SIEMENS

Data sheet 3RV2011-0AA10



Circuit breaker size S00 for motor protection, CLASS 10 A-release 0.11...0.16 A N-release 2.1 A screw terminal Standard switching capacity

design of the product per designation	product brand name	SIRIUS
product type designation General technical data size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current at AC in hot operating state at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU certificate of suitability according to according to ATEX directive 2014/34/EU certificate of suitability according to	product designation	Circuit breaker
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of auxiliary contacts typical • of auxiliary contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during operation • ambient temperature during transport temperature compensation - 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 30 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient temperature during operation • 20 +60 °C - ambient demperature during operation • 20 +60 °C - ambient demperature during operat	design of the product	For motor protection
size of the circuit-breaker size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of auxiliary contacts typical 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • ambient temperature during transport temperature compensation relative humidity during operation Wain circuit number of poles for main current circuit 300 yes S00, S0 Yes 4.8 W 1.8 W 1.	product type designation	3RV2
size of contactor can be combined company-specific product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state	General technical data	
product extension auxiliary switch power loss [W] for rated value of the current • at AC in hot operating state • at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • of the main contacts typical • of the main contacts typical • of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Amblent conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • ambient temperature during storage • ambient temperature during operation relative humidity during operation 100 95 % Main circuit number of poles for main current circuit 2014/34/Inumber of poles for main current circuit 2015.5 W 5.5 W 6.8 V MOV 400 V 500 V	size of the circuit-breaker	S00
power loss [W] for rated value of the current • at AC in hot operating state	size of contactor can be combined company-specific	S00, S0
at AC in hot operating state at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit between	product extension auxiliary switch	Yes
at AC in hot operating state per pole insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point between main and auxiliary circuit alou V cond volus between main and auxiliary circuit between main and auxiliary circuit alou V cond volus between main and auxiliary circuit alou V cond volus between main and auxiliary circuit alou V cond volus cond volus between main and auxiliary circuit alou V cond volus con	power loss [W] for rated value of the current	
insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • both resistance acc. to IEC 60068-2-27 shock resistance acc. to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of auxiliary contacts typical • of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport -50 +80 °C • ambient temperature during transport -50 +80 °C temperature compensation relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3	 at AC in hot operating state 	5.5 W
value surge voltage resistance rated value maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • obtween main and auxiliary circuit • between main and auxiliary circuit • obtween main and auxiliary circuit • of between main and auxiliary circuit • of between main and auxiliary circuit • of between main and auxiliary circuit • of auxiliary contacts typical • to 0000 • of auxiliary contacts typical • contact typical • conta	at AC in hot operating state per pole	1.8 W
maximum permissible voltage for safe isolation in networks with grounded star point • between main and auxiliary circuit • between main and auxiliary circuit 400 V shock resistance acc. to IEC 60068-2-27 25g / 11 ms mechanical service life (switching cycles) • of the main contacts typical • of auxiliary contacts typical 100 000 electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport -50 +80 °C • ambient temperature during transport relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3	0 0 1	690 V
networks with grounded star point • between main and auxillary circuit • between main and auxillary circuit • between main and auxillary circuit shock resistance acc. to IEC 60068-2-27 mechanical service life (switching cycles) • of the main contacts typical • of auxilliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • 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	surge voltage resistance rated value	6 kV
