

overload relay 20...25 A thermal for motor protection frame size S0, Class 10 for mounting on contactors main circuit: spring-loaded terminal auxiliary circuit: spring-loaded terminal 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 Prohibittance (Date)	10/01/2009
Net Weight	0.234 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 %
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	20 ... 25 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	25 A
operational current at AC-3e at 400 V rated value	25 A
operating power	
• at AC-3	
— at 400 V rated value	11 kW
— at 500 V rated value	15 kW
— at 690 V rated value	22 kW
• at AC-3e	
— at 400 V rated value	11 kW
— at 500 V rated value	15 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	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	thermal

UL/CSA ratings

full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	25 A
• at 600 V rated value	25 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	102 mm
width	45 mm
depth	84 mm

Connections/ Terminals

product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
• for main current circuit	spring-loaded terminals
• for auxiliary and control circuit	spring-loaded terminals
arrangement of electrical connectors for main current circuit	Top and bottom
type of connectable conductor cross-sections	
• for main contacts	
— solid or stranded	1x (1 ... 10 mm²)
— finely stranded with core end processing	1x (1 ... 6 mm²)
— finely stranded without core end processing	1x (1 ... 6 mm²)
• for AWG cables for main contacts	1x (18 ... 8)
type of connectable conductor cross-sections	
• for auxiliary contacts	
— solid or stranded	2x (0.5 ... 2.5 mm²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²), 2x (0.75 ... 2.5 mm²)
— finely stranded without core end processing	2x (0.5 ... 1.5 mm²)

• for AWG cables for auxiliary contacts	2x (20 ... 14)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm
Safety related data	
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
MTTF with high demand rate	2 280 a
IEC 61508	
T1 value	20 a
• for proof test interval or service life according to IEC 61508	
Electrical Safety	
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
Approvals Certificates	
Environmental Product Declaration	
• global warming potential [CO2 eq] / during manufacturing	1.57 kg
• global warming potential [CO2 eq] / during sales	0.0608 kg
• global warming potential [CO2 eq] / during operation	55.4 kg
• global warming potential [CO2 eq] / after end of life	-0.0747 kg
• global warming potential [CO2 eq] / total	56.9 kg
Environment	General Product Approval



[Environmental Confirmations](#)



EG-Konf.



UL

General Product Approval	For use in hazardous locations	Test Certificates
 	 ATEX	 IECEX
		Special Test Certificate Type Test Certificates/Test Report

Maritime application					
ABS	BUREAU VERITAS	DNV	LRS	PRS	RINA

Maritime application	other	Railway
	Confirmation	
		Special Test Certificate

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=3RU2126-4DC0	
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RU2126-4DC0	

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2126-4DC0&lang=en

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2126-4DC0>

Characteristic curves

https://curves.simaris.siemens.com/curves/<mmp_prod_noCOMP='HAUPT'></mmp_prod_no>

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