SIEMENS

Data sheet 3RH2371-2FB40



Contactor relay, 7 NO + 1 NC, 24 V DC, with integrated diode Size. S00, spring-type terminal, Removable auxiliary switch

product designation Auxiliary contactor product type designation 3RH2 Size of contactor product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value degree of pollution surge voltage resistance rated value e at DC shock resistance at rectangular impulse at DC shock resistance with sine pulse at DC shock resistance with sine pulse of contactor typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Installation altitude at height above sea level maximum administration altitude at height above sea level maximum during operation during operation during operation during operation during distration relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency at AC at C totol Control Circuit/ Control type of voltage of the control supply voltage rated value of magnet coil at DC initial value full-scale value full-scale value full-scale value design of the surge suppressor closing power of magnet coil at DC 4 W 4 W design of the surge suppressor closing power of magnet coil at DC 4 W 4 W design of the surge suppressor closing power of magnet coil at DC 4 W 4 W design of the surge suppressor closing power of magnet coil at DC 4 W 4 W 4 W 4 W 4 W	product brand name	SIRIUS	
size of contactor S00 product extension auxiliary switch insulation voltage with degree of pollution 3 at AC rated value degree of pollution 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) • of contactor typical 10 000 000 reference code according to IEC 81346-2 K Substance Prohibitance (Date) 1001/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during operation • during storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC 10 000 1/h • at DC control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • unitsia	product designation	Auxiliary contactor	
size of contactor product extension auxiliary switch Insulation voltage with degree of pollution 3 at AC rated value degree of pollution 3 surge voltage resistance rated value 6 kV 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) of contactor typical reference code according to IEC 81346-2 K Substance Prohibitance (Date) Ambient conditions installation allitude at height above sea level maximum ambient temperature during operation during operation during storage 7-55 +80 °C relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency at AC at AC 10 000 1/h at AC at AC 10 000 1/h at DC control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coll at DC initial value fullscale value 0 .8 fullscale value 1.1 design of the surge suppressor	product type designation	3RH2	
product extension auxillary switch insulation voltage with degree of pollution 3 at AC rated value degree of pollution surge voltage resistance rated value	General technical data		
insulation voltage with degree of pollution 3 at AC rated value degree of pollution surge voltage resistance rated value shock resistance at rectangular impulse • at DC shock resistance with sine pulse • at DC reference code according to IEC 81346-2 K Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • full-scale value • full-scale value • full-scale value 1.1 design of the surge suppressor	size of contactor	S00	
value degree of pollution surge voltage resistance rated value https://www.documer.com/doc	product extension auxiliary switch	No	
surge voltage resistance rated value shock resistance at rectangular impulse at DC shock resistance with sine pulse at DC soft resistance with sine pulse soft resistance resistance with sine pulse soft resistance res		690 V	
shock resistance at rectangular impulse	degree of pollution	3	
shock resistance with sine pulse • at DC • at DC mechanical service life (switching cycles) • of contactor typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC 10 000 1/h • at DC Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value 1.1 design of the surge suppressor	surge voltage resistance rated value	6 kV	
shock resistance with sine pulse at DC mechanical service life (switching cycles) of contactor typical reference code according to IEC 81346-2 K Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency of at AC of at DC control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC orated value operating range factor control supply voltage rated value of magnet coil at DC initial value of lill-scale value of lill-scale value of lill-scale value design of the surge suppressor	shock resistance at rectangular impulse		
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mechanical service life (switching cycles) of contactor typical reference code according to IEC 81346-2 Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency of at AC of at DC control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC orated value operating range factor control supply voltage rated value of magnet coil at DC oritial value of full-scale value of the surge suppressor diode	shock resistance with sine pulse		
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ambient temperature • during operation • during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value 1.1 design of the surge suppressor diode	Ambient conditions		
 during operation during storage -55 +80 °C relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 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 or rated value operating range factor control supply voltage rated value of magnet coil at DC initial value one full-scale value 0.8 full-scale value diode	installation altitude at height above sea level maximum	2 000 m	
 during storage relative humidity minimum 10 % relative humidity at 55 °C according to IEC 60068-2-30 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 control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor diode 	ambient temperature		
relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value 10 000 1/h 10 000 1/h DC 24 V 08 08 • full-scale value 1.1 design of the surge suppressor	 during operation 	-25 +60 °C	
relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency	during storage	-55 +80 °C	
Main circuit no-load switching frequency		10 %	
no-load switching frequency • at AC • at DC 10 000 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC • rated value • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor diode		95 %	
 at AC at DC 10 000 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value operating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor diode 	Main circuit		
at DC Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC rated value rated value coperating range factor control supply voltage rated value of magnet coil at DC initial value full-scale value design of the surge suppressor 10 000 1/h 24 V 0.8 1.1 design of the surge suppressor diode	no-load switching frequency		
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 design of the surge suppressor diode	• at AC	10 000 1/h	
type of voltage of the control supply voltage control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor occurrence 24 V 0.8 1.1 design of the surge suppressor	• at DC	10 000 1/h	
control supply voltage at DC • rated value operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor 24 V 0.8 1.1	Control circuit/ Control		
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operating range factor control supply voltage rated value of magnet coil at DC • initial value • full-scale value design of the surge suppressor operating range factor control supply voltage rated 0.8 1.1 diode	control supply voltage at DC		
value of magnet coil at DC	rated value	24 V	
• full-scale value design of the surge suppressor diode			
design of the surge suppressor diode	 initial value 	0.8	
	full-scale value	1.1	
closing power of magnet coil at DC 4 W	design of the surge suppressor	diode	
	closing power of magnet coil at DC	4 W	

