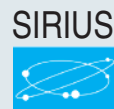


3RV Motor Starter Protectors

For Motor Protection




3RV20 Class 10 – up to 40A

MOTOR STARTER PROTECTORS 1

Description	Ordering Information
<p>The 3RV20x MSPs are UL approved as Self Protected Combination Motor Controllers which are also called Type E. In this application, all the required functions for a motor branch are provided in one device: disconnect, short circuit protection, motor control and overload protection. A type E terminal adaptor is required for screw terminal versions. 3RV20x MSPs with spring terminal can only be applied as Type E when used in the 3RV29 Infeed System. The 3RV20x MSPs are also approved for use as follows:</p> <ul style="list-style-type: none"> – Manual Motor Controller: Motor starter, motor disconnect, control and overload— protection. – Group Installation: Motor starter only, motor disconnect, control and overload protection. – Tap conductor Protection in Group Installation acc. NEC: Motor starter only; motor disconnect, control and overload protection. <p>When the 3RV20x is used with one of the 3 above mentioned approvals, the 3RV20x can be installed downstream of one circuit breaker or fuse set.</p> <p>For more detailed application information and rules how to apply, size and rate the 3RV20x in control panels in general, in group installations or in accordance to international IEC standards visit our website: www.usa.siemens.com/controlpaneldesign</p>	<ul style="list-style-type: none"> ▶ ON/OFF rotary handle with lockout and visible trip indication. ▶ Adjustment dial for setting to motor FLA. ▶ Class 10 overload trip characteristics. ▶ Short circuit trip at 13 times the maximum setting of the FLA adjustment dial. ▶ Short circuit current rating: ▶ Ambient compensated up to 140° F (applies to side by side mounting). ▶ Phase loss sensitivity. ▶ Test trip function. ▶ Terminal versions: screw, spring, ring lug. ▶ Auxiliaries and Accessories see pages 1/10–1/21. ▶ General Information see pages 1/33–1/36. ▶ Technical Data see pages 1/22–1/32. ▶ Dimensions see page 1/37–1/40.

Note: Select MSP by motor Full Load Amperes. Horsepower ratings are for reference only.

Illustration	FLA Adjustment Range [A]	Single-Phase HP Ratings		Three-Phase HP Ratings ¹⁾				Instantaneous short circuit release [A]	UL short-circuit breaking capacity @ 277V/480V [kA]	Size S00 ^{2) 4)}		Size S0 ^{2) 4)}	
		115V	230V	200V	230V	460V	575V			Order Number	Order Number		
	0.11-0.16	—	—	—	—	—	—	2.1	65	3RV2011-0AA●●	3RV2021-0AA●●	3RV2011-0AA●●	3RV2021-0AA●●
	0.14-0.2	—	—	—	—	—	—	2.6	65	3RV2011-0BA●●	3RV2021-0BA●●	3RV2011-0BA●●	3RV2021-0BA●●
	0.18-0.25	—	—	—	—	—	—	3.3	65	3RV2011-0CA●●	3RV2021-0CA●●	3RV2011-0CA●●	3RV2021-0CA●●
	0.22-0.32	—	—	—	—	—	—	4.2	65	3RV2011-0DA●●	3RV2021-0DA●●	3RV2011-0DA●●	3RV2021-0DA●●
	0.28-0.4	—	—	—	—	—	—	5.2	65	3RV2011-0EA●●	3RV2021-0EA●●	3RV2011-0EA●●	3RV2021-0EA●●
	0.35-0.5	—	—	—	—	—	—	6.5	65	3RV2011-0FA●●	3RV2021-0FA●●	3RV2011-0FA●●	3RV2021-0FA●●
	0.45-0.63	—	—	—	—	—	—	8.2	65	3RV2011-0GA●●	3RV2021-0GA●●	3RV2011-0GA●●	3RV2021-0GA●●
	0.55-0.8	—	—	—	—	—	—	10	65	3RV2011-0HA●●	3RV2021-0HA●●	3RV2011-0HA●●	3RV2021-0HA●●
	0.7-1	—	—	—	—	—	1/2	13	65	3RV2011-0JA●●	3RV2021-0JA●●	3RV2011-0JA●●	3RV2021-0JA●●
	0.9-1.25	—	—	—	—	1/2	1/2	16	65	3RV2011-0KA●●	3RV2021-0KA●●	3RV2011-0KA●●	3RV2021-0KA●●
	1.1-1.6	—	1/10	—	—	3/4	3/4	21	65	3RV2011-1AA●●	3RV2021-1AA●●	3RV2011-1AA●●	3RV2021-1AA●●
	1.4-2	—	1/8	—	—	3/4	1	26	65	3RV2011-1BA●●	3RV2021-1BA●●	3RV2011-1BA●●	3RV2021-1BA●●
	1.8-2.5	—	1/8	1/2	1/2	1	1 1/2	33	65	3RV2011-1CA●●	3RV2021-1CA●●	3RV2011-1CA●●	3RV2021-1CA●●
	2.2-3.2	1/10	1/4	1/2	3/4	1 1/2	2	42	65	3RV2011-1DA●●	3RV2021-1DA●●	3RV2011-1DA●●	3RV2021-1DA●●
	2.8-4	1/8	1/4	3/4	3/4	2	3	52	65	3RV2011-1EA●●	3RV2021-1EA●●	3RV2011-1EA●●	3RV2021-1EA●●
	3.5-5	1/8	1/2	1	1	3	3	65	65	3RV2011-1FA●●	3RV2021-1FA●●	3RV2011-1FA●●	3RV2021-1FA●●
	4.5-6.3	1/4	1/2	1	1 1/2	3	5	82	65	3RV2011-1GA●●	3RV2021-1GA●●	3RV2011-1GA●●	3RV2021-1GA●●
	5.5-8	1/3	1	2	2	5	5	104	65	3RV2011-1HA●●	3RV2021-1HA●●	3RV2011-1HA●●	3RV2021-1HA●●
	7-10	1/2	1 1/2	2	3	5	7 1/2	130	65	3RV2011-1JA●●	3RV2021-1JA●●	3RV2011-1JA●●	3RV2021-1JA●●
	9-12.5	1/2	2	3	3	7 1/2	10	163	65	3RV2011-1KA●●	3RV2021-1KA●●	3RV2011-1KA●●	3RV2021-1KA●●
10-16	1	2	3	5	10	—	208	65	3RV2011-4AA●●	3RV2021-4AA●●	3RV2011-4AA●●	3RV2021-4AA●●	
13-20	1 1/2	3	5	5	10	—	260	65	—	3RV2021-4BA●●	3RV2011-4BA●●	3RV2021-4BA●●	
16-22	1 1/2	3	5	7 1/2	15	—	286	65	—	3RV2021-4CA●●	3RV2011-4CA●●	3RV2021-4CA●●	
18-25	2	3	5	7 1/2	15	—	325	65	—	3RV2021-4DA●●	3RV2011-4DA●●	3RV2021-4DA●●	
23-28	2	5	7 1/2	10	20	—	364	50	—	3RV2021-4NA●●	3RV2011-4NA●●	3RV2021-4NA●●	
27-32	2	5	7 1/2	10	20	—	400	50	—	3RV2021-4EA●●	3RV2011-4EA●●	3RV2021-4EA●●	
30-36 ³⁾	3	5	10	10	25	—	432	12	—	3RV2021-4PA●● ⁵⁾	3RV2011-4PA●● ⁵⁾	3RV2021-4PA●● ⁵⁾	
34-40 ³⁾	3	7 1/2	10	10	30	—	480	12	—	3RV2021-4FA●● ⁵⁾	3RV2011-4FA●● ⁵⁾	3RV2021-4FA●● ⁵⁾	

Screw terminals, no auxiliary: ●● = 10
 Screw Terminals, with 1NO/1NC Aux: ●● = 15
 Spring terminals, no auxiliary: ●● = 20
 Spring Terminals, with 1NO/1NC Aux: ●● = 25
 Ring Lug Terminals, no Auxiliary: ●● = 40

1) Select motor starter protector by motor full load amps. Horsepower ratings for reference only.

