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 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	
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	5.5 8 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	8 A	
operational current at AC-3e at 400 V 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		
• at AC-3e			
— 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		
● 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		
trip class design of the overload release	CLASS 10 thermal		
trip class design of the overload release UL/CSA ratings			
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal		
trip class 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		
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	thermal		
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	thermal 8 A		
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	thermal 8 A 8 A		
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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	thermal 8 A 8 A		
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any		
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	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting		
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	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm		
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm		
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm		
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No		
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No screw-type terminals		
trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No		
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trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	thermal 8 A 8 A 8 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No screw-type terminals screw-type terminals Top and bottom 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), 2x 4 mm² 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
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 — solid or stranded 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
 for AWG cables for auxiliary contacts 	2x (20 16), 2x (18 14)		
tightening torque			
 for main contacts with screw-type terminals 	0.8 1.2 N·m		
 for auxiliary contacts with screw-type terminals 	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		
 of the auxiliary and control contacts 	M3		
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		
Certificates/ approvals			
General Product Approval		For use in hazardous locations	

Confirmation











Declaration of Conformity

Test Certificates

Marine / Shipping





Special Test Certificate

Type Test Certificates/Test Report





Marine / Shipping





LRS







Confirmation

other

other

Railway



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)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RU2116-1HB0}$

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-1HB0

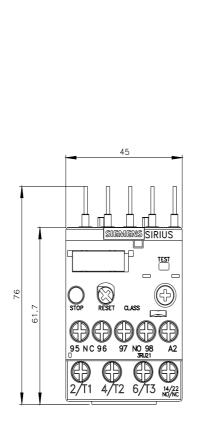
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

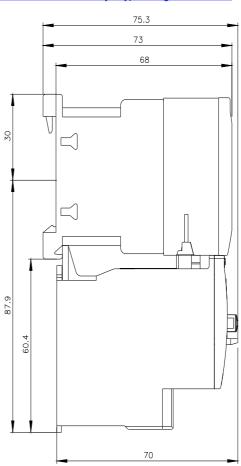
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1HB0

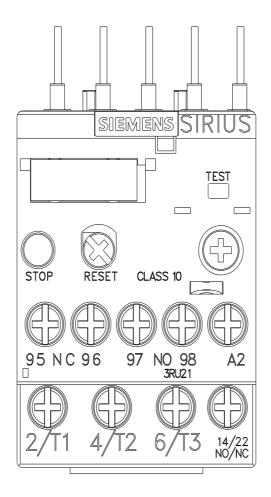
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-1HB0&lang=en

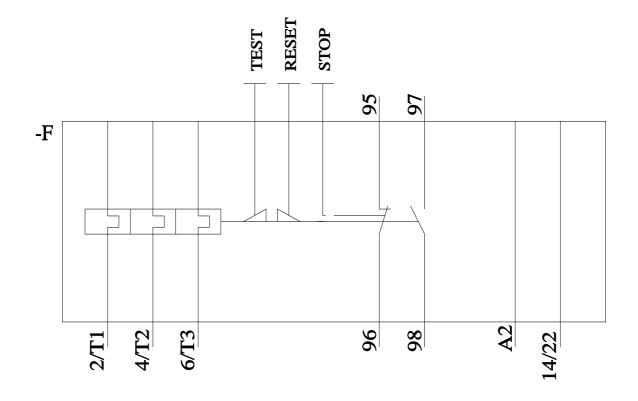
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-1HB0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-1HB0&objecttype=14&gridview=view1









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