## SIEMENS

## Data sheet

## 3RU2116-0KC0



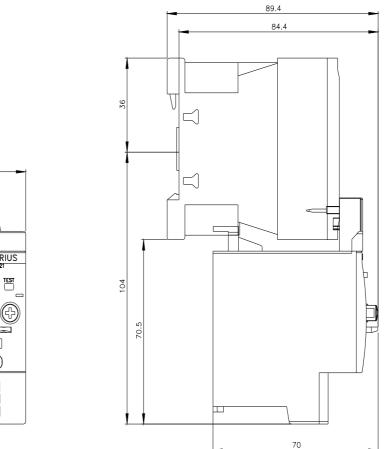
Overload relay 0.90...1.25 A Thermal For motor protection Size S00, Class 10 Contactor mounting Main circuit: Spring-type terminal Auxiliary circuit: spring-type terminal Manual-Automatic-Reset

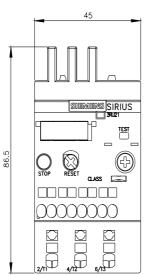
product brand name	SIRIUS
product designation	thermal overload relay
product type designation	3RU2
General technical data	
size of overload relay	S00
size of contactor can be combined company-specific	S00
power loss [W] for rated value of the current at AC in hot operating state	5.7 W
• per pole	1.9 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	
<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	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul> <li>during storage</li> </ul>	-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	0.9 1.25 A
operating voltage	
rated value	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	1.25 A
operational current at AC-3e at 400 V rated value	1.25 A
operating power	

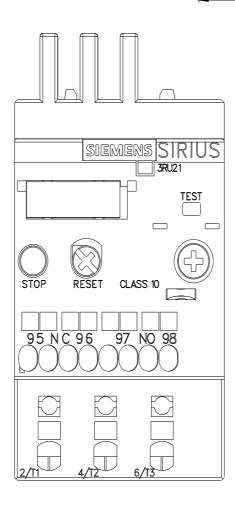
• at AC-3	0.07.114
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.55 kW
— at 690 V rated value	0.75 kW
• at AC-3e	
— at 400 V rated value	0.37 kW
— at 500 V rated value	0.55 kW
— at 690 V rated value	0.75 kW
Auxiliary circuit	
design of the auxiliary switch	integrated
number of NC contacts for 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	
Protective and monitoring functions trip class	CLASS 10
trip class	CLASS 10 thermal
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 1.25 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 1.25 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 1.25 A 1.25 A fuse gG: 6 A, quick: 10 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 • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	thermal 1.25 A 1.25 A 1.25 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 1.25 A 1.25 A 1.25 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 1.25 A 1.25 A 1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 87 mm
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	thermal 1.25 A 1.25 A 1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 87 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         • 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	thermal 1.25 A 1.25 A 1.25 A 1.25 A any Contactor mounting 87 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         • 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	thermal 1.25 A 1.25 A 1.25 A 1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 87 mm 45 mm 70 mm No No spring-loaded terminals
trip class         design of the overload release         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> <li>Short-circuit protection         <ul> <li>design of the fuse link</li> <li>for short-circuit protection of the auxiliary switch required</li> </ul> </li> <li>Installation/ mounting/ dimensions         <ul> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection</li> </ul> </li>	thermal 1.25 A 1.25 A 1.25 A 1.25 A fuse gG: 6 A, quick: 10 A any Contactor mounting 87 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 <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> <li>stort-circuit protection</li> </ul> <li>design of the fuse link         <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> </li> <li>Installation/ mounting/ dimensions         <ul> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>arrangement of electrical connectors for main current circuit</li> <li>for main contacts                  <ul> <li>width connectable conductor cross-sections</li> <li>for main contacts</li></ul></li></ul></li>	thermal 1.25 A 1.25 A 1.25 A 1.25 A
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trip class         design of the overload release         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> Short-circuit protection         design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> 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         of or auxiliary and control circuit         arrangement of electrical connectors for main current circuit         type of connectable conductor cross-sections         of or main contacts         — solid or stranded         — finely stranded with core end processing         — finely stranded without core end processing	thermal         1.25 A         1.25 A         1.25 A         fuse gG: 6 A, quick: 10 A         any         Contactor mounting         87 mm         45 mm         70 mm         No         spring-loaded terminals         spring-loaded terminals         Top and bottom         1x (0,5 4 mm²)         1x (0.5 2.5 mm²)         1x (0.5 2.5 mm²)
trip class         design of the overload release         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor <ul> <li>at 480 V rated value</li> <li>at 600 V rated value</li> </ul> <li>Short-circuit protection</li> <li>design of the fuse link         <ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul> </li> <li>Installation/ mounting/ dimensions         <ul> <li>mounting position</li> <li>fastening method</li> <li>height</li> <li>width</li> <li>depth</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>product component removable terminal for auxiliary and control circuit</li> <li>type of electrical connection             <ul> <li>for auxiliary and control circuit</li> <li>for auxiliary and control circuit</li> <li>arrangement of electrical connectors for main current circuit</li> <li>type of connectable conductor cross-sections</li> <li>for main contacts</li> <li>solid or stranded</li> <li>finely stranded with core end processing</li> </ul> </li> </ul></li>	thermal 1.25 A 1.25 A 1.25 A 1.25 A Guick: 10 A any Contactor mounting 87 mm 45 mm 70 mm No No Spring-loaded terminals spring-loaded terminals Top and bottom 1x (0,5 4 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> )

