SIEMENS

Data sheet 3RV2342-4HC10



Circuit breaker size S3 for starter combination Rated current 50 A N-release 650 A screw terminal Increased switching capacity 100 kA $\,$



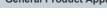


product brand name	SIRIUS
product designation	Circuit breaker
design of the product	For starter combinations
product type designation	3RV2
General technical data	
size of the circuit-breaker	S3
size of contactor can be combined company-specific	S3
product extension auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	27 W
 at AC in hot operating state per pole 	9 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	25g / 11 ms Sinus
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	2.208 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	

full-load current (FLA) for 3-phase AC motor • at 480 V rated value 50 A • at 600 V rated value 50 A yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 5 hp — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 15 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 40 hp — at 575/600 V rated value 50 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic	number of poles for main augment sizes:	2
and AC-3er rated value maximum	-	
eat AC-36 rated value maximum		20 600 V
### ARC-3e rated value ### arch 2-9 rated valu		
operational current rated value 50 A 5		
Operational current rated value		
operating power 50 A - at AC-3 at 400 V rated value 50 A - at AC-3 - at 230 V rated value - at 320 V rated value 11 kW - at 320 V rated value 22 kW - at 500 V rated value 45 kW - at 500 V rated value 45 kW - at 400 V rated value 22 kW - at 400 V rated value 22 kW - at 400 V rated value 22 kW - at 500 V rated value 30 kW - at 500 V rated value 45 kW - at 62 S maximum 15 1th - at AC 3 maximum 15 1th - at AC 3 maximum 15 1th - at AC 3 maximum 10 th - at AC 3 maximum 10 th - at AC 3 maximum short-circuit current breaking capacity (cu) 10 kM - at AC 240 V rated value 10 kA - at AC 240 V rated value 10 kA - at AC 240 V rated value 10 kA - at 1400 V rated value </td <td></td> <td></td>		
* at AC-3 at 400 V rated value * at AC-3 at 400 V rated value * at AC-3 at 400 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at 22 kW * at AC-3 * at 300 V rated value * at 200 V rated value * at 200 V rated value * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * at 300 V rated value * at AC-3 * a	· ·	50 A
### AG-3e ##		EO A
■ at AC-3		
		50 A
		11 kW
→ at AG-3e		
		40 KW
		11 kW
— at 690 V rated value 5 kW		
operating frequency		
• at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • at AC-3 maximum • ground fault detection • ground fault detection • product function • ground fault detection • phase affaire detection • no design of the overload release maximum short-circuit current breaking capacity (icu) • at AC-3 at 240 v rated value • at AC-3 at 500 v rated value • at AC-3 at 500 v rated value • at AC-3 at 500 v rated value • at AC-3 at 690 v rated value • at AC-3 at 690 v rated value • at 600 v rated value • bit 600 v rated value • at 600 v rated value • at 600 v rated value • at 600 v rated value • bit 600 v rated value • at 600 v r		
• at AC-3e maximum Protective and monitoring functions product function • ground fault detection • hyphase failure detection • popular function • product function short circuit trip • mounting position • product function short circuit trip • mounting position • product function short circuit trip • mounting position • product function short circuit production • product function shor		15 1/h
Protective and monitoring functions product function • ground fault detection • prase failure detection No design of the overload release maximum short-circuit current breaking capacity (Icu) • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 240 V rated value • at AC at 500 V rated value • at AC at 500 V rated value • at AC at 600 V rated value • at AC at 600 V rated value • at 240 V rated value • at 240 V rated value • at 240 V rated value • at 400 V rated value • at 400 V rated value • at 800 V rated value • at 500 V rated value • at 600 V rated value • 50 kA • at 600 V rated value • 50 A • at 600 V rated value • 50 A ylelded mechanical performance [hp] • for single-phase AC motor • at 400 V rated value • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 200 V rated value • for 3-phase AC motor • at 575/600 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rated value • for 3-phase AC motor • at 800 V rat		
product function		ic iii
ground fault detection phase failure detection phase failure detection phase failure detection phase failure detection design of the overload release maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value bat AC at 400 V rated value at AC at 509 V rated value bat AC at 690 V rated value at AC at 690 V rated value bat AC at 400 V rated value bat AC at 500 V rated value bat 500 V rated value bat 500 V rated value bat 690 V rated va		
• phase failure detection No	•	No
design of the overload release thermal maximum short-circuit current breaking capacity (Icu) Image: Company of the Company	-	
maximum short-circuit current breaking capacity (Icu) at AC at 240 V rated value at AC at 400 V rated value bit AC at 400 V rated value at AC at 660 V rated value bit AC at 660 V rated value at 240 V rated value bit 240 V rated value at 400 V rated value bit 50 kA at 500 V rated value bit 50 kA at 500 V rated value bit 50 kA at 500 V rated value bit 50 kA bit 500 V rated value bit 600 V rated	·	
at AC at 240 V rated value at AC at 400 V rated value 100 kA at AC at 500 V rated value 15 kA out AC at 500 V rated value 10 kA operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value 100 kA at 400 V rated value 50 kA at 500 V rated value 55 kA response value current of instantaneous short-circuit trip unit 650 A ULCSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor - at 230 V rated value 5 fbp - at 230 V rated value 5 fbp - at 230 V rated value 5 fbp - at 220/208 V rated value 5 fbp - at 220/208 V rated value 5 fb p - at 220/208 V rated value 5 for hyperated value 5 for 3-phase AC motor - at 220/208 V rated value 5 for 3-phase AC motor - at 230 V rated value 5 for 3-phase AC motor - at 220/208 V rated value 5 fbp - at 220/208 V rated value 5 fbp - at 220/208 V rated value 5 fb p - at 275/600 V rated value 5 for hyperated value 5 for hyperated value 6 for hyperated value 7 fb hyperated value 7 fb hyperated value 7 fb hyperated value 8 for hyperated value 9 for hyperat		
at AC at 500 V rated value at AC at 690 V rated value 10 kA operating short-circuit current breaking capacity (Ics) at AC at 240 V rated value 50 kA at 400 V rated value 50 kA at 690 V rated value 55 kA response value current of instantaneous short-circuit trip unit UI/CSA ratings IIII-load current (FLA) for 3-phase AC motor at 480 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor - at 230 V rated value 50 hp - at 220/230 V rated value 50 hp - at 220/230 V rated value 50 hp - at 200/208 V rated value 50 hp - at 460/480 V rated value 40 hp - at 575/600 V rated value 50 hp Short-circuit protection product function short circuit trip magnetic magnetic mounting position any fastening method 10 NA 100 kA 1		100 kA
• at AC at 690 V rated value operating short-circuit current breaking capacity (Ics) at AC • at 240 V rated value • at 400 V rated value • at 500 V rated value • at 690 V rated value • at 800 V rated value • at 480 V rated value • at 600 V rated value • at 110/120 V rated value • for single-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 220/230 V rated value • for 3-phase AC motor — at 220/230 V rated value • for 3-phase AC motor — at 260/480 V rated value • at 660/480 V rated value • to phase AC motor — at 575/600 V rated value • 50 hp Short-circuit protection product function short circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method	at AC at 400 V rated value	100 kA