between main and auxiliary circuit shock resistance acc. to IEC 60068-2-27 25g / 11 ms mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum one ambient temperature during operation one ambient temperature during storage one ambient temperature during storage one ambient temperature during transport temperature compensation relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3		
shock resistance acc. to IEC 60068-2-27 mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum oranbient temperature during operation oranbient temperature during storage oranbient temperature during transport temperature compensation relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 25g / 11 ms 100 000 100 000 EX II (2) GD DMT 02 ATEX F 001 DMT 02 ATEX F 001 200 m 2 000 m 2 000 m 2 000 m 2 000 m 3 000 m 3 000 m 3 000 m 3 000 m 4 000 m 3 000 m 4 000 m	 between main and auxiliary circuit 	400 V
mechanical service life (switching cycles) of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum o ambient temperature during operation o ambient temperature during storage o ambient temperature during transport temperature compensation relative humidity during operation 100 000 Ex II (2) GD DMT 02 ATEX F 001 Q Ambient 2 000 m c 2 000 m c 2 000 m c 3 000 m c 3 000 m c 3 000 m c 4 000 m c 4 000 m c 5 000 m c 5 000 m c 5 000 m c 6 00 m c 7 000 m c 8 000 m c 8 000 m c 9 000 m c	 between main and auxiliary circuit 	400 V
of the main contacts typical of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum o ambient temperature during operation o ambient temperature during storage o ambient temperature during transport temperature compensation relative humidity during operation number of poles for main current circuit 100 000 Ex II (2) GD DMT 02 ATEX F 001 DMT 02 ATEX F 001 2 000 m 3 000 m 3 000 m 3 000 m 4 000 m 4 000 m 4 000 m 5 000 m 6 000 m 6 000 m 7 000 m 7 000 m 8 000 m 9 00	shock resistance acc. to IEC 60068-2-27	25g / 11 ms
of auxiliary contacts typical electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum o ambient temperature during operation o ambient temperature during storage o ambient temperature during transport temperature compensation relative humidity during operation 100 000 EX II (2) GD DMT 02 ATEX F 001 Q ATEX F 001 2 000 m 3 000 m	mechanical service life (switching cycles)	
electrical endurance (switching cycles) typical type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • 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	 of the main contacts typical 	100 000
type of protection according to ATEX directive 2014/34/EU certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum 2 000 m • 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 -20 +60 °C main circuit -50 +80 °C 10 95 %	of auxiliary contacts typical	100 000
certificate of suitability according to ATEX directive 2014/34/EU reference code acc. to IEC 81346-2 Q Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • ambient temperature during transport -50 +80 °C temperature compensation -20 +60 °C temperature compensation -20 +80 °C temperature operature 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	electrical endurance (switching cycles) typical	100 000
reference code acc. to IEC 81346-2 Ambient conditions installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • 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		Ex II (2) GD
installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during storage • ambient temperature during transport • 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		DMT 02 ATEX F 001
installation altitude at height above sea level maximum • ambient temperature during operation • ambient temperature during storage • ambient temperature during transport • 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	reference code acc. to IEC 81346-2	Q
 ambient temperature during operation ambient temperature during storage ambient temperature during transport ambient temperature during transport -50 +80 °C temperature compensation relative humidity during operation 3 	Ambient conditions	
 ambient temperature during storage ambient temperature during transport ambient temperature during storage ambie	installation altitude at height above sea level maximum	2 000 m
 ambient temperature during transport -50 +80 °C temperature compensation relative humidity during operation Main circuit number of poles for main current circuit 3 	 ambient temperature during operation 	-20 +60 °C
temperature compensation -20 +60 °C relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3	 ambient temperature during storage 	-50 +80 °C
relative humidity during operation 10 95 % Main circuit number of poles for main current circuit 3	ambient temperature during transport	-50 +80 °C
Main circuit number of poles for main current circuit 3	temperature compensation	-20 +60 °C
number of poles for main current circuit 3	relative humidity during operation	10 95 %
·	Main circuit	
adjustable current response value current of the 0.11 0.16 A	number of poles for main current circuit	3
	adjustable current response value current of the	0.11 0.16 A

