

Product data sheet 3RU1146-4MB0

OVERLOAD RELAY 80...100 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 / frontal/front side		IP20	
Insulation voltage / with degree of pollution 3 / rated value	V	1,000	
Altitude of installation site / at a height over sea level / maximum	m	2,000	
Ambient temperature			
during the operating phase	°C	-20 70	
during storage	°C	-55 80	
during transport	°C	-55 80	
Relative humidity / during the operating phase / maximum	%	100	
Resistance against shock		8g / 10 ms	
Impulse voltage resistance / rated value	kV	8	
Real loss power / 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	200	
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 3 AC / rated value			
• maximum	V	1,000	

Service power / at AC-3		
• at 400 V	kW	45
Adjustable response current		
of the current-dependent overload release	Α	80 100

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 fixing/fixation		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		
• unifilar		2x (2.5 16 mm2)
stranded wire		2x (10 50 mm2), 10 70 mm2
stranded wire		
 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 wire end processing		2x (0.5 1.5 mm2), 2x (0.75 2.5 mm2)
 without conductor final cutting 		2x (0,5 1,5 mm2), 2x (0,75 2,5 mm2)
at AWG-conductors		
for main contacts		2x (10 1/0), 1x (10 2/0)
for auxiliary contacts		2x (18 14)
Conductor cross section that can be connected		
for main contacts		
• unifilar	mm²	2.5 6
• stranded wire	mm²	10 70
• stranded wire		
with conductor end processing	mm²	2.5 50
for auxiliary contact		
• unifilar	mm²	0.5 2.5

• stranded wire		
 with conductor end processing 	mm²	0.5 2.5
 without conductor final cutting 	mm²	0.5 2.5
AWG number / as coded connectable conductor cross-section		
• for main contacts / minimum		10
for auxiliary contact		18 14

Certificates/approvals:	
verification of suitability	CSA/UL/CC/GL/LRS/BV/DNV/RMRS/RINA/ PRS/ABS
varification of suitability / ATEX	Yes

Further information:

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

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

Global Industry Mall (Online ordering system)

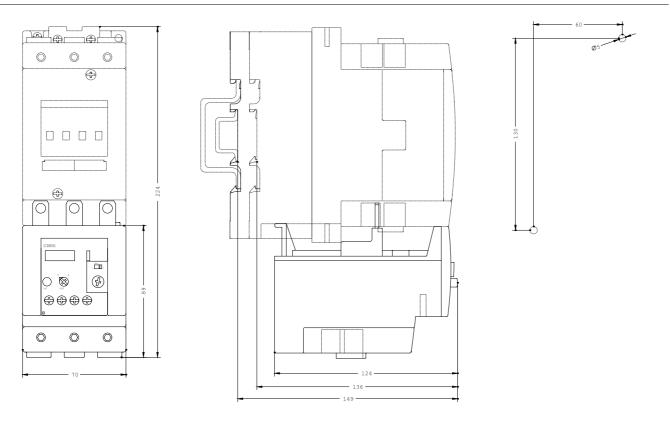
http://www.siemens.com/industrial-controls/mall

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

http://support.automation.siemens.com/WW/view/en/3RU1146-4MB0/all

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RU1146-4MB0



last change: Jun 14, 2010