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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
product designation	Intelligent link module
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
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

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● during transport	-40 ... +80 °C
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
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	
● according to UL 60947 rated value	600 V
● at AC at 60 Hz according to CSA and UL rated value	600 V
Installation/ mounting/ dimensions	
mounting position	vertical, on horizontal standard mounting rail
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	

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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 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
CE EG-Konf. UKCA CCC UL RCM		Type Test Certificates/Test Report

other

Confirmation

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
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

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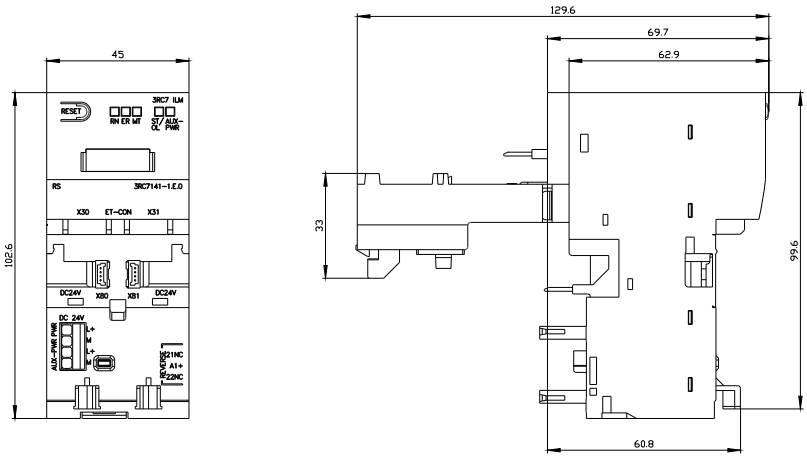
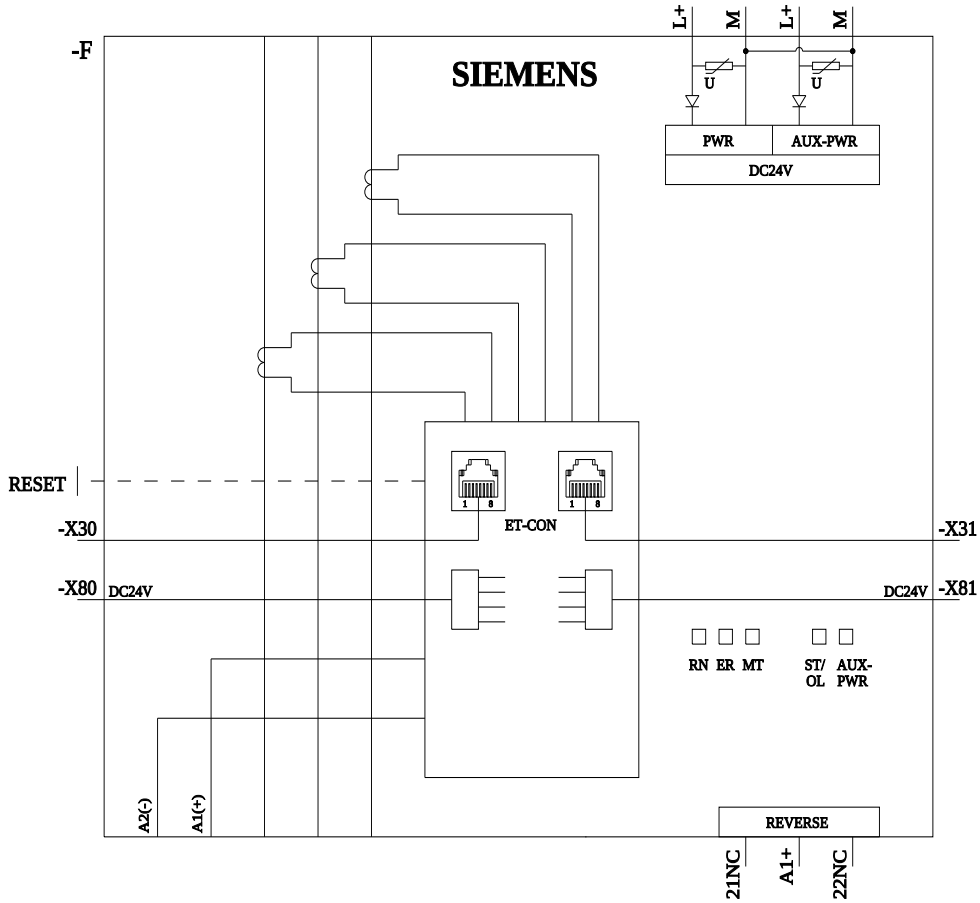
Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RC7141-1KE10&objecttype=14&gridview=view1





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