SIEMENS

Data sheet 3RU2126-4NB0



Overload relay 23...28 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	9.6 W
• per pole	3.2 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 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
SVHC substance name	Blei - 7439-92-1
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	23 28 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	28 A
operational current at AC-3e at 400 V rated value	28 A

operating power	
• at AC-3	
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	22 kW
• at AC-3e	
— at 400 V rated value	15 kW
— at 500 V rated value	18.5 kW
— at 690 V rated value	22 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	
• 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
	0.1174
	B600 / R300
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	B600 / R300 CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release	CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings	CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release	CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A 28 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
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 A 28 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
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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	CLASS 10 thermal 28 A 28 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
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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 — solid or stranded	CLASS 10 thermal 28 A 28 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)
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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 — solid or stranded — finely stranded with core end processing	CLASS 10 thermal 28 A 28 A 28 A any Contactor mounting 85 mm 45 mm 85 mm No screw-type terminals screw-type terminals Top and bottom 2x (1 2.5 mm²), 2x (2.5 10 mm²) 2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²
contact rating of auxiliary contacts according to UL Protective and monitoring functions 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 — solid or stranded	CLASS 10 thermal 28 A 28 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)

 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)
 for 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	
	50 FIT
Safety related data failure rate [FIT] with low demand rate according to SN	50 FIT 2 280 a
Safety related data failure rate [FIT] with low demand rate according to SN 31920	
Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate	
Failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate IEC 61508 T1 value for proof test interval or service life according to	2 280 a
Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate IEC 61508 T1 value for proof test interval or service life according to IEC 61508	2 280 a
Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety	2 280 a 20 a
Safety related data failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529	2 280 a 20 a IP20
Failure rate [FIT] with low demand rate according to SN 31920 MTTF with high demand rate IEC 61508 T1 value for proof test interval or service life according to IEC 61508 Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529	2 280 a 20 a IP20

General Product Approval







Confirmation





For use in hazardous locations

Test Certificates

Marine / Shipping





Special Test Certificate

ate

Type Test Certificates/Test Report





Marine / Shipping





185







Miscellaneous

other

other

Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

 $\underline{\text{https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business}}$

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RU2126-4NB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4NB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4NB0

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

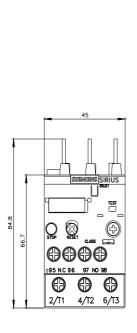
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4NB0&lang=en

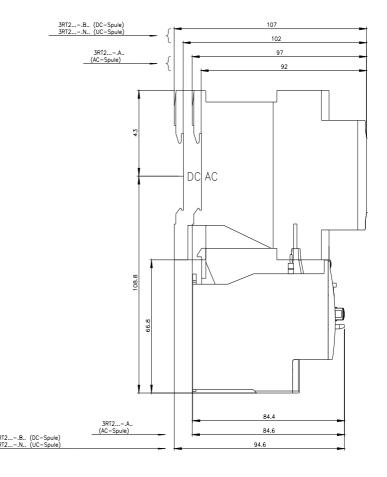
Characteristic: Tripping characteristics, I2t, Let-through current

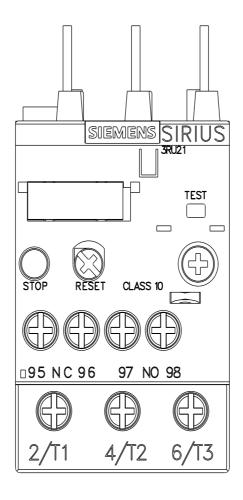
https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4NB0/char

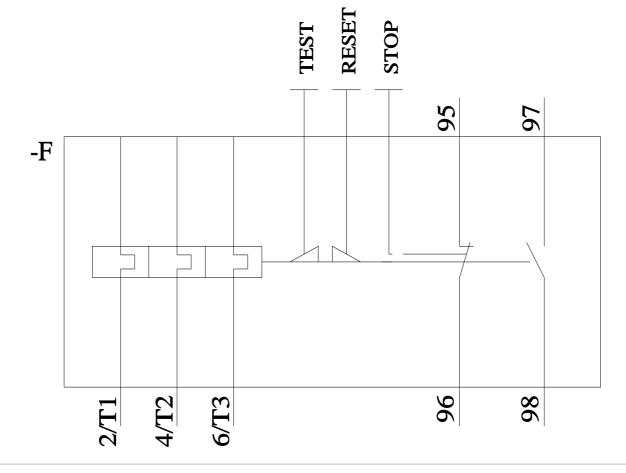
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-4NB0&objecttype=14&gridview=view1









last modified: 9/5/2023 🖸