

Type	3RV1611-0BD10	3RV1611-1.G14	3RV1011
SIRIUS 3RV1 motor starter protectors/circuit breakers			
Applications			
• System protection	--	--	--
• Motor protection	--	--	✓
• Motor protection with overload relay function	--	--	--
• Starter combinations	--	--	--
• Transformer protection	--	--	--
• Fuse monitoring	✓	--	--
• Voltage transformer circuit breakers for distance protection	--	✓	--
Size	S00	S00	S00
Rated current I_n			
• Size S00	0.2	Up to 3	Up to 12
Rated operational voltage U_e acc. to IEC	690 AC[1)]	400 AC	690 AC
Rated frequency	50/60	$16^2/_3$ ... 60	50/60
Trip class	--	--	CLASS 10
Thermal overload releases	0.2	1.4 ... 3	0.11 ... 0.16 to 9 ... 12
Electronic releases A multiple of the rated current	6 times	4 ... 7 times	13 times
Short-circuit breaking capacity I_{cu} at 400 V AC	100	50	100/50
Pages	7/67	7/68	7/69
Accessories			
For sizes	S00	S00	S00
Pages	7/67, 7/68		

✓ Has this function or can use this accessory

-- Does not have this function or cannot use this accessory

1) With molded-plastic enclosure 500 V AC. For DC applications, see "Technical Specifications" → "DC short-circuit breaking capacity", page 7/20.

General data

Technical specifications

More information

System Manual "SIRIUS – System Overview", see https://support.industry.siemens.com/cs/ww/en/view/60311318

Configuration Manual "Load Feeders – SIRIUS Modular System", see https://support.industry.siemens.com/cs/ww/en/view/39714188

Manual, see https://support.industry.siemens.com/cs/ww/en/view/60279172

Technical specifications, see https://support.industry.siemens.com/cs/ww/en/ps/16245/td

UL reports of the individual devices, see www.siemens.com/sirius/manuals

Short-circuit breaking capacity I_{cu}, I_{cs} according to IEC 60947-2

The table shows the rated ultimate short-circuit breaking capacity I_{cu} and the rated service short-circuit breaking capacity I_{cs} of the 3RV motor starter protectors/circuit breakers with different operating voltages dependent on the rated current I_n of the motor starter protectors/circuit breakers.

Power can be supplied to the motor starter protectors/circuit breakers via the terminals at the top or at the bottom without restricting the rated data. If the short-circuit current at the place of installation exceeds the motor starter protector/circuit breaker's specified rated short-circuit breaking capacity, you will need to use a back-up fuse. It is also possible to install an upstream motor starter protector/circuit breaker with a limiter function.

The maximum rated current of this back-up fuse is indicated in the tables. The rated ultimate short-circuit breaking capacity then applies as specified on the fuse.

Fuseless design

Motor starter protector/contactor assemblies for short-circuit currents up to 150 kA can be ordered as 3RA2 fuseless load feeders, see page 8/4 onwards.

