SIEMENS

Data sheet 3RV2011-0BA25



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.14...0.2 A N-release 2.6 A Spring-type terminal Standard switching capacity with transverse auxiliary switches 1 NO+1 NC

product brand name	SIRIUS	
product designation	Circuit breaker	
design of the product	For motor protection	
product type designation	3RV2	
General technical data		
size of the circuit-breaker	S00	
size of contactor can be combined company-specific	S00, S0	
product extension auxiliary switch	Yes	
power loss [W] for rated value of the current		
 at AC in hot operating state 	5.5 W	
at AC in hot operating state per pole	1.8 W	
insulation voltage with degree of pollution 3 at AC rated value	690 V	
surge voltage resistance rated value	6 kV	
shock resistance according to IEC 60068-2-27	25g / 11 ms	
mechanical service life (switching cycles)		
 of the main contacts typical 	100 000	
of auxiliary contacts typical	100 000	
electrical endurance (switching cycles) typical	100 000	
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	Q	
Substance Prohibitance (Date)	10/01/2009	
Ambient conditions		
installation altitude at height above sea level maximum	2 000 m	
ambient temperature		
during operation	-20 +60 °C	
during storage	-50 +80 °C	
during transport	-50 +80 °C	
relative humidity during operation	10 95 %	
Main circuit		
number of poles for main current circuit	3	
adjustable current response value current of the current-dependent overload release	0.14 0.2 A	
operating voltage		
 rated value 	20 690 V	
 at AC-3 rated value maximum 	690 V	
 at AC-3e rated value maximum 	690 V	

operating frequency rated value	50 60 Hz
operating frequency rated value	0.2 A
operational current rated value	0.2 A
operational current	0.0.4
• at AC-3 at 400 V rated value	0.2 A
at AC-3e at 400 V rated value	0.2 A
operating power	
• at AC-3	
— at 230 V rated value	0 kW
— at 400 V rated value	0.06 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.1 kW
• at AC-3e	
— at 230 V rated value	0 kW
— at 400 V rated value	0.06 kW
— at 500 V rated value	0.1 kW
— at 690 V rated value	0.1 kW
operating frequency	
• at AC-3 maximum	15 1/h
• at AC-3e maximum	15 1/h
Auxiliary circuit	
design of the auxiliary switch	transverse
number of NC contacts for auxiliary contacts	1
number of NO contacts for auxiliary contacts	1
number of CO contacts for auxiliary contacts	0
operational current of auxiliary contacts at AC-15	
• at 24 V	2 A
• at 120 V	0.5 A
• at 125 V	0.5 A
• at 230 V	0.5 A
operational current of auxiliary contacts at DC-13	4.4
• at 24 V	1 A
• at 60 V	0.15 A
Protective and monitoring functions	
product function	
•	
ground fault detection	No
•	No Yes
ground fault detection	
ground fault detection phase failure detection	Yes
ground fault detection phase failure detection trip class	Yes CLASS 10
ground fault detection phase failure detection trip class design of the overload release	Yes CLASS 10
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu)	Yes CLASS 10 thermal
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value	Yes CLASS 10 thermal
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value	Yes CLASS 10 thermal 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 500 V rated value	Yes CLASS 10 thermal 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value	Yes CLASS 10 thermal 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics)	Yes CLASS 10 thermal 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 690 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value steponse value current of instantaneous short-circuit trip unit	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 690 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value steponse value current of instantaneous short-circuit trip unit	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 400 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings	Yes CLASS 10 thermal 100 kA 100 kA 100 kA 100 kA 100 kA 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor	Yes CLASS 10 thermal 100 kA 2.6 A
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 500 V rated value at 690 V rated value fresponse value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value	Yes CLASS 10 thermal 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value contact rating of auxiliary contacts according to UL	Yes CLASS 10 thermal 100 kA
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection	Yes CLASS 10 thermal 100 kA 2.6 A
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection product function short circuit protection	Yes CLASS 10 thermal 100 kA 2.6 A 0.2 A 0.2 A C300 / R300
ground fault detection phase failure detection trip class design of the overload release breaking capacity maximum short-circuit current (Icu) at AC at 240 V rated value at AC at 500 V rated value at AC at 690 V rated value breaking capacity operating short-circuit current (Ics) at AC at 240 V rated value at 400 V rated value at 400 V rated value at 500 V rated value at 690 V rated value response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value at 600 V rated value contact rating of auxiliary contacts according to UL Short-circuit protection	Yes CLASS 10 thermal 100 kA C300 / R300

 for short-circuit protection of the auxiliary switch required 	Fuse gL/gG: 10 A, miniature circuit breaker C 6 A (short-circuit current lk < 400 A)
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail according to DIN EN 60715
height	106 mm
width	45 mm
depth	97 mm
required spacing	
• for grounded parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for grounded parts at 500 V	J IIIII
Hor grounded parts at 500 v	30 mm
	30 mm
— upwards	
— at the side	9 mm
• for live parts at 500 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
 for grounded parts at 690 V 	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
 for live parts at 690 V 	
— downwards	50 mm
— upwards	50 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
type of electrical connection	
for main current circuit	spring-loaded terminals
for auxiliary and control circuit	spring-loaded terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
type of connectable conductor cross-sections	
for main contacts	
— solid or stranded	2x (0,5 4 mm²)
 finely stranded with core end processing 	2x (0.5 2.5 mm²)
 finely stranded without core end processing 	2x (0.5 2.5 mm²)
at AWG cables for main contacts	2x (20 12)
type of connectable conductor cross-sections	
for auxiliary contacts	
— solid or stranded	2x (0.5 2.5 mm²)
 finely stranded with core end processing 	2x (0.5 1.5 mm²)
— finely stranded without core end processing	2x (0.5 1.5 mm²)
at AWG cables for auxiliary contacts	2x (20 14)
design of screwdriver shaft	Diameter 3 mm
size of the screwdriver tip	3,0 x 0,5 mm
Safety related data	9,5 9,5 mm
B10 value	

 with high demand rate according to SN 31920 	5 000
proportion of dangerous failures	
 with low demand rate according to SN 31920 	50 %
 with high demand rate according to SN 31920 	50 %
failure rate [FIT]	
 with low demand rate according to SN 31920 	50 FIT
T1 value for proof test interval or service life according to IEC 61508	10 y
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
display version for switching status	Handle

Certificates/ approvals

General Product Approval





Confirmation



<u>KC</u>



For use in hazardous locations

Declaration of Conformity

Test Certificates







Special Test Certificate

Type Test Certificates/Test Report

Marine / Shipping













Marine / Shipping

other

Railway



Confirmation



Vibration and Shock

Confirmation

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=3RV2011-0BA25

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0BA25

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA25

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

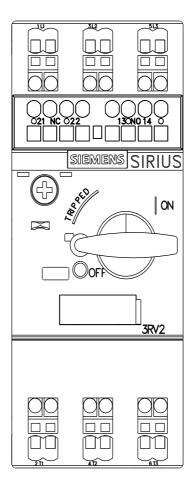
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0BA25&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0BA25/char

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

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0BA25&objecttype=14&gridview=view1



last modified: 6/25/2022 🖸