

## Motor Starter Protectors/Circuit Breakers

### SIRIUS 3RV2 Motor Starter Protectors/Circuit Breakers up to 80 A

#### General data

#### 3RV20 motor starter protectors (up to 80 A) as "Self-Protected Combination Motor Controller (Type E)"

UL 508/UL 60947-4-1 approval demands 1-inch clearance and 2-inch creepage distance at line side for "Self-Protected Combination Motor Controller Type E".

Therefore, 3RV20 motor starter protectors of sizes S00 to S2 are approved according to UL 508/UL 60947-4-1 in combination with the terminal blocks listed below.

CSA does not require these extended clearances and creepage distances. According to CSA, these terminal blocks can be omitted when the device is used as a "Self-Protected Combination Motor Controller".

The 3RV20 motor starter protectors are approved as "Self-Protected Combination Motor Controllers" under the following file numbers:

- UL File No. E156943, CCN: NKJH
- CSA Master Contract 165071, Product Class: 3211 08

Motor starter protectors		hp rating <sup>1)</sup> for FLA <sup>2)</sup> max.		Rated current $I_n$	Up to 240 V AC		Up to 480 Y/277 V AC		Up to 600 Y/347 V AC	
		Single-phase	Three-phase		UL $I_{bc}^{(3)}$	CSA $I_{bc}^{(3)}$	UL $I_{bc}^{(3)}$	CSA $I_{bc}^{(3)}$	UL $I_{bc}^{(3)}$	CSA $I_{bc}^{(3)}$
Type	V			A	kA	kA	kA	kA	kA	kA
<b>Size S00</b>										
<b>3RV2011 + 3RV2928-1H<sup>4)</sup>5)</b>				0.16 ... 12.5	65	65	65	65	30	30
FLA <sup>2)</sup> max.	115	1	2	16	65	65	65	65	--	--
16 A, 480 V;	200	2	3							
12.5 A, 600 V	230	2	5							
	460	--	10							
	575/600	--	10							
<b>Size S0</b>										
<b>3RV2021 + 3RV2928-1H<sup>4)</sup>5)</b>				0.16 ... 12.5	65	65	65	65	30	30
FLA <sup>2)</sup> max.	115	2	5	16 ... 25	65	65	65	65	--	--
32 A, 480 V	200	3	7 1/2	28; 32	50	50	50	50	--	--
	230	5	10							
	460	--	20							
	575/600	--	--							
<b>Size S2</b>										
<b>3RV2031/3RV2032 + 3RV2938-1K<sup>4)</sup></b>					Values on request					

-- No approval

<sup>1)</sup> hp rating = Power rating in horse power (maximum motor rating).

<sup>2)</sup> FLA = Full Load Amps/motor full load current.

<sup>3)</sup> Corresponds to "short-circuit breaking capacity" according to UL/CSA.

<sup>4)</sup> Not required for CSA.

<sup>5)</sup> Alternatively, the 3RV2928-1K phase barrier can also be used.

#### 3RV27 and 3RV28 motor starter protectors as "circuit breakers"

These motor starter protectors are approved as circuit breakers according to UL 489 and CSA 22.2 No. 5. They can be used therefore as upstream short-circuit protective devices for "Manual Motor Controllers" and "Manual Motor Controllers Suitable for Tap Conductor Protection in Group Installations".

3RV27 and 3RV28 motor starter protectors are approved as "circuit breakers" under the following file numbers:

- UL File No. E235044, CCN: DIVQ
- CSA Master Contract 165071, Product Class: 1432 01

Circuit breakers	Rated current $I_n$	240 V AC		480 Y/277 V AC		600 Y/347 V AC	
		UL $I_{bc}^{(1)}$	CSA $I_{bc}^{(1)}$	UL $I_{bc}^{(1)}$	CSA $I_{bc}^{(1)}$	UL $I_{bc}^{(1)}$	CSA $I_{bc}^{(1)}$
Type	A	kA	kA	kA	kA	kA	kA
<b>Size S00</b>							
<b>3RV2711</b>	0.16 ... 12.5	65	65	65	65	10	10
	15	65	65	65	65	--	--
<b>3RV2811</b>	0.16 ... 12.5	65	65	65	65	10	10
	15	65	65	65	65	--	--
<b>Size S0</b>							
<b>3RV2721</b>	20; 22	50	50	50	50	--	--
<b>3RV2821</b>	20; 22	50	50	50	50	--	--

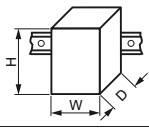

-- No approval

<sup>1)</sup> Corresponds to "short-circuit breaking capacity" according to UL.

