SIEMENS

Data sheet 3RH2140-2WB40



Coupling contactor relay, 4 NO, 24 V DC, 0.85 \dots 1.85* US, with varistor plugged on, Size S00, Spring-type terminal

SIRIUS product brand name product designation Coupling relay for switching auxiliary circuits product type designation 3RH2 General technical data S00 size of contactor No product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated 690 V value 3 degree of pollution 6 kV surge voltage resistance rated value shock resistance at rectangular impulse • at DC 10g / 5 ms, 5g / 10 ms shock resistance with sine pulse at DC 15g / 5 ms, 8g / 10 ms mechanical service life (switching cycles) 30 000 000 • of contactor typical reference code according to IEC 81346-2 **Substance Prohibitance (Date)** 10/01/2009 Ambient conditions installation altitude at height above sea level maximum 2 000 m ambient temperature -25 ... +50 °C during operation during storage -55 ... +80 °C 10 % relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 95 % maximum Main circuit no-load switching frequency at AC 10 000 1/h at DC 10 000 1/h Control circuit/ Control type of voltage of the control supply voltage DC control supply voltage at DC 24 V rated value operating range factor control supply voltage rated value of magnet coil at DC 0.85 • initial value • full-scale value 1.85 design of the surge suppressor with varistor closing power of magnet coil at DC 1.6 W holding power of magnet coil at DC 1.6 W closing delay

* et IDC	100	05 400
a TDC archigitime	• at DC	25 120 ms
Auxiliary circuit number of NC contacts for auxillary contacts * instantianeous contact identification number and letter for switching elements operational current at AC-12 maximum operational current at AC-13 maximum operational current at AC-15 maximum operational current at AC-18 maximum operational current at according to the service of the servi		5 20 mg
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mistantaneous contact 40 E		•
Identification number and letter for switching elements operational current at AC-12 maximum operational current at AC-15 on at 230 V rated value 3 A		
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DC-12	 at 600 V rated value 	0.65 A
• at 60 V rated value • at 110 V rated value • at 220 V rated value • at 440 V rated value • at 440 V rated value • at 600 V rated value • at 110 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 220 V rated value • at 600 V rated value • at 110 V rated value • at 110 V rated value • at 600 V rated value		
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• at 600 V rated value operating frequency at DC-12 maximum operational current at 1 current path at DC-13 • at 24 V rated value • at 110 V rated value • at 220 V rated value • at 600 V rated value • at 600 V rated value • at 24 V rated value • at 24 V rated value • at 600 V rated value • at 100 V rated value • at 200 V rated value • at 600 V rated value • at 60 V rated value • at 100 V rated value • at 220 V rated value • at 220 V rated value • at 220 V rated value • at 440 V rated value • at 600	at 220 V rated value	3.6 A
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• at 24 V rated value • at 60 V rated value • at 110 V rated value • at 220 V rated value • at 440 V rated value • at 600 V rated v	• at 600 V rated value	0.1 A
 at 60 V rated value at 110 V rated value at 220 V rated value at 440 V rated value at 600 V rated value oat 600 V rated value operating frequency at DC-13 maximum design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V contact reliability of auxiliary contacts 4.7 A 3 A 1.2 A 0.5 A 0.26 A 1 000 1/h C characteristic: 6 A; 0.4 kA 1 faulty switching per 100 million (17 V, 1 mA) 		
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design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V contact reliability of auxiliary contacts C characteristic: 6 A; 0.4 kA 1 faulty switching per 100 million (17 V, 1 mA)		
protection of the auxiliary circuit up to 230 V contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V, 1 mA)		
	protection of the auxiliary circuit up to 230 V	
UL/CSA ratings		1 faulty switching per 100 million (17 V, 1 mA)
	UL/CSA ratings	