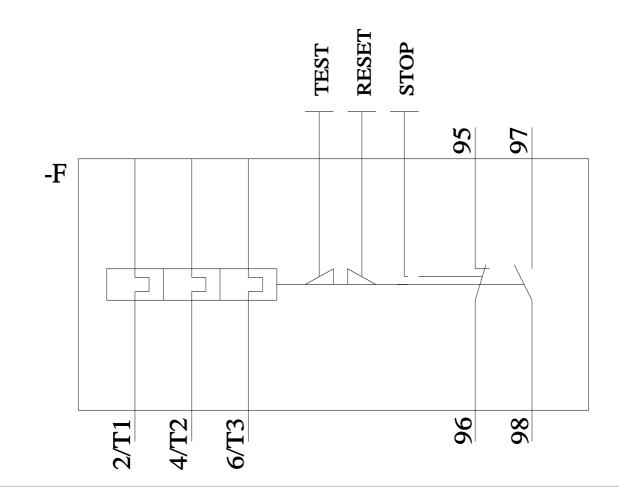
<ul> <li>finely strand</li> <li>for AWG cables f</li> <li>design of screwdriver</li> <li>size of the screwdrive</li> <li>Safety related data</li> <li>failure rate [FIT] with low</li> <li>MTTF with high demand</li> <li>T1 value for proof test in 61508</li> <li>protection class IP on</li> </ul>	r tip w demand rate according nd rate nterval or service life acco the front according to l the front according to IE0	to SN 31920 ording to IEC IEC 60529	2x (0.5 2.5 mm <sup>2</sup> ) 2x (0.5 1.5 mm <sup>2</sup> ), 2x (0.75 2x (0.5 1.5 mm <sup>2</sup> ) 2x (20 14) Diameter 3 mm 3,0 x 0,5 mm 50 FIT 2 280 a 20 a IP20 finger-safe, for vertical conta		
General Product App	roval			For use in hazardous	locations
	<u>Confirmation</u>	(h) u	EHC	K ATEX	IECEx
Declaration of Confor	mity	Test Certificate	es	Marine / Shipping	
UK CA	CE EG-Konf.	<u>Type Test Cer</u> ates/Test Rep		ABS	B U REAU VERITAS
Marine / Shipping					other
Marine / Shipping	Lloyd's Register uis	PRS	() RINA	KMRS	other Confirmation
Marine / Shipping	Ling Railway	PRS	RINA	<b>KMRS</b>	
	Lins Lins Railway Vibration and Shock	PRS	RINA	KARS	
		PRS	RINA	KMRS	

## Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RU2116-0KC0&objecttype=14&gridview=view1









last modified:

