SIEMENS

Data sheet

3RA2110-1HA16-1AP6



Combination Starter Non Reversing FLA Range 5.5-8A 3 Pole 240VAC Coil S00 Open Type 1NO Aux

product brand name	SIRIUS
product brand name	non-fused motor starter 3RA2
· · · · · · · · · · · · · · · · · · ·	
design of the product manufacturer's article number	direct starter
of the supplied contactor	<u>3RT2016-1AP61</u>
of the supplied circuit-breakers	<u>3RV2011-1HA10</u>
 of the supplied link module 	<u>3RA1921-1DA00</u>
General technical data	
size of the circuit-breaker	S00
size of load feeder	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 according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	30 000 000
type of assignment	1
Ambient conditions	
ambient temperature	
 during operation 	-20 +60 °C
 during storage 	-50 +80 °C
 during transport 	-55 +80 °C
Main circuit	
number of poles for main current circuit	3
design of the switching contact	electromechanical
adjustable current response value current of the current-dependent overload release	5.5 8 A
operating voltage	
 rated value 	690 V
 at AC-3 rated value maximum 	690 V
operating frequency rated value	50 60 Hz
operational current at AC-3 at 400 V rated value	6.5 A
operating power at AC-3	
• at 400 V rated value	3 000 W
 at 500 V rated value 	4 000 W
• at 500 v lated value	
at 690 V rated value	5 500 W
	5 500 W

● at 50 Hz rated value	220 V
at 50 Hz rated value at 50 Hz rated value	220 V 187 242 V
	187 242 V 240 V
 at 60 Hz rated value at 60 Hz rated value 	240 V 192 264 V
apparent holding power of magnet coil at AC	4.8 VA
inductive power factor with the holding power of the	0.25
coil	0.20
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	1
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	104 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	7.6 A
• at 600 V rated value	6.33 A
yielded mechanical performance [hp]	
 for single-phase AC motor 	
— at 110/120 V rated value	0.33 hp
— at 230 V rated value	1 hp
 for 3-phase AC motor 	
— at 200/208 V rated value	2 hp
— at 220/230 V rated value	2 hp
— at 460/480 V rated value	5 hp
— at 575/600 V rated value	5 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (Iq)	
• at 400 V according to IEC 60947-4-1 rated value	153 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	Snap-mounted to DIN rail or screw-mounted with additional push-in lug
height	167.2 mm
depth	45 mm 97.1 mm
required spacing	97.1 mm
for grounded parts	
- forwards	0 mm
— backwards	0 mm
— upwards	20 mm
— at the side	9 mm
— downwards	10 mm
• for live parts	
— forwards	0 mm
— backwards	0 mm
— upwards	20 mm
— downwards	10 mm
— at the side	9 mm
Connections/ Terminals	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections	
 for main contacts stranded 	0.5 4 mm², 2x (0.75 2.5 mm²)
at AWG cables for main contacts	2x (20 16), only for contactor 2x (18 14), 2x 12
connectable conductor cross-section for main contacts finely stranded with core end processing	0.5 2.5 mm²
Safety related data	

P10 value with high (domand rate according	to SN 21020 1	000 000					
	B10 value with high demand rate according to SN 31920		1 000 000					
proportion of dangerous failures with high demand rate according to SN 31920			73 %					
protection class IP on the front according to IEC 60529		I to IEC	IP20					
touch protection on the front according to IEC 60529			finger-safe, for vertical contact from the front					
Certificates/ approvals								
General Product Approval				For use in hazard- ous locations	Declaration of Conformity			
SP M	<u>Confirmation</u>		EHC	K ATEX	CE EG-Konf.			
Declaration of Conformity	Test Certificates		Marine / Shipping					
	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certi</u> <u>ate</u>	fic- ABS	BUREAU VERITAS	Lloyd's Register uis			
Marine / Shipping				other	Railway			
PRS	RINA	RMRS	DNV-GL DNV-GL	<u>Confirmation</u>	Vibration and Shock			
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=3RA2110-1HA16-1AP6								
Cax online generator								
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2110-1HA16-1AP6								
Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1AP6								
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2110-1HA16-1AP6⟨=en								
	Characteristic: Tripping characteristics, I ² t, Let-through current							

https://support.industry.siemens.com/cs/ww/en/ps/3RA2110-1HA16-1AP6/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2110-1HA16-1AP6&objecttype=14&gridview=view1

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