## **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	S0
power loss [W] for rated value of the current at AC in hot operating state	5.7 W
• 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	
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	440 V
between main and auxiliary circuit	440 V
shock resistance acc. 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 acc. to IEC 81346-2	F
Substance Prohibitance (Date)	01.10.2009 00:00:00
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-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
■ rateu value	000 V

at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	2.5 A
operating power at AC-3	
<ul> <li>at 400 V rated value</li> </ul>	0.75 kW
<ul> <li>at 500 V rated value</li> </ul>	1.1 kW
<ul> <li>at 690 V rated value</li> </ul>	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"  0
number of CO contacts for auxiliary contacts	U
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	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	
r rotoctivo and momentum tamotiono	
	CLASS 10
trip class	CLASS 10
trip class design of the overload release	CLASS 10 thermal
trip class design of the overload release UL/CSA ratings	
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal 2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal  2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	thermal  2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch	thermal 2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection design of the fuse link	thermal  2.5 A  2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch	thermal  2.5 A  2.5 A
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required	thermal  2.5 A  2.5 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	2.5 A 2.5 A fuse gG: 6 A, quick: 10 A
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position fastening method	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position fastening method height	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position fastening method height width depth  Connections/ Terminals	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 85 mm 45 mm 85 mm
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any  Contactor mounting 85 mm 45 mm 85 mm
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value  Short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions mounting position fastening method height width depth  Connections/ Terminals product component removable terminal for auxiliary and control circuit	thermal  2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No  No
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No
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trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No  No
trip class design of the overload release  UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No  No
trip class design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor	thermal  2.5 A 2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm  No  No  screw-type terminals screw-type terminals Top and bottom  2x (1 2,5 mm²), 2x (2,5 10 mm²)
trip class  design of the overload release  UL/CSA ratings  full-load current (FLA) for 3-phase AC motor  • at 480 V rated value  • at 600 V rated value  Short-circuit protection  design of the fuse link  • for short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  Connections/ Terminals  product component removable terminal for auxiliary and control circuit  type of electrical connection  • for main current circuit  • for auxiliary and control circuit  arrangement of electrical connectors for main current circuit  type of connectable conductor cross-sections  • for main contacts	thermal  2.5 A 2.5 A  2.5 A  fuse gG: 6 A, quick: 10 A  any Contactor mounting 85 mm 45 mm 85 mm No  No  screw-type terminals screw-type terminals Top and bottom

type of connectable conductor cross-sections	
<ul> <li>for auxiliary contacts</li> </ul>	
<ul><li>— solid or stranded</li></ul>	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)
<ul> <li>finely stranded with core end processing</li> </ul>	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>	2x (20 16), 2x (18 14)
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>	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
<ul> <li>of the auxiliary and control contacts</li> </ul>	M3
Safety related data	
failure rate [FIT] with low demand rate acc. to SN 31920	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP20
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front
Display	
display version for switching status	Slide switch
Certificates/ approvals	



**General Product Approval** 









For use in hazardous locations



Declaration	of
Conformity	

**Test Certificates** 

Marine / Shipping



Type Test Certificates/Test Report

Special Test Certificate







Marine / Shipping

other Railway









Confirmation

Vibration and Shock

## **Further information**

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

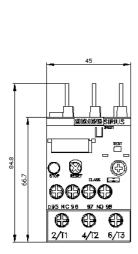
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

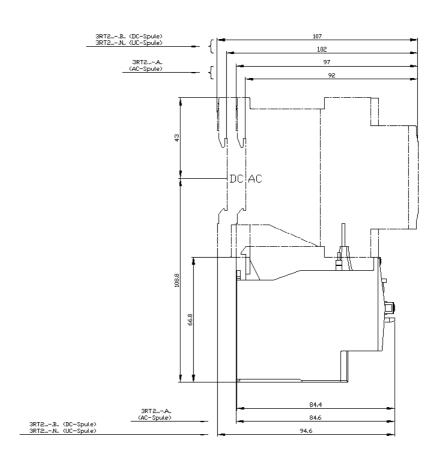
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1CB0

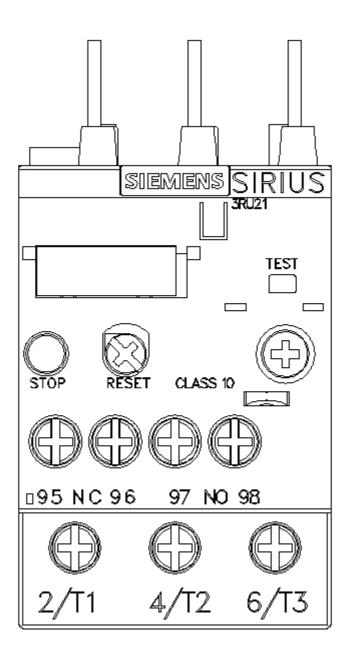
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

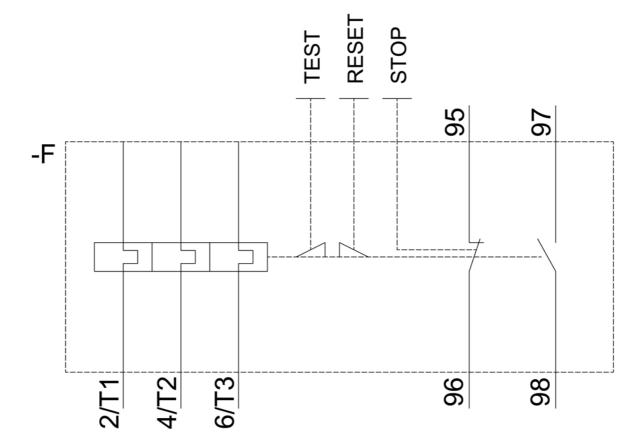
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2126-1CB0&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1CB0/char">https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1CB0/char</a>









last modified: 12/15/2020 🖸