SIEMENS

Data sheet

3RU2116-1CB0



Overload relay 1.8...2.5 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Screw Auxiliary circuit: Screw Manual-Automatic-Reset

product brand name SIRUS product designation thermal overload relay product type designation 3RU2 General technical data size of contactor can be combined company-specific S00 size of contactor can be combined company-specific S00 so0 power loss [W] for rated value of the current at AC in hot operating state 5.7 W - • per pole 1.9 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 main and auxiliary circuit 440 V - - • between main and auxiliary circuit 440 V - - • between main and auxiliary circuit 440 V - - • between main and auxiliary circuit 440 V - - • between main and auxiliary circuit 440 V - -	product brand name	SIRIUS
product type designation 3RU2 General technical data S00 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 5.7 W • 5.7 W • per pole 1.9 W insulation voltage with degree of pollution 3 at AC rated value 690 V surge voltage resistance rated value 680 V maximum permissible voltage for protective separation in networks with grounded star point 440 V • between auxiliary and auxiliary circuit 440 V • between auxiliary and auxiliary circuit 440 V • between main and auxiliary circuit		
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size of contactor can be combined company-specific S00 power loss [W] for rated value of the current at AC in hot operating state 5.7 W • per pole 1.9 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 440 V • between auxiliary and auxiliary circuit 440 V • between main and auxiliary circuit 440 V shock resistance enacording to IEC 80068-2-27 8g /1		000
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• between auxiliary and auxiliary circuit440 V• between main and auxiliary circuit440 V• shock resistance according to IEC 60068-2-278g / 11 ms• reference code according to IEC 81346-2F• Substance Prohibitance (Date)10/01/2009• SVHC substance nameLead - 7439-92-1Ambient conditions• Installation altitude at height above sea level maximum2 000 m• during operation-40 +70 °C• during storage-55 +80 °C• during transport-55 +80 °C• during transport-40 +60 °C		
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shock resistance according to IEC 60068-2-278g / 11 msreference code according to IEC 81346-2FSubstance Prohibitance (Date)10/01/2009SVHC substance nameLead - 7439-92-1Ambient conditions2 000 minstallation altitude at height above sea level maximum2 000 mambient temperature-• during operation-40 +70 °C• during storage-55 +80 °C• during transport-55 +80 °C• temperature compensation-40 +60 °C	 between main and auxiliary circuit 	440 V
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Substance Prohibitance (Date) 10/01/2009 SVHC substance name Lead - 7439-92-1 Ambient conditions 2 000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -40 +70 °C • during storage -55 +80 °C • during transport -55 +80 °C • during transport -40 +60 °C	shock resistance according to IEC 60068-2-27	8g / 11 ms
SVHC substance name Lead - 7439-92-1 Ambient conditions 2000 m installation altitude at height above sea level maximum 2 000 m ambient temperature -40 +70 °C • during operation -40 +70 °C • during storage -55 +80 °C • during transport -55 +80 °C • during transport -40 +60 °C	reference code according to IEC 81346-2	F
Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -40 +70 °C • during operation -40 +70 °C • during storage -55 +80 °C • during transport -55 +80 °C • temperature compensation -40 +60 °C	Substance Prohibitance (Date)	10/01/2009
installation altitude at height above sea level maximum 2 000 m ambient temperature -40 +70 °C • during operation -40 +70 °C • during storage -55 +80 °C • during transport -55 +80 °C temperature compensation -40 +60 °C	SVHC substance name	Lead - 7439-92-1
ambient temperature • during operation • during storage • during storage • during transport -55 +80 °C • temperature compensation -40 +60 °C	Ambient conditions	
• during operation -40 +70 °C • during storage -55 +80 °C • during transport -55 +80 °C temperature compensation -40 +60 °C	installation altitude at height above sea level maximum	2 000 m
• during storage -55 +80 °C • during transport -55 +80 °C temperature compensation -40 +60 °C	ambient temperature	
• during transport • during transport • compensation • -55 +80 °C • -40 +60 °C	during operation	-40 +70 °C
temperature compensation -40 +60 °C	during storage	-55 +80 °C
	 during transport 	-55 +80 °C
relative humidity during operation 10 95 %	temperature compensation	-40 +60 °C
	relative humidity during operation	10 95 %
Main circuit	Main circuit	
number of poles for main current circuit 3	number of poles for main current circuit	3
adjustable current response value current of the current- dependent overload release 1.8 2.5 A		1.8 2.5 A
operating voltage	operating voltage	
• rated value 690 V	rated value	690 V
• at AC-3e rated value maximum 690 V	at AC-3e rated value maximum	690 V
operating frequency rated value 50 60 Hz	operating frequency rated value	50 60 Hz
operational current rated value 2.5 A	operational current rated value	2.5 A
operational current at AC-3e at 400 V rated value 2.5 A	operational current at AC-3e at 400 V rated value	2.5 A
operating power	operating power	

