-5...	50 A	3RV1031-4HA..	10 kA		
			50 A	3RV1041-4HA..	12 kA		
			50 A	3RV1042-4HA..	15 kA		
			52 A	3RV2031-4WA..	8 kA		
			52 A	3RV2032-4WA..	10 kA		
			50 A	3RV2041-4HA..	12 kA		
			50 A	3RV2042-4HA..	15 kA		
	37,0 kW	6SL3210-1PH24-2...	50 A	3RV1031-4HA..	10 kA		
			63 A	3RV1041-4JA..	12 kA		
			63 A	3RV1042-4JA..	15 kA		
			52 A	3RV2031-4WA..	10 kA		
			52 A	3RV2032-4WA..	15 kA		
			59 A	3RV2031-4XA..	8 kA		
			59 A	3RV2032-4XA..	10 kA		
63 A			3RV2041-4JA..	12 kA			
63 A	3RV2042-4JA..	15 kA					

**Note:**

ICC values are only valid for supply grids with grounded star point (solidly grounded wye TN or TT systems)

## 1.3 IEC Circuit Breakers

### 1.3.1 IEC Circuit Breakers, 200 V ... 240 V

Power Module		Article no.	Circuit Breaker			Min. enclosure volume			
Frame Size	Rated Power, (LO)		Max. rated current	Type	ICC @ 240 V	Metric	Imperial (USA)		
FSD	11,0 kW	6SL3210-1PC24-2...	63 A	3VL1706-2D...	100 kA	no restriction	no restriction		
			63 A	3VL2706-3DC...	100 kA				
			63 A	3VA1063-4ED...	55 kA				
			63 A	3VA1163-6E...	100 kA				
	15,0 kW	6SL3210-1PC25-4...	80 A	3VL1708-2D...	100 kA				
			80 A	3VL2708-3DC...	100 kA				
			80 A	3VA1080-4ED...	55 kA				
			80 A	3VA1180-6E...	100 kA				
	18,5 kW	6SL3210-1PC26-8...	100 A	3VL1710-2D...	100 kA				
			100 A	3VL2710-3DC...	100 kA				
			100 A	3VA1010-4ED...	55 kA				
			100 A	3VA1110-6E...	100 kA				
FSE	22,0 kW	6SL3210-1PC28-0...	125 A	3VL1712-2D...	100 kA	0,2 m <sup>3</sup>	7,06 ft <sup>3</sup>		
			125 A	3VL2712-3DC...	100 kA				
			125 A	3VA1112-6E...	100 kA				
	30,0 kW	6SL3210-1PC31-1...	160 A	3VL1716-2D...	100 kA				
			160 A	3VL2716-3DC...	100 kA				
			160 A	3VA1116-6E...	100 kA				
			160 A	3VA1216-6EF...	100 kA				
			200 A	3VL3720-3DC...	100 kA				
FSF	37,0 kW	6SL3210-1PC31-3...	200 A	3VA1220-6EF...	100 kA	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>		
			200 A	3VL3720-3DC...	100 kA				
	45,0 kW	6SL3210-1PC31-6...	200 A	3VA1220-6EF...	100 kA				
			200 A	3VL3720-3DC...	100 kA				
			55,0 kW	6SL3210-1PC31-8...	250 A			3VL3725-3DC...	100 kA
					250 A			3VA1225-6EF...	100 kA

**1.3.2 IEC Circuit Breakers, 380 V ... 480 V**

Power Module		Article no.	Circuit Breaker			Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Type	ICC @ 400 V AC	Metric	Imperial (USA)
FSD	18,5 kW	6SL3210-1PE23-8...	63 A	3VL1706-2D...	65 kA	no restriction	no restriction
				3VL2706-3DC...	100 kA		
				3VA1063-4ED...	36 kA		
				3VA1163-6E...	70 kA		
	22,0 kW	6SL3210-1PE24-5...	80 A	3VL1708-2D...	70 kA		
				3VL2708-3DC...	100 kA		
				3VA1080-4ED...	36 kA		
				3VA1180-6E...	70 kA		
	30,0 kW	6SL3210-1PE26-0...	100 A	3VL1710-2D...	70 kA		
				3VL2710-3DC...	100 kA		
				3VA1010-4ED...	36 kA		
				3VA1110-6E...	70 kA		
37,0 kW	6SL3210-1PE27-5...	100 A	3VL1710-2D...	70 kA			
			3VL2710-3DC...	100 kA			
			3VA1010-4ED...	36 kA			
			3VA1110-6E...	70 kA			
FSE	45,0 kW	6SL3210-1PE28-0...	125 A	3VL1712-2D...	70 kA	0,2 m³	7,06 ft³
				3VL2712-3DC...	100 kA		
	55,0 kW	6SL3210-1PE31-1...	160 A	3VA1112-6E...	70 kA		
				3VL2716-3DC...	100 kA		
FSF	75,0 kW	6SL3210-1PE31-5...	200 A	3VL3720-3DC...	100 kA	0,6 m³	21,19 ft³
				3VA1220-6EF...	70 kA		
	90,0 kW	6SL3210-1PE31-8...	250 A	3VL3725-3DC...	100 kA		
				3VA1225-6EF...	70 kA		
	110,0 kW	6SL3210-1PE32-1...	315 A	3VL4731-3DC...	100 kA		
			400 A	3VA2340-8...	100 kA		
132,0 kW	6SL3210-1PE32-5...	400 A	3VL4740-3DC...	100 kA			
			3VA2340-8...	100 kA			
FSG	160,0 kW	6SL3210-1PE33-0...	400 A	3VL4740-3DC..	100 kA	no restriction	no restriction
			400 A	3VA2340-8..	100 kA		
			400 A	3VA2440-8..	100 kA		
	200,0 kW	6SL3210-1PE33-7...	500 A	3VL5750-3DC..	100 kA		
			500 A	3VA2450-8..	100 kA		
	250,0 kW	6SL3210-1PE34-8...	630 A	3VL5763-3DC..	100 kA		
630 A			3VA2463-8..	100 kA			

## 1.3.3 IEC Circuit Breakers, 500 V ... 690 V

Power Module		Article no.	Circuit Breaker			Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Type	ICC @ 500 V	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	3VL1702-2D...	30 kA	no restriction	no restriction
			20 A	3VA1020-4ED...	16 kA		
			20 A	3VA1120-6E...	20 kA		
	15,0 kW	6SL3210-1PH22-0...	32 A	3VL1703-2D...	30 kA		
			32 A	3VA1032-4ED...	16 kA		
			32 A	3VA1132-6E...	20 kA		
	18,5 kW	6SL3210-1PH22-3...	32 A	3VL1703-2D...	30 kA		
			32 A	3VA1032-4ED...	16 kA		
			32 A	3VA1132-6E...	20 kA		
	22,0 kW	6SL3210-1PH22-7...	40 A	3VL1704-2D...	30 kA		
			40 A	3VA1040-4ED...	16 kA		
			40 A	3VA1140-6E...	20 kA		
	30,0 kW	6SL3210-1PH23-5...	50 A	3VL1705-2D...	30 kA		
			50 A	3VL2705-3DC...	50 kA		
			50 A	3VA1050-4ED...	16 kA		
			50 A	3VA1150-6E...	20 kA		
	37,0 kW	6SL3210-1PH24-2...	63 A	3VL1706-2D...	30 kA		
			63 A	3VL2706-3DC...	50 kA		
63 A			3VA1063-4ED...	16 kA			
63 A			3VA1163-6E...	20 kA			
FSE	45,0 kW	6SL3210-1PH25-2...	80 A	3VL1708-2D...	30 kA	0,2 m³	7,06 ft³
			80 A	3VL2708-3DC...	50 kA		
			80 A	3VA1080-4ED...	16 kA		
			80 A	3VA1180-6E...	20 kA		
	55,0 kW	6SL3210-1PH26-2...	100 A	3VL1710-2D...	30 kA		
			100 A	3VL2710-3DC...	50 kA		
			100 A	3VA1010-4ED...	16 kA		
FSF	75,0 kW	6SL3210-1PH28-0...	125 A	3VL1712-2D...	30 kA	0,6 m³	21,19 ft³
			125 A	3VL2712-3DC...	50 kA		
			125 A	3VA1112-4ED...	20 kA		
	90,0 kW	6SL3210-1PH31-0...	125 A	3VL1712-2D...	30 kA		
			125 A	3VL2712-3DC...	50 kA		
			125 A	3VA1112-4ED...	20 kA		
	110,0 kW	6SL3210-1PH31-2...	160 A	3VL1716-2D...	30 kA		
			160 A	3VL2716-3DC...	50 kA		
			160 A	3VA1116-6E...	10 kA		
	132,0 kW	6SL3210-1PH31-4...	200 A	3VA1216-6EF...	15 kA		
200 A			3VL3720-3DC...	50 kA			
			200 A	3VA1220-6EF...	15 kA		

## 2 Protective devices for UL/CSA applications

### 2.1 UL/CSA fuses

#### 2.1.1 UL/CSA non-semiconductor fuses, 200 V ... 240 V

Power Module Frame Size	Rated Power, (LO)	Article no.	Fuse		Min. enclosure volume	
			Max. rated current	SCCR @ 240 V	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PB13-0...	15 A	100 kA	0,03 m <sup>3</sup> 1)	1,06 ft <sup>3</sup> 1)
	0,75 kW	6SL3210-1PB13-8...	15 A	100 kA		
FSB	1,1 kW	6SL3210-1PB15-5...	35 A	100 kA	0,06 m <sup>3</sup> 1)	2,12 ft <sup>3</sup> 1)
	1,5 kW	6SL3210-1PB17-4...	35 A	101 kA		
	2,2 kW	6SL3210-1PB21-0...	35 A	102 kA		
		6SL3211-1PB21-0...	35 A	103 kA		
FSC	3,0 kW	6SL3210-1PB21-4...	50 A	100 kA	0,14 m <sup>3</sup> 1)	4,94 ft <sup>3</sup> 1)
	4,0 kW	6SL3210-1PB21-8...	50 A	100 kA		
		6SL3211-1PB21-8...	50 A	100 kA		
	5,5 kW	6SL3210-1PC22-2...	50 A	100 kA		
		6SL3211-1PC22-2...	50 A	100 kA		
	7,5 kW	6SL3210-1PC22-8...	50 A	100 kA		
6SL3211-1PC22-8...		50 A	100 kA			
FSD	11,0 kW	6SL3210-1PC24-2...	60 A	100 kA	no restriction	no restriction
	15,0 kW	6SL3210-1PC25-4...	70 A	100 kA		
	18,5 kW	6SL3210-1PC26-8...	90 A	100 kA		
FSE	22,0 kW	6SL3210-1PC28-0...	110 A	100 kA	0,2 m <sup>3</sup> 2)	7,06 ft <sup>3</sup> 2)
	30,0 kW	6SL3210-1PC31-1...	150 A	100 kA		
FSF	37,0 kW	6SL3210-1PC31-3...	175 A	100 kA	0,6 m <sup>3</sup> 2)	21,19 ft <sup>3</sup> 2)
	45,0 kW	6SL3210-1PC31-6...	200 A	100 kA		
	55,0 kW	6SL3210-1PC31-8...	250 A	100 kA		

1) No enclosure size restrictions apply when Mersen (Ferraz Shawmut) type AJT fuses are used.

