



intelligent load feeder reversing starter standard 1.2-12 A up to 690 V AC type of coordination 1 frame size S00 for ET 200SP system consisting of 3RC7141-1KE00, 3RV2311-1KC20, 2x 3RT2017-2BB42

product brand name	SIRIUS
product designation	Intelligent load feeder
design of the product	reversing starter standard
product type designation	3RA8
manufacturer's article number	
• of the supplied contactor	<a href="#">3RT2017-2BB42</a>
• of the supplied circuit-breakers	<a href="#">3RV2311-1KC20</a>
• of the supplied RH assembly kit	<a href="#">3RA2913-2LA2</a>
• of the supplied link module	<a href="#">3RC7141-1KE00</a>
<b>General technical data</b>	
number of monitored phases	2
suitability for use	
• direct starter	No
• reversing starter	Yes
• star-delta starter	No
product function external reset	Yes
product component RESET button	Yes
design of the overcurrent release	electronic
size of the circuit-breaker	S00
size of load feeder	S00
size of contactor can be combined company-specific	S00
product function	
• remote firmware update	Yes
• disconnect functionality	Yes
• for power supply reverse polarity protection	Yes
power loss [W] for rated value of the current at AC in hot operating state per pole	3.6 W
insulation voltage	
• rated value	690 V
• for overvoltage category III according to IEC 60664 with degree of pollution 2 rated value	690 V
degree of pollution	3
overvoltage category	3
surge voltage resistance rated value	6 kV
protection class IP	
• on the front	IP20
• of the terminal	IP20
shock resistance according to IEC 60068-2-27	6g / 11,0 ms (3 shocks); 10g / 6,0 ms (1000 shocks)
vibration resistance	5-8,4 Hz, 3,5 mm; 8,4-150 Hz, 1 g; 10 cycles / 10-60 Hz, 0,35 mm; 60-500 Hz, 5 g; 10 cycles
type of coordination	1

reference code according to IEC 81346-2	Q
reference code according to IEC 81346-2:2019	Q
continuous current rated value	12 A
Substance Prohibitance (Date)	06/21/2024
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Silicic acid, lead salt - 11120-22-2 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7
Weight	1.596 kg
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
ambient temperature <ul style="list-style-type: none"> <li>during operation</li> <li>during storage</li> <li>during transport</li> <li>with upper limit without restrictions</li> </ul>	-20 ... +60 °C -40 ... +80 °C -40 ... +80 °C 40 °C
environmental category during operation according to IEC 60721	3C3 (without salt spray)
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	1.2 ... 12 A
type of the motor protection	solid-state
type of voltage for main current circuit	AC
utilization category according to IEC 60947-4-1	AC-3e
operating voltage <ul style="list-style-type: none"> <li>rated value</li> <li>at AC-3 rated value maximum</li> <li>at AC-3e rated value maximum</li> </ul>	690 V 690 V 690 V
operating frequency rated value	50 ... 60 Hz
operational current rated value	12 A
operational current <ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 440 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> <li>at AC-3e <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 440 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> </ul>	12 A 9.2 A 9.2 A 6.7 A 12 A 9.2 A 9.2 A 6.7 A
operating power <ul style="list-style-type: none"> <li>at AC-3 <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> <li>at AC-3e <ul style="list-style-type: none"> <li>at 400 V rated value</li> <li>at 500 V rated value</li> <li>at 690 V rated value</li> </ul> </li> </ul>	5 500 W 5 500 W 5 500 W 5 500 W 5 500 W 5 500 W
<b>Control circuit/ Control</b>	
type of voltage of the control supply voltage	DC
closing delay at DC	40 ... 110 ms
opening delay at DC	30 ... 50 ms
<b>Auxiliary circuit</b>	
product component auxiliary switch	No
product extension auxiliary switch	Yes
type of voltage for auxiliary and control circuit	DC
auxiliary voltage at DC rated value	24 V