current-dependent overload release	
 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 rated value	0.16 A
operational current at AC-3 at 400 V rated value	0.16 A
operating power at AC-3	
at 230 V rated value	20 W
• at 400 V rated value	40 W
at 500 V rated value	60 W
• at 690 V rated value	60 W
operating frequency at AC-3 maximum	15 1/h
Auxiliary circuit	
number of NC contacts for auxiliary contacts	0
number of NO contacts for auxiliary contacts	0
number of CO contacts for auxiliary contacts	0
Protective and monitoring functions	
product function	
ground fault detection	No
phase failure detection	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity operating short-circuit current (Ics)	World.
at AC	
at 240 V rated value	100 kA
• at 400 V rated value	100 kA
• at 500 V rated value	100 kA
• at 690 V rated value	100 kA
breaking capacity maximum short-circuit current (Icu)	
 at AC at 240 V rated value 	100 kA
 at AC at 400 V rated value 	100 kA
 at AC at 500 V rated value 	100 kA
 at AC at 690 V rated value 	100 kA
response value current of instantaneous short-circuit trip unit	2.1 A
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	0.16 A
at 600 V rated value	0.16 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
Installation/ mounting/ dimensions	magnetic
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail
accoming mounds	according to DIN EN 60715
height	97 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



		locations
General Product Approval		hazardous
		For use in
Certificates/ approvals		
display version for switching status	Handle	
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front	
protection class IP on the front acc. to IEC 60529	IP20	
T1 value for proof test interval or service life acc. to IEC 61508	10 y	
with low demand rate acc. to SN 31920 The value for proof test interval or convice life acc. to	50 FIT	
failure rate [FIT]		
with high demand rate acc. to SN 31920	50 %	
 with low demand rate acc. to SN 31920 	50 %	
proportion of dangerous failures		
with high demand rate acc. to SN 31920	5 000	
B10 value		
Safety related data		
for main contacts	M3	
design of the thread of the connection screw		
size of the screwdriver tip	Pozidriv 2	
design of screwdriver shaft	Diameter 5 to 6 mm	
tightening torque for main contacts with screw-type terminals	0.8 1.2 N·m	
at AWG cables for main contacts	2x (18 14), 2x 12	
 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)	
— solid or stranded	2x (0,75 2,5 mm²), 2x 4 mm²	
• for main contacts		
type of connectable conductor cross-sections		
circuit		
arrangement of electrical connectors for main current	Top and bottom	
• for main current circuit	screw-type terminals	
control circuit type of electrical connection		
product function removable terminal for auxiliary and	No	
Connections/ Terminals		
— forwards	0 mm	
— at the side	30 mm	
— backwards	0 mm	
— upwards	50 mm	
— downwards	50 mm	
 for live parts at 690 V 		
— forwards	0 mm	
— at the side	30 mm	
— backwards	0 mm	
— upwards	50 mm	
— downwards	50 mm	
● for grounded parts at 690 V		
— at the side	9 mm	
— upwards	30 mm	
— downwards	30 mm	
• for live parts at 500 V		
— at the side	9 mm	
— upwards	30 mm	
— downwards	30 mm	
 for grounded parts at 500 V 		













For use in hazardous **locations**

Declaration of Conformity

Test Certificates

<u>KC</u>

Marine / Shipping



Miscellaneous



Special Test <u>Certificate</u>

Type Test Certificates/Test Report



Marine / Shipping













other

Railway

Confirmation



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=3RV2011-0AA10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2011-0AA10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0AA10

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2011-0AA10\&lang=en}}$

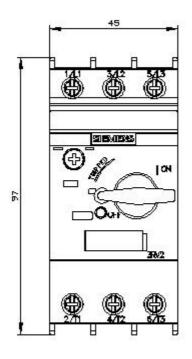
Characteristic: Tripping characteristics, I2t, Let-through current

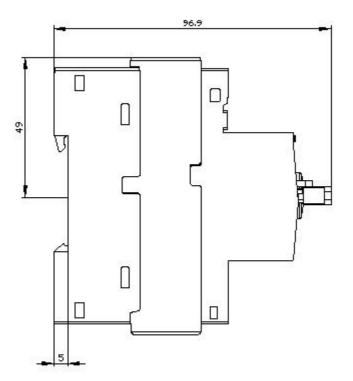
https://support.industry.siemens.com/cs/ww/en/ps/3RV2011-0AA10/char

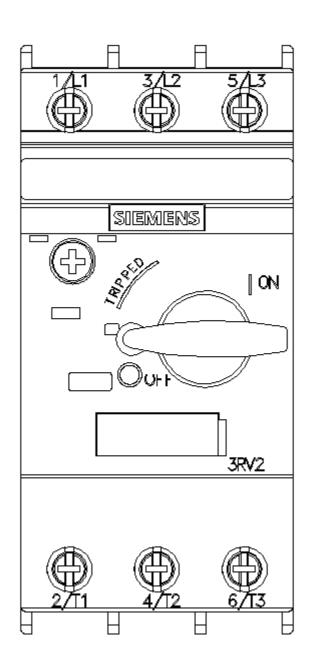
Further characteristics (e.g. electrical endurance, switching frequency)

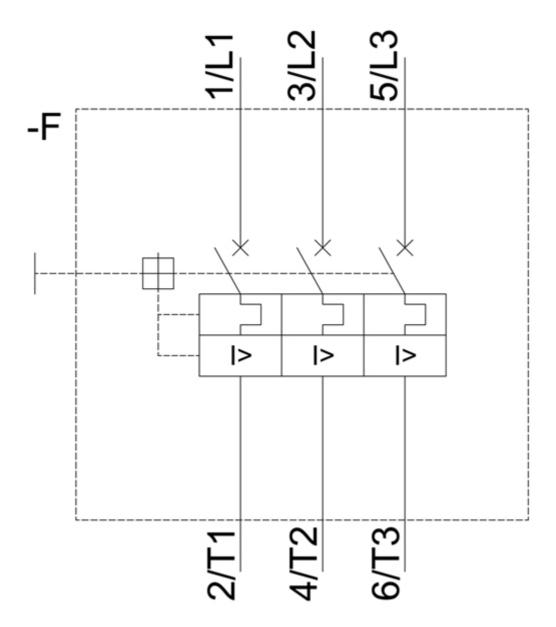
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2011-0AA10&objecttype=14&gridview=view1











last modified: 12/15/2020 ☑