2) No enclosure size restrictions apply for 65 kA SCCR rating

**Note:**

Any non-semiconductor fuse Class J, CF, T, or L (JDDZ) from any manufacturer can be used for all Frame Sizes. Additionally, Class CC and G fuses can be used for Frame Size A to Frame Size C.

## 2.1.2 UL/CSA non-semiconductor fuses, 380 V ... 480 V

Power Module Frame Size	Rated Power, (LO)	Article no.	Fuse		Min. enclosure volume	
			Max. rated current	SCCR @ 480 V	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PE11-8...	10 A	100 kA	0,03 m <sup>3</sup> 1)	1,06 ft <sup>3</sup> 1)
	0,75 kW	6SL3210-1PE12-3...	10 A	100 kA		
	1,1 kW	6SL3210-1PE13-2...	15 A	100 kA		
	1,5 kW	6SL3210-1PE14-3...	15 A	100 kA		
	2,2 kW	6SL3210-1PE16-1...	15 A	100 kA		
	3,0 kW	6SL3210-1PE18-0... 6SL3211-1PE18-0...	15 A 15 A	100 kA 100 kA		
FSB	4,0 kW	6SL3210-1PE21-1...	35 A	100 kA	0,06 m <sup>3</sup> 1)	2,12 ft <sup>3</sup> 1)
	5,5 kW	6SL3210-1PE21-4...	35 A	100 kA		
	7,5 kW	6SL3210-1PE21-8...	35 A	100 kA		
		6SL3211-1PE21-8...	35 A	100 kA		
FSC	11,0 kW	6SL3210-1PE22-7...	50 A	100 kA	0,14 m <sup>3</sup> 1)	4,94 ft <sup>3</sup> 1)
	15,0 kW	6SL3210-1PE23-3...	50 A	100 kA		
		6SL3211-1PE23-3...	50 A	100 kA		
FSD	18,5 kW	6SL3210-1PE23-8...	60 A	100 kA	no restriction	no restriction
	22,0 kW	6SL3210-1PE24-5...	70 A	100 kA		
	30,0 kW	6SL3210-1PE26-0...	90 A	100 kA		
	37,0 kW	6SL3210-1PE27-5...	100 A	100 kA		
FSE	45,0 kW	6SL3210-1PE28-0...	125 A	100 kA	0,2 m <sup>3</sup> 2)	7,06 ft <sup>3</sup> 2)
	55,0 kW	6SL3210-1PE31-1...	150 A	100 kA		
FSF	75,0 kW	6SL3210-1PE31-5...	200 A	100 kA	0,6 m <sup>3</sup> 2)	21,19 ft <sup>3</sup> 2)
	90,0 kW	6SL3210-1PE31-8...	250 A	100 kA		
	110,0 kW	6SL3210-1PE32-1...	300 A	100 kA		
	132,0 kW	6SL3210-1PE32-5...	350 A	100 kA		
FSG	160,0 kW	6SL3210-1PE33-0...	400 A	100 kA	no restriction	no restriction
	200,0 kW	6SL3210-1PE33-7...	500 A	100 kA		
	250,0 kW	6SL3210-1PE34-8...	600 A	100 kA		

1) No enclosure size restrictions apply when Mersen (Ferraz Shawmut) type AJT fuses are used.

2) No enclosure size restrictions apply for 65 kA SCCR rating

**Note:**

Any non-semiconductor fuse Class J, CF, T, or L (JDDZ) from any manufacturer can be used for all Frame Sizes. Additionally, Class CC and G fuses can be used for Frame Size A to Frame Size C.

### 2.1.3 UL/CSA non-semiconductor fuses, 500 V ... 600 V

Power Module		Article no.	Fuse		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	SCCR @ 600 V	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	100 kA	no restriction	no restriction
	15,0 kW	6SL3210-1PH22-0...	25 A	100 kA		
	18,5 kW	6SL3210-1PH22-3...	30 A	100 kA		
	22,0 kW	6SL3210-1PH22-7...	35 A	100 kA		
	30,0 kW	6SL3210-1PH23-5...	50 A	100 kA		
	37,0 kW	6SL3210-1PH24-2...	60 A	100 kA		
FSE	45,0 kW	6SL3210-1PH25-2...	80 A	100 kA	0,2 m <sup>3</sup> 2)	7,06 ft <sup>3</sup> 2)
	55,0 kW	6SL3210-1PH26-2...	80 A	100 kA		
FSF	75,0 kW	6SL3210-1PH28-0...	110 A	100 kA	0,6 m <sup>3</sup> 2)	21,19 ft <sup>3</sup> 2)
	90,0 kW	6SL3210-1PH31-0...	150 A	100 kA		
	110,0 kW	6SL3210-1PH31-2...	150 A	100 kA		
	132,0 kW	6SL3210-1PH31-4...	200 A	100 kA		

2) No enclosure size restrictions apply for 65 kA SCCR rating

**Note:**

Any non-semiconductor fuse Class J, CF, T, or L (JDDZ) from any manufacturer may be used for Frame Sizes D to F.

### 2.1.4 UL/CSA semiconductor fuses, 500 V ... 600 V

Power Module		Article no.	Fuse		ICC @ 600 V AC	Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	Article no.		Metric	Imperial (USA)
FSG	160,0 kW	6SL3210-1PH31-7...	250 A	3NE1	100 kA	no restriction	no restriction
	200,0 kW	6SL3210-1PH32-1...	315 A	3NE1	100 kA		
	250,0 kW	6SL3210-1PH32-5...	350 A	3NE1	100 kA		

**Note:**

3NE1 semiconductor fuses JDDZ2 / JDDZ8

## 2.2 UL/CSA Type E Combination Motor Controllers

### 2.2.1 UL/CSA Type E Combination Motor Controllers, 200 V ... 240 V

Power Module			CMC					Min. enclosure volume	
Frame Size	Rated Power, (LO)	Article no.	Max. rated current	Rated power @		Article no.	SCCR @ 240 V	Metric	Imperial (USA)
				1 AC 230 V	3 AC 230 V				
FSA	0,55 kW	6SL3210-1PB13-0...	16 A	2 HP	5 HP	3RV1031-4AA..	65 kA	0,03 m³	1,06 ft³
			16 A	2 HP	5 HP	3RV2011-4AA..	65 kA		
			16 A	2 HP	5 HP	3RV2021-4AA..	65 kA		
	0,75 kW	6SL3210-1PB13-8... 6SL3211-1PB13-8...	16 A	2 HP	5 HP	3RV1031-4AA..	65 kA		
			16 A	2 HP	5 HP	3RV2011-4AA..	65 kA		
			16 A	2 HP	5 HP	3RV2021-4AA..	65 kA		
FSB	1,1 kW	6SL3210-1PB15-5...	32 A	5 HP	10 HP	3RV1031-4EA..	65 kA	0,06 m³	2,12 ft³
			32 A	5 HP	10 HP	3RV2021-4EA..	50 kA		
			32 A	5 HP	10 HP	3RV2031-4EA..	65 kA		
	1,5 kW	6SL3210-1PB17-4...	32 A	5 HP	10 HP	3RV1031-4EA..	65 kA		
			32 A	5 HP	10 HP	3RV2021-4EA..	50 kA		
			32 A	5 HP	10 HP	3RV2031-4EA..	65 kA		
	2,2 kW	6SL3210-1PB21-0... 6SL3211-1PB21-0...	32 A	5 HP	10 HP	3RV1031-4EA..	65 kA		
			32 A	5 HP	10 HP	3RV2021-4EA..	50 kA		
			32 A	5 HP	10 HP	3RV2031-4EA..	65 kA		
FSC	3,0 kW	6SL3210-1PB21-4...	50 A	10 HP	20 HP	3RV1031-4HA..	65 kA	0,14m³	4,49 ft³
			50 A	10 HP	20 HP	3RV1041-4HA..	65 kA		
	4,0 kW	6SL3210-1PB21-8... 6SL3211-1PB21-8...	50 A	10 HP	20 HP	3RV1031-4HA..	65 kA		
			50 A	10 HP	20 HP	3RV1041-4HA..	65 kA		
	5,5 kW	6SL3210-1PC22-2... 6SL3211-1PC22-2...	50 A	10 HP	20 HP	3RV1031-4HA..	65 kA		
			50 A	10 HP	20 HP	3RV1041-4HA..	65 kA		
	7,5 kW	6SL3210-1PC22-8... 6SL3211-1PC22-8...	50 A	10 HP	20 HP	3RV1031-4HA..	65 kA		
			50 A	10 HP	20 HP	3RV1041-4HA..	65 kA		
FSD	11,0 kW	6SL3210-1PC24-2...	50 A	---	25 HP	3RV1031-4HA..	65 kA	no restriction	no restriction
			63 A	---	25 HP	3RV1041-4JA..	65 kA		
			63 A	---	25 HP	3RV1042-4JA..	65 kA		
			65 A	---	25 HP	3RV2031-4JA..	62 kA		
			65 A	---	25 HP	3RV2032-4JA..	65 kA		
			63 A	---	25 HP	3RV2041-4JA*	65 kA		
			63 A	---	25 HP	3RV2042-4JA*	65 kA		
	15,0 kW	6SL3210-1PC25-4...	73 A	---	30 HP	3RV2031-4KA..	65 kA		
			73 A	---	30 HP	3RV2032-4KA..	65 kA		
			75 A	---	30 HP	3RV1041-4KA..	65 kA		
			75 A	---	30 HP	3RV1042-4KA..	65 kA		
			75 A	---	30 HP	3RV2041-4KA*	65 kA		
			75 A	---	30 HP	3RV2042-4KA*	65 kA		
	18,5 kW	6SL3210-1PC26-8...	90 A	---	40 HP	3RV1041-4LA..	65 kA		
			90 A	---	40 HP	3RV1042-4LA..	65 kA		
			93 A	---	40 HP	3RV2041-4YA*	65 kA		
			93 A	---	40 HP	3RV2042-4YA*	65 kA		

**Note:**

3RV20 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the terminal blocks listed below:

- 3RV2011 and 3RV2021 with 3RV2928-1H
- 3RV203. with 3RV2938-1K
- 3RV204. with 3RT2946-4GA07

Not necessary for CSA

3RV104 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the 3RT1946-4GA07 terminal blocks.



