SIEMENS

Data sheet 3RF3405-2BB26

Siemens EcoTech



Solid-state contactor 3-phase 3RF3 AC 53 / 5.2 A / 40 °C 48-600 V / 110-230 V AC 2-phase controlled Instantaneous switching Spring-type terminal

product brand name	SIRIUS
product designation	solid-state contactor
design of the product	2-pole controlled
product type designation	3RF34
General technical data	
certificate of suitability	CE / UL / CSA / CCC / C-Tick (RCM)
product function	instantaneous switching
product feature	high blocking voltage
power loss [W] for rated value of the current	
● at AC in hot operating state	10 W
● at AC in hot operating state per pole	3.33 W
● without load current share typical	3.5 W
type of calculation of power loss current-dependent	linear
insulation voltage rated value	600 V
degree of pollution	3
surge voltage resistance of main circuit rated value	6 kV
protection class IP	IP20
protection class IP on the front according to IEC 60529	IP20
shock resistance according to IEC 60068-2-27	15 g / 11 ms
vibration resistance according to IEC 60068-2-6	2 g
reference code according to IEC 81346-2	Q
Substance Prohibitance (day/month/year)	05/28/2009
SVHC substance name	Lead monoxide (lead oxide) CAS-No. 1317-36-8
Net Weight	0.272 kg
Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	2
number of NC contacts for main contacts	0
type of voltage of the operating voltage	AC
operating voltage	
● at AC	
— at 50 Hz rated value	48 ... 600 V
— at 60 Hz rated value	48 ... 600 V
operating frequency rated value	50 ... 60 Hz
relative symmetrical tolerance of the operating frequency	10 %
operating range relative to the operating voltage at AC	

Subject to change without notice
© Copyright Siemens

● at 50 Hz	40 ... 660 V
● at 60 Hz	40 ... 660 V
operational current	
● at AC-3 at 400 V rated value	5.2 A
● at AC-53a at 400 V at ambient temperature 40 °C rated value	5.2 A
operational current minimum	500 mA
operating power	
● at AC-3 at 400 V rated value	2.2 kW
rate of voltage rise at the thyristor for main contacts maximum permissible	1 000 V/µs
blocking voltage at the thyristor for main contacts maximum permissible	1 600 V
reverse current of the thyristor	10 mA
derating temperature	40 °C
surge current resistance rated value	600 A
I2t value maximum	1 800 A²·s
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
● at 50 Hz	110 ... 230 V
● at 60 Hz	110 ... 230 V
control supply voltage at AC	
● at 50 Hz full-scale value for signal<0> recognition	40 V
● at 60 Hz full-scale value for signal<0> recognition	40 V
● initial value for signal <1> detection	90 V
control supply voltage frequency	
● 1 rated value	50 Hz
● 2 rated value	60 Hz
relative symmetrical tolerance of the control supply voltage frequency	10 %
symmetrical line frequency tolerance	5 Hz
operating range factor control supply voltage rated value at AC at 50 Hz	
● initial value	0.82
● full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
● initial value	0.82
● full-scale value	1.1
control current at minimum control supply voltage	
● at AC	2 mA
control current at AC rated value	15 mA
ON-delay time	5 ms
OFF-delay time	30 ms; additionally max. one half-wave
Installation/ mounting/ dimensions	
mounting position	vertical
fastening method side-by-side mounting	Yes
fastening method	screw and snap-on mounting onto 35 mm DIN rail
design of the thread of the screw for securing the equipment	M4
height	95 mm
width	45 mm
depth	100.8 mm
required spacing with side-by-side mounting	
● upwards	70 mm
● downwards	50 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of electrical connection	

