



FUSELESS LOAD FEEDER REVERSING OPERATION, AC 400V, SO 9...12.5A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, W. MOUNTING RAIL ADAPTER TYPE OF ASSIGNMENT 2,IQ = 150KA (ALSO FULFILLS TYPE OF ASSIGNMENT 1) 1NO+1NC (CONTACTOR)

product brand name	SIRIUS
product designation	Reversing starter
design of the product	for standard rail or screw mounting
product type designation	3RA22
manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied RH assembly kit • of the supplied link module 	3RT2024-1AK60 3RV2011-1KA10 3RA2923-1BB1 3RA2921-1AA00
General technical data	
size of the circuit-breaker	S00
size of load feeder	S0
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
degree of protection NEMA rating	other
shock resistance according to IEC 60068-2-27	6g / 11 ms
mechanical service life (switching cycles) of contactor typical	10 000 000
type of assignment	2
type of protection according to ATEX directive 2014/34/EU	Ex II (2) GD
certificate of suitability according to ATEX directive 2014/34/EU	DMT 02 ATEX F 001
Substance Prohibitation (Date)	10/01/2009
Ambient conditions	
ambient temperature	
<ul style="list-style-type: none"> • during operation • during storage • during transport 	-20 ... +60 °C -50 ... +80 °C -50 ... +80 °C
temperature compensation	-20 ... +60 °C
relative humidity during operation	10 ... 95 %
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	9 ... 12.5 A
operating voltage	
<ul style="list-style-type: none"> • rated value • at AC-3 rated value maximum 	690 V 690 V

operating frequency rated value	50 ... 60 Hz
operational current at AC-3 at 400 V rated value	11.5 A
operating power at AC-3	
• at 400 V rated value	5 500 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
• at 50 Hz rated value	110 V
• at 50 Hz rated value	88 ... 121 V
• at 60 Hz rated value	120 V
• at 60 Hz rated value	96 ... 132 V
apparent holding power of magnet coil at AC	8.5 VA
Auxiliary circuit	
product extension auxiliary switch	Yes
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	11 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 200/208 V rated value	3 hp
— at 220/230 V rated value	3 hp
— at 460/480 V rated value	7.5 hp
— at 575/600 V rated value	10 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (I_q)	
• at 400 V according to IEC 60947-4-1 rated value	150 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	On adapter for screw and snap-on mounting on 35 mm standard mounting rail
height	265 mm
width	90 mm
depth	120 mm
required spacing	
• for grounded parts	
— forwards	32 mm
— backwards	0 mm
— upwards	50 mm
— at the side	10 mm
— downwards	10 mm
• for live parts	
— forwards	32 mm
— backwards	0 mm
— upwards	50 mm
— downwards	10 mm
— at the side	10 mm
Connections/ Terminals	
type of electrical connection	
• for main current circuit	screw-type terminals
• for auxiliary and control circuit	screw-type terminals
Safety related data	
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 %

touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
--	--

Communication/ Protocol

protocol is supported	
• PROFINET IO protocol	No
• PROFI-safe protocol	No
protocol is supported AS-Interface protocol	No

Certificates/ approvals

General Product Approval	For use in hazardous locations	Declaration of Conformity
---------------------------------	---------------------------------------	----------------------------------



[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
----------------------------------	--------------------------	--------------------------



[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other	Railway
--------------------------	--------------	----------------



[Confirmation](#)

[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=3RA2220-1KB24-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1KB24-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KB24-0AK6>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1KB24-0AK6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1KB24-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1KB24-0AK6&objecttype=14&gridview=view1>

last modified:

3/9/2022