



intelligent load feeder reversing starter high feature 3.5-32 A up to 690 V AC type of coordination 2 frame size S0 for ET 200SP system consisting of 3RC7141-4EE11, 3RV2321-4EC20, 2x 3RT2027-2BB40

<b>product brand name</b>	SIRIUS
<b>product designation</b>	Intelligent load feeder
<b>design of the product</b>	reversing starter high feature
<b>product type designation</b>	3RA8
<b>manufacturer's article number</b>	
• of the supplied contactor	<a href="#">3RT2027-2BB40</a>
• of the supplied circuit-breakers	<a href="#">3RV2321-4EC20</a>
• of the supplied RH assembly kit	<a href="#">3RA2923-2LB2</a>
• of the supplied link module	<a href="#">3RC7141-4EE11</a>
• of the supplied DIN-rail adapter	<a href="#">3RA2922-1AA00</a>
<b>General technical data</b>	
<b>number of monitored phases</b>	3
<b>suitability for use</b>	
• direct starter	No
• reversing starter	Yes
• star-delta starter	No
<b>product function external reset</b>	Yes
<b>product component RESET button</b>	Yes
<b>design of the overcurrent release</b>	electronic
<b>size of the circuit-breaker</b>	S0
<b>size of load feeder</b>	S0
<b>size of contactor can be combined company-specific</b>	S0
<b>product function</b>	
• remote firmware update	Yes
• disconnecter functionality	Yes
• for power supply reverse polarity protection	Yes
<b>power loss [W] for rated value of the current at AC in hot operating state per pole</b>	6.7 W
<b>insulation voltage</b>	
• <b>rated value</b>	690 V
• for overvoltage category III according to IEC 60664 with degree of pollution 2 rated value	690 V
<b>degree of pollution</b>	3
<b>overvoltage category</b>	3
<b>surge voltage resistance rated value</b>	6 kV
<b>protection class IP</b>	
• on the front	IP20
• of the terminal	IP20
<b>shock resistance according to IEC 60068-2-27</b>	6g / 11,0 ms (3 shocks); 10g / 6,0 ms (1000 shocks)
<b>vibration resistance</b>	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

<b>type of coordination</b>	2
<b>reference code according to IEC 81346-2</b>	Q
<b>reference code according to IEC 81346-2:2019</b>	Q
<b>continuous current rated value</b>	32 A
<b>Substance Prohibittance (Date)</b>	06/21/2024
<b>SVHC substance name</b>	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 Lead titanium zirconium oxide - 12626-81-2
<b>Weight</b>	2.679 kg
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<b>ambient temperature</b>	
• during operation	-20 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
• with upper limit without restrictions	40 °C
environmental category during operation according to IEC 60721	3C3 (without salt spray)
relative humidity during operation	10 ... 95 %
<b>Main circuit</b>	
<b>number of poles for main current circuit</b>	3
<b>design of the switching contact</b>	electromechanical
<b>adjustable current response value current of the current-dependent overload release</b>	3.5 ... 32 A
<b>type of the motor protection</b>	solid-state
<b>type of voltage for main current circuit</b>	AC
utilization category according to IEC 60947-4-1	AC-3e
<b>operating voltage</b>	
• rated value	690 V
• at AC-3 rated value maximum	690 V
• at AC-3e rated value maximum	690 V
<b>operating frequency rated value</b>	50 ... 60 Hz
<b>operational current rated value</b>	32 A
<b>operational current</b>	
• at AC-3	
— at 400 V rated value	32 A
— at 440 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
• at AC-3e	
— at 400 V rated value	32 A
— at 440 V rated value	32 A
— at 500 V rated value	32 A
— at 690 V rated value	21 A
<b>operating power</b>	
• at AC-3	
— at 400 V rated value	15 000 W
— at 500 V rated value	15 000 W
— at 690 V rated value	18 500 W
• at AC-3e	
— at 400 V rated value	15 000 W
— at 500 V rated value	15 000 W
— at 690 V rated value	18 500 W
<b>Control circuit/ Control</b>	
<b>type of voltage of the control supply voltage</b>	DC
closing delay at DC	50 ... 170 ms
opening delay at DC	30 ... 50 ms
<b>Auxiliary circuit</b>	
<b>product component auxiliary switch</b>	No
<b>product extension auxiliary switch</b>	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	1.3 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	400 A
<b>UL/CSA ratings</b>	
conditional short-circuit current (I <sub>q</sub> ) with type of coordination 1	
• at 480 AC Y/277 V rated value	50 000 A
• at AC 600 Y/347 V rated value	30 000 A
operating voltage	
• according to UL 60947 rated value	480 V
• at AC at 60 Hz according to CSA and UL rated value	480 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	1 000 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	70 000 A
conditional short-circuit current (I <sub>q</sub> ) with type of coordination 2	
• at 230 V rated value	150 000 A
• at 400 V rated value	150 000 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	269 mm
width	90 mm
depth	174 mm
required spacing	
• for grounded parts at 400 V	
— downwards	10 mm

