## SIEMENS

## Data sheet

## 3RU2116-1HB0



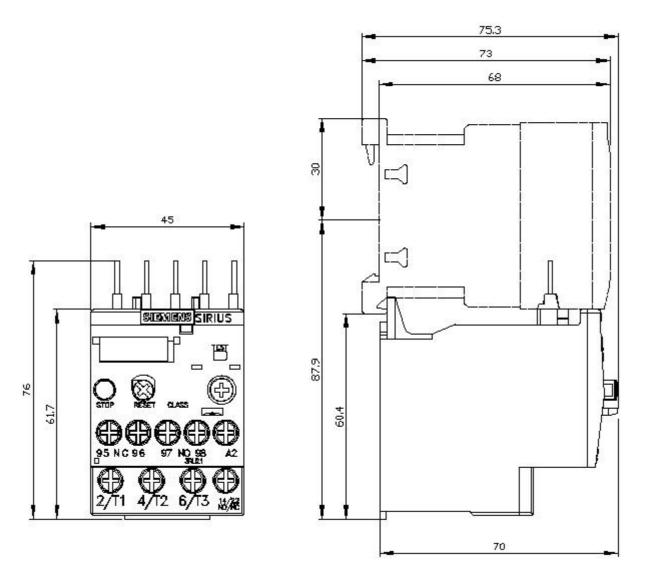
Overload relay 5.5...8.0 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

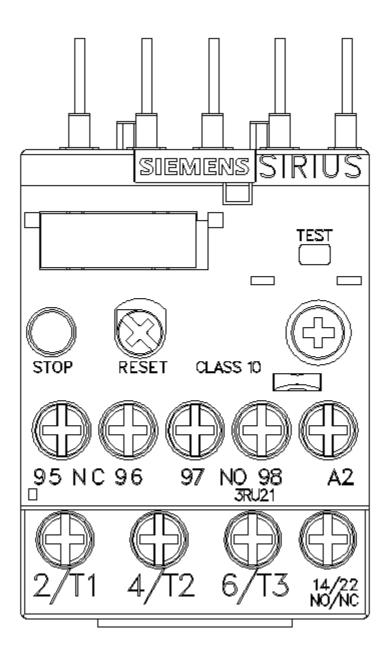
product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
General technical data	
size of overload relay	S00
size of contactor can be combined company-specific	S00
power loss [W] for rated value of the current at AC in hot operating state	6.6 W
per pole	2.2 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between auxiliary and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	440 V
<ul> <li>between main and auxiliary circuit</li> </ul>	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	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-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	5.5 8 A
operating voltage	
<ul> <li>rated value</li> </ul>	690 V

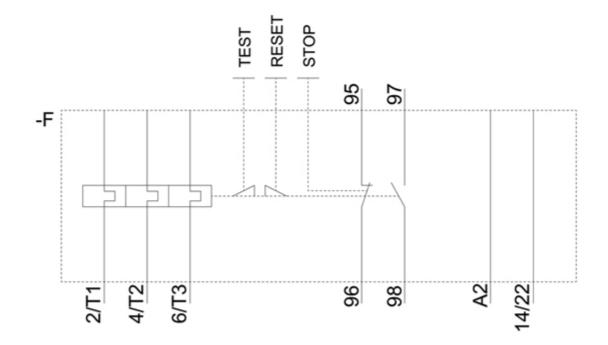
<ul> <li>at AC-3 rated value maximum</li> </ul>	690 V		
operating frequency rated value	50 60 Hz		
operational current rated value	8 A		
operating power at AC-3			
at 400 V rated value	3 kW		
• at 500 V rated value	4 kW		
• at 690 V rated value	5.5 kW		
Auxiliary circuit			
design of the auxiliary switch	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		
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		
trip class design of the overload release	CLASS 10 thermal		
•			
design of the overload release			
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 8 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 8 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	thermal 8 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	thermal 8 A 8 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 8 A 8 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         fastening method	thermal 8 A 8 A 9 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 8 A 8 A 9 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 8 A 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting		
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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 8 A 8 A 8 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A 9 A 9		
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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 function removable terminal for auxiliary and control circuit	thermal 8 A 8 A 8 A 9 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
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type of connectable c	onductor cross-se	ctions				
<ul> <li>for auxiliary containing</li> </ul>	acts					
— solid or stranded		2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²)				
<ul> <li>finely stranded with core end processing</li> </ul>		2x (0.5 1.5 mm²), 2				
<ul> <li>at AWG cables for auxiliary contacts</li> </ul>		2x (20 16), 2x (18 14)				
tightening torque						
<ul> <li>for main contacts with screw-type terminals</li> </ul>		0.8 1.2 N·m				
<ul> <li>for auxiliary contacts with screw-type terminals</li> </ul>			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			M3			
<ul> <li>of the auxiliary and control contacts</li> </ul>		М3				
Safety related data						
failure rate [FIT] with low	w demand rate acc.	to SN 31920	50 FIT			
MTTF with high dema	nd rate		2 280 y			
T1 value for proof test interval or service life acc. to		20 y				
IEC 61508						
protection class IP on the front acc. to IEC 60529		IP20				
touch protection on the front acc. to IEC 60529		finger-safe, for vertica	I contact from the front			
Display						
display version for switching status			Slide switch			
Certificates/ approvals						
General Product App	roval			For use in hazar	dous locations	
USA CSA	ccc	UL	נחנ	IECEx	ATEX	
Declaration of Confor	rmity	Test Certifica	ites	Marine / Shippin	g	
<u>Miscellaneous</u>	CE EG-Konf.	<u>Type Tes</u> <u>Certific-ates/</u> <u>Report</u>	<u>Special Tes</u> Test <u>Certific-ate</u>		B U REAU VERITAS	
Marine / Shipping					other	
Lloydis Register	(2)			DNV-GL	Confirmation	
LRS	PRS	RINA	RMRS	Derval LCORRAF		
urs Railway	PRS	RINA	RMRS	DAVEL LEXING		
	PRS	RINA	RMRS	Ewy2LEXXXX		
	PRS	RINA	RMRS	EW3LEDKA		

## Further information







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