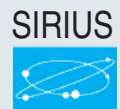
2) The motor starter protectors rated up to 32 A can be used as manual motor controllers or as Type E combination motor controllers. For use as a Type E combination motor controller, a Type E terminal is required. See accessories page 1/10.

3) These products are NOT certified as Type E combination motor controllers. They can only be used as manual motor controllers.

4) 3RV2 MSPs can only be used with Innovations contactors and accessories

5) Spring and Ring Lug terminals are not available

3RV Motor Starter Protectors For Motor Protection



3RV10 Class 10 & 20 – up to 100A

MOTOR STARTER
PROTECTORS

Description	Ordering Information
<p>The 3RV203/204 MSPs are UL approved as Self Protected Combination Motor Controllers which are also called Type E. In this application, all the required functions for a motor branch are provided in one device: disconnect, short circuit protection, motor control and overload protection. A type E terminal adaptor is required for all screw terminal version S2 frame 3RV2031 above 45A and all S2 frame 3RV2032 as well as for all S3 frame motor starter protectors. Spring terminal MSPs can only be applied as Type E when used in the 3RV29 Infeed System.</p> <p>The 3RV203/204 MSPs are also approved for use as follows:</p> <ul style="list-style-type: none"> – Manual Motor Controller: Motor starter, motor disconnect, control and overload protection. – Group Installation: Motor starter only, motor disconnect, control and overload protection. – Tap conductor Protection in Group Installation acc. NEC: Motor starter only; motor disconnect, control and overload protection. <p>When the 3RV203/204 is used with one of the 3 above mentioned approvals, they can be installed downstream of one circuit breaker or fuse set.</p> <p>For more detailed application information and rules how to apply, size and rate these MSPs in control panels in general, in group installations or in accordance to international IEC standards visit our website: www.usa.siemens.com/controlpaneldesign</p>	<ul style="list-style-type: none"> ▶ ON/OFF rotary handle with lockout and visible trip indication. ▶ Adjustment dial for setting to motor FLA. ▶ Class 10 overload trip characteristics. ▶ Short circuit trip at 13 times the maximum setting of the FLA adjustment dial. ▶ Short circuit current rating: ▶ Ambient compensated up to 140° F (applies to side by side mounting). ▶ Phase loss sensitivity. ▶ Test trip function. ▶ Auxiliaries and Accessories see pages 1/10–1/21. ▶ General Information see pages 1/33–1/36. ▶ Technical Data see pages 1/22–1/32. ▶ Dimensions see page 1/37–1/40.

Note: Select MSP by motor Full Load Amperes. Horsepower ratings are for reference only.

Illustration	FLA Adjustment Range [A]	Single Phase HP rating ¹⁾		3 Phase HP Rating ¹⁾				Inst. Short-Circuit Release [A]	UL short-circuit breaking capacity @ 277V/480V [kA] ⁶⁾	Trip Class 10	Trip Class 20
		115V	240V	200V	230V	460V	575V			Order Number ⁴⁾	Order Number ⁴⁾
	3RV203 Frame Size S2										
	9.5 - 14	1.5	3	5	5	10	15	208	65	3RV2031-4SA10	3RV2031-4SB10
	12 - 17	1.5	3	5	7.5	15	15	260	65	3RV2031-4TA10	3RV2031-4TB10
	14 - 20	1.5	3	7.5	7.5	15	20	260	65	3RV2031-4BA10	3RV2031-4BB10
	18 - 25	2	5	7.5	10	20	25	325	65	3RV2031-4DA10	3RV2031-4DB10
	22 - 32	3	5	10	10	25	30	416	65	3RV2031-4EA10	3RV2031-4EB10
	28 - 36	3	7.5	15	15	30	40	520	65	3RV2031-4PA10	3RV2031-4PB10
	32 - 40	3	7.5	15	15	30	40	585	65	3RV2031-4UA10	3RV2031-4UB10
	35 - 45	3	10	15	15	40	50	650	65	3RV2031-4VA10	3RV2031-4VB10
	42 - 52	5	10	15	20	40	50	741	65	3RV2031-4WA10	3RV2031-4WB10
	49 - 59	5	15	20	25	50	60	845	30	3RV2031-4XA10	3RV2031-4XB10
	54 - 65	5	15	20	25	50	60	845	30	3RV2031-4JA10	3RV2031-4JB10
	62 - 73	7.5	15	25	30	60	75	949	30	3RV2031-4KA10	3RV2031-4KB10
	70 - 80 ⁷⁾	7.5	15	25	30	60	75	1040	30	3RV2032-4RA10	3RV2032-4RB10
	3RV204 Frame Size S3										
	28 - 40	3	7.5	15	15	30	40	520A	65	3RV2041-4FA10	3RV2042-4FB10
	36 - 50	5	10	15	20	40	50	650A	65	3RV2041-4HA10	3RV2042-4HB10
	45 - 63	5	15	20	25	50	60	819A	65	3RV2041-4JA10	3RV2042-4JB10
	57 - 75	7.5	15	25	25	60	75	975A	65	3RV2041-4KA10	3RV2042-4KB10
	65 - 84	7.5	15	25	30	60	75	1170A	65	3RV2041-4RA10	3RV2042-4RB10
	75 - 93	7.5	20	30	40	75	100 ³⁾	1300A	65	3RV2041-4YA10	3RV2042-4YB10
	80 - 100	10	25	40	40	75	100 ³⁾	1300A	65	3RV2041-4MA10	3RV2042-4MB10

1) Select motor starter protector by motor full load amps. Horsepower ratings for reference only.
2) Size S2 and S3 are listed as type E combination motor controllers. For required Type E terminals see page 1/13. 3RV2031 MSPs with a current setting limit of 45A or less do not require a type E terminal and fulfill the spacing requirements of UL508.

3) Shaded ratings apply for group installation only. These ratings do not apply as UL listed manual combination starters.
4) Pre-assembled motor starter protector and transverse auxiliary switch with 1NO + 1NC is available. Replace the last digit of the order no. with a "5".
5) 3RV1 MSPs can only be used with 3RT1 contactors and accessories. 3RV2 MSPs can only be used with 3RT2 contactors and accessories.

6) For 100kA SCCR rated MSPs, change the part number from 3RV2031 to 3RV2032. (applies to S2 frame only through 65A).
7) Suitable for use with IE3/IE4 motors up to a starting current of 720A. For higher starting currents use size S3.