## 2.2.2 UL/CSA Type E Combination Motor Controllers, 380 V ... 480 V

Power Module			CMC				Min. enclosure volume	
Frame Size	Rated Power, (LO)	Article no.	Max. rated current	Rated power @ 3 AC 460 V	Article no.	SCCR @ 480 Y / 277 V	Metric	Imperial (USA)
FSA	0,55 kW	6SL3210-1PE11-8...	10 A	5 HP	3RV2011-1JA..	65 kA	0,03 m³	1,06 ft³
			10 A	5 HP	3RV2021-1JA..	65 kA		
	0,75 kW	6SL3210-1PE12-3...	10 A	5 HP	3RV2011-1JA..	65 kA		
			10 A	5 HP	3RV2021-1JA..	65 kA		
	1,1 kW	6SL3210-1PE13-2...	16 A	10 HP	3RV1031-4AA..	65 kA		
			16 A	10 HP	3RV2011-4AA..	65 kA		
			16 A	10 HP	3RV2021-4AA..	65 kA		
	1,5 kW	6SL3210-1PE14-3...	16 A	10 HP	3RV1031-4AA..	65 kA		
			16 A	10 HP	3RV2011-4AA..	65 kA		
			16 A	10 HP	3RV2021-4AA..	65 kA		
	2,2 kW	6SL3210-1PE16-1...	16 A	10 HP	3RV1031-4AA..	65 kA		
			16 A	10 HP	3RV2021-4AA..	65 kA		
3,0 kW	6SL3210-1PE18-0... 6SL3211-1PE18-0...	16 A	10 HP	3RV1031-4AA..	65 kA			
		16 A	10 HP	3RV2011-4AA..	65 kA			
		16 A	10 HP	3RV2021-4AA..	65 kA			
FSB	4,0 kW	6SL3210-1PE21-1...	32 A	25 HP	3RV1031-4EA..	65 kA	0,06 m³	2,12 ft³
			32 A	20 HP	3RV2021-4EA..	50 kA		
			32 A	25 HP	3RV2031-4EA..	65 kA		
	5,5 kW	6SL3210-1PE21-4...	32 A	25 HP	3RV1031-4EA..	65 kA		
			32 A	20 HP	3RV2021-4EA..	50 kA		
			32 A	25 HP	3RV2031-4EA..	65 kA		
7,5 kW	6SL3210-1PE21-8... 6SL3211-1PE21-8...	32 A	25 HP	3RV1031-4EA..	65 kA			
		32 A	20 HP	3RV2021-4EA..	50 kA			
		32 A	25 HP	3RV2031-4EA..	65 kA			
FSC	11,0 kW	6SL3210-1PE22-7...	50 A	40 HP	3RV1031-4HA..	65 kA	0,14 m³	4,49 ft³
	15,0 kW	6SL3210-1PE23-3... 6SL3211-1PE23-3...	50 A	40 HP	3RV1031-4HA..	65 kA		
FSD	18,5 kW	6SL3210-1PE23-8...	63 A	50 HP	3RV1041-4JA..	65 kA	no restriction	no restriction
			63 A	50 HP	3RV1042-4JA..	65 kA		
			65 A	50 HP	3RV2031-4JA..	20 kA		
			65 A	50 HP	3RV2032-4JA..	30 kA		
			63 A	50 HP	3RV2041-4JA*	65 kA		
			63 A	50 HP	3RV2042-4JA*	65 kA		
	22,0 kW	6SL3210-1PE24-5...	75 A	60 HP	3RV1041-4KA..	65 kA		
			75 A	60 HP	3RV1042-4KA..	65 kA		
			73 A	60 HP	3RV2031-4KA..	20 kA		
			73 A	60 HP	3RV2032-4KA..	30 kA		
			75 A	60 HP	3RV2041-4KA..	65 kA		
			75 A	60 HP	3RV2042-4KA..	65 kA		
	30,0 kW	6SL3210-1PE26-0...	90 A	75 HP	3RV1041-4LA..	65 kA		
			90 A	75 HP	3RV1042-4LA..	65 kA		
			93 A	75 HP	3RV2041-4YA..	65 kA		
			93 A	75 HP	3RV2042-4YA..	65 kA		
	37,0 kW	6SL3210-1PE27-5...	100 A	75 HP	3RV1041-4MA..	65 kA		
			100 A	75 HP	3RV1042-4MA..	65 kA		
100 A			75 HP	3RV2041-4MA..	65 kA			
100 A			75 HP	3RV2042-4MA..	65 kA			

**Note:**

3RV20 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the terminal blocks listed below:

- 3RV2011 and 3RV2021 with 3RV2928-1H
- 3RV203. with 3RV2938-1K
- 3RV204. with 3RT2946-4GA07

Not necessary for CSA

3RV104 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the 3RT1946-4GA07 terminal blocks.

### 2.2.3 UL/CSA Type E Combination Motor Controllers, 500 V ... 600 V

Power Module			CMC				Min. enclosure	
Frame Size	Rated Power, (LO)	Article no.	Max. rated current	Rated power @ 3 AC 575 V	Article no.	SCCR @ 600 Y / 347 V	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	20 HP	3RV1031-4BA..	25 kA	no restriction	no restriction
			20 A	20 HP	3RV2031-4BA..	25 kA		
			20 A	20 HP	3RV2032-4BA..	25 kA		
	15,0 kW	6SL3210-1PH22-0...	32 A	30 HP	3RV1031-4EA..	25 kA		
			32 A	30 HP	3RV2031-4EA..	25 kA		
			32 A	30 HP	3RV2032-4EA..	25 kA		
	18,5 kW	6SL3210-1PH22-3...	32 A	30 HP	3RV1031-4EA..	25 kA		
			32 A	30 HP	3RV2031-4EA..	25 kA		
			32 A	30 HP	3RV2032-4EA..	25 kA		
	22,0 kW	6SL3210-1PH22-7...	40 A	40 HP	3RV1031-4FA..	25 kA		
			40 A	40 HP	3RV1041-4FA..	30 kA		
			40 A	40 HP	3RV1042-4FA..	30 kA		
			40 A	40 HP	3RV2031-4UA..	22 kA		
			40 A	40 HP	3RV2032-4UA..	22 kA		
			40 A	40 HP	3RV2041-4FA..	30 kA		
	30,0 kW	6SL3210-1PH23-5...	50 A	50 HP	3RV1031-4HA..	25 kA		
			50 A	50 HP	3RV1041-4HA..	30 kA		
			50 A	50 HP	3RV1042-4HA..	30 kA		
			52 A	50 HP	3RV2031-4WA..	22 kA		
			52 A	50 HP	3RV2032-4WA..	22 kA		
			50 A	50 HP	3RV2041-4HA..	30 kA		
	37,0 kW	6SL3210-1PH24-2...	50 A	50 HP	3RV1031-4HA..	25 kA		
			63 A	60 HP	3RV1041-4JA..	30 kA		
			63 A	60 HP	3RV1042-4JA..	30 kA		
			52 A	50 HP	3RV2031-4WA..	22 kA		
			52 A	50 HP	3RV2032-4WA..	22 kA		
			63 A	60 HP	3RV2041-4JA..	30 kA		
	63 A	60 HP	3RV2042-4JA..	30 kA				

**Note:**

3RV20 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the terminal blocks listed below:

- 3RV2011 and 3RV2021 with 3RV2928-1H
- 3RV203. with 3RV2938-1K
- 3RV204. with 3RT2946-4GA07

3RV104 motor starter protectors are approved in accordance with UL 508/UL60947-4-1 in combination with the 3RT1946-4GA07 terminal blocks.

## 2.3 UL/CSA Circuit Breakers

### 2.3.1 UL/CSA Circuit Breakers, 200 V ... 240 V

Power Module			Circuit Breaker				Min. enclosure volume				
Frame Size	Rated Power, (LO)	Article no.	Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	SCCR @ 240 V	Metric	Imperial (USA)			
FSA	0,55 kW	6SL3210-1PB13-0...	15 A	3RV1742	3RV1742-5BD..	65 kA	0,03 m <sup>3</sup>	1,06 ft <sup>3</sup>			
			15 A	3RV2711	3RV2711-4AD..	65 kA					
			15 A	LGG	-	65 kA					
			15 A	CED6	-	65 kA					
	0,75 kW	6SL3210-1PB13-8... 6SL3211-1PB13-8...	15 A	3RV1742	3RV1742-5BD..	65 kA					
			15 A	3RV2711	3RV2711-4AD..	65 kA					
			15 A	LGG	-	65 kA					
			15 A	CED6	-	65 kA					
FSB	1,1 kW	6SL3210-1PB15-5...	35 A	LGG	-	65 kA	0,06 m <sup>3</sup>	2,12 ft <sup>3</sup>			
			35 A	CED6	-	65 kA					
			35 A	NCGA	3VL1135-1KM..	65 kA					
			35 A	HCGA	3VL1135-2KM..	65 kA					
			35 A	3RV1742	3RV1742-5FD..	65 kA					
	1,5 kW	6SL3210-1PB17-4...	35 A	LGG	-	65 kA					
			35 A	CED6	-	65 kA					
			35 A	NCGA	3VL1135-1KM..	65 kA					
			35 A	HCGA	3VL1135-2KM..	65 kA					
	2,2 kW	6SL3210-1PB21-0... 6SL3211-1PB21-0...	35 A	3RV1742	3RV1742-5FD..	65 kA					
			35 A	LGG	-	65 kA					
			35 A	CED6	-	65 kA					
			35 A	NCGA	3VL1135-1KM..	65 kA					
			35 A	HCGA	3VL1135-2KM..	65 kA					
	FSC	3,0 kW	6SL3210-1PB21-4...	50 A	LGG	-			65 kA	0,14m <sup>3</sup>	4,49 ft <sup>3</sup>
				50 A	CED6	-			65 kA		
50 A				NCGA	3VL1105-1KM..	65 kA					
50 A				HCGA	3VL1105-2KM..	65 kA					
50 A				3RV1742	3RV1742-5JD..	65 kA					
4,0 kW		6SL3210-1PB21-8... 6SL3211-1PB21-8...	50 A	LGG	-	65 kA					
			50 A	CED6	-	65 kA					
			50 A	NCGA	3VL1105-1KM..	65 kA					
			50 A	HCGA	3VL1105-2KM..	65 kA					
			50 A	3RV1742	3RV1742-5JD..	65 kA					
5,5 kW		6SL3210-1PC22-2... 6SL3211-1PC22-2...	50 A	LGG	-	65 kA					
			50 A	CED6	-	65 kA					
			50 A	NCGA	3VL1105-1KM..	65 kA					
			50 A	HCGA	3VL1105-2KM..	65 kA					
			50 A	3RV1742	3RV1742-5JD..	65 kA					
7,5 kW		6SL3210-1PC22-8... 6SL3211-1PC22-8...	50 A	LGG	-	65 kA					
			50 A	CED6	-	65 kA					
			50 A	NCGA	3VL1105-1KM..	65 kA					
			50 A	HCGA	3VL1105-2KM..	65 kA					
			50 A	3RV1742	3RV1742-5JD..	65 kA					

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

Power Module		Article no.	Circuit Breaker				Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	SCCR @ 240 V	Metric	Imperial (USA)
FSD	11,0 kW	6SL3210-1PC24-2...	60 A	NGG	-	65 kA	no restriction	no restriction
			60 A	HGG	-	65 kA		
			60 A	LGG	-	65 kA		
			60 A	NCGA	3VL1106-1KM..	65 kA		
			60 A	HCGA	3VL1106-2KM..	65 kA		
			60 A	NDGB	3VL2506-1KN..	65 kA		
			60 A	HDGB	3VL2506-2KN..	65 kA		
			60 A	LDGB	3VL2506-3KN..	65 kA		
			60 A	CED6	-	100 kA		
			60 A	3VA51	3VA5160-4E..	65 kA		
			60 A	3VA51	3VA5160-5E..	85 kA		
			60 A	3VA51	3VA5160-6E..	100 kA		
	15,0 kW	6SL3210-1PC25-4...	70 A	NGG	-	65 kA		
			70 A	HGG	-	65 kA		
			70 A	LGG	-	65 kA		
			70 A	NCGA	3VL1107-1KM..	65 kA		
			70 A	HCGA	3VL1107-2KM..	65 kA		
			70 A	NDGB	3VL2507-1KN..	65 kA		
			70 A	HDGB	3VL2507-2KN..	65 kA		
			70 A	LDGB	3VL2507-3KN..	65 kA		
			70 A	CED6	-	100 kA		
			70 A	FXD6-A	-	65 kA		
			70 A	FD6-A	-	65 kA		
			70 A	HFD6	-	100 kA		
			70 A	HFXD6	-	100 kA		
			70 A	HHFD6	-	100 kA		
			70 A	HHFXD6	-	100 kA		
			70 A	CFD6	-	100 kA		
			70 A	3VA51	3VA5170-4E..	65 kA		
			70 A	3VA51	3VA5170-5E..	85 kA		
	70 A	3VA51	3VA5170-6E..	100 kA				
	18,5 kW	6SL3210-1PC26-8...	90 A	NGG	-	65 kA		
			90 A	HGG	-	65 kA		
			90 A	LGG	-	65 kA		
			90 A	NCGA	3VL1191-1KM..	65 kA		
			90 A	HCGA	3VL1191-2KM..	65 kA		
			90 A	NDGB	3VL2591-1KN..	65 kA		
			90 A	HDGB	3VL2591-2KN..	65 kA		
			90 A	LDGB	3VL2591-3KN..	65 kA		
			90 A	CED6	-	100 kA		
			90 A	FXD6-A	-	65 kA		
			90 A	FD6-A	-	65 kA		
90 A			HFD6	-	100 kA			
90 A			HFXD6	-	100 kA			
90 A			HHFD6	-	100 kA			
90 A			HHFXD6	-	100 kA			
90 A			CFD6	-	100 kA			
100 A			3VA51	3VA5110-4E..	65 kA			
100 A			3VA51	3VA5110-5E..	85 kA			
100 A	3VA51	3VA5110-6E..	100 kA					

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

Power Module		Article no.	Circuit Breaker			Min. enclosure volume		
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	SCCR @ 240 V	Metric	Imperial (USA)
FSE	22,0 kW	6SL3210-1PC28-0...	100 A	NCGA	3VL1110-1KM..	65 kA	0,2 m³	7,06 ft³
			100 A	HCGA	3VL1110-2KM..	65 kA		
			110 A	NGG	-	65 kA		
			110 A	HGG	-	65 kA		
			110 A	LGG	-	65 kA		
			110 A	NDGB	3VL2511-1KN..	65 kA		
			110 A	HDGB	3VL2511-2KN..	65 kA		
			110 A	LDGB	3VL2511-3KN..	65 kA		
			110 A	LGG	-	65 kA		
			110 A	NFGB	3VL3511-1KN..	65 kA		
			110 A	HFGB	3VL3511-2KN..	65 kA		
			110 A	LFGB	3VL3511-3KN..	65 kA		
			110 A	CED6	-	100 kA		
			110 A	FXD6-A	-	65 kA		
			110 A	FD6-A	-	65 kA		
			110 A	HFD6	-	100 kA		
			110 A	HFXD6	-	100 kA		
			110 A	HHFD6	-	100 kA		
			110 A	HHFXD6	-	100 kA		
			110 A	CFD6	-	100 kA		
			110 A	3VA51	3VA5110-4E..	65 kA		
	110 A	3VA51	3VA5110-5E..	85 kA				
	110 A	3VA51	3VA5110-6E..	100 kA				
	30,0 kW	6SL3210-1PC31-1...	150 A	NCGA	3VL1115-1KM..	65 kA		
			150 A	HCGA	3VL1115-2KM..	65 kA		
			150 A	NDGB	3VL2515-1KN..	65 kA		
			150 A	HDGB	3VL2515-2KN..	65 kA		
			150 A	LDGB	3VL2515-3KN..	65 kA		
			150 A	NFGB	3VL3515-1KN..	65 kA		
			150 A	HFGB	3VL3515-2KN..	65 kA		
			150 A	LFGB	3VL3515-3KN..	65 kA		
			150 A	FXD6-A	-	65 kA		
			150 A	FD6-A	-	65 kA		
150 A			HFD6	-	100 kA			
150 A			HFXD6	-	100 kA			
150 A			HHFD6	-	100 kA			
150 A			HHFXD6	-	100 kA			
150 A			CFD6	-	100 kA			
150 A			3VA52	3VA5215-5E..	85 kA			
150 A			3VA52	3VA5215-6E..	100 kA			
150 A			3VA52	3VA5215-7E..	100 kA			
FSF	37,0 kW	6SL3210-1PC31-3...	175 A	NFGB	3VL3517-1KN..	65 kA	0,6 m³	21,19 ft³
			175 A	HFGB	3VL3517-2KN..	65 kA		
			175 A	LFGB	3VL3517-3KN..	65 kA		
			175 A	FXD6-A	-	65 kA		
			175 A	FD6-A	-	65 kA		
			175 A	HFD6	-	100 kA		
			175 A	HFXD6	-	100 kA		
			175 A	HHFD6	-	100 kA		
			175 A	HHFXD6	-	100 kA		
			175 A	CFD6	-	100 kA		
			175 A	3VA52	3VA5217-5E..	85 kA		
			175 A	3VA52	3VA5217-6E..	100 kA		
			175 A	3VA52	3VA5217-7E..	100 kA		

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

Power Module		Article no.	Circuit Breaker				Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	SCCR @ 240 V	Metric	Imperial (USA)
FSF	45,0 kW	6SL3210-1PC31-6...	200 A	NFGB	3VL3520-1KN..	65 kA	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>
			200 A	HFGB	3VL3520-2KN..	65 kA		
			200 A	LFGB	3VL3520-3KN..	65 kA		
			200 A	FXD6-A	-	65 kA		
			200 A	FD6-A	-	65 kA		
			200 A	HFD6	-	100 kA		
			200 A	HFXD6	-	100 kA		
			200 A	HHFD6	-	100 kA		
			200 A	HHFXD6	-	100 kA		
			200 A	CFD6	-	100 kA		
			200 A	JXD6-A	-	65 kA		
			200 A	JD6-A	-	65 kA		
			200 A	HJD6-A	-	65 kA		
			200 A	HJXD6-A	-	65 kA		
			200 A	HHJD6	-	100 kA		
			200 A	HHJXD6	-	100 kA		
			200 A	CJD6-A	-	100 kA		
			200 A	3VA52	3VA5220-5E..	85 kA		
			200 A	3VA52	3VA5220-6E..	100 kA		
			200 A	3VA52	3VA5220-7E..	100 kA		
	55,0 kW	6SL3210-1PC31-8...	250 A	NFGB	3VL3525-1KN..	65 kA		
			250 A	HFGB	3VL3525-2KN..	65 kA		
			250 A	LFGB	3VL3525-3KN..	65 kA		
			250 A	FXD6-A	-	65 kA		
			250 A	FD6-A	-	65 kA		
			250 A	HFD6	-	100 kA		
			250 A	HFXD6	-	100 kA		
			250 A	HHFD6	-	100 kA		
			250 A	HHFXD6	-	100 kA		
			250 A	CFD6	-	100 kA		
			250 A	JXD6-A	-	65 kA		
			250 A	JD6-A	-	65 kA		
			250 A	HJD6-A	-	65 kA		
			250 A	HJXD6-A	-	65 kA		
250 A	HHJD6	-	100 kA					
250 A	HHJXD6	-	100 kA					
250 A	CJD6-A	-	100 kA					
250 A	3VA52	3VA5225-5E..	85 kA					
250 A	3VA52	3VA5225-6E..	100 kA					
250 A	3VA52	3VA5225-7E..	100 kA					

