SIEMENS

Data sheet 3RH1253-1BB40

Contactor relay, 5 NO + 3 NC Attachable block, captive 24 V DC size S00 Screw terminal size S00 !!! Phased-out product !!! Successor is SIRIUS 3RH2 Preferred successor type is >>3RH2253-1BB40<<



Figure similar

Product brand name	SIRIUS
Product designation	contactor relay
General technical data	
Size of contactor	S00
Product extension	
Auxiliary switch	No
Insulation voltage	
 with degree of pollution 3 rated value 	690 V
Degree of pollution	3
Surge voltage resistance rated value	6 kV
Protection class IP	
• on the front	IP20
Shock resistance	10g / 5 ms and 5g / 10 ms
Mechanical service life (switching cycles)	
 of contactor typical 	10 000 000
Reference code acc. to DIN EN 81346-2	К
Reference code acc. to DIN EN 61346-2	К

Ambient conditions	
Installation altitude at height above sea level	
• maximum	2 000 m
Ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
during transport	-55 +80 °C
Control circuit/ Control	
Type of voltage of the control supply voltage	DC
Control supply voltage at DC	
• rated value	24 V
Operating range factor control supply voltage rated value of magnet coil at DC	
• initial value	0.8
Full-scale value	1.1
Closing power of magnet coil at DC	3.2 W
Holding power of magnet coil at DC	3.2 W
Auxiliary circuit	
Number of NC contacts for auxiliary contacts	3
• instantaneous contact	3
delayed switching	0
 lagging switching 	0
make-before-break switching	0
Number of NO contacts for auxiliary contacts	5
• instantaneous contact	5
delayed switching	0
• leading contact	0
make-before-break switching	0
Number of CO contacts	
for auxiliary contacts	0
 of auxiliary contacts instantaneous contact 	0
Identification number and letter for switching elements	53 E
Operating current at AC-12 maximum	10 A
Operating current at AC-15	
• at 230 V rated value	6 A
• at 400 V rated value	3 A
• at 500 V rated value	2 A
• at 690 V rated value	1 A
Operating current at 1 current path at DC-12	
• at 24 V rated value	10 A

• at 110 V rated value	3 A
• at 220 V rated value	1 A
Operating current at 1 current path at DC-13	
• at 24 V rated value	10 A
• at 110 V rated value	1 A
• at 220 V rated value	0.27 A
Contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)

Shor		

	Design	of the	fuse	link
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• for short-circuit protection of the auxiliary switch required

fuse gL/gG: 10 A

Installation/ mounting/ dimensions	
Mounting position	+/-180° rotation possible on vertical mounting surface; can be tilted forward and backward by +/- 22.5° on vertical mounting surface
Mounting type	screw and snap-on mounting
Height	57.5 mm
Width	45 mm
Depth	111 mm
Required spacing	
 with side-by-side mounting 	
— at the side	0 mm

Connections/Terminals	
Type of electrical connection	
 for auxiliary and control current circuit 	screw-type terminals
Type of connectable conductor cross-sections	
 for auxiliary contacts 	
— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
 at AWG conductors for auxiliary contacts 	2x (20 16), 2x (18 14), 1x 12

Safety related data	
B10 value	
 with high demand rate acc. to SN 31920 	1 000 000; With 0.3 x le
Proportion of dangerous failures	
 with low demand rate acc. to SN 31920 	40 %
 with high demand rate acc. to SN 31920 	75 %
T1 value for proof test interval or service life acc. to	20 y
IEC 61508	

Certificates/approvals

General Product Approval

Functional Safety/Safety of Machinery

Declaration of Conformity









Type Examination



Test Certificates

Marine / Shipping

other

Type Test Certificates/Test Report

Special Test Certificate







Miscellaneous

other

Confirmation

Further information

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

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

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH1253-1BB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH1253-1BB40

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

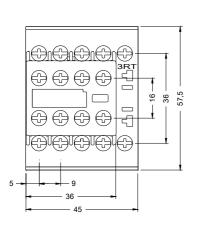
https://support.industry.siemens.com/cs/ww/en/ps/3RH1253-1BB40

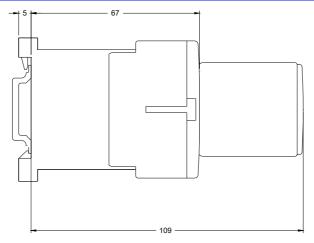
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH1253-1BB40&lang=en

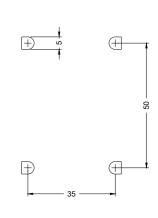
Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RH1253-1BB40/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH1253-1BB40&objecttype=14&gridview=view1







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