auxiliary voltage at DC rated value	20.4 ... 28.8 V
inrush current peak for auxiliary voltage at DC at 24 V	2.5 A
duration of inrush current peak for auxiliary voltage at DC at 24 V	1 ms
power loss [W] at the auxiliary voltage in holding operation at DC at 24 V	0.9 W
<b>Protective and monitoring functions</b>	
type of protection function of the overcurrent release	electronic
product function	
• ground fault detection	No
• phase failure detection	Yes
• phase sequence recognition	Yes
• overcurrent detection 1 phase	Yes
• undercurrent detection 3 phases	Yes
• undercurrent monitoring	Yes
• overcurrent and undercurrent monitoring	Yes
• undercurrent detection 1 phase	Yes
• overcurrent detection 3 phase	Yes
• overload protection	Yes
• overload warning	Yes
• temperature-compensated overload protection	No
• motor protection	Yes
• active current monitoring	No
• main switches with supply disconnect function and EM-STOP switches	No
• operating hours counter	Yes
trip class	CLASS 10E / CLASS 20E
design of the overload release	electronic
response value current of instantaneous short-circuit trip unit	163 A
<b>UL/CSA ratings</b>	
yielded mechanical performance [hp]	
• for single-phase AC motor	
— at 110/120 V rated value	0.5 hp
— at 230 V rated value	1.5 hp
• for 3-phase AC motor	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
conditional short-circuit current (I <sub>q</sub> ) with type of coordination 1	
• at 480 AC Y/277 V rated value	65 000 A
• at AC 600 Y/347 V rated value	30 000 A
operating voltage	
• according to UL 60947 rated value	600 V
• at AC at 60 Hz according to CSA and UL rated value	600 V
<b>Short-circuit protection</b>	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (I <sub>q</sub> )	
• at 690 V according to IEC 60947-4-1 rated value	6 000 A
• at 400 V according to IEC 60947-4-1 rated value	150 000 A
• at 440 V according to IEC 60947-4-1 rated value	100 000 A
• at 500 V according to IEC 60947-4-1 rated value	100 000 A
certificate of suitability ATEX	No
<b>Installation/ mounting/ dimensions</b>	
mounting position	horizontal
fastening method	screw and snap-on mounting onto 35 mm DIN rail
• mounting rail	Yes
height	204 mm
width	90 mm
depth	131 mm

<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• for grounded parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for live parts at 400 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for grounded parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for live parts at 500 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— backwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for grounded parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> <li>• for live parts at 690 V <ul style="list-style-type: none"> <li>— downwards</li> <li>— upwards</li> <li>— at the side</li> <li>— forwards</li> </ul> </li> </ul>	10 mm 20 mm 0 mm 9 mm 0 mm  10 mm 20 mm 0 mm 9 mm 0 mm  10 mm 20 mm 0 mm 9 mm 0 mm  10 mm 50 mm 20 mm 0 mm  10 mm 50 mm 20 mm 0 mm
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	No
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control circuit</li> </ul>	spring-loaded terminals spring-loaded terminals (push-in)
type of electrical connection for supply voltage line-side	spring-loaded terminals (push-in)
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• for main contacts <ul style="list-style-type: none"> <li>— solid</li> <li>— stranded</li> <li>— finely stranded with core end processing</li> </ul> </li> <li>• for AWG cables for main contacts</li> </ul>	2x (0.5 ... 4 mm <sup>2</sup> ) 2x (0.5 ... 4 mm <sup>2</sup> ) 2x (0.5 ... 2.5 mm <sup>2</sup> ) 2x 20 ... 12
<b>connectable conductor cross-section for main contacts</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• stranded</li> <li>• finely stranded with core end processing</li> </ul>	0.5 ... 4 mm <sup>2</sup> 0.5 ... 4 mm <sup>2</sup> 0.5 ... 2.5 mm <sup>2</sup>
<b>type of connectable conductor cross-sections at the inputs for supply voltage</b>	
<ul style="list-style-type: none"> <li>• solid</li> <li>• finely stranded without core end processing</li> <li>• finely stranded with core end processing</li> </ul>	0.2 ... 1.5 mm <sup>2</sup> 0.2 ... 1.5 mm <sup>2</sup> 0.2 ... 1.0 mm <sup>2</sup>
type of connectable conductor cross-sections at the inputs for supply voltage for AWG cables solid	24 ... 16
<b>Electrical Safety</b>	
<b>touch protection against electrical shock</b>	IP20
<b>touch protection on the front according to IEC 60529</b>	finger-safe

Communication/ Protocol	
protocol is supported other protocols	Yes
<b>product function bus communication</b>	Yes
product function control circuit interface with IO link	No
product function control circuit interface with AS-interface	No
<b>data volume</b>	
• of the address range of the inputs with cyclical transfer total	16 byte
• of the address range of the outputs with cyclical transfer total	2 byte
<b>address space memory of address range</b>	
• of the inputs	16 byte
• of the outputs	2 byte
type of electrical connection of the communication interface	RJ45

Electromagnetic compatibility	
<b>conducted interference</b>	
• due to burst according to IEC 61000-4-4	2 kV
• due to conductor-earth surge according to IEC 61000-4-5	2 kV
• due to conductor-conductor surge according to IEC 61000-4-5	1 kV
• due to high-frequency radiation according to IEC 61000-4-6	10 V
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	8 kV air discharge
<b>conducted HF interference emissions according to CISPR11</b>	Class A for industrial environment
<b>field-bound HF interference emission according to CISPR11</b>	Class A for industrial environment


Supply voltage	
<b>type of voltage of the supply voltage</b>	DC
<b>supply voltage 1 at DC rated value</b>	
• minimum permissible	19.2 V
• maximum permissible	28.8 V
<b>auxiliary voltage at DC rated value</b>	20.4 ... 28.8 V
<b>supply voltage at DC rated value</b>	24 V
<b>inrush current peak with supply voltage at DC at 24 V</b>	1.25 A
<b>duration of inrush current peak with supply voltage at DC at 24 V</b>	5 ms
<b>power loss [W] at supply voltage at DC at 24 V</b>	0.5 W

