SIRIUS

3RV20 Class 10 - up to 40A

Description

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. The 3RV20x MSPs are also approved for use as follows:

- 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.

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.

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

Ordering Information

- 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 1/10–1/20.
- General Information see pages 1/32–1/35.
- Technical Data see pages 1/21–1/31.
- Dimensions see page 1/36-1/39.

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

	FLA	Single-Phase HP Ratings		Three-F		1	1	Instant- aneous UL short- circuit breaking circuit capacity	Size S00 ^{2) 4)}	Size S0 ^{2) 4)}		
Illustration	Adjustment Range [A]	115V	230V	200V	230V	460V	575V	release [A]	@ 277V/ 480V [kA]	Order Number	Order Number	
	0.11-0.16	—	—	—	_	—	—	2.1	65	3RV2011-0AA●●	_	
	0.14-0.2	—	—	—	—	—	—	2.6	65	3RV2011-0BA●●	_	
	0.18-0.25	—	—	—	l —	—	—	3.3	65	3RV2011-0CA●●	_	
	0.22-0.32	_	_	<u> </u> —	<u> </u>	<u> </u>	—	4.2	65	3RV2011-0DA●●	_	
	0.28-0.4	—	_	—	_	—	—	5.2	65	3RV2011-0EA●●	_	
	0.35-0.5	—	—	—	l —	—	—	6.5	65	3RV2011-0FA●●	_	
	0.45-0.63	—	—	—	l —	—	—	8.2	65	3RV2011-0GA●●	3RV2021-0GA●●	
	0.55-0.8	_	_	—	l —	<u> </u>	—	10	65	3RV2011-0HA●●	3RV2021-0HA●●	
	0.7-1	_	_	—	_	_	1/2	13	65	3RV2011-0JA●●	3RV2021-0JA●●	
	0.9-1.25	—	—	—	l —	1/2	1/2	16	65	3RV2011-0KA●●	3RV2021-0KA●●	
	1.1-1.6	—	1/10	—	—	3/4	3/4	21	65	3RV2011-1AA●●	3RV2021-1AA●●	
	1.4-2	<u> </u>	1/8	<u> — </u>	<u> </u>	3/4	1	26	65	3RV2011-1BA●●	3RV2021-1BA●●	
	1.8-2.5	—	1/6	1/2	1/2	1	1 ½	33	65	3RV2011-1CA • •	3RV2021-1CA ••	
	2.2-3.2	1/10	1/4	1/2	3/4	1 ½	2	42	65	3RV2011-1DA●●	3RV2021-1DA ••	
	2.8-4	1/8	1/3	3/4	3/4	2	3	52	65	3RV2011-1EA●●	3RV2021-1EA ••	
	3.5-5	1/6	1/2	1	1	3	3	65	65	3RV2011-1FA●●	3RV2021-1FA●●	
	4.5-6.3	1/4	1/2	1	1 ½	3	5	82	65	3RV2011-1GA●●	3RV2021-1GA●●	
	5.5-8	1/3	1	2	2	5	5	104	65	3RV2011-1HA●●	3RV2021-1HA●●	
	7-10	1/2	1 ½	2	3	5	7 ½	130	65	3RV2011-1JA●●	3RV2021-1JA ••	
	9-12.5	1/2	2	3	3	7 ½	10	163	65	3RV2011-1KA●●	3RV2021-1KA●●	
	10-16	1	2	3	5	10	 —	208	65	3RV2011-4AA●●	3RV2021-4AA●●	
	13-20	1 ½	3	5	5	10	—	260	65	_	3RV2021-4BA●●	
	16-22	1 ½	3	5	7 ½	15	—	286	65	_	3RV2021-4CA ••	
	18-25	2	3	5	7 ½	15	—	325	65	_	3RV2021-4DA • •	
	23-28	2	5	7 ½	10	20	—	364	50	_	3RV2021-4NA • •	
	27-32	2	5	7 ½	10	20	—	400	50	_	3RV2021-4EA●●	
	30-36 ³⁾	3	5	10	10	25	l —	432	12	_	3RV2021-4PA●● ⁵⁾	
	34-40 ³⁾	3	7 ½	10	10	30	—	480	12	_	3RV2021-4FA●● ⁵⁾	
										Screw terminals, no auxiliary: ●● = 10		

- Spring Terminals, with 1NO/1NC Aux: ●● = 25
 Ring Lug Terminals, no Auxiliary: ●● = 40
- 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 combina-

1) Select motor starter protector by motor full load amps.

Horsepower ratings for reference only.

- tion motor controller, a Type E terminal is required. See accessories page 1/10.
- These products are NOT certified as Type E combination motor controllers. They can only be used as manual motor controllers.
- 3RV2 MSPs can only be used with Innovations contactors and accessories

Screw Terminals, with 1NO/1NC Aux: ● = 15 Spring terminals, no auxiliary: ● = 20

5) Spring and Ring Lug terminals are not available

For Motor Protection

3RV10 Class 10 & 20 - up to 100A

Description

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 S2 frame 3RV2031 above 45A and all S2 frame 3RV2032 as well as for all S3 frame motor starter protectors.

The 3RV203/204 MSPs are also approved for use as follows:

- 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.

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.

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

Ordering Information

- 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 1/10–1/20.
- General Information see pages 1/32–1/35.
- Technical Data see pages 1/21–1/31.
- Dimensions see page 1/36–1/39.

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

W. cakaaki a a	FLA	Single Phase HP rating 1)		3 Phase HP Rating ¹⁾				Inst. Short-	UL short- circuit breaking		
	Adjustment Range	115)/	0.401/	0001/	0001	4001/	F75\/	Circuit Release	capacity @ 277V/	Trip Class 10	Trip Class 20
Illustration	[A]	115V	240V	200V	230V	460V	575V	[A]	480V [kA] ⁶⁾	Order Number ⁴⁾	Order Number ⁴⁾
	3RV203 Frame Size S2										
after in	9.5 - 14	1.5	3	5	5	10	15	208	65	3RV2031-4SA10	3RV2031-4SB10
111	12 - 17	1.5	3	5	7.5	15	15	260	65	3RV2031-4TA10	3RV2031-4TB10
666 1	14 - 20	1.5	3	7.5	7.5	15	20	260	65	3RV2031-4BA10	3RV2031-4BB10
- 0.	18 - 25	2	5	7.5	10	20	25	325	65	3RV2031-4DA10	3RV2031-4DB10
8 2 3 4	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
2 2 2	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
775	3RV204 F	rame Si	ze 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
I	57 - 75	7.5	15	25	25	60	75	975A	65	3RV2041-4KA10	3RV2042-4KB10
0.	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
1	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.
- 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 UI 508.
- 3) Shaded ratings apply for group installation only. These ratings do not apply as UL listed manual combination starters.
- 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".
- 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).
- Suitable for use with IE3/IE4 motors up to a starting current of 720A. For higher starting currents use size S3.

Refer to pages 1/21 to 1/23 when using an MSP in a Manual Motor Starter or a Manual Self-Protected Combination Motor Controller.