Motor starter protectors/ circuit breakers	Rated current I_n	Up to 240 V AC[1]			Up to 400 V AC[1]/ 415 V AC[2]			Up to 440 V AC[1]/ 460 V AC[2]			Up to 500 V AC[1]/ 525 V AC[2]			Up to 690 V AC[1]		
		I_{cu}	I_{cs}	Max. fuse (gG)	I_{cu}	I_{cs}	Max. fuse (gG)[3]	I_{cu}	I_{cs}	Max. fuse (gG)[3]	I_{cu}	I_{cs}	Max. fuse (gG)[3]	I_{cu}	I_{cs}	Max. fuse (gG)[3][4]
Type	A	kA	kA	A	kA	kA	A	kA	kA	A	kA	kA	A	kA	kA	A
Size S00																
3RV1011	0.16 ... 1	100	100	--	100	100	--	100	100	--	100	100	--	100	100	--
	1.25, 1.6	100	100	--	100	100	--	100	100	--	100	100	--	2	2	20
	2; 2.5	100	100	--	100	100	--	100	100	--	10	10	35	2	2	35
	3.2; 4	100	100	--	100	100	--	50	12.5	40	3	3	40	2	2	40
	5; 6.3	100	100	--	100	100	--	50	12.5	50	3	3	50	2	2	40
	8	100	100	--	50	12.5	80	50	12.5	63	3	3	63	2	2	50
	10	100	100	--	50	12.5	80	10	10	63	3	3	63	2	2	50
	12	100	100	--	50	12.5	80	10	10	80	3	3	80	2	2	50
3RV2.11	0.16 ... 1.6	100	100	--	100	100	--	100	100	--	100	100	--	100	100	--
	2; 2.5	100	100	--	100	100	--	100	100	--	100	100	--	10	10	25
	3.2	100	100	--	100	100	--	100	100	--	100	100	--	10	10	32
	4; 5	100	100	--	100	100	--	100	100	--	100	100	--	6	4	32
	6.3	100	100	--	100	100	--	100	100	--	100	100	--	6	4	50
	8	100	100	--	100	100	--	50	50	63	42	42	63	6	4	50
	10	100	100	--	100	100	--	50	50	80	42	42	63	6	4	50
	12.5	100	100	--	100	100	--	50	50	80	42	42	80	6	4	63
	16	100	100	--	55	30	100	50	12.5	80	10	5	80	4	4	63
3RV1611-0BD10	0.2	100	100	--	100	100	--	100	100	--	100	100	--	100	100	--
Size S0																
3RV2.21	0.16 ... 1.6	100	100	--	100	100	--	100	100	--	100	100	--	100	100	--
	2; 2.5	100	100	--	100	100	--	100	100	--	100	100	--	10	10	25
	3.2	100	100	--	100	100	--	100	100	--	100	100	--	10	10	32
	4; 5	100	100	--	100	100	--	100	100	--	100	100	--	6	4	32
	6.3	100	100	--	100	100	--	100	100	--	100	100	--	6	4	50
	8	100	100	--	100	100	--	50	50	63	42	42	63	6	4	50
	10	100	100	--	100	100	--	50	50	80	42	42	63	6	4	50
	12.5	100	100	--	100	100	--	50	50	80	42	42	80	6	4	63
	16	100	100	--	55	25	100	50	12.5	80	10	5	80	4	2	63
	20	100	100	--	55	25	125	50	10	80	10	5	80	4	2	63
	22; 25	100	100	--	55	25	125	50	10	100	10	5	80	4	2	63
	28; 32	100	100	--	55	25	125	30	10	125	10	5	100	4	2	100
	36; 40	100	100	--	20	10	125	12	8	125	6	3	100	3	2	100

-- No back-up fuse required, since short-circuit resistant up to 100 kA

1) 10% overvoltage.

2) 5% overvoltage.

3) Back-up fuse only required if short-circuit current at the place of installation is > I_{cu}.

4) Alternatively, fuseless limiter combinations for 690 V AC can also be used.

General data

Short-circuit breaking capacity I_{cuIT} in the IT system (IT network) according to IEC 60947-2

3RV motor starter protectors/circuit breakers are suitable for use in IT systems. The values of I_{cu} and I_{cs} apply for the three-pole short circuit. In the case of a double ground fault in different phases at the input and output side of a motor starter protector/circuit breaker, the special short-circuit breaking capacity I_{cuIT} applies. The specifications in the table below apply to 3RV motor starter protectors/circuit breakers.

If the short-circuit current at the place of installation exceeds the motor starter protector/circuit breaker's specified rated short-circuit breaking capacity, you will need to use a back-up fuse. The maximum rated current of this back-up fuse is indicated in the tables. The rated short-circuit breaking capacity then applies as specified on the fuse.

