SIEMENS

Product data sheet 3RU1146-4DB0



OVERLOAD RELAY 18...25 A FOR MOTOR PROTECTION SIZE S3,

CLASS 10 FOR CONTACTOR MOUNTING MAIN CIRCUIT: SCREW CONN. AUX. CIRCUIT: SCREW CONN. MANUAL-AUTOMATIC-RESET

General technical details:				
product brand name		SIRIUS		
product designation		thermal overload relay		
Protection class IP / on the front		IP20		
Insulation voltage / with degree of pollution 3 / rated value	V	1,000		
Installation altitude / at a height over sea level / maximum	m	2,000		
Ambient temperature				
during operating	°C	-20 +70		
during storage	°C	-55 +80		
during transport	°C	-55 +80		
Relative humidity / during operating phase / maximum	%	100		
Resistance against shock		8g / 10 ms		
Impulse voltage resistance / rated value	kV	8		
Active power loss / total / typical	W	16.5		
Item designation				
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		F		
according to DIN EN 61346-2		F		
Operating current / of the fuse link / rated value	А	63		
Trip class		CLASS 10		

Type of assignement		2	
type of protection		DMT 98 ATEX G 001	
Size of overload relay		S3	
Size of the contactor / can be combined / company-specific		S3	
Protection against electrical shock		finger-safe	
Main circuit:			
Number of poles / for main current circuit		3	
Operating voltage / at AC-3 / rated value			
• maximum	V	1,000	
Service power / at AC-3			
• at 400 V	kW	11	
Adjustable response current			
of the current-dependent overload release	Α	18 25	
Auxiliary circuit:			
Contact reliability / of the auxiliary contacts		acceptability for PLC control (17 V, 5 mA)	
Number of NC contacts		1	
Number of NO contacts		1	
Number of change-over switches		0	
Operating current / of the auxiliary contacts / at AC-15			
• at 24 V	Α	3	
• at 110 V	Α	3	
• at 120 V	Α	3	
• at 125 V	Α	3	
• at 230 V	Α	2	
• at 400 V	Α	1	
Operating current / of the auxiliary contacts / at DC-13			
• at 24 V	Α	1	
• at 110 V	Α	0.22	
• at 125 V	Α	0.22	
• at 220 V	Α	0.11	
Short-circuit:			
Design of the fuse link / for short-circuit protection of the auxiliary switch / required		fuse gL/gG: 6 A, quick: 10 A	
Installation/mounting/dimensions:			
Built in orientation		with vertical mounting surface +/-135° rotatable, with vertical mounting surface +/- 45° tiltable to the front and back	
Type of mounting		direct mounting	

Height	mm	120
Width	mm	70
Depth	mm	140
Distance, to be maintained, to the ranks assembly		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	0
Distance, to be maintained, to earthed part		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	6
Distance, to be maintained, conductive elements		
• upwards	mm	0
• downwards	mm	0
• forwards	mm	0
• backwards	mm	0
• sidewards	mm	6

Connection type:			
Product function			
• removable terminal for auxiliary and control circuit	No		
Design of the electrical connection			
for main current circuit	screw-type terminals		
for auxiliary and control current circuit	screw-type terminals		
Type of the connectable conductor cross-section			
• for main contacts			
• solid	2x (2.5 16 mm²)		
• stranded	2x (10 50 mm²), 10 70 mm²		
• finely stranded			
 with conductor end processing 	2x (2.5 35 mm²), 2.5 50 mm²		
• for auxiliary contacts			
• solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
• finely stranded			
 with conductor end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)		
• for AWG conductors			
• for main contacts	2x (10 1/0), 1x (10 2/0)		

for auxiliary contacts		2x (20 16), 2x (18 14)
Conductor cross section that can be connected		
for main contacts		
• solid	mm²	2.5 6
• stranded	mm²	10 70
stranded wire		
 with conductor end processing 	mm²	2.5 50
for auxiliary contact		
• solid	mm²	0.5 2.5
• stranded wire		
 with conductor end processing 	mm²	0.5 2.5
AWG number / as coded connectable conductor cross-section		
for main contacts / minimum		10
for auxiliary contact		20 14

Certificates/approvals:			
Verification of suitability		CSA/U PRS/A	JL/CC/GL/LRS/BV/DNV/RMRS/RINA/ ABS
Varification of suitability / ATEX		Yes	
General Product Approval	For use in hazardous		Test Certificates

ROSTEST



DEKRA EXAM,

locations

Manufacturer

Shipping Approval













Shipping Approval

other



Manufacturer

Further information:

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

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

Industry Mall (Online ordering system)

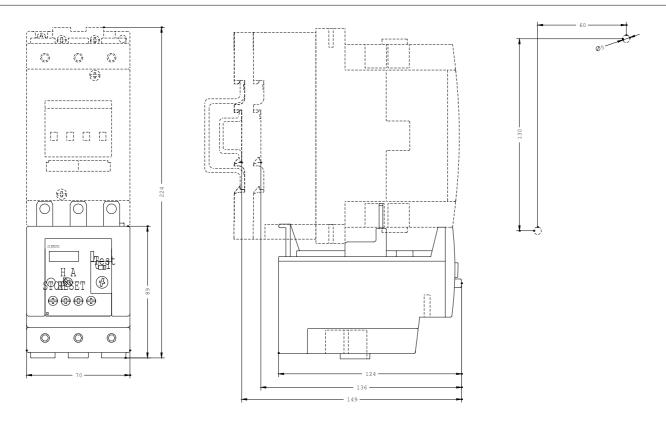
 $\underline{\text{http://www.siemens.com/industrial-controls/mall}}$

CAx-Online-Generator

http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3RU1146-4DB0/all



last change: Mar 5, 2012