SIEMENS

Data sheet 3RU2126-1FJ0



Overload relay 3.5...5.0 A Thermal For motor protection Size S0, Class 10 Contactor mounting Main circuit: Ring cable lug Auxiliary circuit: ring cable lug 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	6.6 W
• per pole	2.2 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
reference code according to 120 01340-2	
Substance Prohibitance (Date)	10/01/2009
	·
Substance Prohibitance (Date)	·
Substance Prohibitance (Date) Ambient conditions	10/01/2009
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum	10/01/2009
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature	10/01/2009 2 000 m
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation	10/01/2009 2 000 m -40 +70 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage	10/01/2009 2 000 m -40 +70 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 %
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 %
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 %
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 %
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 % 3 3.5 5 A
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3e rated value maximum	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 % 3 3.5 5 A
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage • during transport temperature compensation relative humidity during operation Main circuit number of poles for main current circuit adjustable current response value current of the current-dependent overload release operating voltage • rated value • at AC-3e rated value maximum operating frequency rated value	10/01/2009 2 000 m -40 +70 °C -55 +80 °C -55 +80 °C -40 +60 °C 10 95 % 3 3.5 5 A

• at AC 3	
at AC-3— at 400 V rated value	1.5 kW
— at 500 V rated value	2.2 kW
— at 690 V rated value ● at AC-3e	4 kW
■ at 400 V rated value	4 E IAM
	1.5 kW 2.2 kW
— at 500 V rated value — at 690 V rated value	4 kW
Auxiliary circuit	4 KVV
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	1 A
• 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
contact rating of auxiliary contacts according to UL	B600 / R300
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	CLASS 10 thermal
design of the overload release UL/CSA ratings	
design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal
design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	thermal 5 A
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
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	thermal 5 A
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 5 A 5 A
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 5 A
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A
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 5 A 5 A fuse gG: 6 A, quick: 10 A any
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 5 A 5 A fuse gG: 6 A, quick: 10 A
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 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting
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 5 A 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm
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 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm
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 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm
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	thermal 5 A 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection
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	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection
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 tightening torque	thermal 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection Top and bottom
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 tightening torque • for main contacts for ring cable lug	thermal 5 A 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection Top and bottom 2.5 2 N·m
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 tightening torque • for main contacts for ring cable lug • for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum design of screwdriver shaft	thermal 5 A 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection Top and bottom 2.5 2 N·m 0.8 1.2 N·m
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 tightening torque • for main contacts for ring cable lug • for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum	thermal 5 A 5 A 5 A fuse gG: 6 A, quick: 10 A any Contactor mounting 85 mm 45 mm 85 mm No Ring cable lug connection ring terminal lug connection Top and bottom 2.5 2 N·m 0.8 1.2 N·m 7.5 mm

 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	50 FIT	
MTTF with high demand rate	2 280 a	
T1 value for proof test interval or service life according to IEC 61508	20 a	
protection class IP on the front according to IEC 60529	IP00	
Display		
display version for switching status	Slide switch	
Certificates/ approvals		

General Product Approval

For use in hazardous locations



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping











Confirmation

other

Railway

Vibration and Shock

Further informatior

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

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=3RU2126-1FJ0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RU2126-1FJ0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1FJ0

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

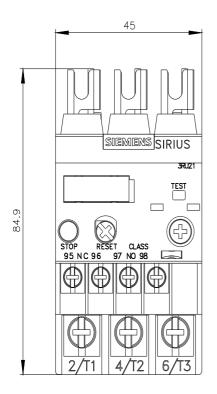
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-1FJ0\&lang=en}}$

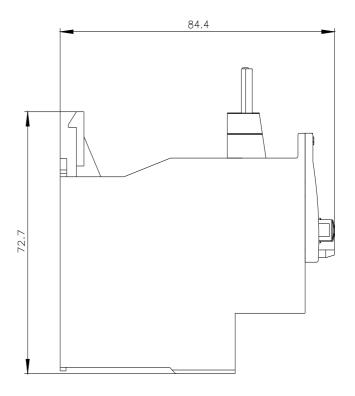
Characteristic: Tripping characteristics, I²t, Let-through current

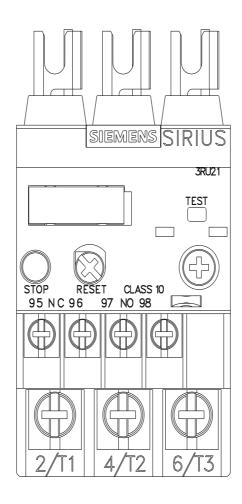
<u> https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-1FJ0/cha</u>

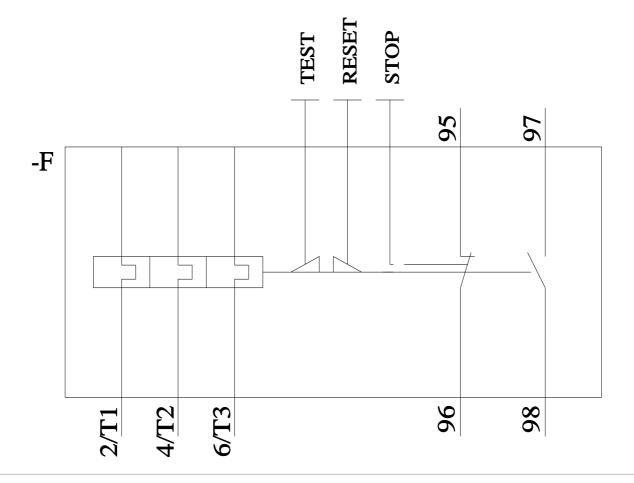
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2126-1FJ0&objecttype=14&gridview=view1









last modified: 3/8/2022 🖸