Motor starter protectors/ circuit breakers	Rated current I_n	Up to 240 V AC[1]		Up to 400 V AC[1]/ 415 V AC[2]		Up to 440 V AC[1]/ 460 V AC[2]		Up to 500 V AC[1]/ 525 V AC[2]		Up to 690 V AC[1][5]	
		I_{cuIT}	Max. fuse (gG)[3]	I_{cuIT}	Max. fuse (gG)[3][4]	I_{cuIT}	Max. fuse (gG)[3]	I_{cuIT}	Max. fuse (gG)[3]	I_{cuIT}	Max. fuse (gG)[3]
Type	A	kA	A	kA	A	kA	A	kA	A	kA	A
Size S00											
3RV1011	0.16 ... 0.4	100	--	100	--	100	--	100	--	100	--
	0.5	100	--	100	--	100	--	100	--	0.5	4
	0.63	100	--	100	--	6	6	6	6	0.5	6
	0.8	100	--	100	--	5	6	5	6	0.5	6
	1	100	--	4	10	2	10	2	10	0.5	10
	1.25	100	--	2	20	2	16	2	16	0.5	16
	1.6	100	--	2	20	2	20	2	20	1	16
	2	100	--	2	35	2	25	2	25	1	20
	2.5	100	--	2	35	2	25	2	25	1	25
	3.2	100	--	2	40	2	35	2	35	1	25
	4	100	--	2	40	2	35	2	35	1	35
	5	100	--	2	50	2	35	2	35	1	35
	6.3	100	--	2	50	2	40	2	40	1	40
	8	50	80	2	63	2	40	2	40	1	40
	10	50	80	2	63	2	50	2	50	1	50
	12	50	80	2	80	2	50	2	50	1	50
3RV2.11	0.16 ... 0.4	100	--	100	--	100	--	100	--	100	--
	0.5	100	--	100	--	100	--	100	--	0.5	4
	0.63; 0.8	100	--	100	--	100	--	100	--	0.5	6
	1	100	--	100	--	2	10	2	10	1.5	10
	1.25	100	--	100	--	2	16	2	16	1.5	16
	1.6	100	--	100	--	2	20	2	20	1.5	16
	2; 2.5	100	--	8	25	2	25	2	25	1.5	20
	3.2	100	--	8	32	2	32	2	32	1.5	25
	4; 5	100	--	4	32	1.5	32	1.5	32	1.5	25
	6.3; 8	100	--	4	50	1	40	1	40	1	35
	10	100	--	4	50	1	40	1	40	1	40
	12.5	100	--	4	63	1	50	1	50	1	40
	16	55	80	4	63	1	50	1	50	1	40
Size S0											
3RV2.21	0.16 ... 0.4	100	--	100	--	100	--	100	--	100	--
	0.5	100	--	100	--	100	--	100	--	0.5	4
	0.63; 0.8	100	--	100	--	100	--	100	--	0.5	6
	1	100	--	100	--	2	10	2	10	1.5	10
	1.25	100	--	100	--	2	16	2	16	1.5	16
	1.6	100	--	100	--	2	20	2	20	1.5	16
	2; 2.5	100	--	8	25	2	25	2	25	1.5	20
	3.2	100	--	8	32	2	32	2	32	1.5	25
	4; 5	100	--	4	32	1.5	32	1.5	32	1.5	25
	6.3; 8	100	--	4	50	1	40	1	40	1	35
	10	100	--	4	50	1	40	1	40	1	40
	12.5	100	--	4	63	1	50	1	50	1	40
	16	55	80	4	63	1	50	1	50	1	40
	20 ... 25	55	80	4	63	1	50	1	50	1	50
	28; 32	55	80	2	63	1	63	1	63	1	63
	36; 40	20	80	2	63	1	63	1	63	1	63

-- No back-up fuse required, since short-circuit resistant up to 100 kA

1) 5% overvoltage.