Approvals Certificates			
General Product Approval	EMV	Test Certificates	other



[Type Test Certificates/Test Report](#)

[Confirmation](#)

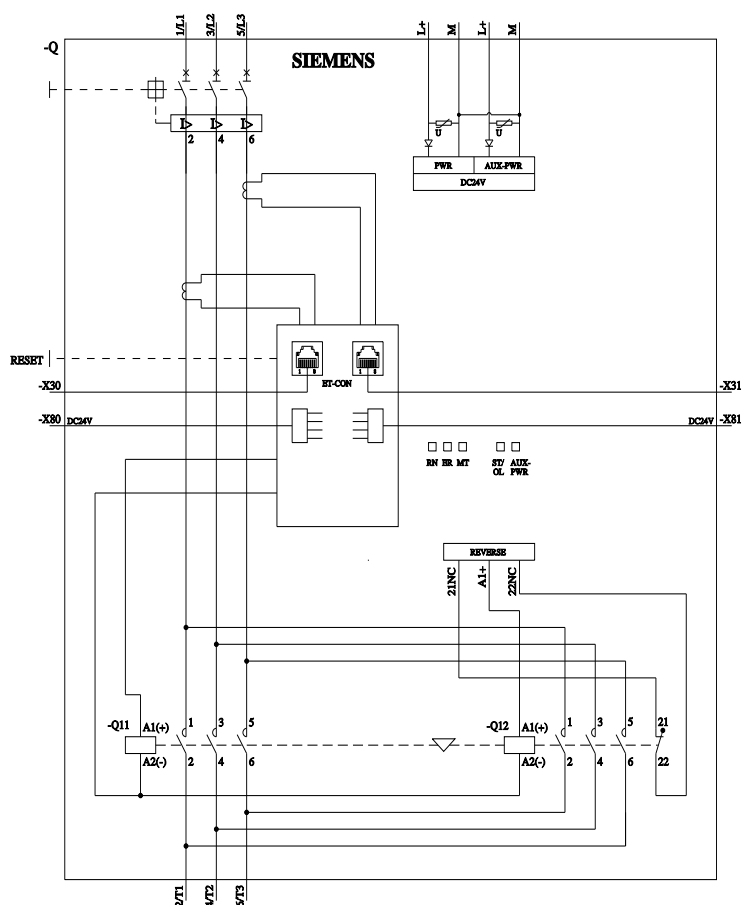
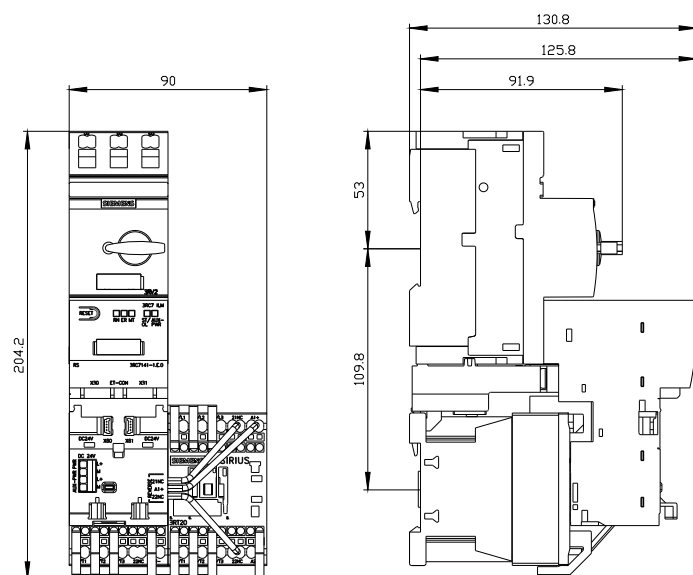
other	Environment
	<a href="#">Environmental Conformations</a>

Further information
<b>Information on the packaging</b> <a href="https://support.industry.siemens.com/cs/ww/en/view/109813875">https://support.industry.siemens.com/cs/ww/en/view/109813875</a> <b>Information- and Downloadcenter (Catalogs, Brochures,...)</b> <a href="https://www.siemens.com/ic10">https://www.siemens.com/ic10</a> <b>Industry Mall (Online ordering system)</b> <a href="https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA8511-1KE00">https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA8511-1KE00</a> <b>Cax online generator</b> <a href="http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RA8511-1KE00">http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&amp;mlfb=3RA8511-1KE00</a> <b>Service&amp;Support (Manuals, Certificates, Characteristics, FAQs,...)</b> <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RA8511-1KE00">https://support.industry.siemens.com/cs/ww/en/ps/3RA8511-1KE00</a>

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA8511-1KE00&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA8511-1KE00&lang=en)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA8511-1KE00/char>

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA8511-1KE00&objecttype=14&gridview=view1>



4/1/2025 