## SIEMENS

## Data sheet

## 3RV2021-4FA10

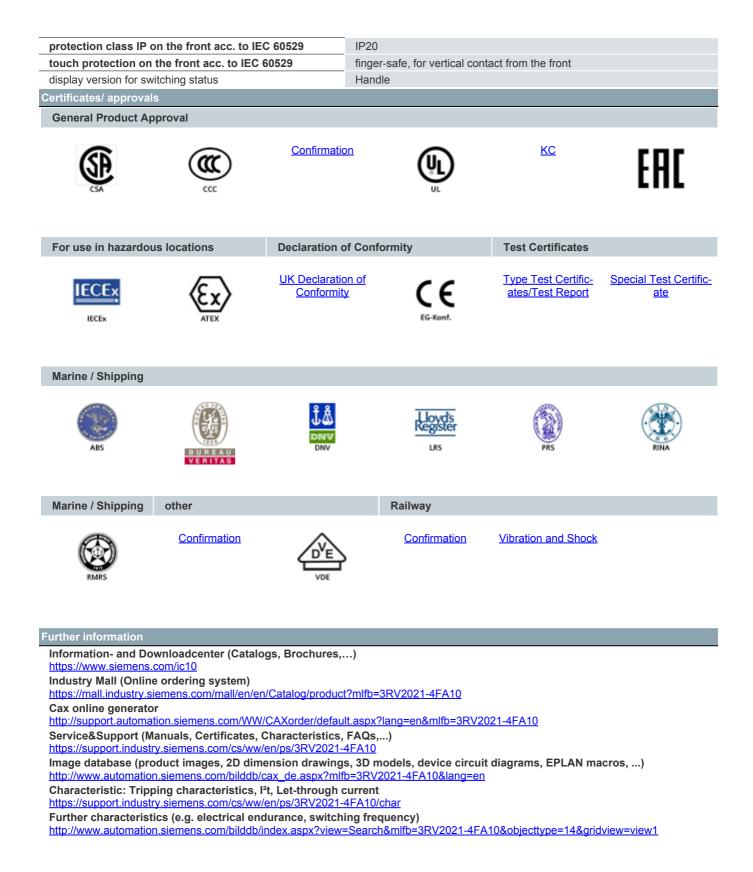


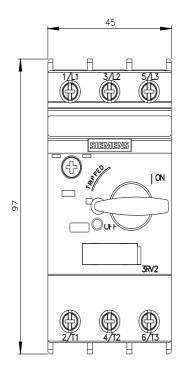
Circuit breaker size S0 for motor protection, CLASS 10 A-release 34...40 A N-release 480 A screw terminal Standard switching capacity

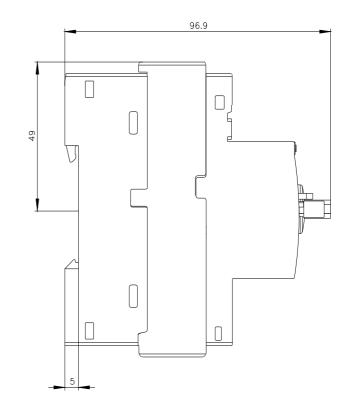
product brand name	SIRIUS	
product designation	Circuit breaker	
design of the product	For motor protection	
product type designation	3RV2	
General technical data		
size of the circuit-breaker	SO	
size of contactor can be combined company-specific	S00, S0	
product extension auxiliary switch	Yes	
power loss [W] for rated value of the current		
<ul> <li>at AC in hot operating state</li> </ul>	16.25 W	
<ul> <li>at AC in hot operating state per pole</li> </ul>	5.4 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 +40 °C	
<ul> <li>during storage</li> </ul>	-50 +80 °C	
<ul> <li>during transport</li> </ul>	-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	34 40 A	

