SIEMENS

Product data sheet 3RU1146-4FB0

OVERLOAD RELAY 28...40 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	Α	80
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	18.5
Adjustable response current		
of the current-dependent overload release	А	28 40

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

mm	0
mm	0
mm	0
mm	6
mm	0
mm	6
	mm mm mm mm mm

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
- for auxiliary contact

10

20 ... 14

Certificates/approvals:

Verification of suitability

CSA / UL / CC / GL / LRS / BV / DNV / RMRS / RINA /

PRS / ABS

Yes

Varification of suitability / ATEX

General Product Approval

For use in hazardous locations

Test Certificates



ROSTEST



DEKRA EXAM,

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)

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

CAx-Online-Generator

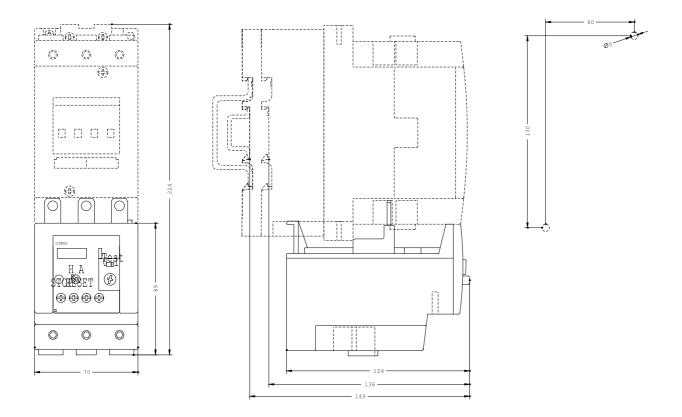
http://www.siemens.com/cax

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

http://support.automation.siemens.com/WW/view/en/3RU1146-4FB0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU1146-4FB0



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