## Motor Starter Protectors/Circuit Breakers

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#### General data

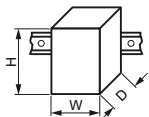
General data						
<b>Type</b>			<b>3RV2.1.</b>	<b>3RV2.2.</b>	<b>3RV2.3.</b>	<b>3RV27, 3RV28</b>
Size			S00	S0	S2	S00, S0
Dimensions (W x H x D)						
• Screw terminals		mm	45 x 97 x 91	45 x 97 x 91	55 x 140 x 149	45 x 144 x 92
• Spring-type terminals		mm	45 x 106 x 91	45 x 119 x 91	--	--
<b>Standards</b>						
• IEC 60947-1, EN 60947-1 (VDE 0660 Part 100)			Yes			
• IEC 60947-2, EN 60947-2 (VDE 0660 Part 101)			Yes			
• IEC 60947-4-1, EN 60947-4-1 (VDE 0660 Part 102)			Yes	Yes	Yes	--
• UL 508/UL 60947-4-1, CSA C22.2 No. 14/CSA C22.2 No. 60947-4-1			Yes	Yes	Yes	--
• UL 489, CSA C22.2 No. 5			--	--	--	Yes
<b>Number of poles</b>			3			
<b>Max. rated current <math>I_n</math> max (= max. rated operational current <math>I_e</math>)</b>		A	16	40	80	22
<b>Permissible ambient temperature</b>						
• Storage/transport		°C	-50 ... +80			
• Operation	$I_n$ : 0.16 ... 32 A	°C	-20 ... +70		--	
	$I_n$ : 36 ... 40 A	°C	(current reduction above +60 °C)		--	
			-20 ... +40		--	
			(the devices must not be mounted side-by-side and they must not be assembled with link modules with contactors. A lateral clearance of 9 mm is required.)			
	$I_n$ : 14 ... 80 A	°C	--		-20 ... +70	--
					(current reduction above +60 °C)	
<b>Permissible rated current at inside temperature of control cabinet</b>						
• +60 °C		%	100			
• +70 °C		%	87			
<b>Permissible rated current at ambient temperature of enclosure (applies for motor starter protector/circuit breaker inside enclosure ≤ 32 A)</b>						
• +35 °C		%	100		On request	100
• +60 °C		%	87			87
<b>Rated operational voltage <math>U_e</math></b>						
• Acc. to IEC		V AC	690 (when a molded-plastic enclosure is used only 500 V)			
• Acc. to UL/CSA		V AC	600			
<b>Rated frequency</b>		Hz	50/60			
<b>Rated insulation voltage <math>U_i</math></b>		V	690			
<b>Rated impulse withstand voltage <math>U_{imp}</math></b>		kV	6			
<b>Utilization category</b>						
• IEC 60947-2 (motor starter protector/circuit breaker)		A				
• IEC 60947-4-1 (motor starter)		AC-3				
<b>Trip class CLASS</b>	Acc. to IEC 60947-4-1		10		10/20	--
<b>DC short-circuit breaking capacity (time constant <math>t = 5</math> ms)</b>						
• 1 conducting path 150 V DC		kA	10		On request	10
• 2 conducting paths in series 300 V DC		kA	10			10
• 3 conducting paths in series 450 V DC		kA	10			10
<b>Power loss <math>P_V</math> for each motor starter protector/circuit breaker</b>						
Dependent on the rated current $I_n$ (upper setting range)	$I_n$ : 0.16 ... 0.63 A	W	5		--	5
	$I_n$ : 0.8 ... 6.3 A	W	6		--	6
	$I_n$ : 8 ... 16 A	W	7		--	7
	$I_n$ : 16 A	W	--	7	10	7
	$I_n$ : 17 ... 25 A	W	--	8	12	8
	$I_n$ : 28 ... 32 A	W	--	11	14	--
	$I_n$ : 36 ... 40 A	W	--	14	15	--
	$I_n$ : 45 ... 52 A	W	--	--	17	--
	$I_n$ : ... 80 A	W	--	--	On request	--
<b>Shock resistance</b>	Acc. to IEC 60068-2-27	g/ms	25/11 (square and sine pulse)			
<b>Degree of protection</b>	Acc. to IEC 60529		IP20			
<b>Touch protection</b>	Acc. to EN 50274		Finger-safe for vertical contact from the front			
<b>Temperature compensation</b>	Acc. to IEC 60947-4-1	°C	-20 ... +60			
<b>Phase failure sensitivity</b>	Acc. to IEC 60947-4-1		Yes (only for 3RV23 motor starter protectors)			No
<b>Explosion protection – Safe operation of motors with "increased safety" type of protection</b>			Yes (only for 3RV20 motor starter protectors)			
EC type test certificate number according to directive 94/9/EC (ATEX)			DMT 02 ATEX F 001  II (2) GD	On request		No