• at AC-3 — at 400 V rated value	0.75 kW
	1.1 kW
— at 500 V rated value	1.5 kW
— at 690 V rated value	1.5 KVV
• at AC-3e	0.75 144
— at 400 V rated value	0.75 kW
— at 500 V rated value	1.1 kW
— at 690 V rated value	1.5 kW
Auxiliary circuit	internets d
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts	4
•	
note	for contactor disconnection
number of NO contacts for auxiliary contacts	4
•	1
note	for message "Tripped"
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	2.4
• at 24 V	3 A 2 A
• at 110 V	3 A 2 A
• at 120 V	3 A 2 A
• at 125 V	3 A 2 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 Protective and monitoring functions	B600 / R300
trip class	CLASS 10
design of the overload release	thermal
UL/CSA ratings	uncinicai
full-load current (FLA) for 3-phase AC motor	
at 480 V rated value	2.5 A
at 600 V rated value	2.5 A
Short-circuit protection	2.3 A
 design of the fuse link for short-circuit protection of the auxiliary switch required 	fuse gG: 6 A, quick: 10 A
• for short-oroun protection of the auxiliary switch required	ide go. o A, quior. io A
Installation/mounting/dimensions	
Installation/ mounting/ dimensions	201
mounting position	any Contractor mounting
mounting position fastening method	Contactor mounting
mounting position fastening method height	Contactor mounting 76 mm
mounting position fastening method height width	Contactor mounting 76 mm 45 mm
mounting position fastening method height width depth	Contactor mounting 76 mm
mounting position fastening method height width depth Connections/ Terminals	Contactor mounting 76 mm 45 mm 70 mm
mounting position fastening method height width depth	Contactor mounting 76 mm 45 mm
mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and	Contactor mounting 76 mm 45 mm 70 mm
mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit	Contactor mounting 76 mm 45 mm 70 mm
mounting position fastening method height width depth Connections/ Terminals product component removable terminal for auxiliary and control circuit type of electrical connection	Contactor mounting 76 mm 45 mm 70 mm No
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	Contactor mounting 76 mm 45 mm 70 mm No Screw-type terminals
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	Contactor mounting 76 mm 45 mm 70 mm No No screw-type terminals screw-type terminals
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	Contactor mounting 76 mm 45 mm 70 mm No No screw-type terminals screw-type terminals
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 type of connectable conductor cross-sections	Contactor mounting 76 mm 45 mm 70 mm No No screw-type terminals screw-type terminals
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 type of connectable conductor cross-sections • for main contacts	Contactor mounting 76 mm 45 mm 70 mm No No screw-type terminals screw-type terminals Top and bottom

