SIEMENS

Data sheet

3RH2244-1AP00



contactor relay, 4 NO + 4 NC, 230 V AC, 50 / 60 Hz, size S00, screw terminal, captive auxiliary switch

product brand name	SIRIUS
product designation	Auxiliary contactor
product type designation	3RH2
General technical data	
size of contactor	S00
product extension auxiliary switch	No
power loss [W] for rated value of the current without load current share typical	1.43 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 kV
shock resistance at rectangular impulse	
• at AC	7,3g / 5 ms, 4,7g / 10 ms
shock resistance with sine pulse	
• at AC	11,4g / 5 ms, 7,3g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
reference code according to IEC 81346-2	К
Substance Prohibitance (Date)	10/01/2009
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
relative humidity minimum	10 %
relative humidity at 55 °C according to IEC 60068-2-30 maximum	95 %
Environmental footprint	
Environmental Product Declaration(EPD)	Yes
Global Warming Potential [CO2 eq] total	95.5 kg
Global Warming Potential [CO2 eq] during manufacturing	1.43 kg
Global Warming Potential [CO2 eq] during operation	94.1 kg
Global Warming Potential [CO2 eq] after end of life	-0.016 kg
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	AC
control supply voltage at AC	
● at 50 Hz rated value	230 V

at 60 Hz rated value	230 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	37 VA
inductive power factor with closing power of the coil	0.8
apparent holding power of magnet coil at AC	5.7 VA
inductive power factor with the holding power of the coil	0.25
closing delay	
• at AC	8 33 ms
opening delay	
• at AC	4 15 ms
arcing time	10 15 ms
Auxiliary circuit	10 10 110
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 elements	44 E
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	1A
at 220 V rated value	0.3 A
at 440 V rated value	0.14 A
at 600 V rated value	0.1 A
	V.17
operational current with 2 current paths in series at DC-13	10.4
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 DIN 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			
— 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	screw-type terminals		
type of connectable conductor cross-sections			
for auxiliary contacts			
- solid or stranded	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), 2x 4 mm²		
 — solid of stranded — finely stranded with core end processing 	2x (0.5 1.5 mm ²), 2x (0.75 2.5 mm ²)		
 Intervision and each of the processing for AWG cables for auxiliary contacts 	2x (0.5 1.5 mm ⁻), 2x (0.75 2.5 mm ⁻) 2x (20 16), 2x (18 14), 2x 12		
Safety related data	LA (LV 10), LA (10 17), LA 12		
proportion of dangerous failures	40.9%		
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		
B10 value with high demand rate according to SN 31920	1 000 000; With 0.3 x le		
product function positively driven operation according to IEC 60947-5-1	Yes		
IEC 61508			
T1 value for proof test interval or service life according to IEC 61508	20 a		
Electrical Safety			
protection class IP on the front according to IEC 60529	IP20		
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touch protection on th	touch protection on the front according to IEC 60529 finger-safe, for vertical contact from the front						
Approvals Certificates							
General Product App	roval						
	UK CA	CE EG-Konf.		<u>Confirmation</u>			
General Product App	roval	EMV	Test Certificates		Marine / Shipping		
KC	EHC		<u>Special Test Certific-</u> <u>ate</u>	<u>Type Test Certific-</u> ates/Test Report	ABS		
Marine / Shipping							
BUREAU VERITAS		Hoyd's Register uis	PRS	RINA	RMRS		
other							
<u>Miscellaneous</u>	<u>Confirmation</u>						
Further information							
Siemens has decided to exit the Russian market (see here).							
https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business							
Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). Information on the packaging https://support.industry.siemens.com/cs/ww/en/view/109813875							
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=3RH2244-1AP00 Cax online generator https://unpact.automation.siemens.com/MM///CAXordor/default.com/2/apag=on8 mlfb=3RH2244_1AP00							

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RH2244-1AP00

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

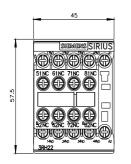
https://support.industry.siemens.com/cs/ww/en/ps/3RH2244-1AP00

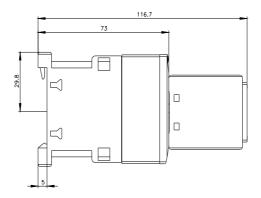
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RH2244-1AP00&lang=en

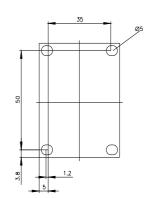
Characteristic: Tripping characteristics, I2t, Let-through current

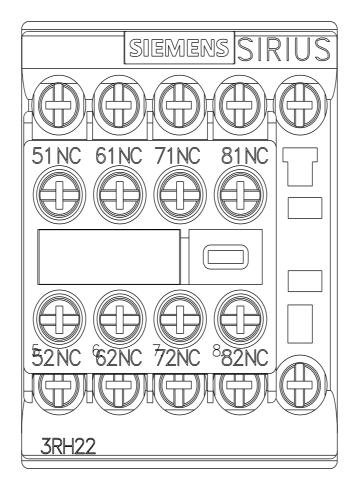
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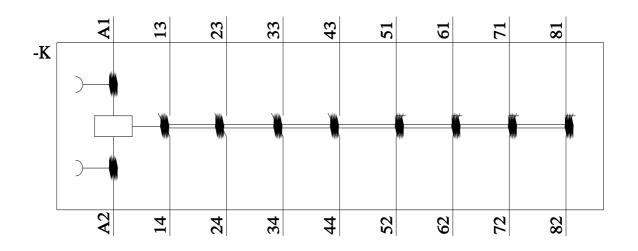
Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2244-1AP00&objecttype=14&gridview=view1











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