SIEMENS

Product data sheet 3RU2116-1HB0



OVERLOAD RELAY 5.5...8.0 A FOR MOTOR PROTECTION SZ S00, CLASS 10, F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT:

F. MOUNTING ONTO CONTACTOR MAIN CIRCUIT: SCREW TERMINAL AUX. CIRCUIT: SCREW TERMINAL MANUAL-AUTOMATIC-RESET

General technical data:				
product brand name		SIRIUS		
product designation		3RU2 thermal overload relay		
Size of overload relay		S00		
Number of poles / for main current circuit		3		
Product function / removable terminal for auxiliary and control circuit		No		
Impulse voltage resistance / rated value	kV	6		
Protection class IP / on the front		IP20		
Protection against electrical shock		finger-safe		
Installation altitude / at a height over sea level / maximum	m	2,000		
Resistance against shock		8g / 11 ms		
Ambient temperature				
during transport	°C	-55 + 80		
during storage	°C	-55 +80		
during operating	°C	-40 +70		
Relative humidity				
during operating phase	/ %	90		
Active power loss / total / typical	W	6		
Size of the contactor / can be combined / company-specific		S00		

Operating current / at AC-3 / at 400 V / rated value A 8 Type of assignement 2 Auxiliary circuits Number of NC contacts / for auxiliary contacts Number of NC contacts / for auxiliary contacts 0 Operating current / of the auxiliary contacts / at AC-15 0 - at 24 V A 3 - at 110 V A 3 - at 120 V A 3 - at 24 V A 3 - at 120 V A 3 - at 120 V A 3 - at 24 V A 2 - at 240 V A 3 - at 120 V A 2 - at 240 V A 2 - at 110 V A 0.22 - at 220 V A 0.22 - at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current - of the current-dependent overload release A	Main circuit:				
Number of NC contacts / for auxiliary contacts	Operating current / at AC-3 / at 400 V / rated value	А	8		
Number of NC contacts / for auxiliary contacts	Type of assignement		2		
Number of NO contacts / for auxiliary contacts 1 Number of changeover contacts / for auxiliary contacts 0 Operating current / of the auxiliary contacts / at AC-15 - at 24 V A 3 - at 110 V A 3 - at 220 V A 3 - at 125 V A 3 - at 230 V A 2 - at 400 V A 2 - at 240 V A 2 - at 125 V A 0.22 - at 125 V A 0.22 - at 125 V A 0.22 - at 125 V A 0.22 - at 125 V A 0.22 - at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50	Auxiliary circuit:				
Number of changeover contacts / for auxiliary contacts	Number of NC contacts / for auxiliary contacts		1		
Operating current / of the auxiliary contacts / at AC-15 at 24 ∨ A 3 • at 110 ∨ A 3 • at 120 ∨ A 3 • at 125 ∨ A 2 • at 400 ∨ A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 ∨ A 2 • at 110 ∨ A 0.22 • at 125 ∨ A 0.22 • at 220 ∨ A 0.11 Protection function: Trip class CLASS 10 Adjustable response current • • • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 wheat time to failure (MTTF) with high demand rate a 2,280 Failure rate (FIT value) / with low demand rate / according to IEC a 20 1 value / for proof test interval or service life / according to IEC a 20 1 va	Number of NO contacts / for auxiliary contacts		1		
- at 24 V	Number of changeover contacts / for auxiliary contacts		0		
- at 110 V A 3 - at 120 V A 3 - at 125 V A 3 - at 230 V A 2 - at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 - at 24 V A 2 - at 110 V A 0.22 - at 125 V A 0.22 - at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current - of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures - with high demand rate / according to SN 31920 % 50 - with low demand rate / according to SN 31920 % 50 Mean time to failure (MTTF) / with high demand rate a 2,280 Trip value / for proof test interval or service life / according to IEC 61508 Trype of mounting / firenesions: Trype of mounting / firenesions:	Operating current / of the auxiliary contacts / at AC-15				
• at 120 V A 3 • at 125 V A 3 • at 230 V A 2 • at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V A 2 • at 110 V A 0.22 • at 125 V A 0.22 • at 220 V A 0.111 Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 • trium to failure (MTTF) / with high demand rate / according to SN 31920 % 50 • trium to failure (MTTF) / with high demand rate / according to SN 31920 a	• at 24 V	Α	3		
• at 125 V A 2 • at 230 V A 2 • at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V A 2 • at 110 V A 0.22 • at 125 V A 0.22 • at 220 V A 0.11 Protection function: Trip class Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • Trip value / for proof test interval or service life / according to IEC also 20 Trip value / for proof test interval or service life / according to IEC also 20 Installation/mounting/dimensions: Type of mounting mounting position Pepth mm 76	• at 110 V	Α	3		
• at 230 V • at 400 V A 1 Operating current / of the auxiliary contacts / at DC-13 • at 24 V A 2 • at 110 V A 0.22 • at 125 V A 0.22 • at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 Failure rate (FIT value) / with low demand rate / according to SN 31920 % 50 T1 value / for proof test interval or service life / according to IEC 61508 a 20 Installation/mounting/dimensions: Type of mounting direct mounting mounting position vertical Depth mm 70 Height mm 76 <td>• at 120 V</td> <td>Α</td> <td>3</td>	• at 120 V	Α	3		
