SIEMENS

Data sheet 3RU2116-4AC0



Overload relay 11...16 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	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 ungrounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with grounded star point between auxiliary and auxiliary circuit 	440 V
 in networks with ungrounded star point between main and auxiliary circuit 	440 V
 in networks with grounded star point between main and auxiliary circuit 	440 V
shock resistance according to IEC 60068-2-27	8g / 11 ms
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	10/01/2009
SVHC substance name	Lead - 7439-92-1
Weight	0.179 kg
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	
• rated value	690 V
at AC-3e rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	16 A

	40.4
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
	D000 / D000
contact rating of auxiliary contacts according to UL	B600 / R300
contact rating of auxiliary contacts according to UL Protective and monitoring functions	B600 / R300
	CLASS 10
Protective and monitoring functions	
Protective and monitoring functions trip class	CLASS 10
Protective and monitoring functions trip class design of the overload release	CLASS 10
Protective and monitoring functions trip class design of the overload release UL/CSA ratings	CLASS 10
Protective and monitoring functions trip class design of the overload release UL/CSA ratings full-load current (FLA) for 3-phase AC motor	CLASS 10 thermal
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	CLASS 10 thermal
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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	CLASS 10 thermal
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	CLASS 10 thermal 16 A 16 A
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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	CLASS 10 thermal 16 A 16 A 16 A fuse gG: 6 A, quick: 10 A
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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	CLASS 10 thermal 16 A 16 A fuse gG: 6 A, quick: 10 A any Contactor mounting 87 mm 45 mm
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 for AWG cables for main contacts 	1x (20 12)
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
IEC 61508	
T1 value	
 for proof test interval or service life according to IEC 61508 	20 a
Electrical Safety	
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	







Confirmation





For use in hazardous locations

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report Special Test Certificate





Marine / Shipping











Miscellaneous

other

other Railway Environment

Confirmation

Special Test Certificate



Environmental Confirmations

Further information

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=3RU2116-4AC0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RU2116-4AC0

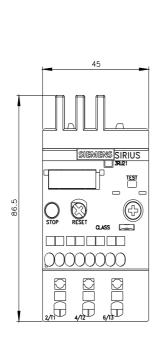
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

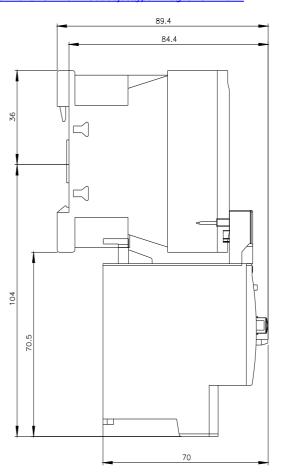
https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-4AC0

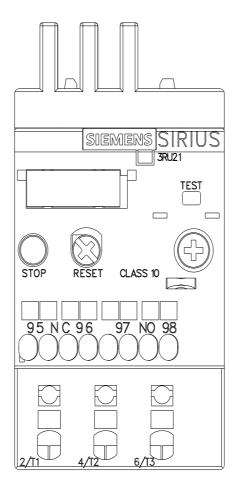
 $Image\ database\ (product\ images,\ 2D\ dimension\ drawings,\ 3D\ models,\ device\ circuit\ diagrams,\ EPLAN\ macros,\ ...)$

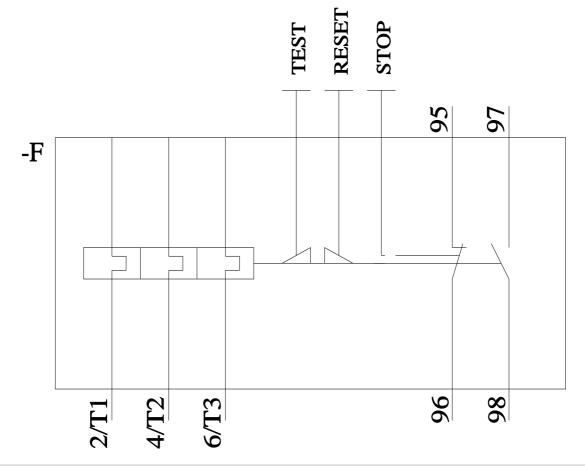
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RU2116-4AC0/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-4AC0&objecttype=14&gridview=view1









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