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

### 2.3.2 UL/CSA Circuit Breakers, 380 V ... 480 V

Power Module		Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)	
FSA	0,55 kW	6SL3210-1PE11-8...	15 A	LGG	-	65 kA	<sup>3)</sup>	0,03 m <sup>3</sup>	1,06 ft <sup>3</sup>	
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
	0,75 kW	6SL3210-1PE12-3...	15 A	LGG	-	65 kA	<sup>3)</sup>			
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
	1,1 kW	6SL3210-1PE13-2...	15 A	LGG	-	65 kA	<sup>3)</sup>			
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
	1,5 kW	6SL3210-1PE14-3...	15 A	LGG	-	65 kA	<sup>3)</sup>			
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
	2,2 kW	6SL3210-1PE16-1...	15 A	LGG	-	65 kA	<sup>3)</sup>			
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
	3,0 kW	6SL3210-1PE18-0... 6SL3211-1PE18-0...	15 A	LGG	-	65 kA	<sup>3)</sup>			
			15 A	CED6	-	65 kA	<sup>3)</sup>			
			15 A	3RV1742	3RV1742-5BD..	65 kA	<sup>3)</sup>			
			15 A	3RV2711	3RV2711-4AD..	---	65 kA			
FSB	4,0 kW	6SL3210-1PE21-1...	35 A	LGG	-	65 kA	<sup>3)</sup>	0,06 m <sup>3</sup>	2,12 ft <sup>3</sup>	
			35 A	CED6	-	65 kA	<sup>3)</sup>			
			35 A	NCGA	3VL1135-1KM..	35 kA	<sup>3)</sup>			
			35 A	HCGA	3VL1135-2KM..	65 kA	<sup>3)</sup>			
			35 A	3RV1742	3RV1742-5FD..	---	65 kA			
	5,5 kW	6SL3210-1PE21-4...	35 A	LGG	-	65 kA	<sup>3)</sup>			
			35 A	CED6	-	65 kA	<sup>3)</sup>			
			35 A	NCGA	3VL1135-1KM..	35 kA	<sup>3)</sup>			
			35 A	HCGA	3VL1135-2KM..	65 kA	<sup>3)</sup>			
	7,5 kW	6SL3210-1PE21-8... 6SL3211-1PE21-8...	35 A	3RV1742	3RV1742-5FD..	---	65 kA			
			35 A	LGG	-	65 kA	<sup>3)</sup>			
			35 A	CED6	-	65 kA	<sup>3)</sup>			
35 A			NCGA	3VL1135-1KM..	35 kA	<sup>3)</sup>				
FSC	11,0 kW	6SL3210-1PE22-7...	50 A	HCGA	3VL1105-2KM..	65 kA	<sup>3)</sup>	0,14 m <sup>3</sup>	4,49 ft <sup>3</sup>	
			50 A	3RV1742	3RV1742-5JD..	---	65 kA			
			50 A	LGG	-	65 kA	<sup>3)</sup>			
			50 A	CED6	-	65 kA	<sup>3)</sup>			
			50 A	NCGA	3VL1105-1KM..	35 kA	<sup>3)</sup>			
	15,0 kW	6SL3210-1PE23-3... 6SL3211-1PE23-3...	50 A	HCGA	3VL1105-2KM..	65 kA	<sup>3)</sup>			
			50 A	3RV1742	3RV1742-5JD..	---	65 kA			
			50 A	LGG	-	65 kA	<sup>3)</sup>			
			50 A	CED6	-	65 kA	<sup>3)</sup>			
			50 A	NCGA	3VL1105-1KM..	35 kA	<sup>3)</sup>			

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike..

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 480 V AC supply systems can also be applied to 3 phase center point grounded (slash rated) supply systems of 480Y/277 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

Power Module		Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)	
FSD	18,5 kW	6SL3210-1PE23-8...	60 A	3RV1742	3RV1742-5LD..	---	65 kA	no restriction	no restriction	
			60 A	3RV2742	3RV2742-5LD..	---	65 kA			
			60 A	NGG	-	25 kA	<sup>3)</sup>			
			60 A	HGG	-	35 kA	<sup>3)</sup>			
			60 A	LGG	-	65 kA	<sup>3)</sup>			
			60 A	NCGA	3VL1106-1KM..	35 kA	<sup>3)</sup>			
			60 A	HCGA	3VL1106-2KM..	65 kA	<sup>3)</sup>			
			60 A	NDGB	3VL2506-1KN..	35 kA	<sup>3)</sup>			
			60 A	HDGB	3VL2506-2KN..	65 kA	<sup>3)</sup>			
			60 A	LDGB	3VL2506-3KN..	65 kA	<sup>3)</sup>			
			60 A	CED6	-	100 kA	<sup>3)</sup>			
			60 A	3VA51	3VA5160-4E..	25 kA	<sup>3)</sup>			
	60 A	3VA51	3VA5160-5E..	35 kA	<sup>3)</sup>					
	60 A	3VA51	3VA5160-6E..	65 kA	<sup>3)</sup>					
	22,0 kW	6SL3210-1PE24-5...	70 A	3RV1742	3RV1742-5QD..	---	65 kA	no restriction	no restriction	
			70 A	3RV2742	3RV2742-5QD..	---	65 kA			
			70 A	NGG	-	25 kA	<sup>3)</sup>			
			70 A	HGG	-	35 kA	<sup>3)</sup>			
			70 A	LGG	-	65 kA	<sup>3)</sup>			
			70 A	NCGA	3VL1107-1KM..	35 kA	<sup>3)</sup>			
			70 A	HCGA	3VL1107-2KM..	65 kA	<sup>3)</sup>			
			70 A	NDGB	3VL2507-1KN..	35 kA	<sup>3)</sup>			
			70 A	HDGB	3VL2507-2KN..	65 kA	<sup>3)</sup>			
			70 A	LDGB	3VL2507-3KN..	65 kA	<sup>3)</sup>			
			70 A	CED6	-	100 kA	<sup>3)</sup>			
			70 A	FXD6-A	-	35 kA	<sup>3)</sup>			
			70 A	FD6-A	-	35 kA	<sup>3)</sup>			
			70 A	HFD6	-	65 kA	<sup>3)</sup>			
			70 A	HFXD6	-	65 kA	<sup>3)</sup>			
			70 A	HHFD6	-	100 kA	<sup>3)</sup>			
			70 A	HHFXD6	-	100 kA	<sup>3)</sup>			
			70 A	CFD6	-	100 kA	<sup>3)</sup>			
	70 A	3VA51	3VA5170-4E..	25 kA	<sup>3)</sup>					
	70 A	3VA51	3VA5170-5E..	35 kA	<sup>3)</sup>					
	70 A	3VA51	3VA5170-6E..	65 kA	<sup>3)</sup>					
	30,0 kW	6SL3210-1PE26-0...	90 A	NGG	-	25 kA	<sup>3)</sup>	no restriction	no restriction	
90 A			HGG	-	35 kA	<sup>3)</sup>				
90 A			LGG	-	65 kA	<sup>3)</sup>				
90 A			NCGA	3VL1191-1KM..	35 kA	<sup>3)</sup>				
90 A			HCGA	3VL1191-2KM..	65 kA	<sup>3)</sup>				
90 A			NDGB	3VL2591-1KN..	35 kA	<sup>3)</sup>				
90 A			HDGB	3VL2591-2KN..	65 kA	<sup>3)</sup>				
90 A			LDGB	3VL2591-3KN..	65 kA	<sup>3)</sup>				
90 A			CED6	-	100 kA	<sup>3)</sup>				
90 A			FXD6-A	-	35 kA	<sup>3)</sup>				
90 A			FD6-A	-	35 kA	<sup>3)</sup>				
90 A			HFD6	-	65 kA	<sup>3)</sup>				
90 A			HFXD6	-	65 kA	<sup>3)</sup>				
90 A			HHFD6	-	100 kA	<sup>3)</sup>				
90 A			HHFXD6	-	100 kA	<sup>3)</sup>				
100 A			3VA51	3VA5110-4E..	---	25 kA				

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike..

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 480 V AC supply systems can also be applied to 3 phase center point grounded (slash rated) supply systems of 480Y/277 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.



Power Module		Article no.	Circuit Breaker			SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)
FSD	30,0 kW	6SL3210-1PE26-0...	100 A	3VA51	3VA5110-5E..	---	35 kA	no restriction	no restriction
			100 A	3VA51	3VA5110-6E..	---	65 kA		
			100 A	3VA52	3VA5210-7E..	100 kA	<sup>3)</sup>		
	37,0 kW	6SL3210-1PE27-5...	100 A	NGG	-	25 kA	<sup>3)</sup>	no restriction	no restriction
			100 A	HGG	-	35 kA	<sup>3)</sup>		
			100 A	LGG	-	65 kA	<sup>3)</sup>		
			100 A	NCGA	3VL1110-1KM..	35 kA	<sup>3)</sup>		
			100 A	HCGA	3VL1110-2KM..	65 kA	<sup>3)</sup>		
			100 A	NDGB	3VL2510-1KN..	35 kA	<sup>3)</sup>		
			100 A	HDGB	3VL2510-2KN..	65 kA	<sup>3)</sup>		
			100 A	LDGB	3VL2510-3KN..	65 kA	<sup>3)</sup>		
			100 A	NFGB	3VL3510-1KN..	35 kA	<sup>3)</sup>		
			100 A	HFGB	3VL3510-2KN..	65 kA	<sup>3)</sup>		
			100 A	LFGB	3VL3510-3KN..	65 kA	<sup>3)</sup>		
			100 A	CED6	-	100 kA	<sup>3)</sup>		
			100 A	FXD6-A	-	35 kA	<sup>3)</sup>		
			100 A	FD6-A	-	35 kA	<sup>3)</sup>		
			100 A	HFD6	-	65 kA	<sup>3)</sup>		
			100 A	HFXD6	-	65 kA	<sup>3)</sup>		
			100 A	HHFD6	-	100 kA	<sup>3)</sup>		
			100 A	HHFXD6	-	100 kA	<sup>3)</sup>		
			100 A	CFD6	-	100 kA	<sup>3)</sup>		
			100 A	3VA51	3VA5110-4E..	---	25 kA		
			100 A	3VA51	3VA5110-5E..	---	35 kA		
			100 A	3VA51	3VA5110-6E..	---	65 kA		
			100 A	3VA52	3VA5210-7E..	100 kA	<sup>3)</sup>		
			FSE	45,0 kW	6SL3210-1PE28-0...	125 A	NGG		
125 A	HGG	-				35 kA	<sup>3)</sup>		
125 A	LGG	-				65 kA	<sup>3)</sup>		
125 A	NCGA	3VL1112-1KM..				35 kA	<sup>3)</sup>		
125 A	HCGA	3VL1112-2KM..				65 kA	<sup>3)</sup>		
125 A	NDGB	3VL2512-1KN..				35 kA	<sup>3)</sup>		
125 A	HDGB	3VL2512-2KN..				65 kA	<sup>3)</sup>		
125 A	LDGB	3VL2512-3KN..				65 kA	<sup>3)</sup>		
125 A	NFGB	3VL3512-1KN..				35 kA	<sup>3)</sup>		
125 A	HFGB	3VL3512-2KN..				65 kA	<sup>3)</sup>		
125 A	LFGB	3VL3512-3KN..				65 kA	<sup>3)</sup>		
125 A	CED6	-				100 kA	<sup>3)</sup>		
125 A	FXD6-A	-				35 kA	<sup>3)</sup>		
125 A	FD6-A	-				35 kA	<sup>3)</sup>		
125 A	HFD6	-				65 kA	<sup>3)</sup>		
125 A	HFXD6	-				65 kA	<sup>3)</sup>		
125 A	HHFD6	-				100 kA	<sup>3)</sup>		
125 A	HHFXD6	-				100 kA	<sup>3)</sup>		
125 A	CFD6	-				100 kA	<sup>3)</sup>		
125 A	3VA51	3VA5112-4E..				---	25 kA		
125 A	3VA51	3VA5112-5E..				---	35 kA		
125 A	3VA51	3VA5112-6E..	---	65 kA					
125 A	3VA52	3VA5212-7E..	100 kA	<sup>3)</sup>					

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike..

