SIEMENS

Data sheet 3RU2116-0KJ0



Overload relay 0.90...1.25 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Ring cable lug Auxiliary circuit: ring cable lug 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 safe isolation 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 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 during operation 	-40 +70 °C
ambient temperature during storage	-55 +80 °C
ambient temperature 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	0.9 1.25 A
operating voltage rated value	690 V
 operating voltage at AC-3 rated value maximum 	690 V

operating frequency rated value	50 60 Hz
operational current rated value	1.25 A
operating power at AC-3	1.23 A
at 400 V rated value	0.37 kW
at 500 V rated value	0.55 kW
at 690 V rated value at 690 V rated value	0.75 kW
Auxiliary circuit	0.75 KW
	integrated
design of the auxiliary switch	integrated
number of NC contacts for auxiliary contacts • note	1 for contactor disconnection
number of NO contacts for auxiliary contacts	1
• note	
number of CO contacts for auxiliary contacts	for message "Tripped" 0
operational current of auxiliary contacts at AC-15	Ü
• 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
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	
UL/CSA ratings full-load current (FLA) for 3-phase AC motor	
full-load current (FLA) for 3-phase AC motor	1.25 A
	1.25 A 1.25 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	1.25 A 1.25 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection	
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	1.25 A
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection	
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	1.25 A
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	1.25 A
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	1.25 A fuse gG: 6 A, quick: 10 A
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	1.25 A fuse gG: 6 A, quick: 10 A any
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	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting
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	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm
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	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm
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	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm
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	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm
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 type of electrical connection	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm
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 type of electrical connection • for main current circuit	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection
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 type of electrical connection • for main current circuit • for auxiliary and control circuit	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection
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 type of electrical connection • for main current circuit	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection
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 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 Ring cable lug connection ring cable connection
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 type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection
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 type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit • tightening torque	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection Top and bottom
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 type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit • tightening torque — for main contacts for ring cable lug	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection Top and bottom
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 type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit • tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug	1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection Top and bottom 1.2 0.8 N·m 0.8 1.2 N·m
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 type of electrical connection • for main current circuit • for auxiliary and control circuit arrangement of electrical connectors for main current circuit • tightening torque — for main contacts for ring cable lug — for auxiliary contacts for ring cable lug outer diameter of the usable ring cable lug maximum	fuse gG: 6 A, quick: 10 A any Contactor mounting 76 mm 45 mm 70 mm No Ring cable lug connection ring cable connection Top and bottom 1.2 0.8 N·m 0.8 1.2 N·m 7.5 mm

	_
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 acc. to SN 31920	50 FIT
MTTF with high demand rate	2 280 y
T1 value for proof test interval or service life acc. to IEC 61508	20 y
protection class IP on the front acc. to IEC 60529	IP00
Display	
display version for switching status	Slide switch
Certificates/ approvals	

General Product Approval

For use in hazardous locations













Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Special Test Certificate Type Test
Certificates/Test
Report





Marine / Shipping

other











Confirmation

Railway

Vibration and Shock

Further information

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=3RU2116-0KJ0

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RU2116-0KJ0}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0KJ0

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

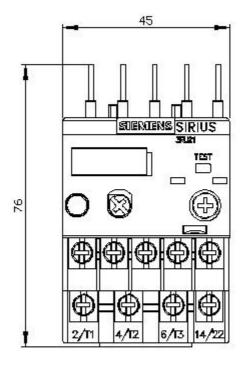
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RU2116-0KJ0&lang=en

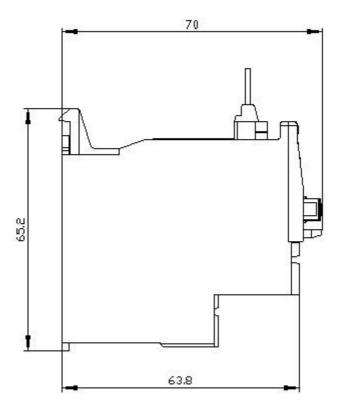
 $\label{lem:characteristics} \textbf{Characteristics}, \textbf{I}^{\textbf{2}}\textbf{t}, \textbf{Let-through current}$

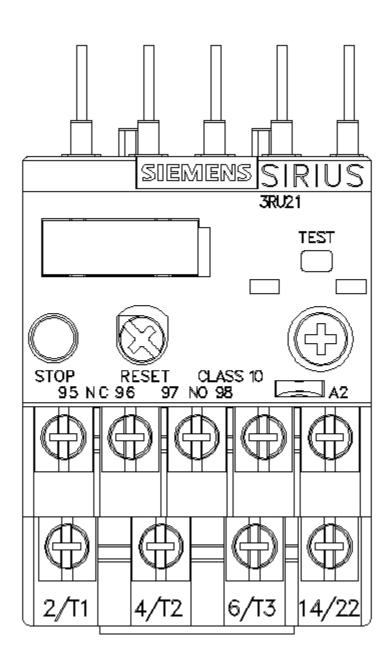
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-0KJ0/char

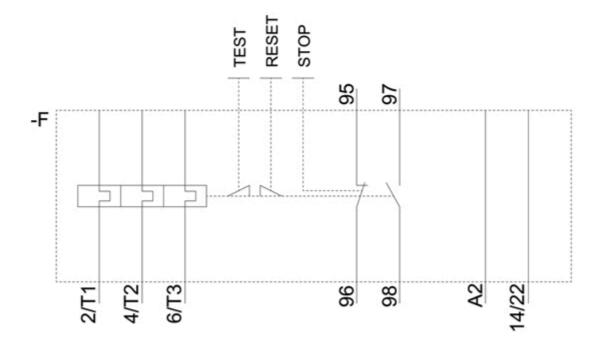
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0KJ0&objecttype=14&gridview=view1









last modified: 1/18/2021 **C**