Refer to pages 1/22 to 1/24 when using an MSP in a Manual Motor Starter or a Manual Self-Protected Combination Motor Controller.

3RV2 Motor Starter Protectors/Circuit Breakers

3RV21 Class 10 – up to 32A with overload relay function (automatic RESET) **IE3/IE4 ready**

Description	Ordering Information
<p>The 3RV21x MSPs are UL approved as Self Protected Combination Motor Controllers which are also called Type E. In this application, all the required functions for a motor branch are provided in one device: disconnect, short circuit protection, motor control and overload protection. A type E terminal adaptor is required for screw terminal versions. 3RV20x MSPs with spring terminal can only be applied as Type E when used in the 3RV29 Infeed System. The 3RV21x MSPs are also approved for use as follows:</p> <ul style="list-style-type: none"> – Manual Motor Controller: Motor starter, motor disconnect, control and overload protection. – Group Installation: Motor starter only, motor disconnect, control and overload protection. – Tap conductor Protection in Group Installation acc. NEC: Motor starter only; motor disconnect, control and overload protection. <p>When the 3RV21x is used with one of the 3 above mentioned approvals, the 3RV21x can be installed downstream of one circuit breaker or fuse set.</p> <p>For more detailed application information and rules how to apply, size and rate the 3RV21x in control panels in general, in group installations or in accordance to international IEC standards visit our website: www.usa.siemens.com/controlpaneldesign</p>	<ul style="list-style-type: none"> ▶ ON/OFF rotary handle with lockout and visible trip indication. ▶ Adjustment dial for setting to motor FLA. ▶ Class 10 overload trip characteristics. ▶ Short circuit trip at 13 times the maximum setting of the FLA adjustment dial. ▶ Short circuit current rating: ▶ Ambient compensated up to 140° F (applies to side by side mounting). ▶ Phase loss sensitivity. ▶ Test trip function. ▶ Terminal versions: screw only. ▶ Auxiliaries and Accessories see pages 1/10–1/21. ▶ General Information see pages 1/33–1/36. ▶ Technical Data see pages 1/22–1/32. ▶ Dimensions see page 1/37–1/40.

Note: Select MSP by motor Full Load Amperes. Horsepower ratings are for reference only.

Illustration	Setting range for thermal overload release	Single-Phase HP Ratings		Three-Phase HP Ratings ¹⁾				Instantaneous electronic release [A]	UL short-circuit breaking capacity @ 480V [kA]	Catalog Number
		115V	230V	200V	230V	460V	575V			
Size S00^{2) 3)}										
 3RV2111-4FA10	0.11 ... 0.16	—	—	—	—	—	—	2.1	100	3RV2111-0AA10
	0.14 ... 0.2	—	—	—	—	—	—	2.6	100	3RV2111-0BA10
	0.18 ... 0.25	—	—	—	—	—	—	3.3	100	3RV2111-0CA10
	0.22 ... 0.32	—	—	—	—	—	—	4.2	100	3RV2111-0DA10
	0.28 ... 0.4	—	—	—	—	—	—	5.2	100	3RV2111-0EA10
	0.35 ... 0.5	—	—	—	—	—	—	6.5	100	3RV2111-0FA10
	0.45 ... 0.63	—	—	—	—	—	—	8.2	100	3RV2111-0GA10
	0.55 ... 0.8	—	—	—	—	—	—	10	100	3RV2111-0HA10
	0.7 ... 1	—	—	—	—	—	1/2	13	100	3RV2111-0JA10
	0.9 ... 1.25	—	—	—	—	1/2	1/2	16	100	3RV2111-0KA10
	1.1 ... 1.6	—	1/10	—	—	3/4	3/4	21	100	3RV2111-1AA10
	1.4 ... 2	—	1/6	—	—	3/4	1	26	100	3RV2111-1BA10
	1.8 ... 2.5	—	1/6	1/2	1/2	1	1 1/2	33	100	3RV2111-1CA10
	2.2 ... 3.2	1/10	1/4	1/2	3/4	1 1/2	2	42	100	3RV2111-1DA10
2.8 ... 4	1/6	1/3	3/4	3/4	2	3	52	100	3RV2111-1EA10	
3.5 ... 5	1/6	1/2	1	1	3	3	65	100	3RV2111-1FA10	
4.5 ... 6.3	1/4	1/2	1	1 1/2	3	5	82	100	3RV2111-1GA10	
5.5 ... 8	1/3	1	2	2	5	5	104	100	3RV2111-1HA10	
7 ... 10	1/2	1 1/2	2	3	5	7 1/2	130	100	3RV2111-1JA10	
9 ... 12.5	1/2	2	3	3	7 1/2	10	163	100	3RV2111-1KA10	
10 ⁵⁾ ... 16	1	2	3	5	10	—	208	55	3RV2111-4AA10	
Size S0^{2) 3)}										
 3RV2111-0BA10	10 ⁵⁾ ... 16	1 1/2	3	5	5	10	—	208	55	3RV2121-4AA10
	13 ⁵⁾ ... 20	1 1/2	3	5	7 1/2	15	—	260	55	3RV2121-4BA10
	16 ⁵⁾ ... 22	2	3	5	7 1/2	15	—	286	55	3RV2121-4CA10
	18 ⁵⁾ ... 25	2	5	7 1/2	10	20	—	325	55	3RV2121-4DA10
	23 ... 28 ⁴⁾	3	5	10	10	25	—	364	55	3RV2121-4NA10
	27 ... 32 ^{4) 5) 6)}	3	7 1/2	10	10	30	—	400	55	3RV2121-4EA10

1) Select motor starter protector by motor full load amps. Horsepower ratings are for reference only.
 2) Accessories for mounting on the right and 3RV2915 three-phase busbars cannot be used. Accessories can be ordered separately.
 3) The motor starter protectors rated up to 32 A can be used as manual motor controllers or as Type E combination motor controllers. For use as a Type E

combination motor controller, a Type E terminal is required. See accessories page 1/10.
 4) These products are NOT certified as Type E combination motor controllers. They can only be used as manual motor controllers.
 5) The setting range of the thermal overload releases has been extended.



6) Suitable for use with IE3/IE4 motors up to a starting current of 256 A. For higher starting currents we recommend using 3RV2 motor starter protectors size S2.
 7) 3RV2 MSPs can only be used with Innovations contactors and accessories.