2) Without overvoltage.

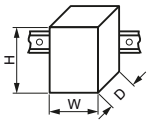
3) Back-up fuse only required if short-circuit current at installation location is > I_{cuIT}.

4) Alternatively, fuseless limiter combinations for 690 V AC can also be used.

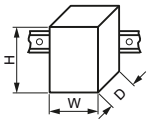
5) Overvoltage category II applies for applications in IT systems > 600 V.

General data

General data (continued)

Type			**3RV2.1.**	**3RV2.2.**	**3RV2.3.**	**3RV2.4.**	**3RV27, 3RV28**
Size			S00	S0	S2	S3	S00, S0
Dimensions (W x H x D)							
• Screw terminals		mm	45 x 97 x 92	45 x 97 x 92	55 x 140 x 149	70 x 165 x 169	45 x 144 x 92
• Spring-type terminals		mm	45 x 106 x 92	45 x 119 x 92	--	--	--
Degree of protection	Acc. to IEC 60529		IP20		- IP20 (front side) - Terminal IP00 (use additional terminal covers for higher degree of protection)		
Touch protection	Acc. to IEC 60529		Finger-safe		Finger-safe, for vertical contact from the front		
Temperature compensation	Acc. to IEC 60947-4-1	°C	-20 ... +60				
Phase failure sensitivity	Acc. to IEC 60947-4-1		Yes (not for 3RV23 motor starter protectors)				No
Protection of motors in hazardous environments			Yes (only for 3RV20 motor starter protectors)				No
• EC type-examination certificate number according to European Directive 2014/34/EU (ATEX)			DMT 02 ATEX F 001 Ex II (2) GD				No
• according to international standard IECEx			IECEx BVS14.0102 [Ex]				No
Isolating function **Main and EMERGENCY STOP switch characteristics** (with corresponding accessories)	Acc. to IEC 60947-2 Acc. to EN 60204-1 VDE 0113		Yes Yes				
Protective separation between main and auxiliary circuits required for PELV-applications	Acc. to IEC 60947-1						
• Up to 400 V + 10%			Yes				
• Up to 415 V + 5% (higher voltages on request)			Yes				
Permissible mounting position			Any, acc. to IEC 60447 start command "I" right-hand side or top				
Mechanical endurance (operating cycles)			100 000		52 A: 50 000, 80 A: 20 000	25 000	100 000
Electrical endurance (operating cycles)			100 000		52 A: 50 000, 80 A: 20 000	25 000	100 000
Max. switching frequency per hour (motor starts)		1/h	15				

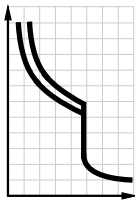
General data

Type			**3RV2742**	**3RV1611-0BD10**[1]	**3RV1011**
Size			S3	S00	S00
Dimensions (W x H x D)		mm	70 x 168 x 169	45 x 90 x 70	45 x 90 x 70
Standards					
• IEC/EN 60947-1 (VDE 0660 Part 100)			Yes		
• IEC/EN 60947-2 (VDE 0660 Part 101)			Yes		
• UL 508/UL 60947-4-1, CSA C22.2 No.14/CSA 60947-4-1			No	Yes	
• UL 489, CSA C22.2 No.5			Yes	No	
Number of poles			3		
Max. rated current $I_{n\ max}$ (= max. rated operational current I_e)		A	70	0.2	12
Permissible ambient temperature					
• Storage/transport		°C	-50 ... +80		
• Operation		°C	-20 ... +70 (current reduction above +60 °C)		
Permissible rated current at inside temperature of control cabinet					
• +60 °C		%	100		
• +70 °C		%	87		
Permissible rated current at ambient temperature of enclosure (applies to motor starter protector/circuit breaker inside enclosure)					
• +35 °C		%	--		100
• +60 °C		%	--		--
Rated operational voltage U_e					
• Acc. to IEC		V AC	690 (with molded-plastic enclosure 500 V)		
• Acc. to UL/CSA		V AC	600		
Rated frequency		Hz	50/60		
Rated insulation voltage U_i		V	1 000	690	
Rated impulse withstand voltage U_{imp}		kV	8	6	
Utilization category					
• IEC 60947-2 (motor starter protector/circuit breaker)			A		
• IEC 60947-4-1 (motor starter)			AC-3		
DC short-circuit breaking capacity (time constant t = 5 ms)					
• 1 conducting path 150 V DC		kA	On request		
• 2 conducting paths in series 300 V DC		kA			
• 3 conducting paths in series 450 V DC		kA			

