3RA2220-1FB24-0AP0

Data sheet



Load feeder fuseless, Reversing duty 400 V AC, Size S0 3.50...5.00 A 230 V AC screw terminal for installation on standard mounting rail with standard mounting rail adapter (also fulfills type of coordination 1) Type of coordination 2, Iq = 150 kA 1 NO+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 	3RT2024-1AP00		
 of the supplied circuit-breakers 	3RV2011-1FA10		
 of the supplied RH assembly kit 	3RA2923-1BB1		
 of the supplied link module 	3RA2921-1AA00		
 of the supplied standard mounting rail adapter 	3RA2922-1AA00		
General technical data			
size of the circuit-breaker	S00		
size of load feeder	S0		
power loss [W] for rated value of the current			
 at AC in hot operating state per pole 	2.7 W		
without load current share typical	7.6 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	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		
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	3.5 5 A		
operating voltage			
● rated value	690 V		

a at AC 2 rated value maximum	600 V		
at AC 3a rated value maximum at AC 3a rated value maximum	690 V		
at AC-3e rated value maximum	690 V		
operating frequency rated value	50 60 Hz		
operational current	5.0		
• at AC-3 at 400 V rated value	5.A		
at AC-3e at 400 V rated value	5 A		
operating power			
• at AC-3	4 500 114		
— at 400 V rated value	1 500 W		
• at AC-3e	4 500 144		
— at 400 V rated value	1 500 kW		
Control circuit/ Control	40		
type of voltage of the control supply voltage	AC		
control supply voltage at AC	000 \		
• at 50 Hz rated value	230 V		
• at 50 Hz rated value	230 230 V		
apparent holding power of magnet coil at AC	7.6 VA		
• at 50 Hz	7.6 VA		
inductive power factor with the holding power of the coil	0.25		
• at 50 Hz	0.25		
Auxiliary circuit	Von		
product extension auxiliary switch	Yes		
Protective and monitoring functions	CI ACC 40		
trip class	CLASS 10		
design of the overload release	thermal (bimetallic)		
response value current of instantaneous short-circuit trip unit	65 A		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
at 480 V rated value	5 A		
at 600 V rated value	5 A		
yielded mechanical performance [hp]			
• for single-phase AC motor			
— at 110/120 V rated value	0.25 hp		
— at 230 V rated value	0.5 hp		
for 3-phase AC motor			
— at 200/208 V rated value	1.5 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		
conditional short-circuit current (Iq)			
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 DIN 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				
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





Confirmation

other

Vibration and Shock

Railway

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=3RA2220-1FB24-0AP0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA2220-1FB24-0AP0

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1FB24-0AP0

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

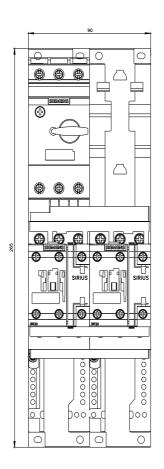
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA2220-1FB24-0AP0&lang=en

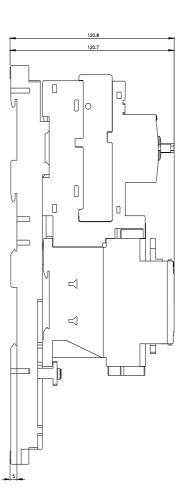
 $\textbf{Characteristic: Tripping characteristics, I}^{2}\textbf{t, Let-through current}$

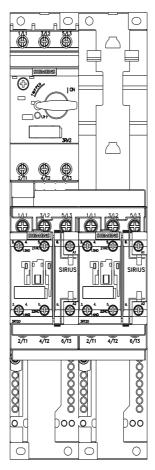
https://support.industry.siemens.com/cs/ww/en/ps/3RA2220-1FB24-0AP0/char

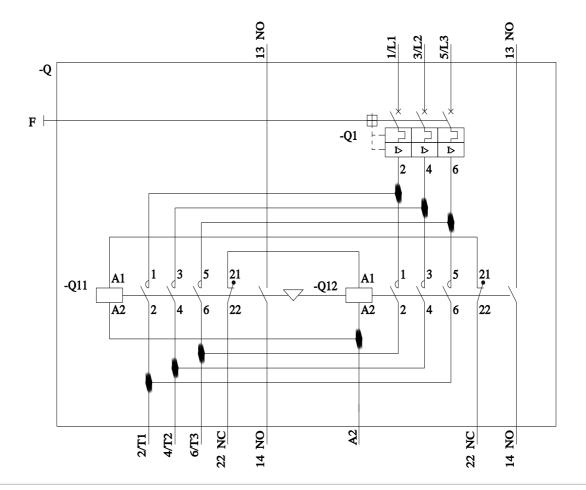
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA2220-1FB24-0AP0&objecttype=14&gridview=view1









last modified: 4/18/2023 🖸