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#### General data

#### General data (continued)

General data (continued)		3RV2.1.	3RV2.2.	3RV2.3.	3RV27, 3RV28
<b>Type</b>		S00	S0	S2	S00, S0
<b>Size</b>		45 x 97 x 91	45 x 97 x 91	55 x 140 x 149	45 x 144 x 92
Dimensions (W x H x D)		45 x 106 x 91	45 x 119 x 91	--	--
• Screw terminals • Spring-type terminals					
<b>Isolating function</b>	Acc. to IEC 60947-2	Yes			
<b>Main and EMERGENCY-STOP switch characteristics</b>	Acc. to DIN EN 60204-1	Yes			
(with corresponding accessories)					
<b>Protective separation between main and auxiliary circuits, required for PELV applications</b>	Acc. to IEC 60947-1				
• Up to 400 V +10 % • Up to 415 V +5 % (higher voltages on request)		Yes			
		Yes			
<b>Permissible mounting position</b>		Any, acc. to IEC 60447 start command "I" right-hand side or top			
<b>Mechanical endurance</b>	Operating cycles	100 000		52 A: 50 000, 80 A: On request	100 000
<b>Electrical endurance</b>	Operating cycles	100 000		52 A: 50 000, 80 A: On request	100 000
<b>Max. switching frequency per hour (motor starts)</b>	1/h	15			

#### Rated data of the auxiliary switches and signaling switches

		Lateral auxiliary switch with 1 NO + 1 NC, 2 NO, 2 NC, 2 NO + 2 NC	Signaling switches	Transverse auxiliary switch with 1 CO	1 NO + 1 NC, 2 NO
<b>Max. rated voltage</b>					
• Acc. to NEMA (UL)	V AC	600			250
• Acc. to NEMA (CSA)	V AC	600			250
<b>Uninterrupted current</b>	A	10		5	2.5
<b>Switching capacity</b>		1 NO + 1 NC, 2 NO, 2 NC; A600, Q300; 2 NO + 2 NC; A300, Q300	A600, Q300	B600, R300	C300, R300

#### Front transverse auxiliary switches

		Switching capacity for different voltages	
		1 CO	1 NO + 1 NC, 2 NO
<b>Rated operational current <math>I_e</math></b>			
• At AC-15, alternating voltage			
- 24 V	A	4	2
- 230 V	A	3	0.5
• At AC-12 = $I_{th}$ , alternating voltage			
- 24 V	A	10	2.5
- 230 V	A	10	2.5
• At DC-13, direct voltage $L/R$ 200 ms			
- 24 V	A	1	1
- 48 V	A	--	0.3
- 60 V	A	--	0.15
- 110 V	A	0.22	--
- 220 V	A	0.1	--
<b>Minimum load capacity</b>	V mA	17 1	

#### Front transverse solid-state compatible auxiliary switches

		Switching capacity for different voltages	
		1 CO	
<b>Rated operational voltage <math>U_e</math></b>	Alternating voltage	V	125
<b>Rated operational current <math>I_e/AC-14</math></b>	at $U_e = 125$ V	A	0.1
<b>Rated operational voltage <math>U_e</math></b>	Direct voltage $L/R$ 200 ms	V	60
<b>Rated operational current <math>I_e/DC-13</math></b>	at $U_e = 60$ V	A	0.3
<b>Minimum load capacity</b>	V mA	5 1	

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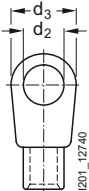
#### General data

