SIEMENS

Data sheet 3RU2126-4CB0



Overload relay 17...22 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	S0
power loss [W] for rated value of the current at AC in hot operating state	8.1 W
• per pole	2.7 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 protective separation	
 in networks with ungrounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with ungrounded star point between main and auxiliary circuit 	440 V
 in networks with grounded star point between main and auxiliary circuit 	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.189 kg
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 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
global warming potential [CO2 eq] total	56.6 kg
global warming potential [CO2 eq] during manufacturing	1.21 kg
global warming potential [CO2 eq] during sales	0.047 kg
global warming potential [CO2 eq] during operation	55.4 kg
global warming potential [CO2 eq] after end of life	-0.027 kg
Main circuit	
number of poles for main current circuit	3

adjustable current response value current of the current-	17 22 A
dependent overload release	
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	22 A
operational current at AC-3e at 400 V rated value	22 A
operating power	
• at AC-3	
— at 400 V rated value	11 kW
— at 500 V rated value	11 kW
— at 690 V rated value	18.5 kW
• at AC-3e	
— at 400 V rated value	11 kW
— at 500 V rated value	11 kW
— at 690 V rated value	18.5 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 110 V	3 A
• at 120 V	3 A
• at 125 V	3 A
• at 230 V	2 A
• at 400 V	1A
• at 690 V	0.75 A
operational current of auxiliary contacts at DC-13	0.70 A
• 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	B000 / R300
	CLASS 10
trip class	
design of the overload release	thermal
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	22.4
at 480 V rated value	22 A
at 600 V rated value	22 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	
mounting position	for mounting on contactors: with a vertical mounting plane +/-135° rotatable & +/- 22.5° tiltable, stand-alone installation: with a vertical mounting plane +/-135° rotatable and +/-45° tiltable; for more details see manual
fastening method	Contactor mounting
height	85 mm
width	45 mm
depth	85 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
for main current circuit	screw-type terminals

arrangement of electrical connectors for main current circuit type of connectable conductor cross-sections of or main contacts — solid or stranded — finely stranded with core end processing of or AWG cables for main contacts 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 1x 10 mm² 2x (1	for auxiliary and control circuit	screw-type terminals
• for main contacts — solid or stranded — finely stranded with core end processing • for AWG cables for main contacts — solid or stranded • for auxiliary contacts — solid or stranded — finely stranded with core end processing • for auxiliary contacts — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — finely stranded with core end processing • for AWG cables for auxiliary contacts • for auxiliary contacts • for main contacts with screw-type terminals • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals design of screwdriver shaft blameter 5 6 mm size of the screwdriver tip design of the thread of the connection screw • for main contacts • for main contacts M4 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value		Top and bottom
- solid or stranded - finely stranded with core end processing • for AWG cables for main contacts • for AWG cables for main contacts • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts • for for AWG cables for auxiliary contacts • for auxiliary contacts with screw-type terminals • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • 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 design of the thread of the connection screw • for main contacts • for main contacts M4 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	type of connectable conductor cross-sections	
- finely stranded with core end processing • for AWG cables for main contacts 2x (1 2.5 mm³), 2x (2.5 6 mm²), 1x 10 mm² 2x (16 12), 2x (14 8) type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14) tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for main contacts • for main contacts	• for main contacts	
• for AWG cables for main contacts type of connectable conductor cross-sections • for auxiliary contacts	— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)
type of connectable conductor cross-sections • for auxiliary contacts — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 0.8 1.2 N·m design of screwdriver shaft plameter 5 6 mm size of the screwdriver tip Pozidriv PZ 2 design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts M4 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 finely stranded with core end processing 	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
• for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • for main contacts with screw-type terminals • for auxiliary part of the connection screw • for main contacts • of the auxiliary and control contacts M4 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 1 2 280 a IEC 61508 T1 value	 for AWG cables for main contacts 	2x (16 12), 2x (14 8)
solid or stranded finely stranded with core end processing finely stranded with core end processing for AWG cables for auxiliary contacts for AWG cables for auxiliary contacts for main contacts with screw-type terminals for auxiliary contacts with screw-type terminals for main contacts for main co	type of connectable conductor cross-sections	
- finely stranded with core end processing • for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14) tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 for auxiliary contacts 	
• for AWG cables for auxiliary contacts tightening torque • for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	— solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
tightening torque • for main contacts with screw-type terminals • 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 • of the auxiliary and control contacts M4 • of the auxiliary and control contacts failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
• for main contacts with screw-type terminals • for auxiliary contacts with screw-type terminals • for auxiliary contacts with screw-type terminals 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 • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)
for auxiliary contacts with screw-type terminals design of screwdriver shaft Diameter 5 6 mm Size of the screwdriver tip Pozidriv PZ 2 design of the thread of the connection screw of the auxiliary and control contacts M4 of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	tightening torque	
design of screwdriver shaft size of the screwdriver tip Pozidriv PZ 2 design of the thread of the connection screw of or main contacts of the auxiliary and control contacts failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 for main contacts with screw-type terminals 	2 2.5 N·m
size of the screwdriver tip design of the thread of the connection screw of or main contacts of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 for auxiliary contacts with screw-type terminals 	0.8 1.2 N·m
design of the thread of the connection screw • for main contacts • of the auxiliary and control contacts M3 Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 1 2 280 a IEC 61508 T1 value	design of screwdriver shaft	Diameter 5 6 mm
for main contacts of the auxiliary and control contacts Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	size of the screwdriver tip	Pozidriv PZ 2
● of the auxiliary and control contacts Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	design of the thread of the connection screw	
Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	• for main contacts	M4
failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	 of the auxiliary and control contacts 	M3
31920 MTTF with high demand rate 2 280 a IEC 61508 T1 value	Safety related data	
IEC 61508 T1 value		50 FIT
T1 value	MTTF with high demand rate	2 280 a
	IEC 61508	
• for proof test interval or service life according to IEC. 20 a	T1 value	
61508	 for proof test interval or service life according to IEC 61508 	20 a
Electrical Safety	Electrical Safety	
protection class IP on the front according to IEC 60529 IP20	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	touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Display	Display	
display version for switching status Slide switch	display version for switching status	Slide switch
Approvals Certificates	Approvals Certificates	