 for auxiliary cont 	conductor cross-sections					
— solid or stra			2x (0	.5 1.5 mm²), 2x (0.75	. 2.5 mm²)	
	ded with core end processi	ina		.5 1.5 mm²), 2x (0.75		
-	for auxiliary contacts			0 16), 2x (18 14)		
tightening torque			2/ (2)	o 10), 2x (10 11)		
• • •	s with screw-type terminals	i	0.8	. 1.2 N·m		
for auxiliary contacts with screw-type terminals			. 1.2 N·m			
design of screwdriver shaft			eter 5 6 mm			
size of the screwdrive				Iriv PZ 2		
	of the connection screw					
 for main contacts 			М3			
of the auxiliary and control contacts		М3				
afety related data						
	low demand rate according	ng to SN	50 FI	Т		
MTTF with high dema	ind rate		2 280) a		
IEC 61508						
T1 value						
 for proof test inte 61508 	erval or service life accordir	ng to IEC	20 a			
Electrical Safety						
protection class IP or	n the front according to IE	EC 60529	IP20			
touch protection on t	he front according to IEC	60529	finger	r-safe, for vertical contact	from the front	
isplay						
display version for swite	ching status		Slide	switch		
pprovals Certificates						
	CE	<u>Confirmatio</u>	<u>//1</u>	(m)	<u>m</u>	гпг
	EG-Konf.					CUL
For use in hazard- ous locations	EG-Konf. Test Certificates			CCC		CUL
For use in hazard-		<u>Type Test Cer</u> ates/Test Rep	tific- port	Marine / Shipping		
For use in hazard-	Test Certificates	<u>Type Test Cer</u> ates/Test Rep	r <u>tific-</u> port			CML t t t t t t t t t t t t t
For use in hazard- ous locations	Test Certificates	<u>Type Test Cer</u> ates/Test Rep	tific- port		VERITAS	Confirmation
For use in hazard- ous locations	Test Certificates	<u>Lype Test Cer</u> ates/Test Rep	tific- port		VERITAS other	
For use in hazard- ous locations	Test Certificates	Lype Lest Cer ates/Test Rep	tific- port		VERITAS other	

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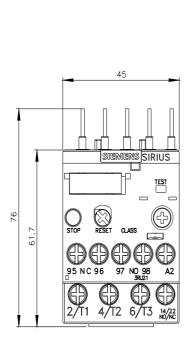
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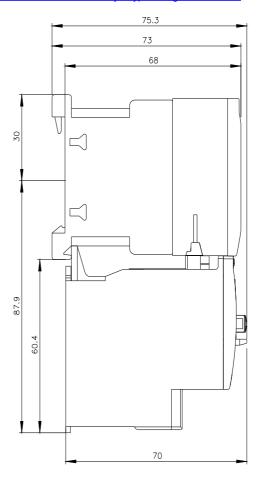
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

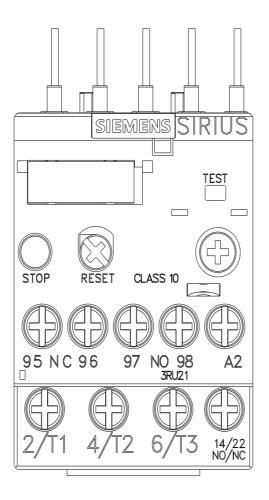
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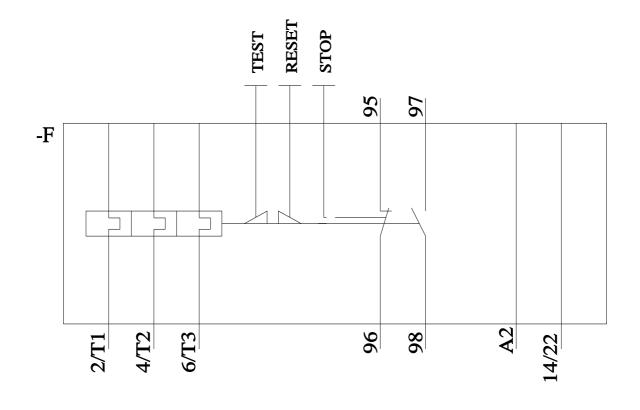
Characteristic: Tripping characteristics, I2t, Let-through current https://support.indu emens.com/cs/ww/en/ps/3RU2116-1CB0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-1CB0&objecttype=14&gridview=view1









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