e at 240 V rated value 50 kA 500 V rated value 55 kA 500 V rated value 500 V rated v	at AC at 500 V rated value	15 kA
 at 240 V rated value at 400 V rated value 50 kA at 500 V rated value at 690 V rated value 5 kA response value current of instantaneous short-circuit trip unit 650 A UL/CSA ratings full-load current (FLA) for 3-phase AC motor at 480 V rated value 50 A at 600 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor at 110/120 V rated value for 3-phase AC motor at 230 V rated value for 3-phase AC motor at 200/208 V rated value 15 hp at 220/230 V rated value at 40/480 V rated value at 40/480 V rated value by hp 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	• at AC at 690 V rated value	10 kA
at 400 V rated value at 500 V rated value 5 kA response value current of instantaneous short-circuit trip unit 650 A **MUCSA ratings** **Will-load current (FLA) for 3-phase AC motor at 480 V rated value 50 A **Idl-load current (FLA) for 3-phase AC motor **at 480 V rated value 50 A **Jelded mechanical performance [hp] **for single-phase AC motor — at 110/120 V rated value 50 hp — at 230 V rated value 10 hp **for 3-phase AC motor — at 200/208 V rated value 15 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 40 hp — at 4575/600 V rated value 50 hp **Short-circuit protection **Pes **design of the short-circuit trip magnetic **Installation/ mounting/ dimensions **mounting position any **screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	operating short-circuit current breaking capacity (Ics) at AC	
at 500 V rated value at 690 V rated value bk A response value current of instantaneous short-circuit trip unit bk A response value current of instantaneous short-circuit trip unit bk A contract (FLA) for 3-phase AC motor at 480 V rated value bk A at 600 V rated value bk A at 600 V rated value bk A bk A yielded mechanical performance [hp] bk of single-phase AC motor at 110/120 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor bf or 3-phase AC motor at 200/208 V rated value bf or 3-phase AC motor bf or 4-phase AC motor bf or 5-phase AC motor bf or 4-phase AC motor bf or 5-phase AC motor bf or 4-phase AC m	at 240 V rated value	100 kA
o at 690 V rated value response value current of instantaneous short-circuit trip unit	• at 400 V rated value	50 kA
response value current of instantaneous short-circuit trip unit UL/CSA ratings full-load current (FLA) for 3-phase AC motor	at 500 V rated value	7.5 kA
full-load current (FLA) for 3-phase AC motor at 480 V rated value 50 A to at 600 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor - at 110/120 V rated value 5 hp - at 230 V rated value 10 hp for 3-phase AC motor - at 200/208 V rated value 15 hp - at 220/230 V rated value 20 hp - at 480/480 V rated value 20 hp - at 460/480 V rated value 30 hp Short-circuit protection product function short circuit protection design of the short-circuit trip mounting position mounting position fastening method 50 A	• at 690 V rated value	5 kA
full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value • for single-phase AC motor — at 110/120 V rated value • for 3-phase AC motor — at 230 V rated value • for 3-phase AC motor — at 200/208 V rated value • for 3-phase AC motor — at 200/208 V rated value • 15 hp — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value — at 575/600 V rated value — at 575/600 V rated value product function short circuit protection product function short circuit trip magnetic Installation/ mounting/ dimensions mounting position fastening method 50 A 5	response value current of instantaneous short-circuit trip unit	650 A
 at 480 V rated value 50 A at 600 V rated value 50 A yielded mechanical performance [hp] for single-phase AC motor — at 110/120 V rated value 5 hp — at 230 V rated value 10 hp for 3-phase AC motor — at 200/208 V rated value 15 hp — at 220/230 V rated value — at 460/480 V rated value — at 575/600 V rated value 50 hp 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 	UL/CSA ratings	
at 600 V rated value yielded mechanical performance [hp] for single-phase AC motor	full-load current (FLA) for 3-phase AC motor	
yielded mechanical performance [hp] • for single-phase AC motor — at 110/120 V rated value 5 hp — at 230 V rated value 10 hp • for 3-phase AC motor — at 200/208 V rated value 15 hp — at 220/230 V rated value 20 hp — at 460/480 V rated value 40 hp — at 575/600 V rated value 50 hp 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	• at 480 V rated value	50 A
for single-phase AC motor — at 110/120 V rated value	at 600 V rated value	50 A
- at 110/120 V rated value 5 hp - at 230 V rated value 10 hp • for 3-phase AC motor - at 200/208 V rated value 15 hp - at 220/230 V rated value 20 hp - at 460/480 V rated value 40 hp - at 575/600 V rated value 50 hp 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	yielded mechanical performance [hp]	
- at 230 V rated value • for 3-phase AC motor - at 200/208 V rated value 15 hp - at 220/230 V rated value 20 hp - at 460/480 V rated value 40 hp - at 575/600 V rated value 50 hp Short-circuit protection product function short circuit protection design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method 10 hp 15 hp 40 hp 50 hp Yes anguetic	 for single-phase AC motor 	
● for 3-phase AC motor — at 200/208 V rated value — at 220/230 V rated value 20 hp — at 460/480 V rated value 40 hp — at 575/600 V rated value 50 hp Short-circuit protection product function short circuit protection design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method 15 hp 20 hp 40 hp 40 hp 50 hp Yes magnetic Installation/ mounting/ dimensions mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	— at 110/120 V rated value	5 hp
- at 200/208 V rated value 15 hp 20 hp - at 220/230 V rated value 40 hp - at 575/600 V rated value 50 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method 55 hp 15 hp 20 hp 20 hp 20 hp 20 hp 30 hp 40 hp 40 hp 50 hp 50 hp Wes anguetic	— at 230 V rated value	10 hp
- at 220/230 V rated value 20 hp - at 460/480 V rated value 50 hp Short-circuit protection product function short circuit protection Yes design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method 20 hp	• for 3-phase AC motor	
- at 460/480 V rated value 40 hp - at 575/600 V rated value 50 hp Short-circuit protection product function short circuit protection 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	— at 200/208 V rated value	15 hp
— at 575/600 V rated value 50 hp 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	— at 220/230 V rated value	20 hp
product function short circuit protection design of the short-circuit trip Installation/ mounting/ dimensions mounting position fastening method Short-circuit protection Yes magnetic magnetic any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	— at 460/480 V rated value	40 hp
product function short circuit protection design of the short-circuit trip magnetic Installation/ mounting/ dimensions mounting position any fastening method Yes magnetic magnetic any screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715		50 hp
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	Short-circuit protection	
Installation/ mounting/ dimensions mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	product function short circuit protection	Yes
mounting position any fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	<u> </u>	magnetic
fastening method screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715	Installation/ mounting/ dimensions	
	mounting position	any
height 165 mm	fastening method	screw and snap-on mounting onto 35 mm DIN rail according to DIN EN 60715
	height	165 mm

