

# 3RV Motor Starter Protectors

## For Motor Protection


**3RV20 Class 10**  
up to 40A

**SIRIUS**



Description	Ordering Information
<p>The 3RV20x MSP's 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 MSP's are also approved for use as follows:</p> <ul style="list-style-type: none"> <li>Manual Motor Controller: Motor starter, motor disconnect, control and overload—protection.</li> <li>Group Installation: Motor starter only, motor disconnect, control and overload protection.</li> <li>Tap conductor Protection in Group Installation acc. NEC: Motor starter only; motor disconnect, control and overload protection.</li> </ul> <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: <a href="http://www.usa.siemens.com/controlpaneldesign">www.usa.siemens.com/controlpaneldesign</a></p>	<ul style="list-style-type: none"> <li>ON/OFF rotary handle with lockout and visible trip indication.</li> <li>Adjustment dial for setting to motor FLA.</li> <li>Class 10 overload trip characteristics.</li> <li>Short circuit trip at 13 times the maximum setting of the FLA adjustment dial.</li> <li>Short circuit current rating:</li> <li>Ambient compensated up to 140° F (applies to side by side mounting).</li> <li>Phase loss sensitivity.</li> <li>Test trip function.</li> <li>Terminal versions: screw, spring, ring lug.</li> <li>Auxiliaries and Accessories see pages 1/7–1/17.</li> <li>General Information see pages 1/29–1/32.</li> <li>Technical Data see pages 1/18–1/28.</li> <li>Dimensions see page 1/33.</li> </ul>

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 <sup>1)</sup>				Instantaneous short circuit release [A]	UL short-circuit breaking capacity @ 480V [kA]	Size S00 <sup>2) 4)</sup>	Size S0 <sup>2) 4)</sup>
		115V	230V	200V	230V	460V	575V			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	—	—	—	—	—	—	3.3	65	3RV2011-0CA●●	—
	0.22-0.32	—	—	—	—	—	—	4.2	65	3RV2011-0DA●●	—
	0.28-0.4	—	—	—	—	—	—	5.2	65	3RV2011-0EA●●	—
	0.35-0.5	—	—	—	—	—	—	6.5	65	3RV2011-0FA●●	—
	0.45-0.63	—	—	—	—	—	—	8.2	65	3RV2011-0GA●●	3RV2021-0GA●●
	0.55-0.8	—	—	—	—	—	—	10	65	3RV2011-0HA●●	3RV2021-0HA●●
	0.7-1	—	—	—	—	—	1/2	13	65	3RV2011-0JA●●	3RV2021-0JA●●
	0.9-1.25	—	—	—	—	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	—	1/8	—	—	3/4	1	26	65	3RV2011-1BA●●	3RV2021-1BA●●
	1.8-2.5	—	1/8	1/2	1/2	1	1 1/2	33	65	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●●
	2.8-4	1/8	1/8	3/4	3/4	2	3	52	65	3RV2011-1EA●●	3RV2021-1EA●●
	3.5-5	1/8	1/2	1	1	3	3	65	65	3RV2011-1FA●●	3RV2021-1FA●●
	4.5-6.3	1/4	1/2	1	1 1/2	3	5	82	65	3RV2011-1GA●●	3RV2021-1GA●●
	5.5-8	1/4	1	2	2	5	5	104	65	3RV2011-1HA●●	3RV2021-1HA●●
	7-10	1/2	1 1/2	2	3	5	7 1/2	130	65	3RV2011-1JA●●	3RV2021-1JA●●
	9-12.5	1/2	2	3	3	7 1/2	10	163	65	3RV2011-1KA●●	3RV2021-1KA●●
	11-16	1	2	3	5	10	—	208	65	3RV2011-4AA●●	3RV2021-4AA●●
	14-20	1 1/2	3	5	5	10	—	260	65	—	3RV2021-4BA●●
	17-22	1 1/2	3	5	7 1/2	15	—	286	65	—	3RV2021-4CA●●
	20-25	2	3	5	7 1/2	15	—	325	65	—	3RV2021-4DA●●
	23-28	2	5	7 1/2	10	20	—	364	50	—	3RV2021-4NA●●
	27-32	2	5	7 1/2	10	20	—	400	50	—	3RV2021-4EA●●
	30-36 <sup>3)</sup>	3	5	10	10	25	—	432	12	—	3RV2021-4PA●●
	34-40 <sup>3)</sup>	3	7 1/2	10	10	30	—	480	12	—	3RV2021-4FA●●

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. Horse power ratings for reference only.