[1] "Technical Specifications" for 3RV1611 voltage transformer circuit breakers, see page 7/25.

Selection and ordering data

CLASS 10, without auxiliary switches



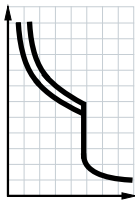
Rated current	Suitable for three-phase motors[1] with *P*	Setting range for thermal overload release	Instantaneous electronic release	Short-circuit breaking capacity at 400 V AC	SD	**Screw terminals** Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
I_n		⊏	$I >$	I_{cu}						
A	kW	A		kA	d					
Size S00										
0.16	0.04	0.11 ... 0.16	2.1	100	5	**3RV1011-0AA10**		1	1 unit	41E
0.2	0.06	0.14 ... 0.2	2.6	100	5	**3RV1011-0BA10**		1	1 unit	41E
0.25	0.06	0.18 ... 0.25	3.3	100	5	**3RV1011-0CA10**		1	1 unit	41E
0.32	0.09	0.22 ... 0.32	4.2	100	5	**3RV1011-0DA10**		1	1 unit	41E
0.4	0.09	0.28 ... 0.4	5.2	100	5	**3RV1011-0EA10**		1	1 unit	41E
0.5	0.12	0.35 ... 0.5	6.5	100	5	**3RV1011-0FA10**		1	1 unit	41E
0.63	0.18	0.45 ... 0.63	8.2	100	5	**3RV1011-0GA10**		1	1 unit	41E
0.8	0.18	0.55 ... 0.8	10	100	5	**3RV1011-0HA10**		1	1 unit	41E
1	0.25	0.7 ... 1	13	100	5	**3RV1011-0JA10**		1	1 unit	41E
1.25	0.37	0.9 ... 1.25	16	100	5	**3RV1011-0KA10**		1	1 unit	41E
1.6	0.55	1.1 ... 1.6	21	100	5	**3RV1011-1AA10**		1	1 unit	41E
2	0.75	1.4 ... 2	26	100	5	**3RV1011-1BA10**		1	1 unit	41E
2.5	0.75	1.8 ... 2.5	33	100	5	**3RV1011-1CA10**		1	1 unit	41E
3.2	1.1	2.2 ... 3.2	42	100	5	**3RV1011-1DA10**		1	1 unit	41E
4	1.5	2.8 ... 4	52	100	5	**3RV1011-1EA10**		1	1 unit	41E
5	1.5	3.5 ... 5	65	100	5	**3RV1011-1FA10**		1	1 unit	41E
6.3	2.2	4.5 ... 6.3	82	100	5	**3RV1011-1GA10**		1	1 unit	41E
8	3	5.5 ... 8	104	50	5	**3RV1011-1HA10**		1	1 unit	41E
10	4	7 ... 10	130	50	5	**3RV1011-1JA10**		1	1 unit	41E
12	5.5	9 ... 12	156	50	5	**3RV1011-1KA10**		1	1 unit	41E

3RV1011-0JA10

[1] 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.

The accessories of 3RV2 can be used with exceptions, see "Accessories" from page 7/43 onwards.