width	70 mm
depth	176 mm
required spacing	
with side-by-side mounting at the side	0 mm
• for grounded parts at 400 V	
— downwards	70 mm
— upwards	70 mm
— at the side	10 mm
• for live parts at 400 V	
— downwards	70 mm
— upwards	70 mm
— at the side	10 mm
for grounded parts at 500 V	10 11111
— downwards	110 mm
— upwards	110 mm
— at the side	10 mm
• for live parts at 500 V	10 111111
— downwards	110 mm
— upwards	110 mm
— upwards — at the side	10 mm
at the sidefor grounded parts at 690 V	TO THILL
	150 mm
— downwards	150 mm
— upwards	
— backwards	0 mm
— at the side	30 mm
— forwards	0 mm
• for live parts at 690 V	
— downwards	150 mm
— upwards	150 mm
— backwards	0 mm
— at the side	30 mm
— forwards	0 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)
tightening torque	
for main contacts for ring cable lug	4.5 6 N·m
outer diameter of the usable ring cable lug maximum	19 mm
tightening torque	
• for main contacts with screw-type terminals	4.5 6 N·m
Safety related data	
product function suitable for safety function	Yes
suitability for use	
safety-related switching on	No
safety-related switching OFF	Yes
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 %
with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920	50 %
with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 failure rate [FIT] with low demand rate according to SN	50 % 5 000 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



Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>







Marine / Shipping







Miscellaneous

other

Confirmation



Railway

Environment

Special Test Certificate



Siemens



Environmental Confirmations

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=3RV2342-4HC10

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RV2342-4HC10

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

https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4HC10

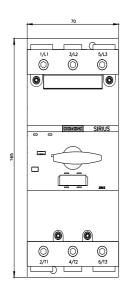
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

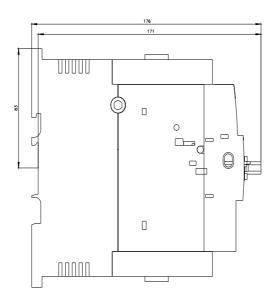
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RV2342-4HC10&lang=en

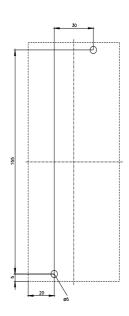
Characteristic: Tripping characteristics, I2t, Let-through current

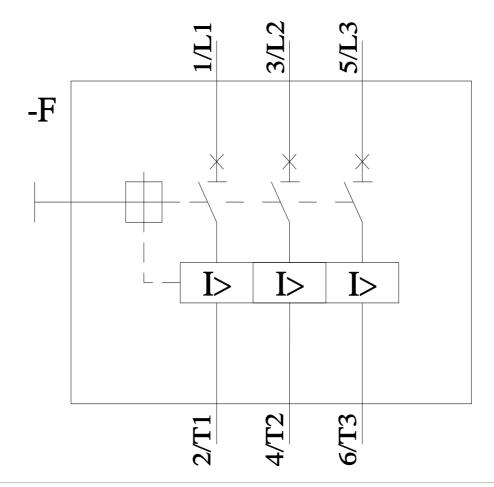
https://support.industry.siemens.com/cs/ww/en/ps/3RV2342-4HC10/char

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RV2342-4HC10&objecttype=14&gridview=view1









last modified:

11/6/2024