General Product Approval











For use in hazard-

ous locations

For use in hazardous locations

Test Certificates

Maritime application



Miscellaneous

Type Test Certificates/Test Report

Special Test Certificate





Maritime application





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Miscellaneous

other

other Railway Environment





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=3RU2126-4CB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4CB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4CB0

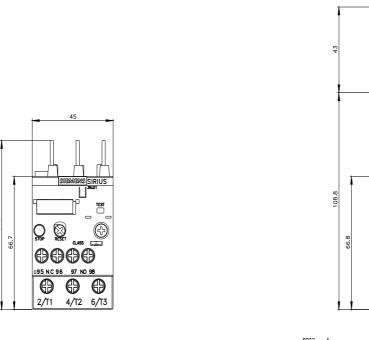
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

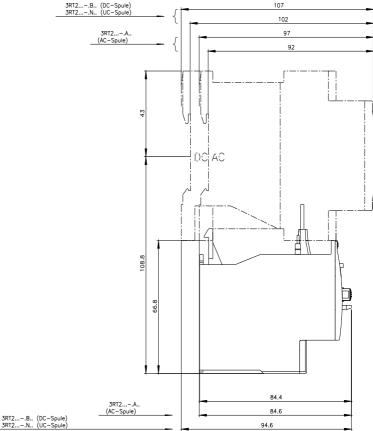
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4CB0&lang=en

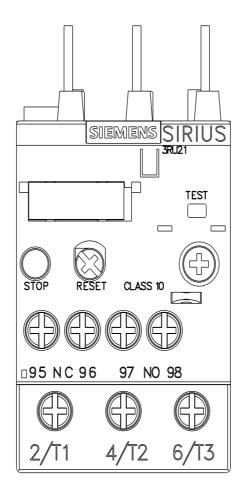
Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4CB0/char

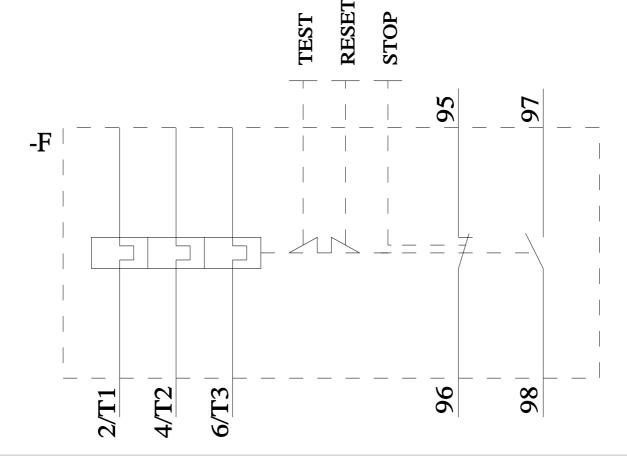
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4CB0&objecttype=14&gridview=view1









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