Lateral auxiliary switches with signaling switch			
Switching capacity for different voltages: Lateral auxiliary switch with 1 NO + 1 NC, 2 NO, 2 NC, 2 NO + 2 NC Signaling switch			
<b>Rated operational current <math>I_e</math></b>			
• At AC-15, alternating voltage			
- 24 V	A	6	
- 230 V	A	4	
- 400 V	A	3	
- 690 V	A	1	
• At AC-12 = $I_{th}$ , alternating voltage			
- 24 V	A	10	
- 230 V	A	10	
- 400 V	A	10	
- 690 V	A	10	
• At DC-13, direct voltage L/R 200 ms			
- 24 V	A	2	
- 110 V	A	0.5	
- 220 V	A	0.25	
- 440 V	A	0.1	
<b>Minimum load capacity</b>	V	17	
	mA	1	
Auxiliary releases			
		Undervoltage releases	Shunt releases
<b>Power consumption</b>			
• During pick-up			
- AC voltages	VA/W	20.2/13	20.2/13
- DC voltages	W	20	13 ... 80
• During uninterrupted duty			
- AC voltages	VA/W	7.2/2.4	--
- DC voltages	W	2.1	--
<b>Response voltage</b>			
• Tripping	V	0.35 ... 0.7 x $U_s$	0.7 ... 1.1 x $U_s$
• Pick-up	V	0.85 ... 1.1 x $U_s$	--
<b>Opening time maximum</b>	ms	20	
Short-circuit protection for auxiliary and control circuits			
<b>Melting fuses</b> operational class gG	A	10	
<b>Miniature circuit breakers</b> C characteristic	A	6 (prospective short-circuit current < 0.4 kA)	

