SIEMENS

Data sheet

3RU2126-1CB0



Overload relay 1.8...2.5 A Thermal For motor protection Size S0, Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
General technical data	
size of overload relay	S0
size of contactor can be combined company-specific	SO
power loss [W] for rated value of the current at AC in hot	5.7 W
operating state	
• per pole	1.9 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
 between auxiliary and auxiliary circuit 	440 V
 between auxiliary and auxiliary circuit 	440 V
 between main and auxiliary circuit 	440 V
 between main and auxiliary circuit 	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 98 ATEX G 001
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
 during operation 	-40 +70 °C
 during storage 	-55 +80 °C
during transport	-55 +80 °C
temperature compensation	-40 +60 °C
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	1.8 2.5 A
operating voltage	
 rated value 	690 V
 at AC-3e rated value maximum 	690 V
operating frequency rated value	50 60 Hz

operational current rated value	2.5 A
operational current at AC-3e at 400 V rated value	2.5 A
operating power	
• at AC-3	
— at 400 V rated value	0.75 kW
— at 500 V rated value	1.1 kW
— at 690 V rated value	1.5 kW
• at AC-3e	
— at 400 V rated value	0.75 kW
— at 500 V rated value	1.1 kW
— at 690 V rated value	1.5 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1
• note	for contactor disconnection
number of NO contacts for auxiliary contacts	1
note	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	3 A
• at 24 v • at 110 V	3 A
• at 120 V	3 A 2 A
• at 125 V	3 A
• at 230 V	2 A
• at 400 V	1 A
operational current of auxiliary contacts at DC-13	
• at 24 V	2 A
• at 60 V	0.3 A
• at 110 V	0.22 A
• at 125 V	0.22 A
• at 220 V	0.11 A
contact rating of auxiliary contacts according to UL	B600 / R300
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	2.5 A
 at 600 V rated value 	2.5 A
Short-circuit protection	
design of the fuse link	
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A
Installation/ mounting/ dimensions	
	201/
mounting position	any Contactor mounting
fastening method	Contactor mounting
height	85 mm
width	45 mm
depth	85 mm
Connections/ Terminals	
product component removable terminal for auxiliary	No
and control circuit	
type of electrical connection	
• for main current circuit	screw-type terminals
for auxiliary and control circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
- for main contact	
 for main contacts — solid or stranded 	2x (1 2.5 mm²), 2x (2.5 10 mm²)

 finely stranded with core end processing at AWG cables for main contacts 	2x (1 2.5 mm ²), 2x (2.5 6 mm ²), 1x 10 mm ²	
	2x (20 16), 2x (20 18), 2x 12	
type of connectable conductor cross-sections		
 for auxiliary contacts 		
— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
 at AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)	
tightening torque		
 for main contacts with screw-type terminals 	2 2.5 N·m	
 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m	
design of screwdriver shaft	Diameter 5 6 mm	
size of the screwdriver tip	Pozidriv PZ 2	
design of the thread of the connection screw		
• for main contacts	M4	
 of the auxiliary and control contacts 	M3	
Safety related data	NIO	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT	
MTTF with high demand rate	2 280 y	
T1 value for proof test interval or service life according to IEC 61508	20 у	
protection class IP on the front according to IEC 60529	IP20	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
Display		
display version for switching status	Slide switch	
Certificates/ approvals		
Certificates/ approvals		For use in bazard
Certificates/ approvals General Product Approval		For use in hazard-
		For use in hazard- ous locations
	²⁰ ••••••••••••••••••••••••••••••••••••	
General Product Approval	²ⁿ EAC	
General Product Approval	^{on} EAC	ous locations
General Product Approval	2n EFFC UL Test Certificates	ous locations
General Product Approval Confirmation	Test Certificates	OUS locations
General Product Approval Confirmation	Test Certificates	ous locations
General Product Approval Confirmation Confirmation Confirmation Confirmation For use in hazard- Declaration of Conformity	Test Certificates	ous locations
General Product Approval Confirmation	Test Certificates	ous locations
General Product Approval Confirmation	Test Certificates	ous locations
General Product Approval Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation	Test Certificates	ous locations
General Product Approval Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation	Test Certificates	ous locations
General Product Approval Confirmation Image: Confirmation of Conformity Image: Confirmation of Conformity Image: Confirmation of Confirmation of Confirmation of C	Test Certificates	ous locations
General Product Approval Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation For use in hazard- ous locations Declaration of Conformity Confirmation Confirmation Confirmation Confirmation	Test Certificates	ous locations
General Product Approval Confirmation Image: Confirmation of Conformity Image: Confirmation of Conformity Image: Confirmation of Confirmati	Test Certificates	ous locations
General Product Approval Confirmation Image: Confirmation of Conformity Image: Confirmation of Conformity Image: Confirmation of Confirmatio of Confirmation of Confirmation of Confirm	Test Certificates	ous locations
General Product Approval Confirmation Image: Confirmation of Conformity Image: Confirmation of Conformity Image: Confirmation of Confirmati	Test Certificates	ous locations

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=3RU2126-1CB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-1CB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1CB0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-1CB0&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1CB0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1CB0&objecttype=14&gridview=view1

last modified:

3/8/2022 🖸