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<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 480 V AC supply systems can also be applied to 3 phase center point grounded (slash rated) supply systems of 480Y/277 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

Power Module		Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)	
FSE	55,0 kW	6SL3210-1PE31-1...	150 A	NCGA	3VL1115-1KM..	35 kA	<sup>3)</sup>	0,2 m <sup>3</sup>	7,06 ft <sup>3</sup>	
			150 A	HCGA	3VL1115-2KM..	65 kA	<sup>3)</sup>			
			150 A	NDGB	3VL2515-1KN..	35 kA	<sup>3)</sup>			
			150 A	HDGB	3VL2515-2KN..	65 kA	<sup>3)</sup>			
			150 A	LDGB	3VL2515-3KN..	65 kA	<sup>3)</sup>			
			150 A	NFGB	3VL3515-1KN..	35 kA	<sup>3)</sup>			
			150 A	HFGB	3VL3515-2KN..	65 kA	<sup>3)</sup>			
			150 A	LFGB	3VL3515-3KN..	65 kA	<sup>3)</sup>			
			150 A	FXD6-A	-	35 kA	<sup>3)</sup>			
			150 A	FD6-A	-	35 kA	<sup>3)</sup>			
			150 A	HFD6	-	65 kA	<sup>3)</sup>			
			150 A	HFXD6	-	65 kA	<sup>3)</sup>			
			150 A	HHFD6	-	100 kA	<sup>3)</sup>			
			150 A	HHFXD6	-	100 kA	<sup>3)</sup>			
			150 A	CFD6	-	100 kA	<sup>3)</sup>			
			150 A	3VA52	3VA5215-5E..	35 kA	<sup>3)</sup>			
150 A	3VA52	3VA5215-6E..	65 kA	<sup>3)</sup>						
150 A	3VA52	3VA5215-7E..	100 kA	<sup>3)</sup>						
FSF	75,0 kW	6SL3210-1PE31-5...	200 A	NFGB	3VL3520-1KN..	35 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>	
			200 A	HFGB	3VL3520-2KN..	65 kA	<sup>3)</sup>			
			200 A	LFGB	3VL3520-3KN..	65 kA	<sup>3)</sup>			
			200 A	FXD6-A	-	35 kA	<sup>3)</sup>			
			200 A	FD6-A	-	35 kA	<sup>3)</sup>			
			200 A	HFD6	-	65 kA	<sup>3)</sup>			
			200 A	HFXD6	-	65 kA	<sup>3)</sup>			
			200 A	HHFD6	-	100 kA	<sup>3)</sup>			
			200 A	HHFXD6	-	100 kA	<sup>3)</sup>			
			200 A	CFD6	-	100 kA	<sup>3)</sup>			
			200 A	JXD6-A	-	35 kA	<sup>3)</sup>			
			200 A	JD6-A	-	35 kA	<sup>3)</sup>			
	200 A	HJD6-A	-	65 kA	<sup>3)</sup>					
	200 A	HJXD6-A	-	65 kA	<sup>3)</sup>					
	200 A	HHJD6	-	100 kA	<sup>3)</sup>					
	200 A	HHJXD6	-	100 kA	<sup>3)</sup>					
	200 A	CJD6-A	-	100 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-5E..	35 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-6E..	65 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-7E..	100 kA	<sup>3)</sup>					
90,0 kW	6SL3210-1PE31-8...	250 A	NFGB	3VL3525-1KN..	35 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>		
		250 A	HFGB	3VL3525-2KN..	65 kA	<sup>3)</sup>				
		250 A	LFGB	3VL3525-3KN..	65 kA	<sup>3)</sup>				
		250 A	FXD6-A	-	35 kA	<sup>3)</sup>				
		250 A	FD6-A	-	35 kA	<sup>3)</sup>				
		250 A	HFD6	-	65 kA	<sup>3)</sup>				
		250 A	HFXD6	-	65 kA	<sup>3)</sup>				
		250 A	HHFD6	-	100 kA	<sup>3)</sup>				
		250 A	HHFXD6	-	100 kA	<sup>3)</sup>				
		250 A	CFD6	-	100 kA	<sup>3)</sup>				
		250 A	JXD6-A	-	35 kA	<sup>3)</sup>				
		250 A	JD6-A	-	35 kA	<sup>3)</sup>				
250 A	HJD6-A	-	65 kA	<sup>3)</sup>						

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike..

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3) The SCCR shown in the table for 3 phase straight rated 480 V AC supply systems can also be applied to 3 phase center point grounded (slash rated) supply systems of 480Y/277 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

Power Module Frame Size	Rated Power, (LO)	Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
			Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)	
FSF	90,0 kW	6SL3210-1PE31-8...	250 A	HJXD6-A	-	65 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>	
			250 A	HHJD6	-	100 kA	<sup>3)</sup>			
			250 A	HHJXD6	-	100 kA	<sup>3)</sup>			
			250 A	CJD6-A	-	100 kA	<sup>3)</sup>			
			250 A	3VA52	3VA5225-5E..	35 kA	<sup>3)</sup>			
			250 A	3VA52	3VA5225-6E..	65 kA	<sup>3)</sup>			
			250 A	3VA52	3VA5225-7E..	100 kA	<sup>3)</sup>			
	110,0 kW	6SL3210-1PE32-1...	300 A	NJGA	3VL4130-1KN..	35 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>	
			300 A	HJGA	3VL4130-2KN..	65 kA	<sup>3)</sup>			
			300 A	LJGA	3VL4130-3KN..	65 kA	<sup>3)</sup>			
			300 A	JXD6-A	-	35 kA	<sup>3)</sup>			
			300 A	JD6-A	-	35 kA	<sup>3)</sup>			
			300 A	HJD6-A	-	65 kA	<sup>3)</sup>			
			300 A	HJXD6-A	-	65 kA	<sup>3)</sup>			
			300 A	HHJD6	-	100 kA	<sup>3)</sup>			
			300 A	HHJXD6	-	100 kA	<sup>3)</sup>			
			300 A	CJD6-A	-	100 kA	<sup>3)</sup>			
			300 A	LD6-A	-	35 kA	<sup>3)</sup>			
			300 A	HLD6-A	-	65 kA	<sup>3)</sup>			
			300 A	HLXD6-A	-	65 kA	<sup>3)</sup>			
			300 A	HHLD6	-	100 kA	<sup>3)</sup>			
			300 A	HHLXD6	-	100 kA	<sup>3)</sup>			
			400 A	3VA63	3VA6340-5..	35 kA	<sup>3)</sup>			
			400 A	3VA63	3VA6340-6..	65 kA	<sup>3)</sup>			
	400 A	3VA63	3VA6340-7..	100 kA	<sup>3)</sup>					
	400 A	3VA63	3VA6340-8..	100 kA	<sup>3)</sup>					
	132,0 kW	6SL3210-1PE32-5...	350 A	NJGA	3VL4135-1KN..	35 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>	
			350 A	HJGA	3VL4135-2KN..	65 kA	<sup>3)</sup>			
			350 A	LJGA	3VL4135-3KN..	65 kA	<sup>3)</sup>			
			350 A	JXD6-A	-	35 kA	<sup>3)</sup>			
			350 A	JD6-A	-	35 kA	<sup>3)</sup>			
			350 A	HJD6-A	-	65 kA	<sup>3)</sup>			
			350 A	HJXD6-A	-	65 kA	<sup>3)</sup>			
			350 A	HHJD6	-	100 kA	<sup>3)</sup>			
			350 A	HHJXD6	-	100 kA	<sup>3)</sup>			
			350 A	CJD6-A	-	100 kA	<sup>3)</sup>			
350 A			LD6-A	-	35 kA	<sup>3)</sup>				
350 A			HLD6-A	-	65 kA	<sup>3)</sup>				
350 A			HLXD6-A	-	65 kA	<sup>3)</sup>				
350 A			HHLD6	-	100 kA	<sup>3)</sup>				
350 A			HHLXD6	-	100 kA	<sup>3)</sup>				
400 A			3VA63	3VA6340-5..	35 kA	<sup>3)</sup>				
400 A			3VA63	3VA6340-6..	65 kA	<sup>3)</sup>				
400 A	3VA63	3VA6340-7..	100 kA	<sup>3)</sup>						
400 A	3VA63	3VA6340-8..	100 kA	<sup>3)</sup>						

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 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