# Motor Starter Protectors/Circuit Breakers

## SIRIUS 3RV2 Motor Starter Protectors/Circuit Breakers up to 80 A

### General data

Conductor cross-sections of main circuit						
Type		3RV2.11	3RV2.21	3RV2.31-4B1., 3RV2.31-4D.1., 3RV2.31-4E.1., 3RV2.31-4P.1., 3RV2.31-4S.1., 3RV2.31-4T.1., 3RV2.31-4U.1., 3RV2.31-4V.1.	3RV2.31-4J.1., 3RV2.31-4K.1., 3RV2.31-4R.1., 3RV2.31-4W.1., 3RV2.31-4X.1., 3RV2431-4VA1., 3RV2.32	3RV27, 3RV28
Size		S00	S0	S2		S00, S0
<b>Connection type</b>		 <b>Screw terminals</b>				
<b>Terminal screw</b>		M3, Pozidriv size 2	M4, Pozidriv size 2	M6, Pozidriv size 2		M4, Pozidriv size 2
<b>Operating devices</b>	mm	∅ 5 ... 6	∅ 5 ... 6	∅ 5 ... 6		∅ 5 ... 6
<b>Prescribed tightening torque</b>	Nm	0.8 ... 1.2	2 ... 2.5	3.0 ... 4.5		2.5 ... 3
<b>Conductor cross-sections (min./max.),</b> 1 or 2 conductors can be connected						
• Solid or stranded	mm <sup>2</sup>	2 x (0.75 ... 2.5) <sup>1)</sup> , 2 x 4	2 x (1 ... 2.5) <sup>1)</sup> , 2 x (2.5 ... 10) <sup>1)</sup>	2 x (1 ... 25) <sup>1)</sup> , 1 x (1 ... 35) <sup>1)</sup>	2 x (1 ... 35) <sup>1)</sup> , 1 x (1 ... 50) <sup>1)</sup>	2 x (1 ... 10) <sup>1)</sup> , max. 1 x 25
• Finely stranded with end sleeve (DIN 46228-1)	mm <sup>2</sup>	2 x (0.5 ... 1.5) <sup>1)</sup> , 2 x (0.75 ... 2.5) <sup>1)</sup>	2 x (1 ... 2.5) <sup>1)</sup> , 2 x (2.5 ... 6) <sup>1)</sup> , 1 x 10	2 x (1 ... 16) <sup>1)</sup> , 1 x (1 ... 25) <sup>1)</sup>	2 x (1 ... 25) <sup>1)</sup> , 1 x (1 ... 35) <sup>1)</sup>	1 x (1 ... 16), max. 6 + 16
• AWG cables, solid or stranded	AWG	2 x (20 ... 16) <sup>1)</sup> , 2 x (18 ... 12) <sup>1)</sup>	2 x (16 ... 12) <sup>1)</sup> , 2 x (14 ... 8) <sup>1)</sup>	2 x (18 ... 3) <sup>1)</sup> , 1 x (18 ... 2) <sup>1)</sup>	2 x (18 ... 2) <sup>1)</sup> , 1 x (18 ... 1) <sup>1)</sup>	2 x (14 ... 10)
<b>Connection type</b>		 <b>Spring-type terminals</b>				
<b>Operating devices</b>	mm	3.0 x 0.5 and 3.5 x 0.5				
<b>Conductor cross-sections (min./max.),</b> 1 or 2 conductors can be connected						
• Solid or stranded	mm <sup>2</sup>	2 x (0.5 ... 4)	2 x (1 ... 10)	--		
• Finely stranded without end sleeve	mm <sup>2</sup>	2 x (0.5 ... 2.5)	2 x (1 ... 6)	--		
• Finely stranded with end sleeve (DIN 46228-11)	mm <sup>2</sup>	2 x (0.5 ... 2.5)	2 x (1 ... 6)	--		
• AWG cables, solid or stranded	AWG	2 x (20 ... 12)	2 x (18 ... 8)	--		
Max. external diameter of the conductor insulation	mm	3.6	3.6	--		
<b>Connection type</b>		 <b>Ring terminal lug connections</b>				
<b>Terminal screw</b>		M3, Pozidriv size 2	M4, Pozidriv size 2	--		
<b>Operating devices</b>	mm	∅ 5 ... 6	∅ 5 ... 6	--		
<b>Prescribed tightening torque</b>	Nm	0.8 ... 1.2	2 ... 2.5	--		
<b>Usable ring terminal lugs</b>	mm	d <sub>2</sub> = min. 3.2, d <sub>3</sub> = max. 7.5	d <sub>2</sub> = min. 4.3, d <sub>3</sub> = max. 12.2	--		
<ul style="list-style-type: none"> <li>• DIN 46234 without insulation sleeve</li> <li>• DIN 46225 without insulation sleeve</li> <li>• DIN 46237 with insulation sleeve</li> <li>• JIS C2805 Type R without insulation sleeve</li> <li>• JIS C2805 Type RAV with insulation sleeve</li> <li>• JIS C2805 Type RAP with insulation sleeve</li> </ul>						




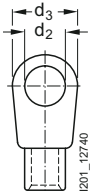
<sup>1)</sup> If two different conductor cross-sections are connected to one clamping point, both cross-sections must be in the range specified.

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

#### General data

##### Conductor cross-sections for auxiliary and control circuits

Type	3RV2.11	3RV2.21	3RV2.31, 3RV2.32	3RV27, 3RV28
Size	S00	S0	S2	S00, S0
Connection type	 Screw terminals			
Terminal screw	M3, Pozidriv size 2			
Operating devices	mm	∅ 5 ... 6		
Prescribed tightening torque	Nm	0.8 ... 1.2		
<b>Conductor cross-sections (min./max.)</b> , 1 or 2 conductors can be connected				
• Solid or stranded	mm <sup>2</sup>	2 x (0.5 ... 1.5) <sup>1)</sup> , 2 x (0.75 ... 2.5) <sup>1)</sup>		
• Finely stranded with end sleeve (DIN 46228-1)	mm <sup>2</sup>	2 x (0.5 ... 1.5) <sup>1)</sup> , 2 x (0.75 ... 2.5) <sup>1)</sup>		
• AWG cables, solid or stranded	AWG	2 x (18 ... 14) <sup>1)</sup> , 2 x (20 ... 16) <sup>1)</sup>		
Connection type	 Spring-type terminals			
Operating devices	mm	3.0 x 0.5 and 3.5 x 0.5		
<b>Conductor cross-sections (min./max.)</b> , 1 or 2 conductors can be connected				
• Solid or stranded	mm <sup>2</sup>	2 x (0.5 ... 2.5)		
• Finely stranded without end sleeve	mm <sup>2</sup>	2 x (0.5 ... 2.5)		
• Finely stranded with end sleeve (DIN 46228-1)	mm <sup>2</sup>	2 x (0.5 ... 1.5)		
• AWG cables, solid or stranded	AWG	2 x (20 ... 14)		
Max. external diameter of the conductor insulation	mm	3.6		
Connection type	 Ring terminal lug connections			
Terminal screw	M3, Pozidriv size 2			
Operating devices	mm	∅ 5 ... 6		
Tightening torque	Nm	0.8 ... 1.2		
Usable ring terminal lugs	mm	d <sub>2</sub> = min. 3.2, d <sub>3</sub> = max. 7.5		
• DIN 46234 without insulation sleeve				
• DIN 46225 without insulation sleeve				
• DIN 46237 with insulation sleeve				
• JIS C2805 Type R without insulation sleeve				
• JIS C2805 Type RAV with insulation sleeve				
• JIS C2805 Type RAP with insulation sleeve				