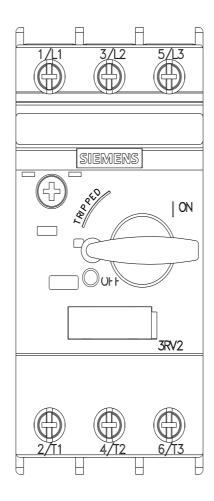
current-dependent overload release	
operating voltage	222.14
rated value	690 V
rated value	20 690 V
at AC-3 rated value maximum	690 V
operating frequency rated value	50 60 Hz
operational current rated value	40 A
operational current at AC-3 at 400 V rated value	40 A
operating power at AC-3	
<ul> <li>at 230 V rated value</li> </ul>	11 kW
• at 400 V rated value	18.5 kW
<ul> <li>at 500 V rated value</li> </ul>	22 kW
at 690 V rated value	39 kW
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	
<ul> <li>ground fault detection</li> </ul>	No
<ul> <li>phase failure detection</li> </ul>	Yes
trip class	CLASS 10
design of the overload release	thermal
breaking capacity operating short-circuit current (Ics) at AC	
<ul> <li>at 240 V rated value</li> </ul>	100 kA
<ul> <li>at 400 V rated value</li> </ul>	10 kA
<ul> <li>at 500 V rated value</li> </ul>	3 kA
• at 690 V rated value	2 kA
breaking capacity maximum short-circuit current (Icu)	
• at AC at 240 V rated value	100 kA
at AC at 400 V rated value	20 kA
at AC at 500 V rated value	6 kA
at AC at 690 V rated value	3 kA
response value current of instantaneous short-circuit trip	480 A
unit	
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
• at 480 V rated value	40 A
<ul> <li>at 600 V rated value</li> </ul>	40 A
yielded mechanical performance [hp]	
<ul> <li>for single-phase AC motor</li> </ul>	
— at 110/120 V rated value	3 hp
— at 230 V rated value	7.5 hp
<ul> <li>for 3-phase AC motor</li> </ul>	
— at 200/208 V rated value	10 hp
— at 220/230 V rated value	10 hp
— at 460/480 V rated value	30 hp
Short-circuit protection	
product function short circuit protection	Yes
design of the short-circuit trip	magnetic
design of the fuse link for IT network for short-circuit protection of the main circuit	
• at 400 V	gG 63 A
• at 500 V	gG 63 A
• at 690 V	gG 63 A
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting onto 35 mm standard mounting rail

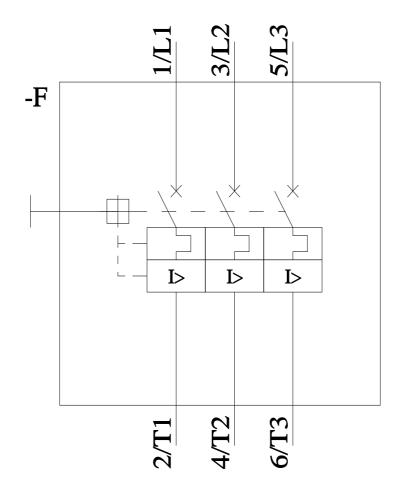
	according to DIN EN 60715
height	97 mm
width	45 mm
	97 mm
depth	97 11111
required spacing	
for grounded parts at 400 V	20
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
• for live parts at 400 V	
— downwards	30 mm
— upwards	30 mm
— at the side	9 mm
<ul> <li>for grounded parts at 500 V</li> </ul>	
— 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	70 mm
— upwards	70 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
<ul> <li>for live parts at 690 V</li> </ul>	
— downwards	70 mm
— upwards	70 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
Connections/ Terminals	
product component removable terminal for auxiliary	No
and control circuit	
type of electrical connection	
for main current circuit	screw-type terminals
arrangement of electrical connectors for main current	Top and bottom
circuit	
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
at AWG cables for main contacts	2x (16 12), 2x (14 8)
tightening torque	
• for main contacts with screw-type terminals	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	
<ul> <li>for main contacts</li> </ul>	M4
Safety related data	
B10 value	
with high demand rate acc. to SN 31920	5 000
proportion of dangerous failures	
with low demand rate acc. to SN 31920	50 %
<ul> <li>with high demand rate acc. to SN 31920</li> </ul>	50 %
failure rate [FIT]	50 EIT
with low demand rate acc. to SN 31920	50 FIT
T1 value for proof test interval or service life acc. to IEC 61508	10 у











last modified:

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