## SIEMENS

## Data sheet

## 3RU2116-4AB0



Overload relay 11...16 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	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 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 according 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 according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
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	11 16 A
operating voltage	
<ul> <li>rated value</li> </ul>	690 V
<ul> <li>at AC-3e rated value maximum</li> </ul>	690 V
operating frequency rated value	50 60 Hz
operational current rated value	16 A
operational current at AC-3e at 400 V rated value	16 A
operating power	

• at AC-3			
— at 400 V rated value	7.5 kW		
— at 500 V rated value	7.5 kW		
— at 690 V rated value	11 kW		
• at AC-3e			
— at 400 V rated value	7.5 kW		
— at 500 V rated value	7.5 kW		
— at 690 V rated value	11 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			
	16 A		
<ul> <li>at 480 V rated value</li> </ul>			
<ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul>	16 A		
• at 600 V rated value	16 A		
at 600 V rated value Short-circuit protection	16 A		
at 600 V rated value Short-circuit protection design of the fuse link			
at 600 V rated value     Short-circuit protection     design of the fuse link         e for short-circuit protection of the auxiliary switch required	16 A fuse gG: 6 A, quick: 10 A		
at 600 V rated value Short-circuit protection design of the fuse link     o for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gG: 6 A, quick: 10 A		
• 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	fuse gG: 6 A, quick: 10 A any		
at 600 V rated value Short-circuit protection design of the fuse link     o for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method	fuse gG: 6 A, quick: 10 A any Contactor mounting		
at 600 V rated value Short-circuit protection design of the fuse link     o for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position fastening method height	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm		
at 600 V rated value  Short-circuit protection  design of the fuse link     ofor short-circuit protection of the auxiliary switch required  Installation/ mounting/ dimensions  mounting position fastening method height width	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm		
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• 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	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
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• 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 component removable terminal for auxiliary and	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
• 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 component removable terminal for auxiliary and     control circuit	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
• 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 component removable terminal for auxiliary and     control circuit     type of electrical connection	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
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• 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 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	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Screw-type terminals screw-type terminals		
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<ul> <li>— solid or stranded</li> <li>— finely stranded with</li> <li>for AWG cables for auxiliation</li> <li>tightening torque</li> <li>for main contacts with sca</li> <li>for auxiliary contacts with</li> <li>design of screwdriver shaft</li> <li>size of the screwdriver tip</li> <li>design of the thread of the co</li> <li>for main contacts</li> <li>of the auxiliary and control</li> <li>Safety related data</li> <li>failure rate [FIT] with low demart</li> <li>MTTF with high demand rate</li> <li>T1 value for proof test interval o</li> <li>61508</li> </ul>	ary contacts rew-type terminals screw-type terminals nnection screw ol contacts nd rate according to SN r service life according to nt according to IEC 609	to IEC 529	2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2x (20 16), 2x (18 14) 0.8 1.2 N·m 0.8 1.2 N·m Diameter 5 6 mm Pozidriv PZ 2 M3 M3 M3 50 FIT 2 280 a 20 a IP20	. 2.5 mm²)		
touch protection on the front	according to IEC 6052	3	finger-safe, for vertical contact			
Display	tue		Slido switch			
display version for switching sta	ius		Slide switch			
Certificates/ approvals				For use in hazardous	locations	
General Product Approval				For use in nazardous	locations	
	<u>onfirmation</u>	(ال س	EHC	IECEx	KEX ATEX	
Declaration of Conformity	Tes	t Certificate	S	Marine / Shipping		
UK CA		<u>pe Test Certi</u> <u>es/Test Rep</u>		ABS	BUREAU VERITAS	
Marine / Shipping					other	
	Lloyd's Register uis	PRS	RINA	RMRS R	<u>Confirmation</u>	
other Railw	ay					
	tion and Shock					
Further information						
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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=3RU2116-4AB0						
Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-4AB0						

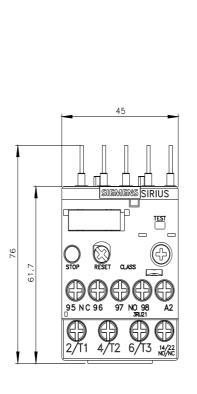
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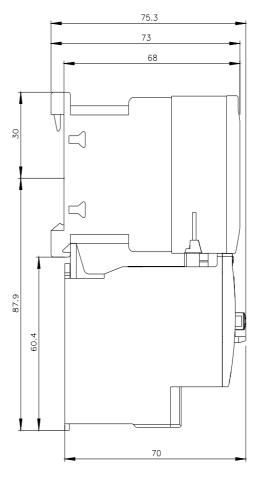
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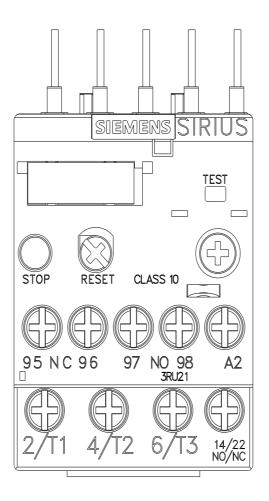
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RU2116-4AB0&lang=en

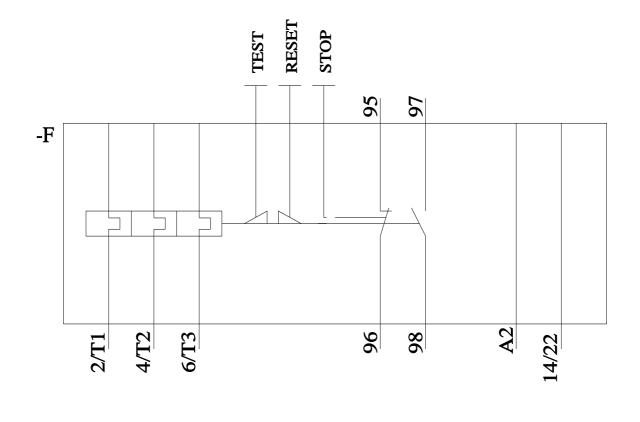
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-4AB0/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-4AB0&objecttype=14&gridview=view1









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