Data sheet

3RA2220-1GD24-0AK6



FUSELESS LOAD FEEDER REVERSING OPERATION, AC 400V, S0 4.5...6.3A, AC 110/120V 50/60HZ SCREW TERMINAL FOR BUSBAR SYSTEMS 60MM 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 60 mm busbars
product type designation	3RA22
manufacturer's article number	
 of the supplied contactor 	3RT2024-1AK60
 of the supplied circuit-breakers 	3RV2011-1GA10
 of the supplied RS assembly kit 	<u>8US1250-5AT10</u>
 of the supplied busbar adapter 	<u>8US1251-5NT10</u>
 of the supplied link module 	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 Prohibitance (Date)	10/01/2009
Ambient conditions	
ambient temperature	
during operation	-20 +60 °C
 during storage 	-50 +80 °C
during transport	-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	4.5 6.3 A
operating voltage	
rated value	690 V

at AC-3 rated value maximum	690 V
	50 60 Hz
operating frequency rated value operational current at AC-3 at 400 V rated value	4.9 A
operating power at AC-3	4.3 A
at 400 V rated value	2 200 W
Control circuit/ Control	2 200 11
type of voltage of the control supply voltage	AC
control supply voltage at AC	AO
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	4.8 A
yielded mechanical performance [hp]	
 for 3-phase AC motor 	
— at 200/208 V rated value	1 hp
 at 220/230 V rated value 	1.5 hp
— at 460/480 V rated value	3 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
and general and an analysis	-
conditional short-circuit current (Iq)	
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value	150 000 A
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions	150 000 A
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position	vertical
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method	vertical for snapping onto 60 mm busbar systems
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height	vertical for snapping onto 60 mm busbar systems 260 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth	vertical for snapping onto 60 mm busbar systems 260 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — forwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — backwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 10 mm 10 mm 10 mm 0 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards • for live parts — forwards — backwards — upwards — upwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 0 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — downwards	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — downwards — downwards — downwards — at the side	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side — downwards — at the side — downwards — backwards — upwards — backwards — at the side — downwards — at the side Connections/ Terminals	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — a the side — downwards • for live parts — forwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 0 mm 10 mm 10 mm 10 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — the side Connections/ Terminals type of electrical connection • for main current circuit	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection • for auxiliary and control circuit	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side — downwards — to backwards — upwards — backwards — upwards — to rumands — to rumands — of or main current circuit • for auxiliary and control circuit Safety related data	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm
conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit Safety related data B10 value with high demand rate according to SN 31920	vertical for snapping onto 60 mm busbar systems 260 mm 90 mm 155 mm 32 mm 0 mm 50 mm 10 mm 10 mm 32 mm 0 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm

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
PROFIsafe protocol	No
protocol is supported AS-Interface protocol	No
Cortificatos/approvals	

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=3RA2220-1GD24-0AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1GD24-0AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1GD24-0AK6

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

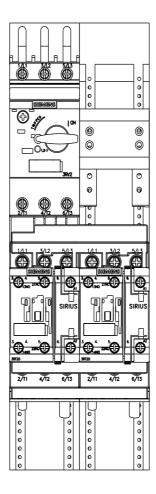
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1GD24-0AK6&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1GD24-0AK6/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1GD24-0AK6&objecttype=14&gridview=view1



last modified: 3/9/2022 🖸