<sup>1)</sup> If two different conductor cross-sections are connected to one clamping point, both cross-sections must be in the range specified.

##### Terminals for "Self-Protected Combination Motor Controllers (Type E) according to UL 508/UL 60947-4-1"

Type	3RV2928-1H
Prescribed tightening torque	Nm 2.5 ... 3
<b>Conductor cross-sections</b>	
• Front clamping point connected	
 NSBU_00479	
- Solid	mm <sup>2</sup> 1 ... 10
- Finely stranded with end sleeve	mm <sup>2</sup> 1 ... 16
- Stranded	mm <sup>2</sup> 2.5 ... 25
- AWG cables, solid or stranded	AWG 14 ... 3
- Terminal screw	M4
• Rear clamping point connected	
 NSBU_00480	
- Solid	mm <sup>2</sup> 1 ... 10
- Finely stranded with end sleeve	mm <sup>2</sup> 1 ... 16
- Stranded	mm <sup>2</sup> 1.5 ... 25
- AWG cables, solid or stranded	AWG 14 ... 6
- Terminal screw	M4
• Both clamping points connected	
 NSBU_00481	
- Front clamping point:	
Solid	mm <sup>2</sup> 1 ... 10
Finely stranded with end sleeve	mm <sup>2</sup> 1 ... 10 <sup>1)</sup> , 1 ... 6 <sup>1)</sup>
Stranded	mm <sup>2</sup> 2.5 ... 10
AWG cables, solid or stranded	AWG 14 ... 6
Terminal screw	M4
- Rear clamping point:	
Solid	mm <sup>2</sup> 1 ... 10
Finely stranded with end sleeve	mm <sup>2</sup> 1 ... 10 <sup>1)</sup> , 1 ... 16 <sup>1)</sup>
Stranded	mm <sup>2</sup> 2.5 ... 10
AWG cables, solid or stranded	AWG 16 ... 3
Terminal screw	M4

<sup>1)</sup> The following can be connected when both clamping points are connected:

- Front 1 ... 10 mm<sup>2</sup> and rear 1 ... 10 mm<sup>2</sup>
- Front 1 ... 6 mm<sup>2</sup> and rear 1 ... 16 mm<sup>2</sup>

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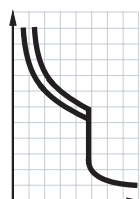
## SIRIUS 3RV2 Motor Starter Protectors up to 80 A

