SIEMENS

Data sheet

3RH2431-1AP00

Contactor relay, latched, 3 NO + 1 NC, 230 V AC, 50 / 60 Hz, Size S00, screw terminal



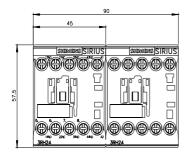
product brand name	SIRIUS
product designation	Auxiliary contactor
product type designation	3RH2
General technical data	
size of contactor	S00
product extension auxiliary switch	Yes
insulation voltage with degree of pollution 3 at AC rated value	690 V
degree of pollution	3
surge voltage resistance rated 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 (switching cycles)	
 of contactor typical 	5 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
 of the contactor with added auxiliary switch block typical 	5 000 000
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 %
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	

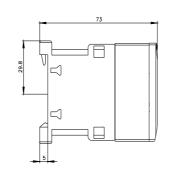
• 1 rated value	50 Hz
• 2 rated value	60 Hz
operating range factor control supply voltage rated value of magnet coil at AC	
• at 50 Hz	0.8 1.1
• at 60 Hz	0.85 1.1
apparent pick-up power of magnet coil at AC	37 VA
inductive power factor with closing power of the coil	0.8
apparent holding power of magnet coil at AC	5.7 VA
inductive power factor with the holding power of the	0.25
coil	0.20
closing delay	
• at AC	8 33 ms
opening delay	
• at AC	4 15 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	3
 instantaneous contact 	3
identification number and letter for switching elements	31 E
operational current at AC-12 maximum	10 A
operational current at AC-15	
 at 230 V rated value 	10 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	10.4
at 24 V rated value	10 A
at 110 V rated value	1 A
at 220 V rated value	0.3 A 0.14 A
at 440 V rated value	0.14 A 0.1 A
at 600 V rated value operational current with 2 current paths in series at DC-13	0.1 A
	10.4
 at 24 V rated value 	10 A

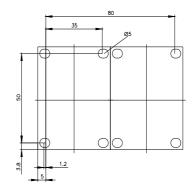
• if 110 V risk value 1.3 A • if 260 V risk value 0.4 A • if 260 V risk value 0.1 A • or 260 of current with 3 current paths in series at 0.1 A • of 260 V risk value 10 A • if 260 V risk value 10 A • of 260 V risk value 10 A • of 260 V risk value 12 A • of 100 V risk value 12 A • of 100 V risk value 12 A • of 100 V risk value 0.5 A • of 100 V risk value 0.6 A •				
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• e1 440 V rated value 0.1 A • e1 24 V rated value 0.1 A • e1 24 V rated value 10 A • e1 24 V rated value 10 A • e1 20 V rated value 10 A • e1 40 V rated value 0.2 A • e1 400 V rated value 0.2 A • contact reliability of auxiliary contacts 1 faulty switching per 100 million (17 V.1 mA) • UUCSA ratio 0 mm • for standard datackward by -v -2 2 b' on remetical mounting surface fastening method screw and snap-on mounting on 35 mm standard mounting surface fastening method screw and snap-on mounting on 35 mm standard mounting rate <				
• at 800 V rated value 0.1 A operational current with 3 current paths in series at Coll at 24 V rated value 10 A • at 800 V rated value 17 A • at 100 V rated value 3 A • at 24 V rated value 12 A • at 24 V rated value 12 A • at 24 V rated value 12 A • at 400 V rated value 0.5 A • at 200 V rated value 0.2 & A object rate value 0.2 & A object rate value 0.2 & A operating frequency at DC-13 maximum 1000 1/h design of the maxuliary contacts for short-circuit protection of the axuliary sortacts for short-circuit protection of the axuliary sortacts 1 faulty switching per 100 million (17 V, 1 mA) UCSA ratings Contact rating of auxiliary contacts according to UL Short-circuit protection of the axuliary software for short-circuit protection of the axuliary software for short-circuit protection of the auxiliary software for short-circuit protection of the auxiliary software for short-circuit protection of the auxiliary software for short circuit protection of t				
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b-13 at 24 V Inted value 10 A at 60 V rated value 4.7 A at 610 V rated value 3.A at 220 V rated value 0.5 A at 400 V rated value 0.5 A at 600 V rated value 0.2 A et 600 V rated value 0.2 A ot 400 V rated value 0.2 A constract reliables for short-circul protection of the axallary contacts 1000 1/h design of the missue circul treater for short-circul protection of the axallary contacts 1 fauly switching per 100 million (17 V, 1 mA) ULCSA ratings contact reliabling of auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) ULCSA ratings contact reliables of auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) ULCSA ratings contact reliables of auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) UCSA ratings contact reliables of auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) Unstational regularity of auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) Instational regularity absent on auxiliary auxiliary contacts 1 fauly switching per 100 million (17 V, 1 mA) Instational regularity absent on auxiliary auxiliary contacts 1 fauly switching per 100 million (17 V,		U. I A		
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• et 220 V rated value 1.2 A • et 400 V rated value 0.5 A • et 300 V rated value 0.26 A operating frequency at DC-13 maximum 1.000 1/h design of the ministrue ricult braker for short-circuit protection of the auxiliary contacts according to UL. 1.000 1/h contact reliability of auxiliary contacts 1.000 1/h Contact rating of auxiliary contacts according to UL. A800 / Q800 Short-circuit protection fauly switching per 100 million (17 V, 1 mA) IUCESA ratings A800 / Q800 Short-circuit protection of the auxiliary switching per 100 million (17 V, 1 mA) Installation mounting surface; can be lifted forward and backward by +/- 22.5' on vertical mounting surface; san be lifted forward and backward by +/- 22.5' on vertical mounting surface; san be lifted forward and backward by +/- 22.5' on vertical mounting surface; san be lifted forwards and backward by +/- 22.5' on vertical mounting surface; san be lifted forwards and backward by +/- 22.5' on vertical mounting rail height 97.5 mm width 90 mm despin file 97.5 mm • unwards 10 mm - upwards 10 mm - upwards 10 mm - upwards 10 mm - forwards 10 mm	 at 60 V rated value 	4.7 A		
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	at 600 V rated value	0.26 A		
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		20 y		

protection class IP of 60529	on the front according	to IEC	P20			
touch protection on the front according to IEC 60529		DIEC 60529 f	inger-safe, for vertical cont	act from the front		
Certificates/ approval	S					
General Product Ap	oproval					
SEA.		<u>Confirmation</u>		KC	EHC	
EMC	Functional Safety/Safety of Machinery	Declaration of 0	Conformity	Test Certificates		
RCM	<u>Type Examination</u> <u>Certificate</u>	CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	Special Test Certific- ate	
Marine / Shipping						
ABS	BUREAU VERITAS		Lloyd's Register urs	PRS	RINA	
Marine / Shipping	other		Railway			
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	wnloadcenter (Catalo	gs, Brochures,)				
https://www.siemens.com/ic10 Industry Mall (Online ordering system) https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RH2431-1AP00						
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Image database (pro http://www.automation Characteristic: Tripp https://support.industr		andrawings, 3 ax_de.aspx?mlfb=3 t, Let-through cur en/ps/3RH2431-1A	3D models, device circuit 3RH2431-1AP00⟨=en rent P00/char	diagrams, EPLAN ma	acros,)	

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RH2431-1AP00&objecttype=14&gridview=view1







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