SIEMENS

Data sheet

3RU2116-0JC0



Overload relay 0.70...1.0 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

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 safe isolation 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 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 during operation 	-40 +70 °C
 ambient temperature during storage 	-55 +80 °C
 ambient temperature 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	0.7 1 A
 operating voltage rated value 	690 V
 operating voltage at AC-3 rated value maximum 	690 V

operating frequency rated value	50 60 Hz
operating frequency rated value	1A
operational current rated value operating power at AC-3	
at 400 V rated value	0.25 kW
at 500 V rated value	0.27 kW
at 690 V rated value	0.57 kW
	0.55 KW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	1 for each start discourse the
note	for contactor disconnection
number of NO contacts for auxiliary contacts	1 for more and "Trianger"
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 24 v • at 110 V	3 A
• at 120 V	3 A
• at 125 V	3 A
• at 230 V	2 A
• at 400 V operational current of auxiliary contacts at DC-13	1 A
• at 24 V	2 A
• at 24 V • at 60 V	0.3 A
• at 10 V	0.3 A 0.22 A
• at 125 V	0.22 A 0.22 A
• at 125 V • at 220 V	0.22 A 0.11 A
	B600 / R300
contact rating of auxiliary contacts according to UL	B0007 K300
Protective and monitoring functions	0140040
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	1 A
at 600 V rated value	1 A
Short-circuit protection	
design of the fuse link	
6	
 for short-circuit protection of the auxiliary switch 	fuse gG: 6 A, quick: 10 A
 for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	any
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	any Contactor mounting
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height	any Contactor mounting 87 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width	any Contactor mounting 87 mm 45 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth	any Contactor mounting 87 mm
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals	any Contactor mounting 87 mm 45 mm 70 mm
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and	any Contactor mounting 87 mm 45 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and control circuit	any Contactor mounting 87 mm 45 mm 70 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection	any Contactor mounting 87 mm 45 mm 70 mm
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for main current circuit	any Contactor mounting 87 mm 45 mm 70 mm No No
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for main current circuit for auxiliary and control circuit	any Contactor mounting 87 mm 45 mm 70 mm No Spring-loaded terminals spring-loaded terminals
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function removable terminal for auxiliary and control circuit type of electrical connection for main current circuit	any Contactor mounting 87 mm 45 mm 70 mm No No
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No Spring-loaded terminals spring-loaded terminals
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No Spring-loaded terminals spring-loaded terminals
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No Spring-loaded terminals spring-loaded terminals
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No No spring-loaded terminals spring-loaded terminals Top and bottom
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No No spring-loaded terminals spring-loaded terminals Top and bottom
• for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height width depth Connections/ Terminals product function 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	any Contactor mounting 87 mm 45 mm 70 mm No No spring-loaded terminals spring-loaded terminals Top and bottom $1x (0.5 4 mm^2)$ $1x (0.5 2.5 mm^2)$

	conductor cross-sec	tions				
 for auxiliary con 						
	— solid or stranded		2x (0.5 2.5 mm²)			
 finely stranded with core end processing 		2x (0.5 1.5 mm²), 2x (0.7	′5 2.5 mm²)			
•	nded without core end	processing	2x (0.5 1.5 mm²)			
 at 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 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 cont	tact from the front		
Display						
display version for sv	vitching status		Slide switch			
Certificates/ approva	ls					
General Product A	oproval			For use in hazardo	us locations	
		(UL)	EHC	IECE×	ATEX ATEX	
Declaration of Conformity Test Certifica		tes	Marine / Shipping			
CE EG-Konf.	<u>Miscellaneous</u>	<u>Special Tes</u> <u>Certificate</u>		ABS	BUREAU VERITAS	
Marine / Shipping					other	
Lloyd's Register urs	PRS	RINA	RAMES	DNV-GL DNV-GL	<u>Confirmation</u>	
Railway						
Vibration and Shock						
Further information						
https://www.siemens Industry Mall (Onlin		-				

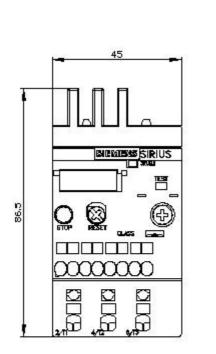
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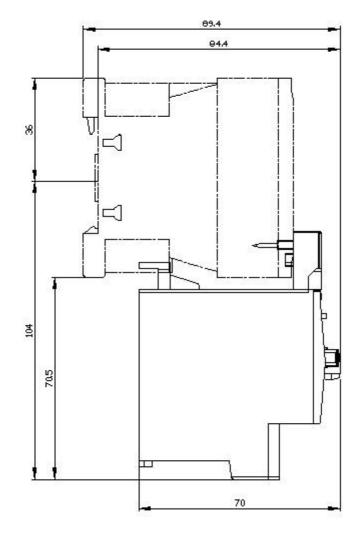
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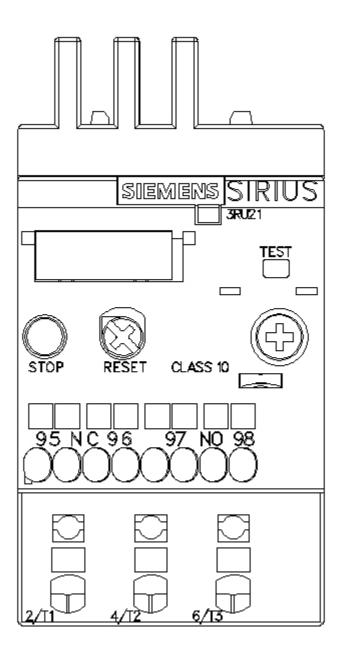
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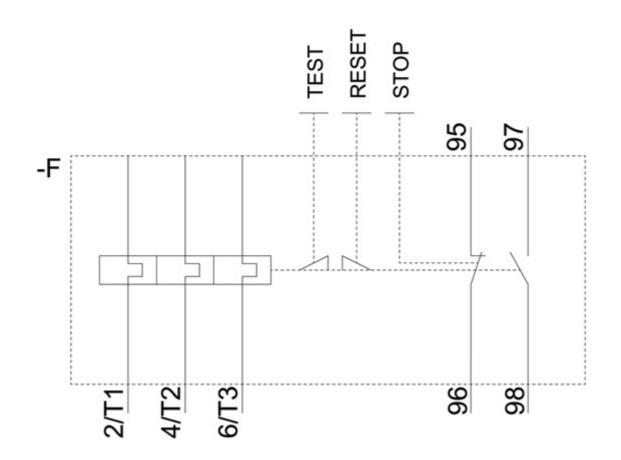
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0JC0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-0JC0&lang=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0JC0/char Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0JC0&objecttype=14&gridview=view1









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