SIEMENS

Data sheet

3RU2116-0GB0



Overload relay 0.45...0.63 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

needuct brend name	
product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
General technical data	
size of overload relay	S00
size of contactor can be combined company-specific	S00
power loss [W] for rated value of the current at AC in hot operating state	4.8 W
• per pole	1.6 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	0.157 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	
global warming potential [CO2 eq] total	39.9 kg
global warming potential [CO2 eq] during manufacturing	0.921 kg
global warming potential [CO2 eq] during sales	0.039 kg
global warming potential [CO2 eq] during operation	39 kg
global warming potential [CO2 eq] after end of life	-0.015 kg
Main circuit	
number of poles for main current circuit	3
adjustable current response value current of the current-	0.45 0.63 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	0.63 A
operational current at AC-3e at 400 V rated value	0.63 A
operating power	
• at AC-3	
— at 400 V rated value	0.18 kW
— at 500 V rated value	0.18 kW
— at 690 V rated value	0.25 kW
• at AC-3e	
— at 400 V rated value	0.18 kW
— at 500 V rated value	0.18 kW
— at 690 V rated value	0.25 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
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	0.6 A
at 400 V rated value	0.6 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 &
mounting position	+/- 22.5° tiltable, stand-alone installation: with a vertical mounting plane +/- 135° $+/-$ 135°
	rotatable and +/-45° tiltable
fastening method	Contactor mounting
height	76 mm
width	45 mm
depth	70 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	No
type of electrical connection	
for main current circuit	screw-type terminals

 for auxiliary and 	d control circuit	ol circuit screw-type terminals				
arrangement of elec circuit	trical connectors for main	n current	Top and bottom			
type of connectable	conductor cross-section	S				
 for main contact 	cts					
— solid or st	randed		2x (0,5 1,5 mm²), 2x (0,75 .	2,5 mm²), 2x 4 mm²		
 finely stranded with core end processing 			2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)			
for AWG cables for main contacts		2x (20 16), 2x (18 14), 2x 12				
	conductor cross-section	s				
 for auxiliary cor 		-				
— solid or st			2x (0.5 1.5 mm²), 2x (0.75 .	2.5 mm^2		
 — finely stranded with core end processing 		2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)				
for AWG cables for auxiliary contacts		2x (0.3 13) hini), 2x (0.7 3 2.3 hini) 2x (20 16), 2x (18 14)				
	s for auxiliary contacts		2X (20 10), 2X (10 14)			
tightening torque			0.0			
	 for main contacts with screw-type terminals 			0.8 1.2 N·m		
,	ntacts with screw-type term	inals	0.8 1.2 N·m			
	design of screwdriver shaft Diameter 5 6 mm					
size of the screwdriv	ver tip		Pozidriv PZ 2			
design of the thread	of the connection screw					
 for main contact 	cts		M3			
of the auxiliary	and control contacts		M3			
Safety related data						
failure rate [FIT] with 31920	n low demand rate accord	ling to SN	50 FIT			
MTTF with high dem	and rate		2 280 a			
IEC 61508						
T1 value						
 for proof test in 61508 	• for proof test interval or service life according to IEC 20 a		20 a			
Electrical Safety						
	on the front according to	IEC 60529	IP20			
			finger-safe, for vertical contact from the front			
Display						
display version for sw	itching status		Slide switch			
Approvals Certificates	5		Side switch			
	· · · · · · · · · · · · · · · · · · ·					
General Product Ap	proval				For use in hazard- ous locations	
	UK CA	CE EG-Konf.	(U) u	EHC	IECEx IECEx	
For use in hazardou	is locations	Test Certificate	es	Marine / Shipping		
K ATEX	<u>Miscellaneous</u>	<u>Type Test Cer</u> ates/Test Rep		ABS	BUREAU VERITAS	
Marine / Shipping					other	
Ĵ۵	Lloyds	(5)			<u>Miscellaneous</u>	
DNV	LRS	PRS	RINA	RMRS		
other	Railway	Environment				



Special Test Certificate



Environmental Confirmations

Further information

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=3RU2116-0GB0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-0GB0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0GB0

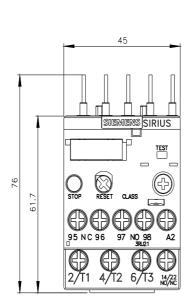
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

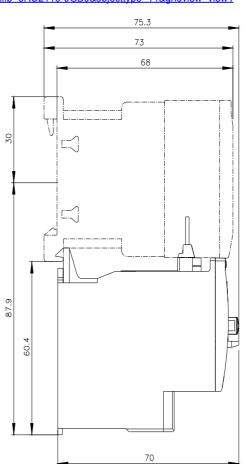
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-0GB0&lang=en

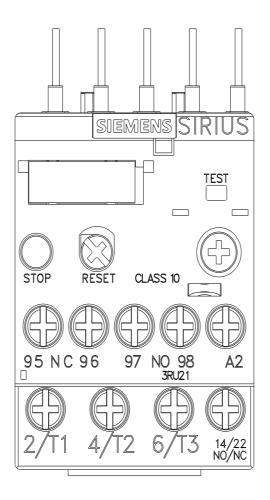
Characteristic: Tripping characteristics, I²t, Let-through current

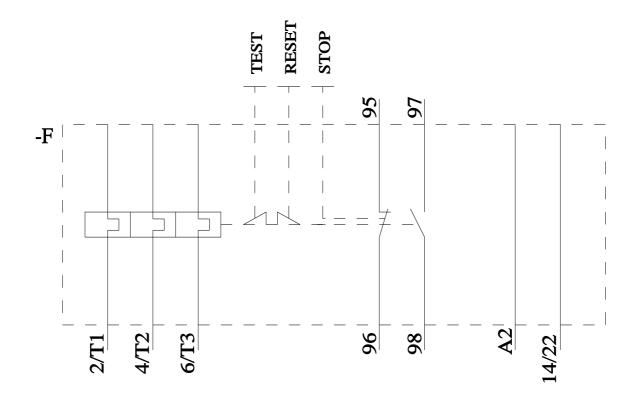
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0GB0/char Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0GB0&objecttype=14&gridview=view1









last modified:

4/1/2025 🖸