## SIEMENS

## Data sheet

## 3RV2021-0HA10



Circuit breaker size S0 for motor protection, CLASS 10 A-release 0.55...0.8 A N-release 10 A screw terminal Standard switching capacity

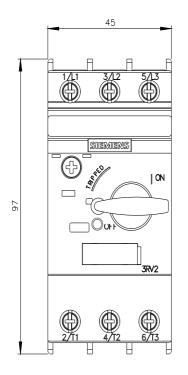
product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For motor protection
product type designation	3RV2
General technical data	
size of the circuit-breaker	SO
size of contactor can be combined company-specific	S00, S0
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
<ul> <li>at AC in hot operating state</li> </ul>	7.25 W
<ul> <li>at AC in hot operating state per pole</li> </ul>	2.4 W
insulation voltage with degree of pollution 3 at AC rated value	690 V
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation in networks with grounded star point	
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
<ul> <li>between main and auxiliary circuit</li> </ul>	400 V
shock resistance acc. to IEC 60068-2-27	25g / 11 ms
mechanical service life (switching cycles)	
<ul> <li>of the main contacts typical</li> </ul>	100 000
<ul> <li>of auxiliary contacts typical</li> </ul>	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 acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	01.10.2009
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
<ul> <li>during operation</li> </ul>	-20 +60 °C
<ul> <li>during storage</li> </ul>	-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
adjustable current response value current of the	0.55 0.8 A

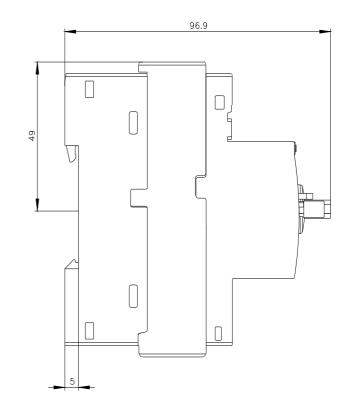
current-dependent overload release	
operating voltage	
<ul> <li>rated value</li> </ul>	690 V
<ul> <li>rated value</li> </ul>	20 690 V
at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	0.8 A
operational current	
at AC-3 at 400 V rated value	0.8 A
operating power	
• at AC-3	
— at 230 V rated value	0.1 kW
— at 400 V rated value	0.2 kW
— at 500 V rated value	0.3 kW
— at 690 V rated value	0.4 kW
operating frequency	
<ul> <li>at AC-3 maximum</li> </ul>	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 (lcs)	
at AC	
<ul> <li>at 240 V rated value</li> </ul>	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)	
<ul> <li>at AC at 240 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 400 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 500 V rated value</li> </ul>	100 kA
<ul> <li>at AC at 690 V rated value</li> </ul>	100 kA
response value current of instantaneous short-circuit trip	10 A
unit	
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	0.8 A
• at 600 V rated value	0.8 A
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
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	97 mm
width	45 mm
depth	97 mm
required spacing	
<ul> <li>for grounded parts at 400 V</li> </ul>	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for live parts at 400 V</li> </ul>	

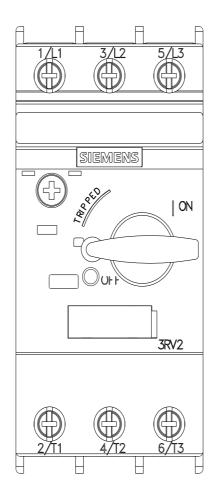
— downwards	30 mm	
— upwards	30 mm	
— at the side	9 mm	
<ul> <li>for grounded parts at 500 V</li> </ul>		
— downwards	30 mm	
— upwards	30 mm	
— at the side	9 mm	
<ul> <li>for live parts at 500 V</li> </ul>		
— downwards	30 mm	
— upwards	30 mm	
— at the side	9 mm	
<ul> <li>for grounded parts at 690 V</li> </ul>		
— downwards	50 mm	
— upwards	50 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
<ul> <li>for live parts at 690 V</li> </ul>		
— downwards	50 mm	
— upwards	50 mm	
— backwards	0 mm	
— at the side	30 mm	
— forwards	0 mm	
Connections/ Terminals		
product component removable terminal for auxiliary and control circuit	No	
type of electrical connection		
for main current circuit	screw-type terminals	
arrangement of electrical connectors for main current circuit	Top and bottom	
type of connectable conductor cross-sections		
<ul> <li>for main contacts</li> </ul>		
— solid or stranded	2x (1 2.5 mm²), 2x (2.5 10 mm²)	
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1 2.5 mm²), 2x (2.5 6 mm²), 1x 10 mm²	
<ul> <li>at AWG cables for main contacts</li> </ul>	2x (16 12), 2x (14 8)	
tightening torque		
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m	
design of screwdriver shaft	Diameter 5 to 6 mm	
size of the screwdriver tip	Pozidriv size 2	
design of the thread of the connection screw		
for main contacts	M4	
Safety related data		
B10 value		
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	5 000	
proportion of dangerous failures		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 %	
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %	
failure rate [FIT]		
<ul> <li>with low demand rate acc. to SN 31920</li> </ul>	50 FIT	
T1 value for proof test interval or service life acc. to IEC 61508	10 y	
protection class IP on the front acc. to IEC 60529	IP20	
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front	
display version for switching status	Handle	
Certificates/ approvals		
General Product Approval		For use in hazard- ous locations

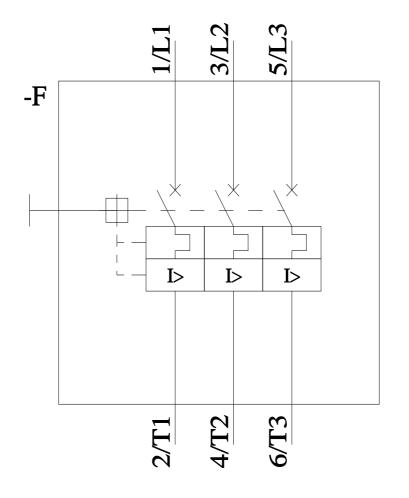
		<u>Confirmation</u>		EHC	IECE×		
For use in hazard- ous locations	Declaration of Con	formity	Test Certificates		Marine / Shipping		
KEx ATEX	CE EG-Konf.	<u>UK Declaration of</u> <u>Conformity</u>	<u>Type Test Certific-</u> ates/Test Report	<u>Special Test Certific-</u> <u>ate</u>	ABS		
Marine / Shipping							
B UREAU VERITAS		Lloyds Register uis	PRS	RINA	RMRS		
other		Railway					
<u>Confirmation</u>	UDE VDE	<u>Confirmation</u>	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=3RV2021-0HA10 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2021-0HA10 Service&Support (Manuals, Certificates, Characteristics, FAQs,) https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0HA10 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros,) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2021-0HA10⟨=en Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RV2021-0HA10/char Further characteristics (e.g. electrical endurance, switching frequency)							

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2021-0HA10&objecttype=14&gridview=view1









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