3RV2 Motor Starter Protectors/Circuit Breakers

3RV21 Class 10 – up to 100A with overload relay function (automatic RESET)

Description	Ordering Information
<p>The 3RV2131/2142 MSPs are UL approved as Self Protected Combination Motor Controllers which are also called Type E. In this application, all the required functions for a motor branch are provided in one device: disconnect, short circuit protection, motor control and overload protection. A type E terminal adaptor is required for all screw terminal version S2 frame 3RV2131 above 45A as well as for all S3 frame motor starter protectors. Spring terminal MSPs can only be applied as Type E when used in the 3RV29 Infeed System.</p> <p>The 3RV2131/2142 MSPs are also approved for use as follows:</p> <ul style="list-style-type: none"> – Manual Motor Controller: Motor starter, motor disconnect, control and overload protection. – Group Installation: Motor starter only, motor disconnect, control and overload protection. – Tap conductor Protection in Group Installation acc. NEC: Motor starter only; motor disconnect, control and overload protection. <p>When the 3RV2131/2142 is used with one of the 3 above mentioned approvals, they can be installed downstream of one circuit breaker or fuse set.</p> <p>For more detailed application information and rules how to apply, size and rate these MSPs in control panels in general, in group installations or in accordance to international IEC standards visit our website: www.usa.siemens.com/controlpaneldesign</p>	<ul style="list-style-type: none"> ▶ ON/OFF rotary handle with lockout and visible trip indication. ▶ Adjustment dial for setting to motor FLA. ▶ Class 10 overload trip characteristics. ▶ Short circuit trip at 13 times the maximum setting of the FLA adjustment dial. ▶ Short circuit current rating: ▶ Ambient compensated up to 140° F (applies to side by side mounting). ▶ Phase loss sensitivity. ▶ Test trip function. ▶ Terminal versions: screw only. ▶ Auxiliaries and Accessories see pages 1/10–1/21. ▶ General Information see pages 1/33–1/36. ▶ Technical Data see pages 1/22–1/32. ▶ Dimensions see page 1/37–1/40.

Note: Select MSP by motor Full Load Amperes. Horsepower ratings are for reference only.

Illustration	Setting range for thermal overload release	Single-Phase HP Ratings		Three-Phase HP Ratings ¹⁾				Instantaneous electronic release [A]	UL short-circuit breaking capacity @ 480V [kA]	Catalog Number
		115V	230V	200V	230V	460V	575V			
 3RV2131-4WB10	Size S2²⁾									
	9.5 ... 14	1.5	3	5	5	10	15	208	65	3RV2131-4SA10
	12 ... 17	1.5	3	5	7.5	15	15	260	65	3RV2131-4TA10
	14 ... 20	1.5	3	7.5	7.5	15	20	260	65	3RV2131-4BA10
	18 ... 25	2	5	7.5	10	20	25	325	65	3RV2131-4DA10
	22 ... 32	3	5	10	10	25	30	416	65	3RV2131-4EA10
	28 ... 36	3	7.5	15	15	30	40	520	65	3RV2131-4PA10
	32 ... 40	3	7.5	15	15	30	40	585	65	3RV2131-4UA10
	35 ... 45	3	10	15	15	40	50	650	65	3RV2131-4VA10
	42 ... 52	5	10	15	20	40	50	741	65	3RV2131-4WA10
49 ... 59	5	15	20	25	50	60	845	65	3RV2131-4XA10	
54 ... 65	5	15	20	25	50	60	845	65	3RV2131-4JA10	
62 ... 73	7.5	15	25	30	60	75	949	65	3RV2131-4KA10	
70 ... 80 ⁴⁾	7.5	15	25	30	60	75	1040	65	3RV2131-4RA10	
 3RV2142-4FA10	Size S3 with increased switching capacity²⁾									
	28 ... 40	3	7.5	15	15	30	40	520	55	3RV2142-4FA10
	36 ... 50	5	10	15	20	40	50	650	55	3RV2142-4HA10
	45 ... 63	5	15	20	25	50	60	819	55	3RV2142-4JA10
	57 ... 75	7.5	15	25	25	60	75	975	55	3RV2142-4KA10
	65 ... 84	7.5	15	25	30	60	75	1170	55	3RV2142-4RA10
	75 ... 93	7.5	20	30	40	75	100 ³⁾	1300	55	3RV2142-4YA10
80 ... 100 ⁵⁾	10	25	40	40	75	100 ³⁾	1300	55	3RV2142-4MA10	

1) Select motor starter protector by motor full load amps. Horsepower ratings are for reference only.
 2) Accessories for mounting on the right and 3RV2915 three-phase busbars cannot be used. Accessories can be ordered separately.
 3) Shaded ratings apply for group installation only. These ratings do not apply as UL listed manual combination starters.

4) Suitable for use with IE3/IE4 motors up to a starting current of 720 A. For higher starting currents we recommend using 3RV2 motor starter protectors size S3.
 5) Suitable for use with IE3/IE4 motors up to a starting current of 780 A. For higher starting currents we recommend using 3VA circuit breakers.

6) Size S2 and S3 are listed as type E combination motor controllers. For required Type E terminals see page 1/10. 3RV2031 MSPs with a current setting limit of 45A or less do not require a type E terminal and fulfill the spacing requirements of UL508.
 7) 3RV2 MSPs can only be used with 3RT2 contactors and accessories.


3RV1 Motor Starter Protectors

3RV10 Class 10 – up to 12A

1
MOTOR STARTER
PROTECTORS

Description	Ordering Information
<p>The 3RV101 MSP's, can be used as components in Group Installation per NEC 430-53(C) to turn motors on and off. Each device has built-in heater elements that provide overload protection and magnetic trip elements to protect the motor. When the 3RV101 is used as a component in Group Installation, multiple MSP's can be installed below one circuit breaker to protect its own motor. A contactor can be mounted to the MSP to provide a remotely operated starter.</p>	<ul style="list-style-type: none"> ▶ ON/OFF rocker mechanism with lockout. ▶ Adjustment dial for setting to motor FLA. ▶ Class 10 overload trip characteristics. ▶ Short circuit trip at 12 times the maximum setting of the FLA adjustment dial. ▶ Short circuit current rating: ▶ Ambient compensated up to 140° F (applies to side by side mounting). ▶ Phase loss sensitivity. ▶ Test trip function. ▶ Cage Clamp version. ▶ Terminal versions: screw, spring, ring lug. ▶ Auxiliaries and Accessories see pages 1/10–1/21. ▶ General Information see pages 1/33–1/36. ▶ Technical Data see pages 1/22–1/32. ▶ Dimensions see page 1/37–1/40.

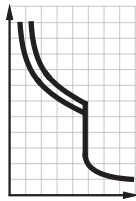
Note: Select MSP by motor Full Load Amperes. Horsepower ratings are for reference only.