• at 400 ∨ A 1 Operating current / of the auxiliary contacts / at DC-13	• at 125 V	Α	3		
Operating current / of the auxiliary contacts / at DC-13 • at 24 V • at 110 V • at 125 V • at 220 V • at 220 V Protection function: Trip class Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth mm 70 Height mm 70	• at 230 V	Α	2		
• at 24 V A 2 • at 110 V A 0.22 • at 125 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 Mean time to failure (MTTF) / with high demand rate a 2,280 Failure rate (FIT value) / with low demand rate / according to SN 31920 FIT 50 Try value / for proof test interval or service life / according to IEC 61508 a 20 Installation/mounting/dimensions: Type of mounting direct mounting mounting position vertical Depth mm 70 Height mm 76	• at 400 V	Α	1		
• at 110 V • at 125 V • at 220 V A 0.22 A 0.11 Protection function: Trip class Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low for proof test interval or service life / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Type of mounting mounting position Pepth Height mm 70 Height A 0.22 A 0.11 CLASS 10 CLASS 10 CLASS 10 S.5 8 CLASS 10 FI S 50 50 40 50 61 61 61 61 61 61 61 61 61 6	Operating current / of the auxiliary contacts / at DC-13				
• at 125 V • at 220 V A 0.11 Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 • with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height mm 70 Height A 0.22 A 0.11	• at 24 V	Α	2		
Protection function: Trip class CLASS 10 Adjustable response current of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures with high demand rate / according to SN 31920 with low demand rate / according to SN 31920 with low demand rate / according to SN 31920 failure rate (FIT value) / with high demand rate / according to SN 31920 Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting dimensions Type of mounting mounting mounting mounting position Depth mm 70 Height mr A 5.5 8 CLASS 10 CLASS 10 CLASS 10 A 5.5 8 FIT 50 50 60 61 61 61 61 61 61 61 61 6	• at 110 V	Α	0.22		
Protection function: Trip class CLASS 10 Adjustable response current • of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 % 50 • with low demand rate / according to SN 31920 % 50 Mean time to failure (MTTF) / with high demand rate a 2,280 Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting direct mounting wertical Depth mm 70 Height manual face of the current-dependent overload release A 5.5 8 CLASS 10 CLASS 10 CLASS 10 A 5.5 8 CLASS 10 A 5.5 8	• at 125 V	Α	0.22		
Trip class Adjustable response current of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures with high demand rate / according to SN 31920 with low demand rate / according to SN 31920 with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height CLASS 10 CLASS 10 CLASS 10 CLASS 10 A 5.5 8 FIT 50 50 40 50 61 61 61 61 61 61 61 61 61 6	• at 220 V	А	0.11		
Adjustable response current of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures with high demand rate / according to SN 31920 with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height A 5.5 8 5.6 S.7 S.7 S.7 S.7 S.7 S.7 S.7 S	Protection function:				
• of the current-dependent overload release A 5.5 8 Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate a 2,280 Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height A 5.5 8 50 direct mounting direct mounting vertical mm 70 Height	Trip class		CLASS 10		
Safety: Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height ### T0 ### T6 ### T6	Adjustable response current				
Proportion of dangerous failures • with high demand rate / according to SN 31920 • with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth mm mm mm mm mm mm mm mm mm	of the current-dependent overload release	А	5.5 8		
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• with low demand rate / according to SN 31920 Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height ### 50 ### 50 ### 50 ### 50 ### 50 ### 50 ### 50 ### 61508 ### 50 ### 61508 ### 70 ### 76	Proportion of dangerous failures				
Mean time to failure (MTTF) / with high demand rate Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting direct mounting vertical Depth mm 70 Height 2,280 FIT 50 20 direct mounting vertical	 with high demand rate / according to SN 31920 	%	50		
Failure rate (FIT value) / with low demand rate / according to SN 31920 T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth Height FIT 50 4 20 direct mounting vertical mm 70 Height	 with low demand rate / according to SN 31920 	%	50		
T1 value / for proof test interval or service life / according to IEC 61508 Installation/mounting/dimensions: Type of mounting mounting position Depth mm 70 Height Mm 76	Mean time to failure (MTTF) / with high demand rate	а	2,280		
Installation/mounting/dimensions: Type of mounting mounting position Depth mm 70 Height mm 76		FIT	50		
Type of mounting mounting position Depth Height direct mounting vertical mm 70 mm 76		а	20		
mounting positionverticalDepthmm70Heightmm76	Installation/mounting/dimensions:				
Depth mm 70 Height mm 76	Type of mounting		direct mounting		
Height mm 76	mounting position		vertical		
	Depth	mm	70		
Width mm 45	Height	mm	76		
	Width	mm	45		

