

# Protection Equipment

## Introduction

### Overview



Type	3RV20	3RV21	3RV23	3RV24	3RV27	3RV28
<b>SIRIUS 3RV2 motor starter protectors/circuit breakers up to 40 A</b>						
<b>Applications</b>						
• System protection	✓ <sup>1)</sup>	✓ <sup>1)</sup>	--	--	✓	✓
• Motor protection	✓	--	--	--	--	--
• Motor protection with overload relay function	--	✓	--	--	--	--
• Starter combinations	--	--	✓	--	--	--
• Transformer protection	--	--	--	✓	✓	✓
<b>Size</b>	S00, S0	S00, S0	S00, S0	S00, S0	S00, S0	S00, S0
<b>Rated current <math>I_n</math></b>						
• Size S00	A	up to 16	up to 16	up to 16	up to 16	up to 15
• Size S0	A	up to 40	up to 32	up to 40	up to 25	up to 22
<b>Rated operational voltage <math>U_e</math> according to IEC</b>	V	690 AC <sup>2)</sup>	690 AC <sup>2)</sup>	690 AC <sup>2)</sup>	690 AC <sup>2)</sup>	690 AC
<b>Rated frequency</b>	Hz	50/60	50/60	50/60	50/60	50/60
<b>Trip class</b>		CLASS 10	CLASS 10	--	CLASS 10	--
<b>Thermal overload releases</b>	A	0.11 ... 0.16 to 34 ... 40	0.11 ... 0.16 to 27 ... 32	Without <sup>3)</sup>	0.11 ... 0.16 to 20 ... 25	0.16 ... 22 non-adjustable
<b>Electronic release</b>		A multiple of the rated current	13 times	13 times	20 times	20 times
<b>Short-circuit breaking capacity <math>I_{cu}</math> at 400 V AC</b>	kA	20/55/100	55/100	20/55/100	55/100	4) <sup>4)</sup>

<b>Accessories</b>						
<b>For sizes</b>	S00	S0	S00	S0	S00	S0
Auxiliary switches	✓	✓	✓	✓	✓	✓
Signaling switches	✓	✓	✓	✓	--	--
Undervoltage releases	✓	✓	--	--	✓	✓
Shunt releases	✓	✓	--	--	✓	✓
Isolator modules	✓	✓	✓	✓	✓	--
Insulated three-phase busbar system	✓	✓	--	--	✓	--
Busbar adapters	✓	✓	✓	✓	--	--
Door-coupling rotary operating mechanisms	✓	✓	✓	✓	✓	✓
Link modules	✓	✓	✓	✓	--	--
Enclosures for surface mounting	✓	✓	✓	✓	--	--
Enclosures for flush mounting	✓	✓	✓	✓	--	--
Front plates	✓	✓	✓	✓	--	--
Infeed system	✓	✓	--	--	✓	--
Terminal covers for ring terminal lug connections	✓ <sup>5)</sup>	✓ <sup>5)</sup>	--	--	--	--
Sealable scale covers for setting knobs	✓	✓	✓	✓	--	--

✓ Has this function or can use this accessory

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

<sup>1)</sup> For symmetrical loading of the three phases.

<sup>2)</sup> With 500 V AC molded-plastic enclosure. For DC applications see "SIRIUS Innovations – SIRIUS 3RV2 Motor Starter Protectors" Manual, <http://support.automation.siemens.com/WW/view/en/60279172> → "Technical specifications" → "Direct current short-circuit breaking capacity".

<sup>3)</sup> For overload protection of the motors, appropriate overload relays must be used.

<sup>4)</sup> According to UL 489 at 480 V/277 V AC: 65 kA or 50 kA.

<sup>5)</sup> Terminal covers are available for 3RV20 motor starter protectors for motor protection with ring terminal lug connection to ensure finger-safety.