Illustration	FLA Adjustment Range [A]	Single-Phase HP Ratings		Three-Phase HP Ratings ¹⁾				Instantaneous short circuit release [A]	UL short-circuit breaking capacity @ 480V [kA]	Screw connection Catalog Number	
		115V	230V	200V	230V	460V	575V				
	3RV101 Frame Size S00²⁾										
	0.11–0.16	—	—	—	—	—	—	— ⁴⁾	2.1	65	3RV1011-0AA10
	0.14–0.2	—	—	—	—	—	—	—	2.6	65	3RV1011-0BA10
	0.18–0.25	—	—	—	—	—	—	—	3.3	65	3RV1011-0CA10
	0.22–0.32	—	—	—	—	—	—	—	4.2	65	3RV1011-0DA10
	0.28–0.4	—	—	—	—	—	—	—	5.2	65	3RV1011-0EA10
	0.35–0.5	—	—	—	—	—	—	—	6.5	65	3RV1011-0FA10
	0.45–0.63	—	—	—	—	—	—	¼	8.2	65	3RV1011-0GA10
	0.55–0.8	—	—	—	—	¼	½	½	10	65	3RV1011-0HA10
	0.7–1	—	—	—	—	½	½	½	13	65	3RV1011-0JA10
	0.9–1.25	—	—	—	¼	¾	¾	¾	16	65	3RV1011-0KA10
	1.1–1.6	—	1/10	¼	1/3	¾	1	1	21	65	3RV1011-1AA10
	1.4–2	—	1/8	1/3	½	1	1 ½	1 ½	26	65	3RV1011-1BA10
	1.8–2.5	—	1/6	½	½	1 ½	1 ½	1 ½	33	65	3RV1011-1CA10
	2.2–3.2	1/10	¼	¾	¾	1 ½	2	2	42	65	3RV1011-1DA10
	2.8–4	1/6	1/3	¾	1	2	3	3	52	65	3RV1011-1EA10
3.5–5	1/6	½	1	1	3	3	3	65	65	3RV1011-1FA10	
4.5–6.3	¼	¾	1 ½	1 ½	5	5	5	82	65	3RV1011-1GA10	
5.5–8	1/3	1	2	2	5	5	5	104	65	3RV1011-1HA10	
7–10	½	1 ½	3	3	7 ½	10 ⁴⁾	10 ⁴⁾	130	65	3RV1011-1JA10	
9–12	½	2	3	3	7 ½	10	10	156	65	3RV1011-1KA10	
Accessories											
Transverse auxiliary switch ³⁾ 1 NO + 1 NC separately								Approx. weight .02 kg		3RV1901-1E	

1) Select MSP by motor full load amps. Horse power ratings for reference only. 3) Shaded ratings apply for group installation only. These ratings do not apply as UL listed manual combination starters.

2) Size S00 MSP are listed for group installation only.

Selection and ordering data



Rated Current ¹⁾ [A]	Thermal overload release (non-adjustable) [A]	Short Circuit breaking capacity [kA]			For Motor Protection ²⁾			For Transformer Protection ³⁾		
		480 VAC	480Y/277VAC	600Y/347VAC	Instantaneous Over Current Release [A]	Order Number (Screw Terminals)	Weight [kg]	Instantaneous Over Current Release [A]	Order Number (Screw Terminals)	Weight [kg]
Innovations Frame Size S00⁴⁾										
0.16	0.16	—	65	10	2.1	3RV2711-0AD10	0.390	3.3	3RV2811-0AD10	0.390
0.2	0.2	—	65	10	2.6	3RV2711-0BD10	0.390	4.2	3RV2811-0BD10	0.390
0.25	0.25	—	65	10	3.3	3RV2711-0CD10	0.390	5.2	3RV2811-0CD10	0.390
0.32	0.32	—	65	10	4.2	3RV2711-0DD10	0.390	6.5	3RV2811-0DD10	0.390
0.4	0.4	—	65	10	5.2	3RV2711-0ED10	0.390	8.2	3RV2811-0ED10	0.390
0.5	0.5	—	65	10	6.5	3RV2711-0FD10	0.390	10	3RV2811-0FD10	0.390
0.63	0.63	—	65	10	8.2	3RV2711-0GD10	0.390	13	3RV2811-0GD10	0.400
0.8	0.8	—	65	10	10	3RV2711-0HD10	0.390	16	3RV2811-0HD10	0.450
1	1	—	65	10	13	3RV2711-0JD10	0.450	21	3RV2811-0JD10	0.450
1.25	1.25	—	65	10	16	3RV2711-0KD10	0.450	26	3RV2811-0KD10	0.460
1.6	1.6	—	65	10	21	3RV2711-1AD10	0.460	33	3RV2811-1AD10	0.460
2	2	—	65	10	26	3RV2711-1BD10	0.460	42	3RV2811-1BD10	0.460
2.5	2.5	—	65	10	33	3RV2711-1CD10	0.460	52	3RV2811-1CD10	0.460
3.2	3.2	—	65	10	42	3RV2711-1DD10	0.460	65	3RV2811-1DD10	0.460
4	4	—	65	10	52	3RV2711-1ED10	0.450	82	3RV2811-1ED10	0.460
5	5	—	65	10	65	3RV2711-1FD10	0.460	104	3RV2811-1FD10	0.460
6.3	6.3	—	65	10	82	3RV2711-1GD10	0.460	130	3RV2811-1GD10	0.460
8	8	—	65	10	104	3RV2711-1HD10	0.460	163	3RV2811-1HD10	0.460
10	10	—	65	10	130	3RV2711-1JD10	0.460	208	3RV2811-1JD10	0.460
12.5	12.5	—	65	10	163	3RV2711-1KD10	0.460	260	3RV2811-1KD10	0.460
15	15	—	65	—	208	3RV2711-4AD10	0.470	286	3RV2811-4AD10	0.470
Innovations Frame Size S0⁴⁾										
20	20	—	50	—	260	3RV2721-4BD10	0.514	325	3RV2821-4BD10	0.516
22	22	—	50	—	286	3RV2721-4CD10	0.516	364	3RV2821-4CD10	0.528
Innovations Frame Size S3⁵⁾										
10	10	65	—	20	150	3RV2742-5AD10	0.460	—	—	—
15	15	65	—	20	225	3RV2742-5BD10	0.460	—	—	—
20	20	65	—	20	260	3RV2742-5CD10	0.460	—	—	—
25	25	65	—	20	325	3RV2742-5DD10	0.460	—	—	—
30	30	65	—	20	390	3RV2742-5ED10	0.460	—	—	—
35	35	—	65	20	455	3RV2742-5FD10	0.460	—	—	—
40	40	—	65	20	520	3RV2742-5GD10	0.460	—	—	—
45	45	—	65	20	585	3RV2742-5HD10	0.460	—	—	—
50	50	—	65	20	650	3RV2742-5JD10	0.460	—	—	—
60	60	—	65	20	780	3RV2742-5LD10	0.460	—	—	—
70	70	—	65	10	910	3RV2742-5QD10	0.460	—	—	—



1) 100 % rated value acc. to UL 489 and IEC 60947-2 (100 % rated breaker).
 2) Circuit breakers for system protection of motor and non-motor loads. Requires use of separate overload protection for motor applications.
 3) Circuit breakers for system and transformer protection according to UL/CSA. Specially designed for transformers with high inrush current.

4) Transverse and lateral auxiliary switches can be ordered separately (see "Mountable accessories").
 5) Transverse auxiliary switches must not be mounted. Lateral auxiliary switches can be ordered separately (see "Mountable accessories").
 6) Siemens now has UL/CSA approvals for using the 3RV27 and 3RV28 UL489 Circuit Breakers with the 3RV2917 Infeed System and with the 3RV1915 comb-

busbars. Up until now it was limited to standard 3RV20 MSPs. These new approvals will greatly enhance application flexibility for customers. Not only can they use the bus systems to feed motor loads, they can now feed non-motor loads which should allow the bus systems to feed complete control panel applications. Customers will need to remove the line side terminals on any 3RV27 or 28s that will be fed by the bus system. Contact your Siemens representative for more information.

Refer to page 1/25 when using as upstream protection of a Manual Motor Controller or a Manual Motor Controller Suitable for Tap Conductor Protection in Group Installations.