contact rating of auxiliary contacts according to UL	A600 / Q600	
	A000 / Q000	
Short-circuit protection	f 1/ 0 /0 f	
design of the fuse link 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	
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail	
height	70 mm	
width	45 mm 73 mm	
depth required spacing	73 11111	
with side-by-side mounting		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	0 mm	
for grounded parts	·	
— forwards	10 mm	
— upwards	10 mm	
— at the side	6 mm	
— downwards	10 mm	
for live parts		
— forwards	10 mm	
— upwards	10 mm	
— downwards	10 mm	
— at the side	6 mm	
Connections/ Terminals		
type of electrical connection for auxiliary and control circuit	spring-loaded terminals	
type of connectable conductor cross-sections		
• for auxiliary contacts		
— solid or stranded	2x (0,5 4 mm²)	
— finely stranded with core end processing	2x (0.5 2.5 mm²)	
— finely stranded without core end processing	2x (0.5 2.5 mm²)	
at AWG cables for auxiliary contacts	2x (20 12)	
Safety related data product function positively driven operation according to	Voo	
IEC 60947-5-1	Yes	
B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x le	
proportion of dangerous failures		
 with low demand rate according to SN 31920 	40 %	
with high demand rate according to SN 31920	73 %	
failure rate [FIT] with low demand rate according to SN 31920	100 FIT	
T1 value for proof test interval or service life according to IEC 61508	20 y	
protection class IP on the front according to IEC 60529	IP20	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front	
Certificates/ approvals		

General Product Approval





Confirmation



<u>KC</u>



Function EMC Safety/S Machine	afety of Declaration of Conformity	Test Certificates
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Type Examination Certificate





Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway

Dangerous Good



Confirmation



Vibration and Shock

<u>Transport Information</u>

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2140-2WB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2140-2WB40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2140-2WB40

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

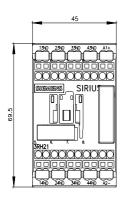
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2140-2WB40&lang=en

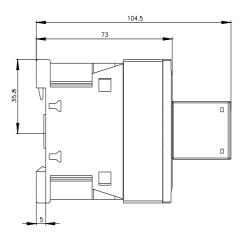
Characteristic: Tripping characteristics, I2t, Let-through current

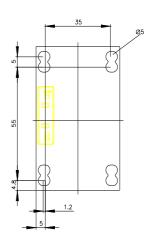
 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RH2140-2WB40/char}$

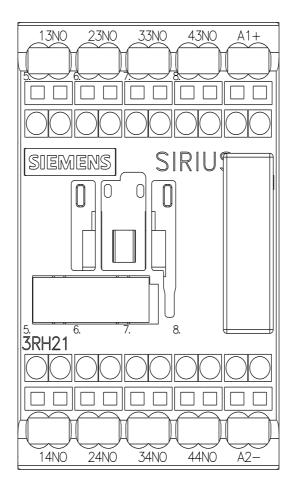
Further characteristics (e.g. electrical endurance, switching frequency)

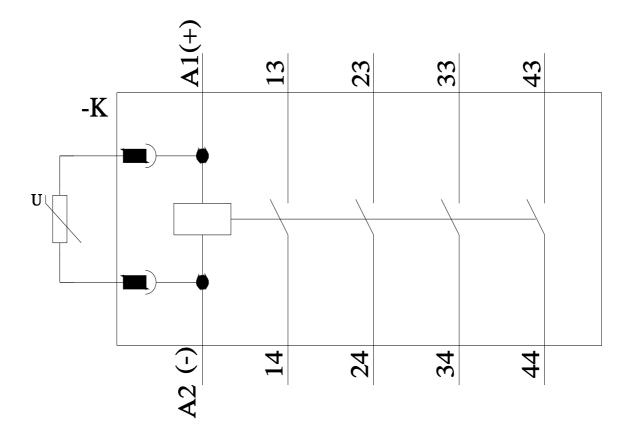
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2140-2WB40&objecttype=14&gridview=view1











last modified: 11/10/2021 🖸