holding power of magnet coil at DC	4 W
closing delay	7 10
• at DC	30 100 ms
opening delay	33 133 III0
• at DC	38 65 ms
arcing time	10 15 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	1
instantaneous contact	1
number of NO contacts for auxiliary contacts	7
instantaneous contact	7
identification number and letter for switching	71
elements	
operational current at AC-12 maximum	10 A
operational 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
operational 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
at 440 V rated value	0.3 A
at 600 V rated value	0.15 A
operational current with 2 current paths in series at DC-12	
at 24 V rated value	10 A
at 60 V rated value	10 A
at 110 V rated value	4 A
at 220 V rated value	2 A
at 440 V rated value	1.3 A
at 600 V rated value	0.65 A
operational current with 3 current paths in series at	
DC-12	
 at 24 V rated value 	10 A
 at 60 V rated value 	10 A
at 110 V rated value	10 A
at 220 V rated value	3.6 A
at 440 V rated value	2.5 A
at 600 V rated value	1.8 A
operating frequency at DC-12 maximum	1 000 1/h
operational current at 1 current path at DC-13	C A
at 24 V rated value at 110 V rated value	6 A
at 110 V rated value at 220 V rated value	1 A
at 220 V rated value at 440 V rated value	0.3 A 0.14 A
at 440 V rated valueat 600 V rated value	0.14 A 0.1 A
operational current with 2 current paths in series at	V.1 A
DC-13	10.4
 at 24 V rated value at 60 V rated value 	10 A 3.5 A
at 60 V rated value at 110 V rated value	1.3 A
at 220 V rated value	0.9 A
at 440 V rated value	0.9 A 0.2 A
at 600 V rated value	0.1 A
- at ood v rated value	U.I.A.
operational current with 3 current paths in series at DC-13	
	10 A
DC-13	10 A 4.7 A

• at 220 V rated value	1.2 A
 at 440 V rated value 	0.5 A
at 600 V rated value	0.26 A
operating frequency at DC-13 maximum	1 000 1/h
design of the miniature circuit breaker for short-circuit protection of the auxiliary circuit up to 230 V	C characteristic: 6 A; 0.4 kA
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	
contact rating of auxiliary contacts according to UL	A600 / Q600
Short-circuit protection	
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
depth	121 mm
required spacing	
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 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	
σοποιαι τ τουμοι Αμμιοναι	



Confirmation





<u>KC</u>



EMC

Declaration of Conformity

Test Certificates

Marine / Shipping







Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping













other

Railway

Dangerous Good

Confirmation



Vibration and Shock

Transport Information

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=3RH2371-2FB40

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RH2371-2FB40}$

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

 $\underline{\text{https://support.industry.siemens.com/cs/ww/en/ps/3RH2371-2FB40}}$

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

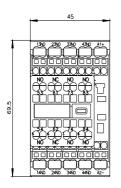
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2371-2FB40&lang=en

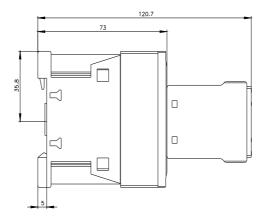
Characteristic: Tripping characteristics, I2t, Let-through current

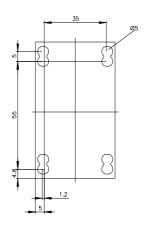
https://support.industry.siemens.com/cs/ww/en/ps/3RH2371-2FB40/char

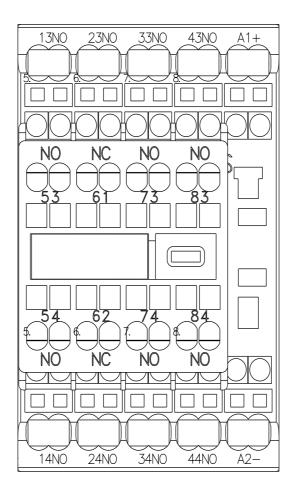
Further characteristics (e.g. electrical endurance, switching frequency)

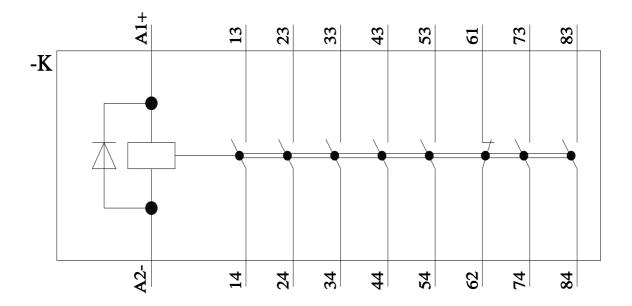
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