Selection and ordering data

	Type	Version	Width	Innovations	
				Fits 3RV2 Frame Size	Screw Connection Order No.
Auxiliary switches³⁾					
3RV2901-1E 	Transverse auxiliary switches	1 CO 1 NO + 1 NC 2 NO		S00, S0, S2, S3	3RV2901-1D 1), 2) 3RV2901-1E 1) 3RV2901-1F
3RV2901-1G 	Solid-state compatible, transverse auxiliary switches for use in dusty atmosphere and in electronic circuits with low operating currents	1 CO		S00, S0, S2, S3	3RV2901-1G
3RV2901-1A 	Covering caps for transverse auxiliary switch slots (pack of 10)			S00, S0, S2, S3	3RV2901-0H
	Lateral auxiliary switches (side mount) Width = 9 mm	1 NO + 1 NC 2 NO 2 NC 2 NO + 2 NC	9 9 9 18	S00, S0, S2, S3	1), 2) 3RV2901-1A 1) 3RV2901-1B 1) 3RV2901-1C 3RV2901-1J
Signaling switch⁴⁾					
3RV2921-1M 	Signaling switch (side mount) Individual tripped and short-circuit signaling Width = 18 mm	1 NO + 1 NC each	18	S00, S0, S2, S3	1), 2) 3RV2921-1M
Auxiliary releases⁵⁾					
3RV2902-1AB4 	Undervoltage releases (side mount) Width = 18 mm	DC 24 V		S00, S0, S2, S3	3RV2902-1AB4
		AC 50 Hz 24 V 110 V — 230 V 400 V 415 V 500 V	AC 60 Hz — 120 V 208 V 240 V 440 V 480 V 600 V	S00, S0, S2, S3	3RV2902-1AB0 3RV2902-1AF0 1), 2) 3RV2902-1AM1 1), 2) 3RV2902-1AP0 3RV2902-1AV0 3RV2902-1AV1 3RV2902-1AS0
	Undervoltage releases with leading auxiliary contacts 2 NO (side mount) Width = 18 mm	24V 230 V 400 V 415 V	24V 240 V 440 V 480 V	S00, S0, S2, S3	3RV2922-1CB0 1) 3RV2922-1CP0 1) 3RV2922-1CV0 1), 2) 3RV2922-1CV1
	Shunt releases (side mount) Width = 18 mm	AC 50/60 Hz 100% ON⁶⁾ 20-24 V 90-110 V 210-240 V 350-415 V 500 V	AC 50/60 Hz 5 sec ON⁷⁾ 20-70 V 70-190 V 190-330 V 330-500 V 500 V	S00, S0, S2, S3	1), 2) 3RV2902-1DB0 1), 2) 3RV2902-1DF0 1) 3RV2902-1DP0 3RV2902-1DV0 3RV2902-1DS0

1) This product is also available with spring terminals. The order no. must be changed in the 8th position to a "2": e.g. 3RV1901-2E or 3RV2901-2E

2) This product is also available with ring lug terminals. The order no. must be changed in the 8th position to a "4": e.g. 3RV2901-4E

3) Each motor starter protector can be fitted with one transverse and one lateral auxiliary switch. The lateral auxiliary switch 2 NO + 2 NC is used without transverse auxiliary switch.

4) One signaling switch can be mounted at the left of the motor starter protector. This accessory cannot be used on the 3RV27 and 3RV28 circuit breakers.

5) One auxiliary release can be mounted at the right of each MSP: motor starter protector.

6) The response voltage at the lower limit of the voltage range at 0.85 (Tu=60°C) is valid for 100% (infinite)

7) The response voltage at the lower limit of the voltage range at 0.9 (Tu=60°C) applies for a duty cycle of 5 seconds at AC 50/60 Hz and DC.

Selection and ordering data

Modular spacing	Number of motor starter protectors that can be connected			Rated current I_n at 690 V	For motor starter protectors Size	Order No.	Order quantity	Weight approx.
	Without lateral accessories	Incl. lateral auxiliary switch	With auxiliary trip unit					
mm				A				kg

Three-phase busbar systems for Classic and Innovations

Modular spacing	Without lateral accessories	Incl. lateral auxiliary switch	With auxiliary trip unit	Rated current I_n at 690 V	For motor starter protectors Size	Order No.	Order quantity	Weight approx.			
For feeding several motor starter protectors with screw terminals, mounted side-by-side on standard mounting rails, insulated, with touch protection.											
3RV19 15-1AB	2	--	--	63	S00, S0 ¹⁾²⁾	3RV19 15-1AB	1 unit	0.044			
	3								3RV19 15-1BB	1 unit	0.071
	4								3RV19 15-1CB	1 unit	0.099
	5								3RV19 15-1DB	1 unit	0.124
3RV19 15-1BB	2	--	--	63	S00, S0 ¹⁾²⁾	3RV19 15-2AB	1 unit	0.048			
	3								3RV19 15-2BB	1 unit	0.079
	4								3RV19 15-2CB	1 unit	0.111
	5								3RV19 15-2DB	1 unit	0.140
3RV19 15-1CB	--	--	2	63	S00, S0 ¹⁾²⁾	3RV19 15-3AB	1 unit	0.052			
			4						3RV19 15-3CB	1 unit	0.120
3RV19 15-1DB	2	--	--	108	S2 ³⁾	3RV19 35-1A	1 unit	0.150			
	3								3RV19 35-1B	1 unit	0.214
	4								3RV19 35-1C	1 unit	0.295
		2	2						3RV19 35-3A	1 unit	0.161
	3	3	3RV19 35-3B	1 unit	0.262						
	4	4	3RV19 35-3C	1 unit	0.369						

1) Not suitable for 3RV21 motor starter protectors with overload relay function. The 3RV1915-5DB connecting piece is available for connecting motor starter protectors from size S0 to size S00.

2) Not suitable for 3RV UL 489 circuit breakers.

3) Auxiliary trip units and lateral auxiliary switches cannot be used in combination.

Version	Modular spacing	For motor starter protectors Size	Order No.	Order quantity	Weight approx.
	mm				kg

Connecting pieces for three-phase busbars

Version	Modular spacing	For motor starter protectors Size	Order No.	Order quantity	Weight approx.
For Innovations					
3RV19 15-5DB	45	S00, S0	3RV19 15-5DB	1 unit	0.042
	For connecting three-phase busbars for motor starter protectors of size S0 (left) to size S00 (right)				
For 3RV2 Innovations²⁾					
Conductor cross-section, AWG cables, solid or stranded		Tightening torque	For motor starter protector size	Order No.	
For 3RV1 MSP	For 3RV2 MSP				
AWG	AWG	Nm			

Three-phase feeder terminals

Version	Modular spacing	For motor starter protectors Size	Order No.	Order quantity	Weight approx.
Connection from top					
3RV29 25-5AB	10...4	3...4	S00	3RV2925-5AB	
	10...4	3...4	S0		
Connection from below³⁾					
3RV2915-5B	10...4	Input: 4, Output: 2 ... 2.5	S00, S0	3RV2915-5B	
Connection from top					
3RV2935-5A	14...0	4-6	S2	3RV2935-5A	

Three-phase feeder terminals for constructing "Type E Starters" Innovations

Version	Modular spacing	For motor starter protectors Size	Order No.	Order quantity	Weight approx.	
Connection from top						
3RV2935-5E	10...4	3-4	S00	3RV2925-5EB		
	10...4	3-4	S0			3RV2925-5EB
	8...0	10...2/0	4.5-6			S2

1) Do not mix 3RV1 Classic Accessories with 3RV2 Innovations MSPs

2) Do not mix 3RV2 Innovations Accessories with 3RV1 Classic MSPs

3) This terminal is connected in place of a switch, please take the space requirement into account.

