SIEMENS

Data sheet 3RC7141-1KE10



intelligent link module reversing starter high feature 1.2-12 A up to 690 V AC frame size S00 for 3RV2.1 and 3RT2.1 for ET 200SP system

| product brand name | SIRIUS | | |
|--|--|--|--|
| design of the product | reversing starter high feature | | |
| product type designation | 3RC7 | | |
| General technical data | | | |
| number of monitored phases | 3 | | |
| suitability for use | | | |
| direct starter | No | | |
| reversing starter | Yes | | |
| product function external reset | Yes | | |
| product component RESET button | Yes | | |
| design of the overcurrent release | electronic | | |
| type of current for monitoring | AC | | |
| size of the circuit-breaker | S00 | | |
| size of contactor can be combined company-specific | S00 | | |
| product function | | | |
| remote firmware update | Yes | | |
| for power supply reverse polarity protection | Yes | | |
| 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 | 2 | | |
| overvoltage category | 3 | | |
| surge voltage resistance rated value | 6 kV | | |
| 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 | | |
| operating frequency maximum | 3 600 1/h | | |
| mechanical service life (operating cycles) typical | 10 000 000 | | |
| reference code according to IEC 81346-2 | F | | |
| 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 | 0.26 kg | | |
| Ambient conditions | | | |
| installation altitude at height above sea level maximum | 2 000 m | | |
| ambient temperature | | | |
| during operation | -20 +60 °C | | |
| during storage | -40 +80 °C | | |

| e during transport | -40 +80 °C | | |
|---|-----------------------------------|--|--|
| during transport | | | |
| environmental category during operation according to IEC 60721 | 3C3 (without salt spray) | | |
| relative humidity during operation | 10 95 % | | |
| Main circuit | | | |
| number of poles for main current circuit | 3 | | |
| 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 AC | | |
| operating voltage | | | |
| rated value | 690 V | | |
| at AC-3 rated value maximum | 690 V | | |
| at AC-3e rated value maximum | 690 V | | |
| operating frequency rated value | 50 60 Hz | | |
| operational current rated value | 12 A | | |
| Auxiliary circuit | | | |
| 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 | | |
| Protective and monitoring functions | | | |
| 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 | | |
| active current monitoring | No | | |
| operating hours counter | Yes | | |
| trip class | CLASS 10E / CLASS 20E | | |
| design of the overload release | electronic | | |
| UL/CSA ratings | | | |
| operating voltage | 600 V | | |
| according to UL 60947 rated value at AC at 60 Hz according to CSA and UL rated value | 600 V 600 V | | |
| Installation/ mounting/ dimensions | | | |
| mounting position | horizontal | | |
| fastening method | clip-on | | |
| height | 103 mm | | |
| width | 45 mm | | |
| depth | 130 mm | | |
| Connections/ Terminals | | | |
| type of electrical connection for supply voltage line-side | spring-loaded terminals (push-in) | | |
| type of connectable conductor cross-sections at the inputs for supply voltage | | | |
| • solid | 0.2 1.5 mm² | | |
| finely stranded without core end processing | 0.2 1.5 mm² | | |
| finely stranded with core end processing | 0.2 1.0 mm² | | |
| type of connectable conductor cross-sections at the inputs for supply voltage for AWG cables solid | 24 16 | | |
| Electrical Safety | | | |
| | | | |

| touch protection on the front according to IEC 60529 | finger-safe | | | | |
|---|---|-------------------|-------|--|--|
| Communication/ Protocol | | | | | |
| product function bus communication | Yes | | | | |
| address space memory of address range | | | | | |
| • of the inputs | 16 byte | | | | |
| of the outputs | 2 byte | | | | |
| type of electrical connection of the communication interface | RJ45 | | | | |
| Electromagnetic compatibility | | | | | |
| EMC emitted interference according to IEC 60947-1 | environment A | | | | |
| EMC immunity according to IEC 60947-1 | environment A | | | | |
| conducted interference | | | | | |
| 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 | | | | |
| field-based interference according to IEC 61000-4-3 | 10 V/m | | | | |
| electrostatic discharge according to IEC 61000-4-2 | 6 kV contact discharge / 8 kV air discharge | | | | |
| conducted HF interference emissions according to CISPR11 | Class A for industrial environment | | | | |
| field-bound HF interference emission according to CISPR11 | Class A for industrial environment | | | | |
| Supply voltage | | | | | |
| type of voltage of the supply voltage | DC | | | | |
| supply voltage 1 at DC rated value | | | | | |
| minimum permissible | 19.2 V | | | | |
| maximum permissible | 28.8 V | | | | |
| auxiliary voltage at DC rated value | 20.4 28.8 V | | | | |
| supply voltage at DC rated value | 24 V | | | | |
| inrush current peak with supply voltage at DC at 24 V | 1.25 A | | | | |
| duration of inrush current peak with supply voltage at DC at 24 $\ensuremath{\text{V}}$ | 5 ms | | | | |
| power loss [W] at supply voltage at DC at 24 V | 0.5 W | | | | |
| Approvals Certificates | | | | | |
| General Product Approval | EMV | Test Certificates | other | | |









Type Test Certificates/Test Report

Confirmation

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=3RC7141-1KE10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RC7141-1KE10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RC7141-1KE10

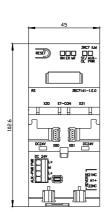
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

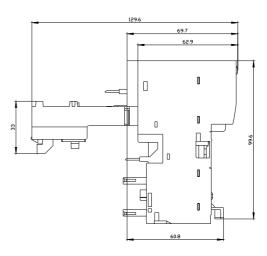
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RC7141-1KE10&lang=en

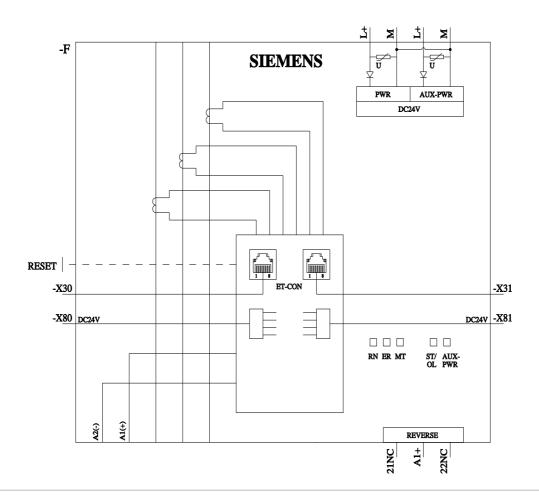
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RC7141-1KE10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RC7141-1KE10&objecttype=14&gridview=view1







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