CLASS 10, with transverse auxiliary switch (1 NO + 1 NC)



Rated current	Suitable for three-phase motors[1] with *P*	Setting range for thermal overload release	Instantaneous electronic release	Short-circuit breaking capacity at 400 V AC	SD	**Screw terminals** Article No.	Price per PU	PU (UNIT, SET, M)	PS*	PG
I_n		⊏	$I >$	I_{cu}						
A	kW	A		kA	d					
Size S00										
0.16	0.04	0.11 ... 0.16	2.1	100	5	**3RV1011-0AA15**		1	1 unit	41E
0.2	0.06	0.14 ... 0.2	2.6	100	5	**3RV1011-0BA15**		1	1 unit	41E
0.25	0.06	0.18 ... 0.25	3.3	100	5	**3RV1011-0CA15**		1	1 unit	41E
0.32	0.09	0.22 ... 0.32	4.2	100	5	**3RV1011-0DA15**		1	1 unit	41E
0.4	0.09	0.28 ... 0.4	5.2	100	5	**3RV1011-0EA15**		1	1 unit	41E
0.5	0.12	0.35 ... 0.5	6.5	100	5	**3RV1011-0FA15**		1	1 unit	41E
0.63	0.18	0.45 ... 0.63	8.2	100	5	**3RV1011-0GA15**		1	1 unit	41E
0.8	0.18	0.55 ... 0.8	10	100	5	**3RV1011-0HA15**		1	1 unit	41E
1	0.25	0.7 ... 1	13	100	5	**3RV1011-0JA15**		1	1 unit	41E
1.25	0.37	0.9 ... 1.25	16	100	5	**3RV1011-0KA15**		1	1 unit	41E
1.6	0.55	1.1 ... 1.6	21	100	5	**3RV1011-1AA15**		1	1 unit	41E
2	0.75	1.4 ... 2	26	100	5	**3RV1011-1BA15**		1	1 unit	41E
2.5	0.75	1.8 ... 2.5	33	100	5	**3RV1011-1CA15**		1	1 unit	41E
3.2	1.1	2.2 ... 3.2	42	100	5	**3RV1011-1DA15**		1	1 unit	41E
4	1.5	2.8 ... 4	52	100	5	**3RV1011-1EA15**		1	1 unit	41E
5	1.5	3.5 ... 5	65	100	5	**3RV1011-1FA15**		1	1 unit	41E
6.3	2.2	4.5 ... 6.3	82	100	5	**3RV1011-1GA15**		1	1 unit	41E
8	3	5.5 ... 8	104	50	5	**3RV1011-1HA15**		1	1 unit	41E
10	4	7 ... 10	130	50	5	**3RV1011-1JA15**		1	1 unit	41E
12	5.5	9 ... 12	156	50	5	**3RV1011-1KA15**		1	1 unit	41E

3RV1011-0KA15 with integrated transverse auxiliary switch

[1] 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.

The accessories of 3RV2 can be used with exceptions, see "Accessories" from page 7/43 onwards.

General data

Overview

More information
Homepage, see www.siemens.com/sirius-circuit-breaker

SIRIUS 3RV1063-7AL10 molded case motor starter protector

The 3RV10 and 3RV13 molded case motor starter protectors for up to 800 A are compact, current-limiting motor starter protectors which can be used above all in motor feeders for special voltages of 440 V, 480 V and 690 V. They are used for switching and protecting three-phase motors and other loads with rated currents up to 800 A.

Note:

For motor feeders above 100 A and at 400 V and 500 V, the 3VL molded case motor starter protectors must be used, see Catalog LV 10.

Type of construction

The molded case motor starter protectors are available in three widths:

- 3RV1.6. – width 105 mm,
  max. rated current 250 A,
  at 690 V AC suitable for three-phase motors up to 160 kW
- 3RV1.7. – width 140 mm,
  max. rated current 630 A,
  at 690 V AC suitable for three-phase motors up to 315 kW
- 3RV1.83 – width 210 mm,
  max. rated current 800 A,
  at 690 V AC suitable for three-phase motors up to 500 kW

The 3RV1 molded case motor starter protectors for up to 800 A can be mounted in horizontal, vertical or lying arrangement directly on a mounting plate or mounting rail. Their rated data are adversely affected as the result.