For motor protection

### Selection and ordering data

**CLASS 10, without auxiliary switches<sup>1)</sup>**

PU (UNIT, SET, M) = 1  
 PS\* = 1 unit  
 PG = 41E



3RV2011-0AA10



3RV2011-0EA20



3RV2021-4AA10



3RV2021-4AA20

Rated current $I_n$ A	Suitable for three-phase motors <sup>2)</sup> with P kW	Setting range for thermal overload release A	Instantaneous overcurrent release A	Short-circuit breaking capacity at 400 V AC $I_{cu}$ kA	DT	Screw terminals		Spring-type terminals	
						Article No.	Price per PU	Article No.	Price per PU
<b>Size S00</b>									
0.16	0.04	0.11 ... 0.16	2.1	100		▶	▶	▶	▶
0.2	0.06	0.14 ... 0.2	2.6	100		▶	▶	▶	▶
0.25	0.06	0.18 ... 0.25	3.3	100		▶	▶	▶	▶
0.32	0.09	0.22 ... 0.32	4.2	100		▶	▶	▶	▶
0.4	0.09	0.28 ... 0.4	5.2	100		▶	▶	▶	▶
0.5	0.12	0.35 ... 0.5	6.5	100		▶	▶	▶	▶
0.63	0.18	0.45 ... 0.63	8.2	100		▶	▶	▶	▶
0.8	0.18	0.55 ... 0.8	10	100		▶	▶	▶	▶
1	0.25	0.7 ... 1	13	100		▶	▶	▶	▶
1.25	0.37	0.9 ... 1.25	16	100		▶	▶	▶	▶
1.6	0.55	1.1 ... 1.6	21	100		▶	▶	▶	▶
2	0.75	1.4 ... 2	26	100		▶	▶	▶	▶
2.5	0.75	1.8 ... 2.5	33	100		▶	▶	▶	▶
3.2	1.1	2.2 ... 3.2	42	100		▶	▶	▶	▶
4	1.5	2.8 ... 4	52	100		▶	▶	▶	▶
5	1.5	3.5 ... 5	65	100		▶	▶	▶	▶
6.3	2.2	4.5 ... 6.3	82	100		▶	▶	▶	▶
8	3	5.5 ... 8	104	100		▶	▶	▶	▶
10	4	7 ... 10	130	100		▶	▶	▶	▶
12.5	5.5	9 ... 12.5	163	100		▶	▶	▶	▶
16	7.5	10 <sup>3)</sup> ... 16	208	55		▶	▶	▶	▶
<b>Size S0</b>									
0.63	0.18	0.45 ... 0.63	8.2	100	NEW	B	▶	B	▶
0.8	0.18	0.55 ... 0.8	10	100	NEW	B	▶	B	▶
1	0.25	0.7 ... 1	13	100	NEW	B	▶	B	▶
1.25	0.37	0.9 ... 1.25	16	100	NEW	B	▶	B	▶
1.6	0.55	1.1 ... 1.6	21	100	NEW	B	▶	B	▶
2	0.75	1.4 ... 2	26	100	NEW	B	▶	B	▶
2.5	0.75	1.8 ... 2.5	33	100	NEW	B	▶	B	▶
3.2	1.1	2.2 ... 3.2	42	100	NEW	B	▶	B	▶
4	1.5	2.8 ... 4	52	100	NEW	B	▶	B	▶
5	1.5	3.5 ... 5	65	100	NEW	B	▶	B	▶
6.3	2.2	4.5 ... 6.3	82	100	NEW	B	▶	B	▶
8	3	5.5 ... 8	104	100	NEW	B	▶	B	▶
10	4	7 ... 10	130	100	NEW	B	▶	B	▶
12.5	5.5	9 ... 12.5	163	100	NEW	B	▶	B	▶
16	7.5	10 <sup>3)</sup> ... 16	208	55		▶	▶	▶	▶
20	7.5	13 <sup>3)</sup> ... 20	260	55		▶	▶	▶	▶
22	11	16 <sup>3)</sup> ... 22	286	55		▶	▶	▶	▶
25	11	18 <sup>3)</sup> ... 25	325	55		▶	▶	▶	▶
28	15	23 ... 28	364	55		▶	▶	▶	▶
32 <sup>4)</sup>	15	27 ... 32	400	55		▶	▶	▶	▶
36 <sup>5)</sup>	18.5	30 ... 36	432	20		▶	▶	--	--
40 <sup>5)</sup>	18.5	34 ... 40	480	20		▶	▶	--	--

1) The 3RV20.1-...A.0 motor starter protectors up to 32 A are also available with ring terminal lug connection. The Article No. must be changed in the 11th digit to "4": e.g. 3RV2011-0AA40.

2) Guide value for 4-pole standard motors at 50 Hz 400 V AC. The actual starting and rated data of the motor to be protected must be considered when selecting the units.

3) The setting range of the thermal overload releases has been extended.

4) Suitable for use with IE3 motors up to a starting current of 256 A. For higher starting currents we recommend using 3RV2 motor starter protectors size S2.

5) The devices must not be mounted side-by-side and they must not be assembled with link modules with contactors. A lateral clearance of 9 mm is required. For use with IE3 motors we recommend using 3RV2 motor starter protectors size S2.

Auxiliary switches and other accessories can be ordered separately (see "Accessories" page 7/32 onwards).