SIEMENS

Data sheet 3RU2116-1AC0



Overload relay 1.1...1.6 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	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 auxiliary and auxiliary circuit 	440 V		
 between main and auxiliary circuit 	440 V		
between main and auxiliary circuit	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		
SVHC substance name	Blei - 7439-92-1		
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	1.1 1.6 A		
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	1.6 A		
operational current at AC-3e at 400 V rated value	1.6 A		

operating power	
• at AC-3	
— at 400 V rated value	0.55 kW
— at 500 V rated value	0.75 kW
— at 690 V rated value	1.1 kW
• at AC-3e	
— at 400 V rated value	0.55 kW
— at 500 V rated value	0.75 kW
— at 690 V rated value	1.1 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
	0.11 A
■ AT ZZU V	
• at 220 V contact rating of auxiliary contacts according to UL	
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class	B600 / R300 CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings	B600 / R300 CLASS 10
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	B600 / R300 CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	B600 / R300 CLASS 10 thermal
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contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class 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	B600 / R300 CLASS 10 thermal
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class 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	B600 / R300 CLASS 10 thermal 1.6 A 1.6 A
contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class 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	B600 / R300 CLASS 10 thermal
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contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class 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	CLASS 10 thermal 1.6 A 1.6 A 1.6 A Contactor mounting 87 mm
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contact rating of auxiliary contacts according to UL Protective and monitoring functions trip class 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 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 — solid or stranded	CLASS 10 thermal 1.6 A 1.6 A 1.6 A any Contactor mounting 87 mm 45 mm 70 mm No spring-loaded terminals spring-loaded terminals Top and bottom



type of connectable conductor cross-sections			
 for auxiliary contacts 			
— solid or stranded	2x (0.5 2.5 mm²)		
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 finely stranded without core end processing 	2x (0.5 1.5 mm²)		
 for 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 according to SN 31920	50 FIT		
MTTF with high demand rate	2 280 a		
T1 value for proof test interval or service life according to IEC 61508	20 a		
protection class IP on the front according to IEC 60529	IP20		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front		
Display			
display version for switching status	Slide switch		
Approvals Certificates			
General Product Approval		For use in hazardous locations	

Confirmation

Test Certificates

Marine / Shipping

Declaration of Conformity

Type Test Certific-Special Test Certificates/Test Report ate





IECEx

Marine / Shipping other











Household and similar appliances

other Railway

> Confirmation Vibration 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=3RU2116-1AC0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RU2116-1AC0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1AC0

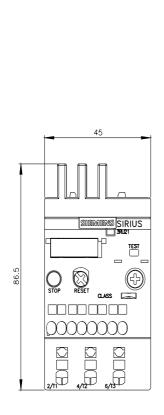
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

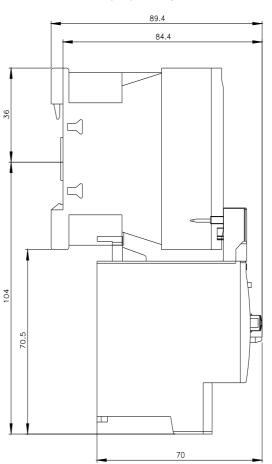
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1AC0&lang=en

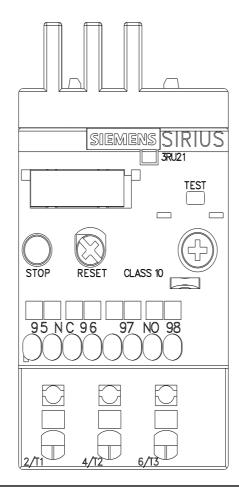


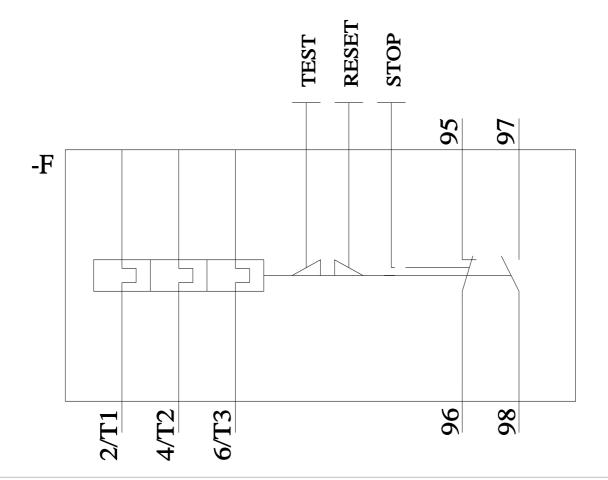
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-1AC0&objecttype=14&gridview=view1









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