Subject to change without notice
© Copyright Siemens

● for main current circuit	spring-loaded terminals
● for auxiliary and control circuit	spring-loaded terminals
type of connectable conductor cross-sections	
● for main contacts	
— solid	2x (0.5 ... 2.5 mm²)
— finely stranded with core end processing	2x (0.5 ... 1.5 mm²)
— finely stranded without core end processing	2x (0.5 ... 2.5 mm²)
● for AWG cables for main contacts	2x (18 ... 14)
connectable conductor cross-section for main contacts	
● solid or stranded	0.5 ... 2.5 mm²
● finely stranded with core end processing	0.5 ... 1.5 mm²
● finely stranded without core end processing	0.5 ... 2.5 mm²
type of connectable conductor cross-sections	
● for auxiliary and control contacts	
— solid	0.5 ... 2.5 mm²
— finely stranded with core end processing	0.5 ... 2.5 mm²
— finely stranded without core end processing	0.5 ... 2.5 mm²
● for AWG cables for auxiliary and control contacts	1x (20 ... 12)
AWG number as coded connectable conductor cross section for main contacts	18 ... 14
stripped length of the cable	
● for main contacts	10 mm
● for auxiliary and control contacts	10 mm
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	
● at 480 V rated value	3.4 A
● at 600 V rated value	2.7 A
yielded mechanical performance [hp] for 3-phase AC motor	
● at 200/208 V rated value	0.5 hp
● at 220/230 V rated value	0.75 hp
● at 460/480 V rated value	2 hp
● at 575/600 V rated value	2 hp
Safety related data	
proportion of dangerous failures with high demand rate according to SN 31920	50 %
MTTF with high demand rate	76 a
IEC 61508	
T1 value for proof test interval or service life according to IEC 61508	20 a
Electrical Safety	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Ambient conditions	
installation altitude at height above sea level maximum	1 000 m
ambient temperature	
● during operation	-25 ... +60 °C
● during storage	-55 ... +80 °C
Electromagnetic compatibility	
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV / 5 kHz, behavior criterion 2
● due to conductor-earth surge according to IEC 61000-4-5	2 kV, behavior criterion 2
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV, behavior criterion 2
● due to high-frequency radiation according to IEC 61000-4-6	140 dBuV in the frequency range 0.15 ... 80 MHz, behavior criterion 1
electrostatic discharge according to IEC 61000-4-2	4 kV contact discharging / 8 kV air discharging, behavior criterion 2
conducted HF interference emissions according to CISPR11	Class A for industrial environment
field-bound HF interference emission according to CISPR11	Class A for industrial environment
Short-circuit protection, design of the fuse link	
manufacturer's article number	

© Copyright Siemens

● of full range R fuse link for semiconductor protection at NH design usable	3NE1813-0
● of back-up R fuse link for semiconductor protection at NH design usable	3NE8015-1
● of back-up R fuse link for semiconductor protection at cylindrical design 10 x 38 mm usable	3NC1016
● of back-up R fuse link for semiconductor protection at cylindrical design 14 x 51 mm usable	3NC1420
● of back-up R fuse link for semiconductor protection at cylindrical design 22 x 58 mm usable	3NC2220
manufacturer's article number of the gG fuse	
● at NH design usable	3NA3801-6

Approvals Certificates

Environment	General Product Approval
Environmental Confirmations	

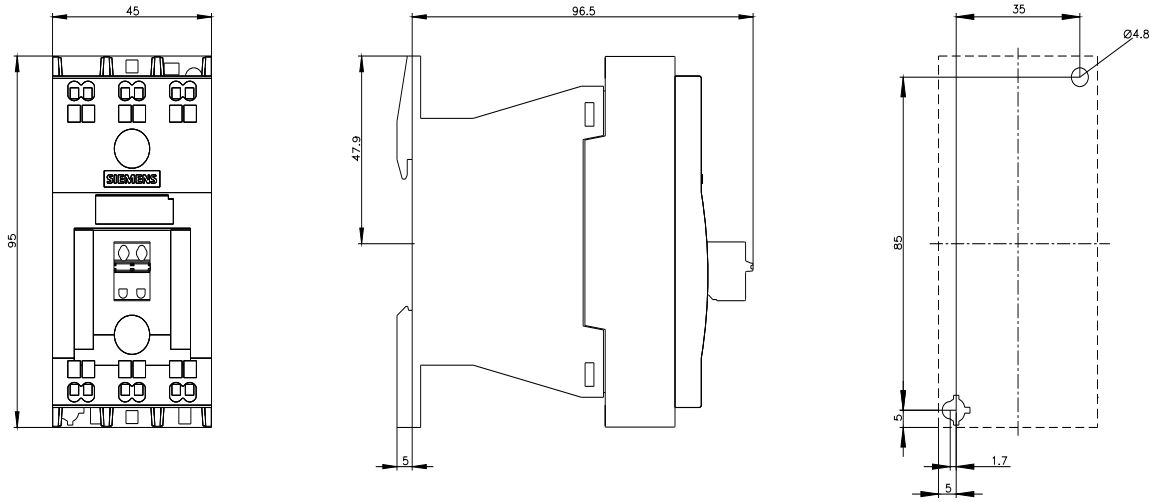
General Product Approval	EMV	Test Certificates	other	
		Type Test Certificates/Test Report	Confirmation	Confirmation