Power Module Frame Size	Rated Power, (LO)	Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
			Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)	
FSG	160,0 kW	6SL3210-1PE33-0...	400 A	NJGA	3VL4140-1KN..	35 kA	<sup>3)</sup>	no restriction	no restriction	
			400 A	HJGA	3VL4140-2KN..	65 kA	<sup>3)</sup>			
			400 A	LJGA	3VL4140-3KN..	65 kA	<sup>3)</sup>			
			400 A	JXD6-A	-	35 kA	<sup>3)</sup>			
			400 A	JD6-A	-	35 kA	<sup>3)</sup>			
			400 A	HJD6-A	-	65 kA	<sup>3)</sup>			
			400 A	HJXD6-A	-	65 kA	<sup>3)</sup>			
			400 A	HHJD6	-	100 kA	<sup>3)</sup>			
			400 A	HHJXD6	-	100 kA	<sup>3)</sup>			
			400 A	CJD6-A	-	100 kA	<sup>3)</sup>			
			400 A	LD6-A	-	35 kA	<sup>3)</sup>			
			450 A	LXD6-A	-	35 kA	<sup>3)</sup>			
			400 A	HLD6-A	-	65 kA	<sup>3)</sup>			
			400 A	HLXD6-A	-	65 kA	<sup>3)</sup>			
			400 A	HHLD6	-	100 kA	<sup>3)</sup>			
			400 A	HHLXD6	-	100 kA	<sup>3)</sup>			
			450 A	CLD6-A	-	100 kA	<sup>3)</sup>			
			400 A	3VA63	3VA6340-5..	35 kA	<sup>3)</sup>			
			400 A	3VA63	3VA6340-6..	65 kA	<sup>3)</sup>			
			400 A	3VA63	3VA6340-7..	100 kA	<sup>3)</sup>			
400 A	3VA63	3VA6340-8..	100 kA	<sup>3)</sup>						
	200,0 kW	6SL3210-1PE33-7...	500 A	NLGB	3VL4850-1KN..	35 kA	<sup>3)</sup>	no restriction	no restriction	
			500 A	HLGB	3VL4850-2KN..	65 kA	<sup>3)</sup>			
			500 A	LLGB	3VL4850-3KN..	65 kA	<sup>3)</sup>			
			500 A	LD6-A	-	35 kA	<sup>3)</sup>			
			500 A	LXD6-A	-	35 kA	<sup>3)</sup>			
			500 A	HLD6-A	-	65 kA	<sup>3)</sup>			
			500 A	HLXD6-A	-	65 kA	<sup>3)</sup>			
			500 A	HHLD6	-	100 kA	<sup>3)</sup>			
			500 A	HHLXD6	-	100 kA	<sup>3)</sup>			
			500 A	CLD6-A	-	100 kA	<sup>3)</sup>			
			600 A	3VA64	3VA6460-5..	35 kA	<sup>3)</sup>			
			600 A	3VA64	3VA6460-6..	65 kA	<sup>3)</sup>			
			600 A	3VA64	3VA6460-7..	100 kA	<sup>3)</sup>			
			600 A	3VA64	3VA6460-8..	100 kA	<sup>3)</sup>			

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 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

Power Module		Article no.	Circuit Breaker			SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	480 V	480 Y / 277 V	Metric	Imperial (USA)
FSG	250,0 kW	6SL3210-1PE34-8...	600 A	NLGB	3VL4860-1KN..	35 kA	<sup>3)</sup>	no restriction	no restriction
			600 A	HLGB	3VL4860-2KN..	65 kA	<sup>3)</sup>		
			600 A	LLGB	3VL4860-3KN..	65 kA	<sup>3)</sup>		
			600 A	LD6-A	-	35 kA	<sup>3)</sup>		
			600 A	LXD6-A	-	35 kA	<sup>3)</sup>		
			600 A	HLD6-A	-	65 kA	<sup>3)</sup>		
			600 A	HFXD6-A	-	65 kA	<sup>3)</sup>		
			600 A	HHL6	-	100 kA	<sup>3)</sup>		
			600 A	HHL6	-	100 kA	<sup>3)</sup>		
			600 A	CLD6-A	-	100 kA	<sup>3)</sup>		
			600 A	3VA64	3VA6460-5..	35 kA	<sup>3)</sup>		
			600 A	3VA64	3VA6460-6..	65 kA	<sup>3)</sup>		
			600 A	3VA64	3VA6460-7..	100 kA	<sup>3)</sup>		
			600 A	3VA64	3VA6460-8..	100 kA	<sup>3)</sup>		

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike..

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 480 V AC supply systems can also be applied to 3 phase center point grounded (slash rated) supply systems of 480Y/277 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for 3 phase center point grounded (slash rated) supply systems CANNOT be applied to straight rated supply systems.

### 2.3.3 UL/CSA Circuit Breakers, 500 V ... 600 V

Power Module		Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	600 V	600 Y / 347 V	Metric	Imperial (USA)	
FSD	11,0 kW	6SL3210-1PH21-4...	20 A	3RV1742	3RV1742-5CD..	---	20 kA	no restriction	No restriction	
			20 A	3RV2742	3RV2742-5CD..	---	20 kA			
			20 A	NGG	-	---	14 kA			
			20 A	HGG	-	---	14 kA			
			20 A	LGG	-	---	14 kA			
			20 A	NCGA	3VL1102-1KM..	---	10 kA			
			20 A	HCGA	3VL1102-2KM..	---	10 kA			
			20 A	CED6	-	100 kA	<sup>3)</sup>			
			20 A	3VA51	3VA5120-4E..	---	14 kA			
			20 A	3VA51	3VA5120-5E..	---	18 kA			
	20 A	3VA51	3VA5120-6E..	---	25 kA					
	15,0 kW	6SL3210-1PH22-0...	25 A	3RV1742	3RV1742-5DD..	---	20 kA			
			25 A	3RV2742	3RV2742-5DD..	---	20 kA			
			30 A	NGG	-	---	14 kA			
			30 A	HGG	-	---	14 kA			
			30A	LGG	-	---	14 kA			
			30A	NCGA	3VL1103-1KM..	---	10 kA			
			30A	HCGA	3VL1103-2KM..	---	10 kA			
			30A	CED6	-	100 kA	<sup>3)</sup>			
			30 A	3VA51	3VA5130-4E..	---	14 kA			
			30 A	3VA51	3VA5130-5E..	---	18 kA			
	30 A	3VA51	3VA5130-6E..	---	25 kA					
	18,5 kW	6SL3210-1PH22-3...	30 A	3RV1742	3RV1742-5ED..	---	20 kA			
			30 A	3RV2742	3RV2742-5ED..	---	20 kA			
			30 A	NGG	-	---	14 kA			
			30 A	HGG	-	---	14 kA			
			30 A	LGG	-	---	14 kA			
			30 A	NCGA	3VL1103-1KM..	---	10 kA			
			30 A	HCGA	3VL1103-2KM..	---	10 kA			
			30 A	CED6	-	100 kA	<sup>3)</sup>			
			30 A	3VA51	3VA5130-4E..	---	14 kA			
			30 A	3VA51	3VA5130-5E..	---	18 kA			
	30 A	3VA51	3VA5130-6E..	---	25 kA					
	22,0 kW	6SL3210-1PH22-7...	40 A	3RV1742	3RV1742-5GD..	---	20 kA			
			40 A	3RV2742	3RV2742-5GD..	---	20 kA			
			40 A	NGG	-	---	14 kA			
			40 A	HGG	-	---	14 kA			
			40 A	LGG	-	---	14 kA			
			40 A	NCGA	3VL1104-1KM..	---	10 kA			
			40 A	HCGA	3VL1104-2KM..	---	10 kA			
			40 A	CED6	-	100 kA	<sup>3)</sup>			
			40 A	3VA51	3VA5140-4E..	---	14 kA			
			40 A	3VA51	3VA5140-5E..	---	18 kA			
	40 A	3VA51	3VA5140-6E..	---	18 kA					
	30,0 kW	6SL3210-1PH23-5...	50 A	3RV1742	3RV1742-5JD..	---	20 kA			
			50 A	3RV2742	3RV1742-5JD..	---	20 kA			
			50 A	NGG	-	---	14 kA			
			50 A	HGG	-	---	14 kA			
50 A			LGG	-	---	14 kA				
50 A			NCGA	3VL1105-1KM..	---	10 kA				
50 A	HCGA	3VL1105-2KM..	---	10 kA						

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 600 V AC supply systems can also be applied to a 3 phase center point grounded (slash rated) supply systems of 600Y/347 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for a 3 phase center point grounded (slash rated) supply systems CANNOT be applied to a straight rated supply systems.

Power Module		Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
Frame Size	Rated Power, (LO)		Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	600 V	600 Y / 347 V	Metric	Imperial (USA)	
FSD	30,0 kW	6SL3210-1PH23-5...	50 A	NDGB	3VL2505-1KN..	---	18 kA	no restriction	no restriction	
			50 A	HDGB	3VL2505-2KN..	---	18 kA			
			50 A	LDGB	3VL2505-2KN..	---	18 kA			
			50 A	CED6	-	100 kA	<sup>3)</sup>			
			50 A	3VA51	3VA5150-4E..	---	14 kA			
			50 A	3VA51	3VA5150-5E..	---	18 kA			
			50 A	3VA51	3VA5150-6E..	---	18 kA			
	37,0 kW	6SL3210-1PH24-2...	60 A	3RV1742	3RV1742-5LD..	---	20 kA			
			60 A	3RV2742	3RV2742-5LD..	---	20 kA			
			60 A	NGG	-	---	14 kA			
			60 A	HGG	-	---	14 kA			
			60 A	LGG	-	---	14 kA			
			60 A	NCGA	3VL1106-1KM..	---	10 kA			
			60 A	HCGA	3VL1106-2KM..	---	10 kA			
			60 A	NDGB	3VL2506-1KN..	---	18 kA			
			60 A	HDGB	3VL2506-2KN..	---	18 kA			
			60 A	LDGB	3VL2506-3KN..	---	18 kA			
			60 A	CED6	-	100 kA	<sup>3)</sup>			
			60 A	3VA51	3VA5160-4E..	---	14 kA			
			60 A	3VA51	3VA5160-5E..	---	18 kA			
60 A	3VA51	3VA5160-6E..	---	18 kA						
FSE	45,0 kW	6SL3210-1PH25-2...	80 A	NGG	-	---	14 kA			
			80 A	HGG	-	---	14 kA			
			80 A	LGG	-	---	14 kA			
			80 A	NCGA	3VL1108-1KM..	---	10 kA			
			80 A	HCGA	3VL1108-2KM..	---	10 kA			
			80 A	NDGB	3VL2508-1KN..	---	18 kA			
			80 A	HDGB	3VL2508-2KN..	---	18 kA			
			80 A	LDGB	3VL2508-3KN..	---	18 kA			
			80 A	CED6	-	100 kA	<sup>3)</sup>			
			80 A	FXD6-A	-	22 kA	<sup>3)</sup>			
			80 A	FD6-A	-	22 kA	<sup>3)</sup>			
			80 A	HFD6	-	25 kA	<sup>3)</sup>			
			80 A	HFXD6	-	25 kA	<sup>3)</sup>			
			80 A	HHFD6	-	25 kA	<sup>3)</sup>			
			80 A	HHFXD6	-	25 kA	<sup>3)</sup>			
			80 A	CFD6	-	100 kA	<sup>3)</sup>			
	55,0 kW	6SL3210-1PH26-2...	90 A	NGG	-	---	14 kA			
			90 A	HGG	-	---	14 kA			
			90 A	LGG	-	---	14 kA			
			90 A	NCGA	3VL1191-1KM..	---	10 kA			
			90 A	HCGA	3VL1191-2KM..	---	10 kA			
			90 A	NDGB	3VL2591-1KN..	---	18 kA			
			90 A	HDGB	3VL2591-2KN..	---	18 kA			
90 A	LDGB	3VL2591-3KN..	---	18 kA						
90 A	CED6	-	100 kA	<sup>3)</sup>						
90 A	FXD6-A	-	22 kA	<sup>3)</sup>						

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 600 V AC supply systems can also be applied to a 3 phase center point grounded (slash rated) supply systems of 600Y/347 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for a 3 phase center point grounded (slash rated) supply systems CANNOT be applied to a straight rated supply systems.