The phase barriers for better insulation between the phases are included in the scope of supply, and it is essential to use them.

The motor starter protectors can be supplied through top and bottom terminals without impairing their function, enabling them to be installed in any type of switchgear without any further steps.

Connection methods

The 3RV1 molded case motor starter protectors up to 800 A are suitable solely for screw connection.

⏚	Screw terminals
	The terminals are indicated in the corresponding tables by the symbols shown on orange backgrounds.

Article No. scheme

Product versions		Article number
Molded case motor starter protectors		**3RV1** □□□ – □□□□□ – □□□□
Type of motor starter protector/ circuit breaker	e.g. 0 = for motor protection	□
Rated current	e.g. 6 = 100 A	□
Breaking capacity	e.g. 3 = standard switching capacity	□
Setting range for overload release	e.g. 7A = 40 ... 100 A	□□
Trip class (CLASS)	e.g. L = CLASS 10A, 10, 20, 30	□
Connection methods	e.g. 1 = screw terminals	□
With or without auxiliary switch	e.g. 0 = without	□
Special versions		□□□□
Example		**3RV1 0 6 3 – 7 A L 1 0**

Note:

The Article No. scheme shows an overview of product versions for better understanding of the logic behind the article numbers.

For your orders please use the article numbers quoted in the selection and ordering data.

Benefits

- High short-circuit breaking capacity in the feeder
- Optimum usability in motor feeders for the special voltages 440 V, 480 V and 690 V
- Compact design
- The releases are available in electronic versions (100 A to 800 A).
- Available for motor or starter protection (short-circuit protection alone)

Application

Operating conditions

The 3RV1 molded case motor starter protectors for up to 800 A can be operated at ambient temperatures between -25 °C and +70 °C. They can be used according to IEC 60721-2-1 in the most difficult environmental conditions with a hot and damp climate.

Since operational currents, starting currents and current peaks are different even for motors with identical power ratings due to the inrush current, the motor ratings in the selection tables are only guide values. The specific rated and start up data of the motor to be protected is always paramount to the choice of the most suitable molded case motor starter protectors.

The 3RV1 molded case motor starter protectors up to 800 A have not been tested for use with frequency converters. The possibility of premature tripping in such applications cannot therefore be ruled out.

Possible uses

The 3RV1 molded case motor starter protectors for up to 800 A are suitable as switching and protection devices for motors. The following versions are available:

- For motor protection;
  the overload and short-circuit releases are designed for optimized protection and direct-on-line starting of three-phase AC squirrel-cage motors. The motor starter protectors have an electronic release which not only provides short-circuit and overload protection but is also sensitive to phase failure and phase unbalance and offers protection in the event of rotor blockage.
- For starter combinations;
  these molded case motor starter protectors are used for short-circuit protection in combinations of circuit breaker, motor contactor and overload relay. They are equipped with an electronic release (100 A to 800 A).

Standards and specifications

The electronic releases for motor protection comply with IEC 60947-4-1. Isolating features are also compliant with IEC 60947-2.

The 3RV1 molded case motor starter protectors comply in addition with IEC 60068-2-6 (shock and vibration strength) and are certified for the specifications of the major marine classification societies:

- RINA
- Det Norske Veritas
- Bureau Veritas
- Lloyds Register of Shipping
- Germanischer Lloyd
- American Bureau of Shipping

Use of SIRIUS protection devices in conjunction with IE3/IE4 motors

Note:

For the use of 3RV1 motor starter protectors/circuit breakers in conjunction with highly energy-efficient IE3/IE4 motors, please observe the information on dimensioning and configuring, see Application Manual.

For more information, see page 1/7.