SIEMENS

Data sheet 3RV2742-5DD10



Circuit breaker size S3 for system protection with approval circuit breaker UL 489, CSA C22.2 No.5-02 A-release 25 A N-release 325 A screw terminal



product brand name	SIRIUS		
product designation	Circuit breaker		
design of the product	For system protection according to UL 489/CSA C22.2 No. 5		
product type designation	3RV2		
General technical data			
size of the circuit-breaker	S3		
product extension auxiliary switch	Yes		
power loss [W] for rated value of the current			
 at AC in hot operating state 	14 W		
 at AC in hot operating state per pole 	4.7 W		
insulation voltage with degree of pollution 3 at AC rated value	1 000 V		
surge voltage resistance rated value	8 kV		
shock resistance according to IEC 60068-2-27	25 g / 11 ms (rectangular impulse and sine pulse)		
mechanical service life (operating cycles)			
 of the main contacts typical 	25 000		
of auxiliary contacts typical	25 000		
electrical endurance (operating cycles) typical	25 000		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	03/01/2017		
SVHC substance name	Lead - 7439-92-1		
Weight	2.25 kg		
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 %		
Environmental footprint			
global warming potential [CO2 eq] total	283.24 kg		
global warming potential [CO2 eq] during manufacturing	18.5 kg		
global warming potential [CO2 eq] during sales	1.24 kg		
global warming potential [CO2 eq] during operation	265 kg		
global warming potential [CO2 eq] after end of life	-1.5 kg		
Siemens Eco Profile (SEP)	Siemens EcoTech		
Main circuit			
number of poles for main current circuit	3		

operating voltage			
rated value	20 600 V		
operating frequency rated value	50 60 Hz		
operational current rated value	25 A		
Protective and monitoring functions			
product function			
 ground fault detection 	No		
phase failure detection	No		
design of the overload release	thermal		
maximum short-circuit current breaking capacity (Icu)			
at AC at 240 V rated value	100 kA		
at AC at 400 V rated value	100 kA		
at 480 AC Y/277 V according to UL 489 rated value At 480 V AC according to UL 480 rated value	65 kA		
at 480 V AC according to UL 489 rated value	65 kA		
operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value	100 kA		
at 400 V rated value at 400 V rated value	50 kA		
response value current of instantaneous short-circuit trip unit	325 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 DIN rail according to DIN EN 60715		
height	170 mm		
width	70 mm		
depth	176 mm		
required spacing			
 for grounded parts at 400 V 			
— downwards	90 mm		
— upwards	90 mm		
— at the side	10 mm		
• for live parts at 400 V			
— downwards	90 mm		
— upwards	90 mm		
— at the side	10 mm		
Connections/ Terminals			
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			
• for main contacts			
— solid	2x (2.5 16 mm²)		
— solid or stranded	2x (2,5 50 mm²), 1x (10 70 mm²)		
 finely stranded with core end processing 	2x (2.5 35 mm²), 1x (2.5 50 mm²)		
 finely stranded without core end processing 	2x (10 35 mm²), 1x (10 50 mm²)		
 for AWG cables for main contacts 	10 only front clamping point		
 for AWG cables for main contacts for box terminal using the front clamping point 	10 only front clamping point		
tightening torque			
for main contacts with screw-type terminals	4.5 6 N·m		
design of screwdriver shaft	Hexagonal socket		
size of the screwdriver tip	4 mm		
design of the thread of the connection screw	MR		
for main contacts Safety related data	M8		
	Yes		
product function suitable for safety function suitability for use	100		
safety-related switching on	No		
safety-related switching OFF safety-related switching OFF	Yes		
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service life maximum	10 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	50 %
B10 value with high demand rate according to SN 31920	5 000
failure rate [FIT] with low demand rate according to SN 31920	50 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
T1 value	
 for proof test interval or service life according to IEC 61508 	10 a
Electrical Safety	
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	
display version for switching status	Handle
Approvals Certificates	

General Product Approval







Confirmation



<u>KC</u>

General Product Approval

Test Certificates

Marine / Shipping

other



Type Test Certificates/Test Report

Special Test Certificate



Miscellaneous

Confirmation

other

Environment









Further information

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=3RV2742-5DD10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2742-5DD10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2742-5DD10

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

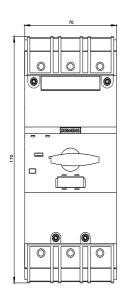
 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2742-5DD10\&lang=en}}$

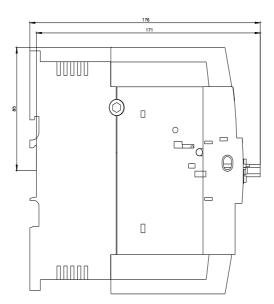
Characteristic: Tripping characteristics, I^2t , Let-through current

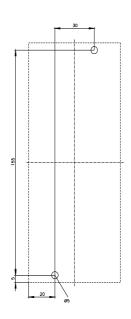
https://support.industry.siemens.com/cs/ww/en/ps/3RV2742-5DD10/char

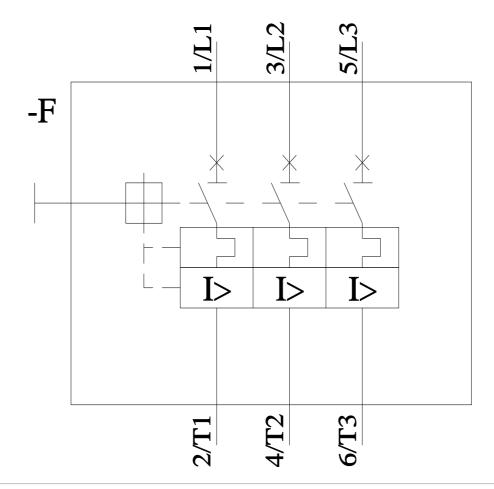
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2742-5DD10&objecttype=14&gridview=view1









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