Power Module Frame Size	Rated Power, (LO)	Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
			Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	600 V	600 Y / 347 V	Metric	Imperial (USA)	
FSE	55,0 kW	6SL3210-1PH26-2...	90 A	FD6-A	-	22 kA	<sup>3)</sup>	0,2 m³	7,06 ft³	
			90 A	HFD6	-	25 kA	<sup>3)</sup>			
			90 A	HFXD6	-	25 kA	<sup>3)</sup>			
			90 A	HHFD6	-	25 kA	<sup>3)</sup>			
			90 A	HHFXD6	-	25 kA	<sup>3)</sup>			
			90 A	CFD6	-	100 kA	<sup>3)</sup>			
			90 A	3VA51	3VA5180-4E..	---	14 kA			
			90 A	3VA51	3VA5180-5E..	---	18 kA			
			90 A	3VA51	3VA5180-6E..	---	18 kA			
			100 A	3VA52	3VA5210-7E..	35 kA	<sup>3)</sup>			
FSF	75,0 kW	6SL3210-1PH28-0...	110 A	NGG	-	---	14 kA	0,6 m³	21,19 ft³	
			110 A	HGG	-	---	14 kA			
			110 A	LGG	-	---	14 kA			
			100 A	NCGA	3VL1110-1KM..	---	10 kA			
			100 A	HCGA	3VL1110-2KM..	---	10 kA			
			110 A	NDGB	3VL2511-1KN..	---	18 kA			
			110 A	HDGB	3VL2511-2KN..	---	18 kA			
			110 A	LDGB	3VL2511-3KN..	---	18 kA			
			110 A	NFGB	3VL3511-1KN..	---	18 kA			
			110 A	HFGB	3VL3511-2KN..	---	18 kA			
			110 A	LFGB	3VL3511-3KN..	---	18 kA			
			110 A	CED6	-	100 kA	<sup>3)</sup>			
			110 A	FXD6-A	-	22 kA	<sup>3)</sup>			
			110 A	FD6-A	-	22 kA	<sup>3)</sup>			
			110 A	HFD6	-	25 kA	<sup>3)</sup>			
	110 A	HFXD6	-	25 kA	<sup>3)</sup>					
	110 A	HHFD6	-	25 kA	<sup>3)</sup>					
	110 A	HHFXD6	-	25 kA	<sup>3)</sup>					
	110 A	CFD6	-	100 kA	<sup>3)</sup>					
	110 A	3VA51	3VA5111-4E..	---	14 kA					
	110 A	3VA51	3VA5111-5E..	---	14 kA					
	110 A	3VA51	3VA5111-6E..	---	14 kA					
	110 A	3VA52	3VA5211-7E..	35 kA	<sup>3)</sup>					
		90,0 kW	6SL3210-1PH31-0...	125 A	NGG	-	---			14 kA
	125 A			HGG	-	---	14 kA			
	125 A			LGG	-	---	14 kA			
	125 A			CED6	-	100 kA	<sup>3)</sup>			
150 A	NCGA			3VL1115-1KM..	---	10 kA				
150 A	HCGA			3VL1115-2KM..	---	10 kA				
150 A	NDGB			3VL2515-1KN..	---	18 kA				
150 A	HDGB			3VL2515-2KN..	---	18 kA				
150 A	LDGB			3VL2515-3KN..	---	18 kA				
150 A	NFGB			3VL3515-1KN..	---	18 kA				
150 A	HFGB			3VL3515-2KN..	---	18 kA				
150 A	LFGB			3VL3515-3KN..	---	18 kA				
150 A	FXD6-A	-	22 kA	<sup>3)</sup>						
150 A	FD6-A	-	22 kA	<sup>3)</sup>						
150 A	HFD6	-	25 kA	<sup>3)</sup>						
150 A	HFXD6	-	25 kA	<sup>3)</sup>						
150 A	HHFD6	-	25 kA	<sup>3)</sup>						

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 600 V AC supply systems can also be applied to a 3 phase center point grounded (slash rated) supply systems of 600Y/347 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for a 3 phase center point grounded (slash rated) supply systems CANNOT be applied to a straight rated supply systems.



Power Module Frame Size	Rated Power, (LO)	Article no.	Circuit Breaker				SCCR @		Min. enclosure volume	
			Max. rated current	UL/CSA Type <sup>1)</sup>	Article no. Example (European) <sup>2)</sup>	600 V	600 Y / 347 V	Metric	Imperial (USA)	
FSF	90,0 kW	6SL3210-1PH31-0...	150 A	HHFXD6	-	25 kA	<sup>3)</sup>	0,6 m <sup>3</sup>	21,19 ft <sup>3</sup>	
			150 A	CFD6	-	100 kA	<sup>3)</sup>			
			150 A	3VA52	3VA5215-5E.	18 kA	<sup>3)</sup>			
			150 A	3VA52	3VA5215-6E.	25 kA	<sup>3)</sup>			
			150 A	3VA52	3VA5215-7E.	35 kA	<sup>3)</sup>			
	110,0 kW	6SL3210-1PH31-2...	150 A	NCGA	3VL1115-1KM.	---	10 kA			
			150 A	HCGA	3VL1115-2KM.	---	10 kA			
			150 A	NDGB	3VL2515-1KN.	---	18 kA			
			150 A	HDGB	3VL2515-2KN.	---	18 kA			
			150 A	LDGB	3VL2515-3KN.	---	18 kA			
			150 A	NFGB	3VL3515-1KN.	---	18 kA			
			150 A	HFGB	3VL3515-2KN.	---	18 kA			
			150 A	LFGB	3VL3515-3KN.	---	18 kA			
			150 A	FXD6-A	-	22 kA	<sup>3)</sup>			
			150 A	FD6-A	-	22 kA	<sup>3)</sup>			
			150 A	HFD6	-	25 kA	<sup>3)</sup>			
			150 A	HFXD6	-	25 kA	<sup>3)</sup>			
			150 A	HHFD6	-	25 kA	<sup>3)</sup>			
			150 A	HHFXD6	-	25 kA	<sup>3)</sup>			
			150 A	CFD6	-	100 kA	<sup>3)</sup>			
	132,0 kW	6SL3210-1PH31-4...	200 A	NFGB	3VL3520-1KN.	---	18 kA			
			200 A	HFGB	3VL3520-2KN.	---	18 kA			
			200 A	LFGB	3VL3520-3KN.	---	18 kA			
			200 A	FXD6-A	-	22 kA	<sup>3)</sup>			
			200 A	FD6-A	-	22 kA	<sup>3)</sup>			
			200 A	HFD6	-	25 kA	<sup>3)</sup>			
			200 A	HFXD6	-	25 kA	<sup>3)</sup>			
			200 A	HHFD6	-	25 kA	<sup>3)</sup>			
			200 A	HHFXD6	-	25 kA	<sup>3)</sup>			
			200 A	CFD6	-	100 kA	<sup>3)</sup>			
			200 A	JXD6-A	-	25 kA	<sup>3)</sup>			
			200 A	JD6-A	-	25 kA	<sup>3)</sup>			
			200 A	HJD6-A	-	35 kA	<sup>3)</sup>			
			200 A	HJXD6-A	-	35 kA	<sup>3)</sup>			
			200 A	HHJD6	-	50 kA	<sup>3)</sup>			
	200 A	HHJXD6	-	50 kA	<sup>3)</sup>					
	200 A	CJD6-A	-	100 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-5E.	18 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-6E.	25 kA	<sup>3)</sup>					
	200 A	3VA52	3VA5220-7E.	35 kA	<sup>3)</sup>					

1) NCGA & HCGA are UL listed 3VL11 series (Siemens type VL150x UL) circuit breakers shown in the European circuit breaker catalog LV 16. Other Frame Sizes alike.

2) For more breaker article numbers, please refer to the European circuit breaker catalog LV 16.  
<https://support.industry.siemens.com/cs/ww/en/view/109744329>

3) The SCCR shown in the table for 3 phase straight rated 600 V AC supply systems can also be applied to a 3 phase center point grounded (slash rated) supply systems of 600Y/347 V AC.  
 However, vice versa or conversely CANNOT be done i.e. the SCCR shown in the table for a 3 phase center point grounded (slash rated) supply systems CANNOT be applied to a straight rated supply systems.

## More Information

For more information, see the following links:



- Manuals  
<https://support.industry.siemens.com/cs/ww/en/view/109756015>
- Siemens SENTRON fuses / 3NA fuses  
<https://support.industry.siemens.com/cs/ww/en/view/45314810>
- Low-Voltage Power Distribution and Electrical Installation Technology  
<https://support.industry.siemens.com/cs/ww/en/view/109482234>
- SIRIUS Industrial Controls  
<https://support.industry.siemens.com/cs/ww/en/view/109747945>
- IEC Circuit Breakers, 3VA1 series  
<https://support.industry.siemens.com/cs/ww/en/view/109743932>
- UL Molded Case Circuit Breakers, 3VA5 series Circuit Breakers  
<https://support.industry.siemens.com/cs/ww/en/view/109744301>
- UL Molded Case Circuit Breakers, SENTRON & VL series, see Siemens SPEEDFAX Product Catalog Section 7  
<http://w3.usa.siemens.com/powerdistribution/us/en/speedfax-product-catalog/Documents/2017>