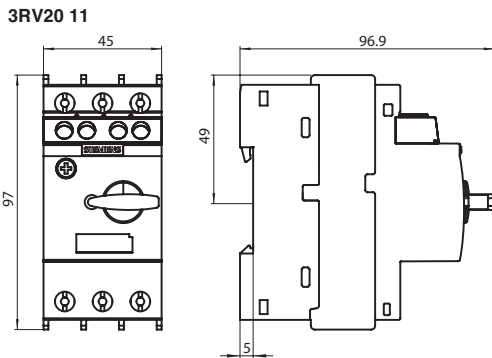
2) The motor starter protectors rated up to 32 A can be used as manual motor controllers or as Type E combination motor controllers. For use as a Type E combination motor controller, a Type E terminal is required. See accessories page 1/10.

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

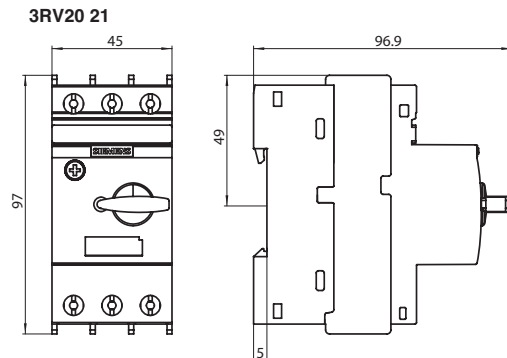
4) 3RV2 MSP's can only be used with Innovations contactors and accessories

### Dimension drawings

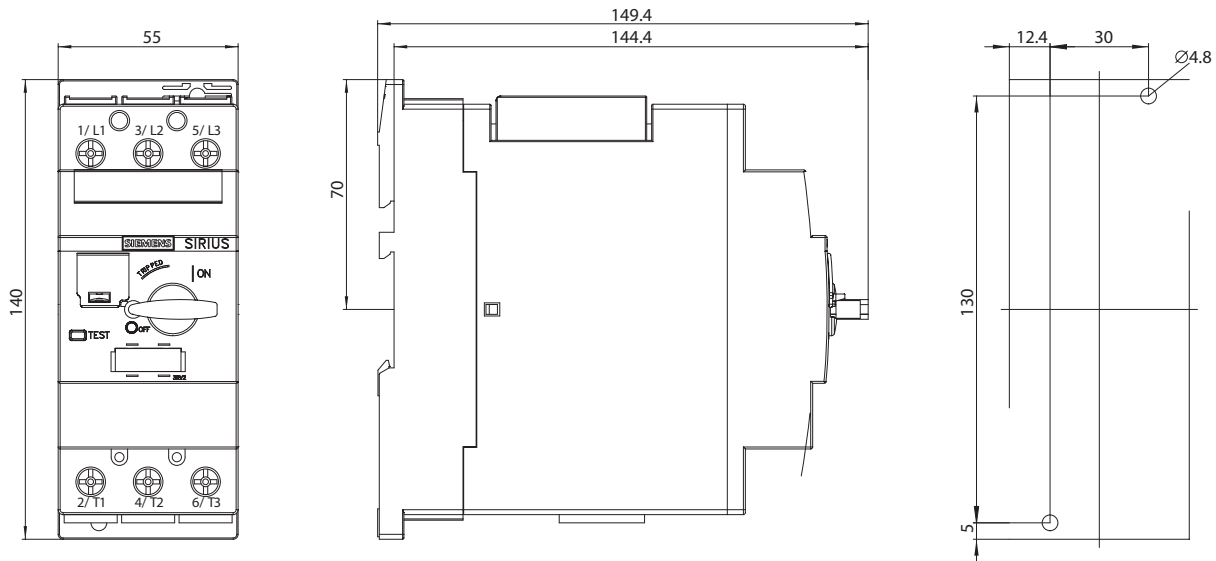
#### 3RV2 MSP, size S00



#### 3RV2 MSP, size S0



#### 3RV2 MSP, size S2



3RV2.31 motor starter protector (<= 45A)

- 1) 2-pole lateral auxiliary switch
- 2) Signalling switch (S0-S3) or lateral auxiliary switch, 4-pole (S00-S3)
- 3) Auxiliary releases
- 4) Transverse auxiliary switch
- 5) Push-in lugs for screw mounting
- 6) Only for undervoltage release with leading auxiliary switch
- 7) Drilling template
- 8) 35 mm standard mounting rail acc. to EN 50 022
- 9) Mounting on 35 mm standard mounting rail, 15 mm high, acc. to EN 50 022 or on 75 mm standard mounting rail acc. to EN 50 023
- 10) 4 mm hexagon socket screw
- 11) Lockable in 0 position with shackle diameter 3.5 to 4.5 mm