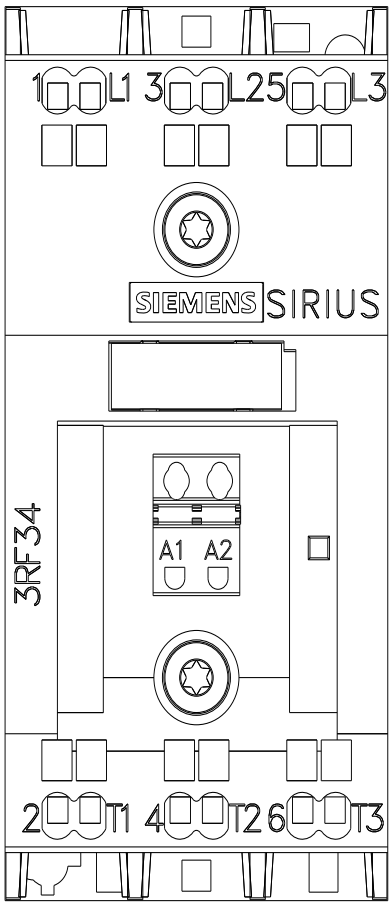
other

Further information

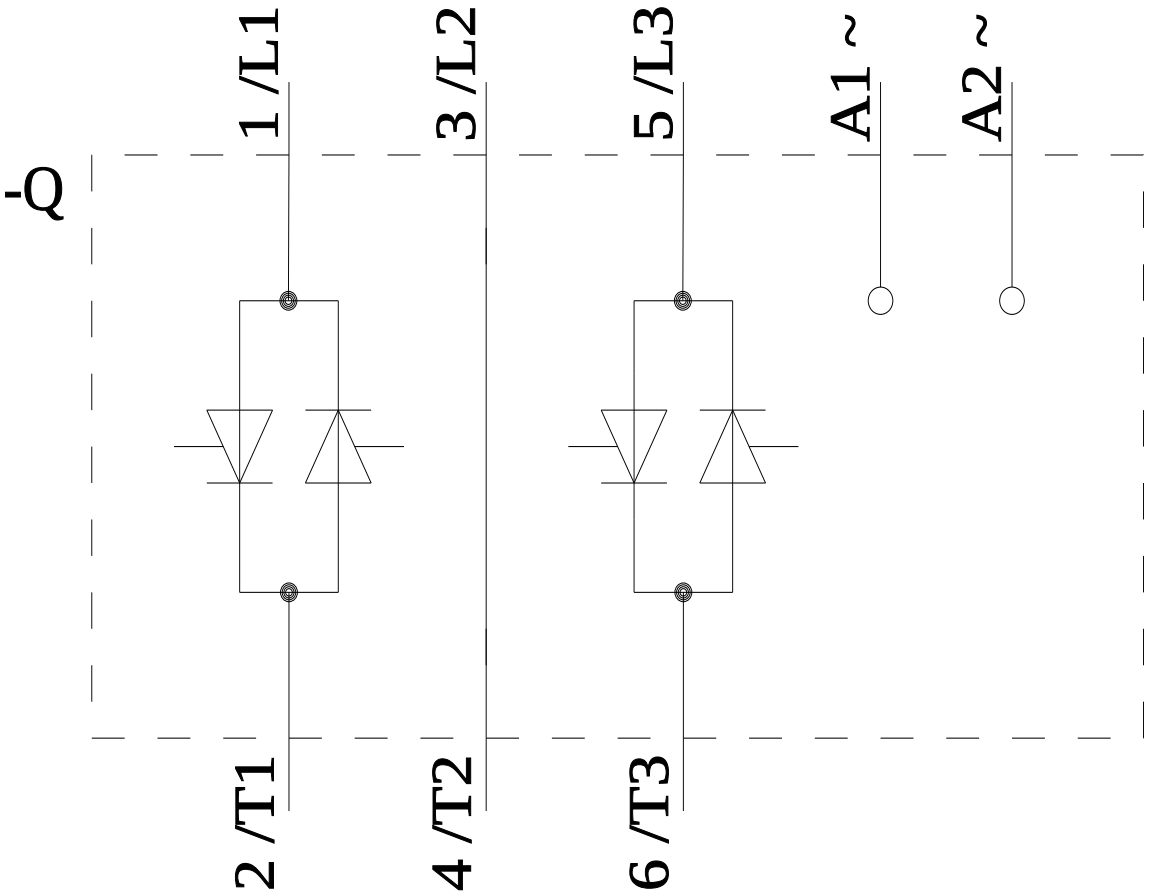
Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10
Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RF3405-2BB26
Cax online generator
https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RF3405-2BB26
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/3RF3405-2BB26
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RF3405-2BB26&lang=en

© Copyright Siemens





Subject to change without notice
© Copyright Siemens



last modified: 7/11/2026

Subject to change without notice
© Copyright Siemens