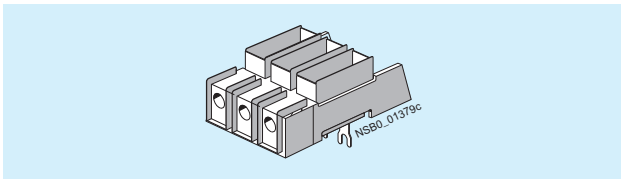
Overview

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

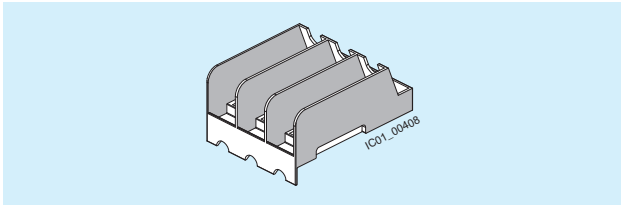
The 3RV20 motor starter protectors **with screw terminals** are approved according to UL 508/UL 60947-4-1 as "Self-Protected Combination Motor Controllers (Type E)".

This requires increased clearance and creepage distances (1 inch and 2 inches respectively) at the input side of the device, which are achieved by mounting a terminal block or a phase barrier.

3RV20 motor starter protectors **with spring terminals** can only be used as Type E when used in the 3RV29 Infeed System.



SIRIUS 3RV2928-1H terminal block*



SIRIUS 3RV2938-1K phase barrier*

* These accessories are only for screw terminals and mount on top of MSPs and are not for use on spring terminals which are located on the front of MSPs.

If screw terminal MSPs and spring terminal contactors are preferred, a hybrid link module can be utilized. See note 3.

Motor starter protectors/circuit breakers	Size	Essential accessories for "Self-Protected Combination Motor Controllers (Type E)" according to UL 508/UL 60947-4-1
3RV201., 3RV202.	S00/S0	3RV2928-1H terminal block or 3RV2928-1K phase barrier
3RV2031-4B1., 3RV2031-4D.1., 3RV2031-4E1., 3RV2031-4P.1., 3RV2031-4S.1., 3RV2031-4T.1., 3RV2031-4U.1., 3RV2031-4V.1.	S2	--
3RV2031-4J.1., 3RV2031-4K.1., 3RV2031-4R.1., 3RV2031-4W.1., 3RV2031-4X.1., 3RV2032	S2	3RV2938-1K phase barrier
3RV204	S3	3RT2946-4GA07 terminal block

-- No accessories needed

Special 3-phase infeed terminals are required for constructing "Type E Starters" with an insulated 3-phase busbar system (see page 1/11). These infeed terminals are only available for 3RV20 motor starter protectors **with screw terminals**.

The 3RV29 infeed system also enables the assembly of "Type E Starters", see page 1/18 onwards.

Note:

According to CSA, these terminal blocks and the phase barriers can be omitted when the device is used as a "Self-Protected Combination Motor Controller (Type E)".

Link modules

Feeders can be easily assembled from single devices with the help of the link modules. The following table shows the different combination options for devices with screw or spring-type terminals.

Combination devices	3RV2 motor starter protectors/circuit breakers	3RT2 contactors; 3RW30, 3RW40 soft starters; 3RF34 solid-state contactors	Link modules	
	Size	Size	Screw terminals	Spring-type terminals

Link modules for connecting switching devices to 3RV2 motor starter protectors/circuit breakers¹⁾

3RT2 contactors with AC or DC coil	S00	S00	3RA1921-1DA00	3RA2911-2AA00
	S0	S00		--
	S2	S2	3RA2931-1AA00	--
3RT2 contactors with AC coil	S0	S0	3RA2921-1AA00	3RA2921-2AA00
	S00	S0		--
3RT2 contactors with DC coil	S0	S0	3RA2921-1BA00	3RA2921-2AA00
	S00	S0		--
3RW30 soft starters	S00	S00	3RA2921-1BA00	3RA2911-2GA00
	S0	S00		--
3RW30/3RW40 soft starters	S0	S0	3RA2921-1BA00	3RA2921-2GA00
	S00	S0		--
	S2 ²⁾	S2 ²⁾	3RA2931-1AA00	--
3RF34 solid-state contactors	S00/S0	S00	3RA2921-1BA00	--

Hybrid link modules for connecting contactors with spring-type terminals to 3RV2 motor starter protectors/circuit breakers with screw terminals³⁾

3RT2 contactors with AC or DC coil	S00	S00	3RA2911-2FA00	--
	S0	S0	3RA2921-2FA00	--

-- Version not possible

¹⁾ The link modules cannot be used for the 3RV2.21-4PA1., 3RV2.21-4FA1., 3RV2.31-4K.1., 3RV2.31-4R.1., 3RV2.32-4K.1., 3RV2.32-4R.1., 3RV27 and 3RV28 motor starter protectors/circuit breakers.

²⁾ To assemble the feeder between a motor starter protector and a soft starter in size S2, the 3RA2932-1AC00 standard mounting rail adapter must be used.

³⁾ The motor starter protector to contactor hybrid link modules cannot be used for the 3RV2.21-4PA1., 3RV2.21-4FA1., 3RV27 and 3RV28 motor starter protectors/circuit breakers. They are only suitable for constructing direct-on-line starters.

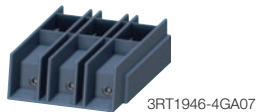
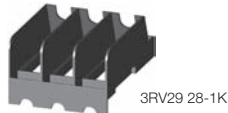
Note:

- Link modules can be used in
 - Sizes S00 and S0: up to max. 32 A
 - Size S2: up to max. 65 A
- Hybrid link modules can be used in
 - Sizes S00 and S0: up to max. 32 A

Selection and ordering data

Version	For motor starter protector size	Innovations 3RV2/3RT2 Order No.	Order Quantity
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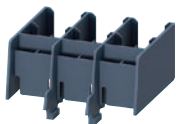
Terminal blocks and phase barriers for “Self-Protected Combination Motor Controllers (Type E)” according to UL 508 / UL 60947-4-1



Note:
 UL 508 / UL 60947-4-1 demands 1-inch clearance and 2-inch creepage distance at line side for “Combination Motor Controller Type E”.
 The following terminal blocks or phase barriers must be used on 3RV motor starter protectors.
 The terminal blocks or phase barriers cannot be used in combination with the 3RV19 .5 three-phase busbars.
 For construction with three-phase busbars, see “Accessories for busbar”

Terminal blocks type E	For extended clearance and creepage distances (1 and 2 inch)	S00, S0 S0 S2 S3	3RV29 28-1H — 3RV29 35-5E 3RT2946-4GA07 ¹⁾	1 unit 1 unit 1 unit 1 unit
Phase barriers	For extended clearance and creepage distances (1 and 2 inch)	S00, S0 S2	3RV29 28-1K 3RV29 38-1K	1 unit 1 unit

Terminal covers for box terminals on 3RV2742 and Type E terminal block 3RT2946-4GA07



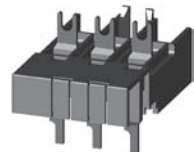
3RV2948-1LAA00

Additional touch protection to be fitted at the box terminals 3RV2742 (2 units required per device) and at Type E terminal block 3RT2946-4GA07

• Main current level	S3	NEW	3RV2948-1LAA00	1 unit
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Actuating voltage of contactor	Size 3RT contactor	3RV motor starter protector	Innovations 3RV2/3RT2 Order No.	Order Quantity
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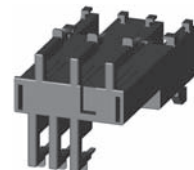
Link modules for motor starter protector to contactor²⁾



3RA29 21-1AA00

For mechanical and electrical connection between motor starter protector and contactor with screw terminals.