Connections: Design of the electrical connection • for main current circuit • for auxiliary and control current circuit Type of the connectable conductor cross-section • for AWG conductors / for auxiliary contacts 2x (20 ... 16), 2x (18 ... 14)

	ratings:

Contact rating designation / for auxiliary contacts / according to UL

B600 / R300

Certificates/approvals:

General Product Approval

For use in hazardous locations

Declaration of Conformity











Test Certificates

Special Test Certificate Type Test
Certificates/Test
Report

Shipping Approval













Shipping Approval





other

Environmental Confirmations

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

Cax online generator:

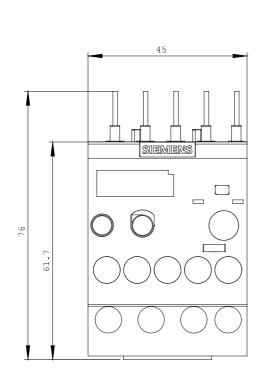
http://www.siemens.com/cax

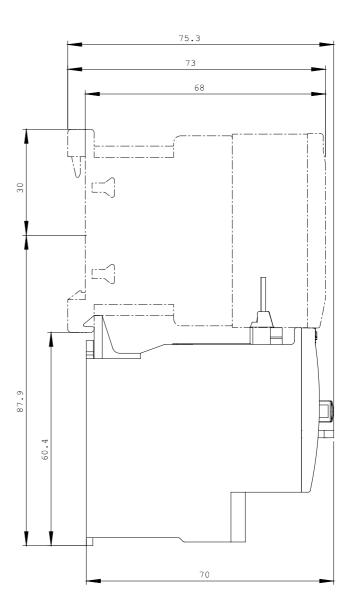
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

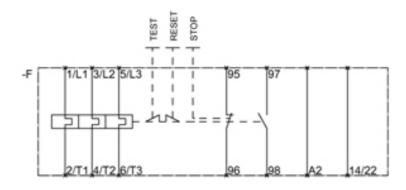
http://support.automation.siemens.com/WW/view/en/3RU2116-1HB0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU2116-1HB0







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