SIEMENS

Data sheet 3RH2344-1DG40



Contactor relay with auxiliary switch 125 V DC Size S00, screw terminal, 4 NC basic unit / EN Varistor plugged on

product type designation General technical data 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 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 ambient temperature o during operation other insulations relative humidity minimum relative humidity minimum relative humidity minimum relative humidity minimum relative humidity frequency other insulation at the designation of the conditions of the	product brand name	SIRIUS	
Sone	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 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 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	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 • at DC shock resistance with sine pulse • at DC at DC shock resistance with sine pulse • at DC for 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 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	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 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 at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC Control circuit/ Control	size of contactor	S00	
degree of pollution surge voltage resistance rated value 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 Kubstance 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	product extension auxiliary switch	No	
surge voltage resistance rated value shock resistance at rectangular impulse • at DC shock resistance with sine pulse • 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 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		690 V	
shock resistance at rectangular impulse • at DC 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 at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC 10g / 5 ms, 5g / 10 ms 15g / 5 ms, 8g / 10 ms 10 000 000 K Control circuit/ Control	degree of pollution	3	
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 of 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 10 000 1/h Control circuit/ Control	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 at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC 15g / 5 ms, 8g / 10 ms 10 000 000 10 000 000 10 000 000 10 000 00	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 • 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 10 000 1/h Control circuit/ Control	• at DC	10g / 5 ms, 5g / 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 at 55 °C according to IEC 60068-2-30 maximum Main circuit no-load switching frequency • at AC • at DC Control circuit/ Control	shock resistance with sine pulse		
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 oduring 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	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	mechanical service life (switching cycles)		
Substance Prohibitance (Date) Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage -25 +60 °C • 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	of contactor typical	10 000 000	
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	reference code according to IEC 81346-2	K	
installation altitude at height above sea level maximum ambient temperature • during operation • during storage • 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 • at DC Control circuit/ Control	. ,	07/01/2006	
ambient temperature • during operation • during storage -55 +60 °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 Control circuit/ Control	Ambient conditions		
 during operation during storage telative 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 Control circuit/ Control 	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 • at DC 10 000 1/h Control circuit/ Control	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 10 000 1/h Control circuit/ Control	 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 10 000 1/h Control circuit/ Control	during storage	-55 +80 °C	
maximum Main circuit no-load switching frequency • at AC • at DC 10 000 1/h 10 000 1/h Control circuit/ Control	relative humidity minimum	10 %	
no-load switching frequency		95 %	
• at AC 10 000 1/h • at DC 10 000 1/h Control circuit/ Control	Main circuit		
at DC 10 000 1/h Control circuit/ Control	no-load switching frequency		
Control circuit/ Control	• at AC	10 000 1/h	
	• at DC	10 000 1/h	
1 6 14 641 4 1 1 14	Control circuit/ Control		
type of voltage of the control supply voltage	type of voltage of the control supply voltage	DC	
control supply voltage at DC	control supply voltage at DC		
• rated value 125 V	rated value	125 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 with varistor	design of the surge suppressor	with varistor	
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	
• at DC	7 13 ms
arcing time	10 15 ms
Auxiliary circuit	
number of NC contacts for auxiliary contacts	4
instantaneous contact	4
number of NO contacts for auxiliary contacts	4
instantaneous contact	4
identification number and letter for switching	44 E
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	
at 24 V rated value	6 A
• at 110 V rated value	1 A
• at 220 V rated value	0.3 A
• at 440 V rated value	0.14 A
at 600 V rated value	0.1 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	57.5 mm
width	45 mm
depth	117 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	10 111111
— forwards	10 mm
— upwards	10 mm
— downwards	10 mm
— at the side	6 mm
Connections/ Terminals	
	corrough use terminals
type of electrical connection for auxiliary and control circuit	screw-type terminals
type of connectable conductor cross-sections	
for auxiliary contacts and or attended.	2v (0 F 4 F mm²) 2v (0 7F 9 F mm²) 2v 4 mm²
— solid or stranded	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 cables for auxiliary contacts	2x (20 16), 2x (18 14), 2x 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	EMC
- Physical P	





Confirmation

F



Declaration of Conformity

Test Certificates

Marine / Shipping

<u>KC</u>





Type Test Certificates/Test Report







Marine / Shipping

other









Confirmation



Railway

Dangerous Good

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=3RH2344-1DG40

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2344-1DG40

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

https://support.industry.siemens.com/cs/ww/en/ps/3RH2344-1DG40

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

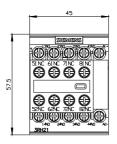
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2344-1DG40&lang=en

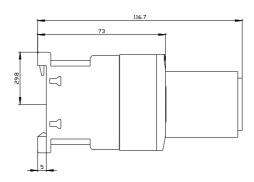
Characteristic: Tripping characteristics, I2t, Let-through current

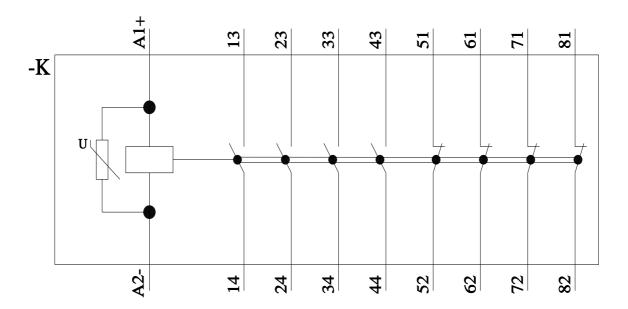
https://support.industry.siemens.com/cs/ww/en/ps/3RH2344-1DG40/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2344-1DG40&objecttype=14&gridview=view1







last modified: 12/1/2021 **C**