			Screw Terminals	
Single-unit packaging				
AC/DC	S00	S00/S0	3RA19 21-1DA00	1 unit
AC	S0	S00/S0	3RA29 21-1AA00	1 unit
AC	S2	S2	3RA29 31-1AA00	1 unit
AC	S3	S3	3RA19 41-1AA00	1 unit
DC	S0	S00/S0	3RA29 21-1BA00	1 unit
DC	S2	S2	3RA29 31-1AA00	1 unit
DC	S3	S3	3RA19 41-1AA00	1 unit
Multi-unit packaging				
AC/DC	S00	S00/S0	3RA19 21-1D	10 units
AC	S0	S00/S0	3RA29 21-1A	10 units
DC	S0	S00/S0	3RA29 21-1B	10 units
AC/DC	S2	S2	3RA29 31-1A	5 units
AC/DC	S3	S3	3RA19 41-1A	5 units



3RA29 11-2AA00

For mechanical and electrical connection between motor starter protector and contactor with spring-type terminals.

			Spring-type Terminals	
Single-unit packaging				
AC/DC	S00	S00	3RA29 11-2AA00	1 unit
AC ³⁾	S0	S0	3RA29 21-2AA00	1 unit
DC	S0	S0	3RA29 21-2AA00	1 unit
Multi-unit packaging				
AC/DC	S00	S00	3RA29 11-2A	10 units
AC ³⁾	S0	S0	3RA29 21-2A	10 units
DC	S0	S0	3RA29 21-2A	10 units
Spacers				
For compensating height on AC contactors				
Single-unit packaging	S0	S0	3RA29 11-1CA00	1 unit
Multi-unit packaging	S0	S0	3RA29 11-1C	5 units

1) Transverse auxiliary switches cannot be installed when using this terminal block
 2) The link modules for motor starter protector to contactor cannot be used for the 3RV2. 21-4PA1., 3RV2. 21-4FA1., 3RV27 and 3RV28 motor starter protectors
 3) A spacer for height compensation on AC contactors size S0 is optionally available

Note
 Size S0 link modules can be used up to max. 32 A.
 Size S2 link modules can be used up to 65A max.

Selection and ordering data

Size	Order No.	PU (UNIT, SET, M)	PS*	Weight approx. kg
3RW30, 3RW40 soft starters; 3RF34 solid-state contactors	3RV2 motor starter protectors			

Link modules for motor starter protector to soft starter^{1) 3)} and motor starter protector to solid-state contactor

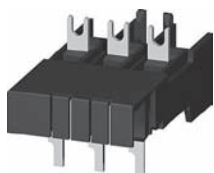
Connection between motor starter protector and soft starter / solid-state contactor with screw terminals

Single-unit packaging

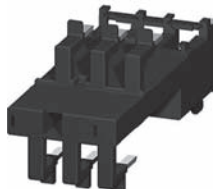
S00	S00/S0
S0	S00/S0
S2 ³⁾	S2
S3 ⁴⁾	S3

Multi-unit packaging

S00	S00/S0
S0	S00/S0
S2 ³⁾	S2
S3 ⁴⁾	S2



3RA29 21-1BA00



3RA29 21-2GA00

Screw terminals



3RA29 21-1BA00	1	1 unit	0.068
3RA29 21-1BA00	1	1 unit	0.068
3RA29 31-1AA00	1	1 unit	0.104
3RA19 41-1AA00	1	1 unit	0.104

3RA29 21-1B	1	10 units	0.068
3RA29 21-1B	1	10 units	0.068
3RA29 31-1A	1	5 units	0.104
3RA19 41-1A	1	5 units	0.104

Connection between motor starter protector and soft starter with spring-type terminals

Single-unit packaging

S00	S00
S0	S0

Multi-unit packaging

S00	S00
S0	S0

Spring-type terminals



3RA29 11-2GA00	1	1 unit	0.038
3RA29 21-2GA00	1	1 unit	0.072

3RA29 11-2G	1	10 units	0.380
3RA29 21-2G	1	10 units	0.720

¹⁾ The link modules for motor starter protector to soft starter and for motor starter protector to solid-state contactor cannot be used for the 3RV2. 21-4PA1., 3RV2. 21-4FA1., 3RV27 and 3RV28 motor starter protectors.

Note:
S0 link modules can be used up to max. 32 A.
S2 link modules can be used up to max. 65 A.

Actuating voltage of contactor	Size	Order No.	PU (UNIT, SET, M)	PS*	Weight approx. kg
	3RT2 contactors	3RV2 motor starter protectors			

Hybrid link modules for motor starter protector to contactor¹⁾

For mechanical and electrical connection between motor starter protector with screw terminals and contactor with spring-type terminals

Single-unit packaging

AC/DC	S00	S00
AC ²⁾ /DC	S0	S0

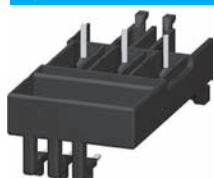
Multi-unit packaging

AC/DC	S00	S00
AC ²⁾ /DC	S0	S0

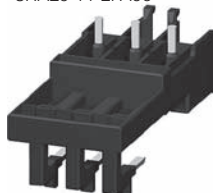
Spacers²⁾

for compensating the height on AC contactors

Single-unit packaging	S0	S0
Multi-unit packaging	S0	S0



3RA29 11-2FA00



3RA29 21-2FA00

3RA29 11-2FA00	1	1 unit	0.029
3RA29 21-2FA00	1	1 unit	0.056

3RA29 11-2F	1	10 units	0.290
3RA29 21-2F	1	10 units	0.560

3RA29 11-1CA00	1	1 unit	0.001
3RA29 11-1C	1	5 units	0.001

¹⁾ The hybrid link modules for motor starter protector to contactor cannot be used for the 3RV2. 21-4PA1., 3RV2. 21-4FA1., 3RV27 and 3RV28 motor starter protectors or reversing starters.

²⁾ A spacer for height compensation on AC contactors size S0 is optionally available. See 3RA2911-1CA00

³⁾ To assemble the starter between a motor starter protector and a soft starter in size S2, the 3RA2932-1AC00 standard mounting rail adapter must be used.

⁴⁾ It is only permissible to assemble the feeder between the motor starter protector and the soft starter in Size S3 on a mounting plate.

Note:
Hybrid link modules can be used up to max. 32 A.