3RA2220-4EB27-0AK6

Data sheet



FUSELESS LOAD FEEDER REVERSING OPERATION, AC 400V, S0 27...32A, AC 110/120V 50/60HZ SCREW TERMINAL FOR DIN RAIL MOUNTING, WITH DIN RAIL ADAPTER TYPE OF ASSIGNMENT 2,IQ = 150KA (ALSO 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	
 of the supplied contactor 	3RT2027-1AK60
 of the supplied circuit-breakers 	3RV2021-4EA10
 of the supplied RH assembly kit 	3RA2923-1BB1
 of the supplied link module 	3RA2921-1AA00
General technical data	
size of the circuit-breaker	S0
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
shock resistance acc. 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)	01.05.2012 00:00:00
Ambient conditions	
 ambient temperature during operation 	-20 +60 °C
 ambient temperature during storage 	-50 +80 °C
 ambient temperature 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	27 32 A
operating voltage rated value	690 V
 operating voltage 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	29 A
operating power at AC-3	45 000 W
at 400 V rated value	15 000 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 60 Hz rated value	120 V
apparent holding power of magnet coil at AC	9.8 V·A
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 	14 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	
— at 220/230 V rated value	10 hp
 at 460/480 V rated value 	20 hp
 at 575/600 V rated value 	25 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 acc. to IEC 60947-4-1 rated value 	150 000 A
Installation/ mounting/ dimensions	
mounting position	vertical
mounting position fastening method	vertical On adapter for screw and snap-on mounting on 35 mm standard mounting rail
	On adapter for screw and snap-on mounting on 35 mm standard
fastening method	On adapter for screw and snap-on mounting on 35 mm standard mounting rail
fastening method height	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm
fastening method height width	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm
fastening method height width depth	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm
fastening method height width depth required spacing	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm
fastening method height width depth required spacing • for grounded parts	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm
fastening method height width depth required spacing • for grounded parts — forwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards - backwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 10 mm 10 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — upwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 0 mm 50 mm
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 — backwards — backwards — upwards — downwards	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 0 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — at the side — downwards • at the side — downwards — forwards — backwards — backwards — upwards — at the side	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 0 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — at the side — downwards — to rewards — backwards — backwards — backwards — upwards — at the side Connections/ Terminals	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 0 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — torwards — backwards — upwards — torwards — at the side Connections/ Terminals type of electrical connection • for main current circuit	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm 10 mm 10 mm
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 — torwards — backwards — upwards — at the side Connections/ Terminals type of electrical connection • for main current circuit Safety related data	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 10 mm 50 mm 10 mm 10 mm 10 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — backwards — upwards — backwards — upwards — torwards — at the side Connections/ Terminals type of electrical connection • for main current circuit Safety related data B10 value with high demand rate acc. to SN 31920	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 50 mm 10 mm 32 mm 0 mm 50 mm 10 mm screw-type terminals
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fastening method height width depth required spacing • for grounded 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 Safety related data B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with high demand rate acc. to SN 31920	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 10 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
fastening method height width depth required spacing • for grounded parts — forwards — backwards — upwards — at the side — downwards • for live parts — forwards — backwards — upwards — backwards — upwards — odwnwards — of or main current circuit Safety related data B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with high demand rate acc. to IEC 60529	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 10 mm 10 mm 10 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm 50 mm
fastening method height width depth required spacing • for grounded 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 Safety related data B10 value with high demand rate acc. to SN 31920 proportion of dangerous failures • with high demand rate acc. to SN 31920	On adapter for screw and snap-on mounting on 35 mm standard mounting rail 265 mm 90 mm 120 mm 32 mm 0 mm 10 mm 10 mm 32 mm 0 mm 50 mm 10 mm 50 mm 10 mm 50 mm 10 mm 70 mm 70 mm 70 mm 70 mm











Miscellaneous

Test Certificates

Marine / Shipping

Special Test Certificate

Type Test Certificates/Test Report









Marine / Shipping



Confirmation

other

Vibration and Shock

Railway

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=3RA2220-4EB27-0AK6

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-4EB27-0AK6

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-4EB27-0AK6

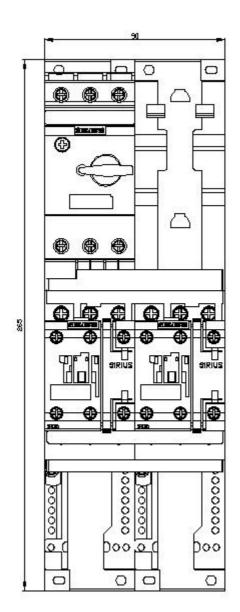
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RA2220-4EB27-0AK6&lang=en

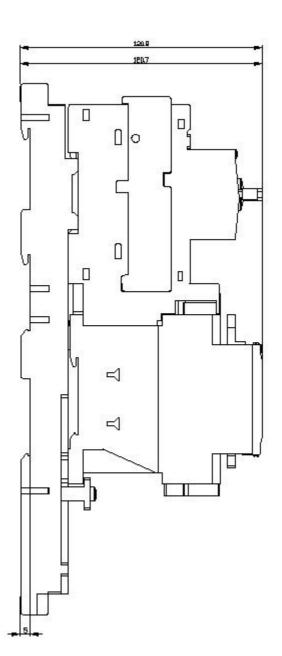
Characteristic: Tripping characteristics, I2t, Let-through current

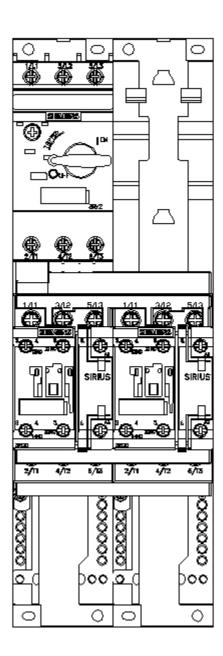
https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-4EB27-0AK6/char

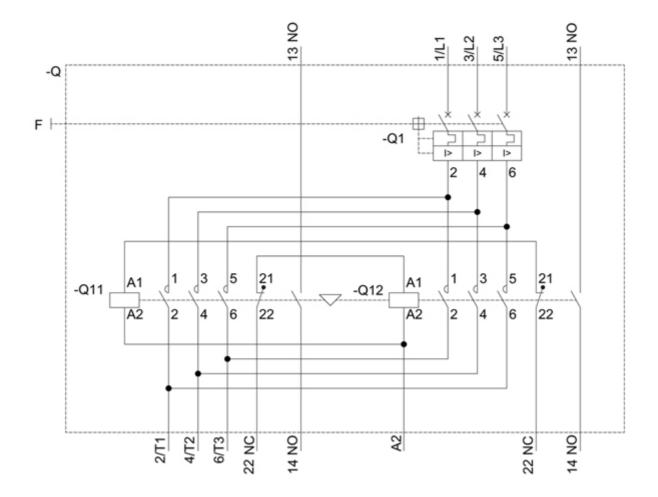
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-4EB27-0AK6&objecttype=14&gridview=view1









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