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 type designation product type designation 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 of kV shock resistance at rectangular impulse of DC shock resistance with sine pulse of contactor typical 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 at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency of control supply voltage at DC related value DC Ontrol circuit/ Control type of voltage of the control supply voltage control supply voltage at DC or related value Auxiliary contactor S00 S00 S00 S00 S00 S00 S00 S00 S00 S0	product brand name	SIRIUS
Sono	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 690 V 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) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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 10 000 1/h 10 000 1/h type of voltage of the control supply voltage Control supply voltage at DC	product type designation	3RH2
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 reference code according to IEC 81346-2 Kubstance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage relative humidity at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency at AC control circuit/ Control type of voltage of the control supply voltage Control supply voltage at DC	General technical data	
insulation voltage with degree of pollution 3 at AC rated value degree of pollution surge voltage resistance rated value • at DC shock resistance with sine pulse • of contactor typical reference code according to IEC 81346-2 K Substance Prohibitance (Date) Involv/2009 Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage relative humidity minimum relative humidity at 55 °C according to IEC 60068-2-30 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 DC control supply voltage at DC	size of contactor	S00
degree of pollution surge voltage resistance rated value shock resistance at rectangular impulse • at DC shock resistance with sine pulse • but one of contactor typical shock resistance with sine pulse • but one of contactor typical shock resistance with sine pulse shock resistance with sine pulse **C **Substance Prohibitance (Date) **A **C **Substance Prohibitance (Date) **A **In 10/10/2009 **A **Mailation altitude at height above sea level maximum shielate temperature • during operation • 25 +60 °C • 55 +80 °C 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 **Ontrol circuit/ Control **Type of voltage of the control supply voltage **DC **Control supply voltage at DC	product extension auxiliary switch	No
surge voltage resistance rated value shock resistance at rectangular impulse • at DC shock resistance with sine pulse • 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 • during operation • during operation • during storage 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		690 V
shock resistance at rectangular impulse • at DC 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 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 DC control supply voltage at DC	degree of pollution	3
at DC 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 oduring 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	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 • 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	shock resistance at rectangular impulse	
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 Televice in the service in the	• at DC	10g / 5 ms, 5g / 10 ms
mechanical service life (switching cycles)	shock resistance with sine pulse	
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 ouring operation during storage 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 DC Control supply voltage at DC K 10 000 000 10/01/2009 AK Control circuit/ Control type of voltage of the control supply voltage DC Control supply voltage at DC	• at DC	15g / 5 ms, 8g / 10 ms
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 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	mechanical service life (switching cycles)	
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage 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		10 000 000
installation altitude at height above sea level maximum ambient temperature during operation during storage during storage 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 type of voltage of the control supply voltage control supply voltage at DC 2 000 m 2 000 m 2 000 m 2 000 m 10 °C -25 +60 °C -55 +80 °C 95 % 10 % 10 % 10 % 10 000 1/h 10 000 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC	reference code according to IEC 81346-2	K
installation altitude at height above sea level maximum ambient temperature during operation during storage 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 To woo 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC		10/01/2009
ambient temperature • during operation • during storage • during storage 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	Ambient conditions	
 during operation during storage the during storage <li< th=""><th>installation altitude at height above sea level maximum</th><th>2 000 m</th></li<>	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	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	 during operation 	-25 +60 °C
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	during storage	-55 +80 °C
maximum Main circuit no-load switching frequency • at AC • at DC 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	relative humidity minimum	10 %
no-load switching frequency • at AC • at DC Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC		95 %
at AC at DC 10 000 1/h type of voltage of the control supply voltage control supply voltage at DC 10 000 1/h DC DC	Main circuit	
at DC 10 000 1/h Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC DC	no-load switching frequency	
Control circuit/ Control type of voltage of the control supply voltage control supply voltage at DC	• at AC	10 000 1/h
type of voltage of the control supply voltage control supply voltage at DC	• at DC	10 000 1/h
control supply voltage at DC	Control circuit/ Control	
	type of voltage of the control supply voltage	DC
• rated value 24 V	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	• initial value	0.8
• full-scale value 1.1	full-scale value	1.1
design of the surge suppressor diode	design of the surge suppressor	diode
closing power of magnet coil at DC 4 W	closing power of magnet coil at DC	4 W

holding power of magnet coil at DC	4 W
closing delay	- · · ·
• at DC	30 100 ms
opening delay	00 100 HIS
• 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	40.4
at 24 V rated value	10 A
at 60 V rated value	10 A
at 110 V rated value at 220 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 • at 24 V rated value	6 A
at 24 v rated value at 110 V rated value	1 A
at 110 V rated value at 220 V rated value	0.3 A
at 440 V rated value	0.3 A 0.14 A
at 600 V rated value	0.14 A
operational current with 2 current paths in series at DC-13	
at 24 V rated value	10 A
at 60 V rated value	3.5 A
at 110 V rated value	1.3 A
at 220 V rated value	0.9 A
at 440 V rated value	0.2 A
at 600 V rated value	0.1 A
operational current with 3 current paths in series at DC-13	
• at 24 V rated value	10 A
at 60 V rated value	4.7 A
• at 110 V rated value	3 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	
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>



EMC

Declaration of Conformity

Test Certificates

Marine / Shipping







Type Test Certificates/Test Report

Special Test Certificate



Marine / Shipping













other

Dangerous Good

Confirmation



<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=3RH2371-2FB40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2371-2FB40

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

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)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2371-2FB40&objecttype=14&gridview=view1

last modified:

1/26/2022

