



FUSELESS LOAD FEEDER DIRECT START, AC 400V, SZ. S0, 9...12.5A, AC 110/120V 50/60HZ SCREW TERMINAL FOR RAIL MOUNTING, TYPE OF ASSIGNMENT 2,IQ = 150KA (ALSO FULFILLS TYPE OF ASSIGNMENT 1) 1NO+1NC (CONTACTOR)

product brand name	SIRIUS
product designation	non-fused load feeders 3RA2
design of the product	direct starter
manufacturer's article number	
<ul style="list-style-type: none"> • of the supplied contactor • of the supplied circuit-breakers • of the supplied link module 	3RT2024-1AK60 3RV2021-1KA10 3RA2921-1AA00
General technical data	
size of the circuit-breaker	S0
size of load feeder	S0
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	10 000 000
type of assignment	2
Substance Prohibitance (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
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	
<ul style="list-style-type: none"> • at 400 V rated value • at 500 V rated value • at 690 V rated value 	5 500 W 7 500 W 7 500 W
Control circuit/ Control	

control supply voltage at AC	
<ul style="list-style-type: none"> ● at 50 Hz rated value ● at 60 Hz rated value 	<p>110 V 120 V</p>
apparent holding power of magnet coil at AC	8.5 VA
Protective and monitoring functions	
trip class	CLASS 10
design of the overload release	thermal (bimetallic)
response value current of instantaneous short-circuit trip unit	162.5 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
<ul style="list-style-type: none"> ● at 480 V rated value ● at 600 V rated value 	<p>11 A 11 A</p>
yielded mechanical performance [hp]	
<ul style="list-style-type: none"> ● for single-phase AC motor <ul style="list-style-type: none"> — at 110/120 V rated value — at 230 V rated value ● for 3-phase AC motor <ul style="list-style-type: none"> — at 200/208 V rated value — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 	<p>0.5 hp 2 hp 3 hp 3 hp 7.5 hp 10 hp</p>
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
conditional short-circuit current (I_q)	
<ul style="list-style-type: none"> ● at 690 V according to IEC 60947-4-1 rated value ● at 400 V according to IEC 60947-4-1 rated value ● at 500 V according to IEC 60947-4-1 rated value 	<p>4 000 A 153 000 A 42 000 A</p>
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
height	193.1 mm
width	45 mm
depth	97.1 mm
required spacing	
<ul style="list-style-type: none"> ● for grounded parts <ul style="list-style-type: none"> — forwards — backwards — upwards — at the side — downwards ● for live parts <ul style="list-style-type: none"> — forwards — backwards — upwards — downwards — at the side 	<p>10 mm 0 mm 30 mm 9 mm 10 mm 10 mm 0 mm 30 mm 10 mm 9 mm</p>
Connections/ Terminals	
type of electrical connection for main current circuit	screw-type terminals
type of connectable conductor cross-sections	
<ul style="list-style-type: none"> ● for main contacts stranded ● at AWG cables for main contacts 	<p>1 ... 10 mm², 2x (2.5 ... 6 mm²) 2x (16 ... 12), 2x (14 ... 8)</p>
connectable conductor cross-section for main contacts finely stranded with core end processing	1 ... 6 mm ²
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 %
protection class IP on the front according to IEC	IP20

60529

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 hazardous locations	Declaration of Conformity
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[Confirmation](#)



Declaration of Conformity	Test Certificates	Marine / Shipping
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[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)



Marine / Shipping	other	Railway
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[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=3RA2120-1KA24-0AK6>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2120-1KA24-0AK6>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KA24-0AK6>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2120-1KA24-0AK6&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

<https://support.industry.siemens.com/cs/ww/en/ps/3RA2120-1KA24-0AK6/char>

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

<http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2120-1KA24-0AK6&objecttype=14&gridview=view1>

last modified:

12/15/2020