SIEMENS

Data sheet



Load feeder fuseless, Reversing duty 400 V AC, Size S00 10.0...16.0 A 24 V DC screw terminal for installation on standard mounting rail Type of coordination 1, Iq = 150 kA 1 NC (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	3RT2018-1BB42		
of the supplied circuit-breakers	3RV2011-4AA10		
of the supplied link module	3RA1921-1DA00		
General technical data			
size of the circuit-breaker	S00		
size of load feeder	S00		
power loss [W] for rated value of the current			
 at AC in hot operating state per pole 	4.1 W		
 without load current share typical 	4 W		
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 (operating cycles) of contactor typical	30 000 000		
type of assignment	1		
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		
reference code according to IEC 81346-2:2019	Q		
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	10 16 A		
operating voltage			
rated value	690 V		
 at AC-3 rated value maximum 	690 V		
 at AC-3e rated value maximum 	690 V		

encycling fyeguency rated walva	E0 60 Hz		
operating frequency rated value	50 60 Hz		
operational current			
• at AC-3 at 400 V rated value	16 A		
at AC-3e at 400 V rated value	16 A		
operating power			
• at AC-3			
— at 400 V rated value	7 500 W		
• at AC-3e			
— at 400 V rated value	7 500 kW		
Control circuit/ Control			
type of voltage of the control supply voltage	DC		
control supply voltage at DC			
rated value	24 V		
rated value	24 24 V		
holding power of magnet coil at DC	4 W		
Auxiliary circuit			
product extension auxiliary switch	Yes		
Protective and monitoring functions			
trip class	CLASS 10		
design of the overload release	thermal (bimetallic)		
response value current of instantaneous short-circuit trip unit	208 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
at 480 V rated value	14 A		
• at 600 V rated value	11 A		
yielded mechanical performance [hp]			
for single-phase AC motor			
— at 110/120 V rated value	1 hp		
— at 230 V rated value	2 hp		
• for 3-phase AC motor	'		
— at 200/208 V rated value	3 hp		
— at 220/230 V rated value	5 hp		
 at 460/480 V rated value 	10 hp		
— at 460/480 V rated value Short-circuit protection	10 hp		
Short-circuit protection			
Short-circuit protection product function short circuit protection	Yes		
Short-circuit protection product function short circuit protection design of the short-circuit trip			
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq)	Yes magnetic		
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value	Yes		
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions	Yes magnetic 150 000 A		
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position	Yes magnetic 150 000 A vertical		
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail		
Short-circuit protection product function short circuit protection design of the short-circuit trip conditional short-circuit current (Iq) • at 400 V according to IEC 60947-4-1 rated value Installation/ mounting/ dimensions mounting position fastening method height	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 0 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — torwards — backwards — upwards	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm 50 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — downwards • for live parts — forwards — backwards — backwards — backwards — backwards — backwards — downwards	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 50 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — downwards — obackwards — downwards — backwards — at the side — downwards — backwards — backwards — backwards — at the side — downwards — at the side	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 10 mm 10 mm 50 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — downwards • for live parts — forwards — backwards — backwards — backwards — backwards — backwards — downwards	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 50 mm 10 mm 10 mm 10 mm 50 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — downwards — obackwards — downwards — backwards — at the side — downwards — backwards — backwards — backwards — at the side — downwards — at the side	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 50 mm 10 mm 10 mm		
Short-circuit protection product function short circuit protection design of the short-circuit trip 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 — backwards — upwards — at the side — downwards — backwards — upwards — backwards — upwards — backwards — upwards — at the side Connections/ Terminals	Yes magnetic 150 000 A vertical screw and snap-on mounting onto 35 mm DIN rail 170 mm 90 mm 97 mm 32 mm 0 mm 10 mm 10 mm 10 mm 50 mm 10 mm 10 mm		

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				
PROFIsafe protocol	No				
protocol is supported AS-Interface protocol	No				
Certificates/ approvals					
General Product Approval		For use in hazard- ous locations	Declaration of Conformity		

Confirmation











Test Certificates

Marine / Shipping

Special Test Certificate Type Test Certificates/Test Report









Marine / Shipping other Railway Dangerous Good







Confirmation

Vibration and Shock

Transport Information

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3RA2210-4AA18-2BB4

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2210-4AA18-2BB4

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-4AA18-2BB4

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

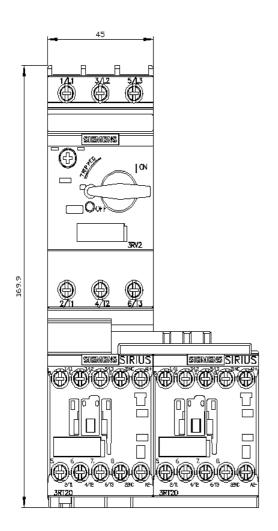
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2210-4AA18-2BB4&lang=en

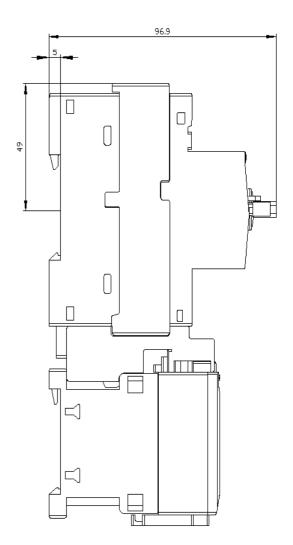
Characteristic: Tripping characteristics, I2t, Let-through current

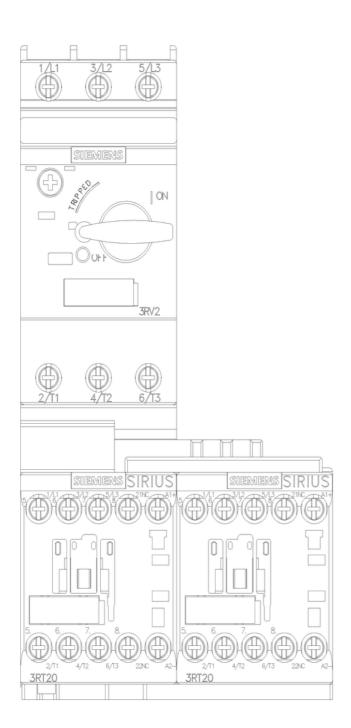
https://support.industry.siemens.com/cs/ww/en/ps/3RA2210-4AA18-2BB4/char

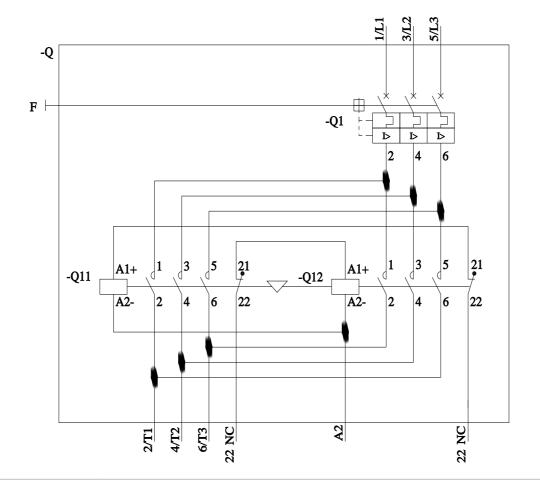
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2210-4AA18-2BB4&objecttype=14&gridview=view1









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