— upwards	30 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
• for live parts at 400 V	
— downwards	10 mm
— upwards	30 mm
— backwards	0 mm
— at the side	9 mm
— forwards	0 mm
• for grounded parts at 500 V	
— downwards	10 mm
— upwards	30 mm
— backwards	0 mm
— at the side	20 mm
— forwards	0 mm
• for live parts at 500 V	
— downwards	10 mm
— upwards	30 mm
— backwards	0 mm
— at the side	20 mm
— forwards	0 mm
• for grounded parts at 690 V	
— downwards	10 mm
— upwards	80 mm
— at the side	20 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	10 mm
— upwards	80 mm
— at the side	20 mm
— forwards	0 mm
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	No
<b>type of electrical connection</b>	
• for main current circuit	spring-loaded terminals
• for auxiliary and control circuit	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>	
• for main contacts	
— solid	2x (1 ... 10 mm <sup>2</sup> )
— stranded	2x (1 ... 10 mm <sup>2</sup> )
— finely stranded with core end processing	2x (1 ... 6 mm <sup>2</sup> )
• for AWG cables for main contacts	2x 18 ... 8
<b>connectable conductor cross-section for main contacts</b>	
• solid	1 ... 10 mm <sup>2</sup>
• stranded	1 ... 10 mm <sup>2</sup>
• finely stranded with core end processing	1 ... 6 mm <sup>2</sup>
<b>type of connectable conductor cross-sections at the inputs for supply voltage</b>	
• solid	0.2 ... 1.5 mm <sup>2</sup>
• finely stranded without core end processing	0.2 ... 1.5 mm <sup>2</sup>
• finely stranded with core end processing	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
<b>Communication/ Protocol</b>	
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
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[Type Test Certificates/Test Report](#)

[Confirmation](#)

other	Environment
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[Environmental Confirmations](#)

#### Further information

Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

Information- and Downloadcenter (Catalogs, Brochures,...)

<https://www.siemens.com/ic10>

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA8522-4EE10>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA8522-4EE10>

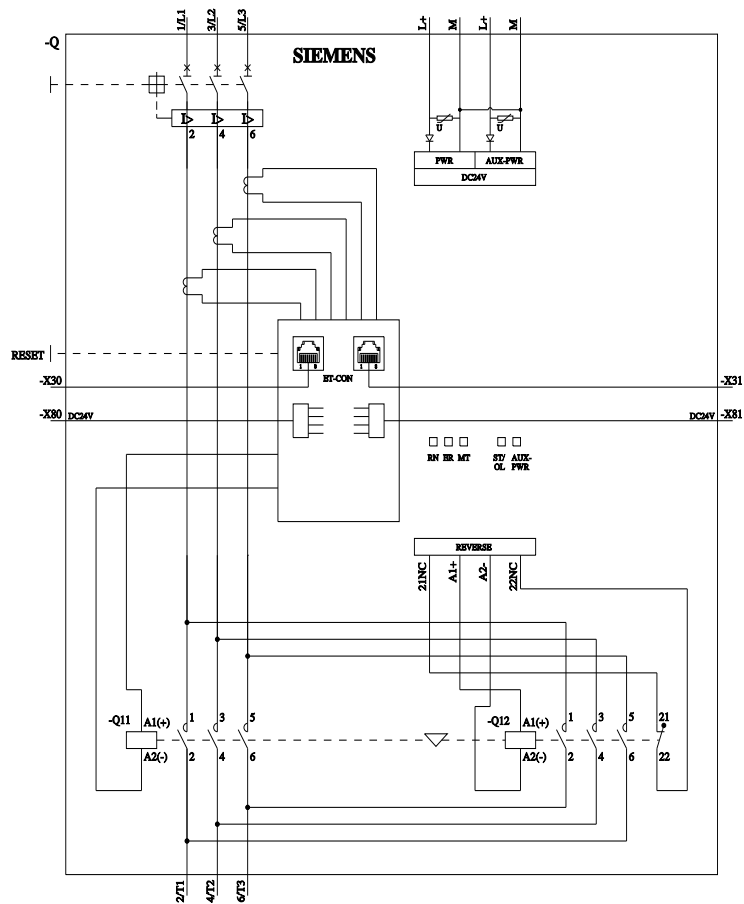
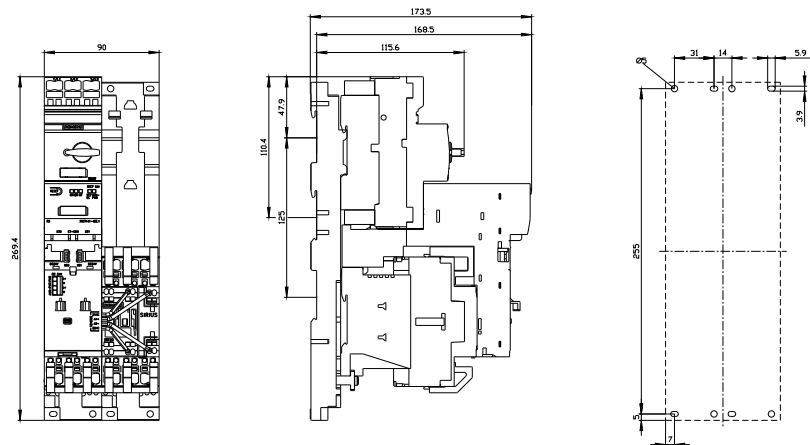
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3RA8522-4EE10>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3RA8522-4EE10&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA8522-4EE10&lang=en)

Characteristic: Tripping characteristics, I<sub>t</sub>, Let-through current



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