SIEMENS

Data sheet 3RW5243-6AC04

SIRIUS soft starter 200-480 V 210 A, 24 V AC/DC Screw terminals Analog output



Figure similar

Product brand name	SIRIUS
Product category	Hybrid switching devices
Product designation	Soft starter
Manufacturer's article number	
 of HMI module usable 	3RW5980-0HS00
 of HMI-Modul high-feature usable 	3RW5980-0HF00
• of communication module PROFINET standard	3RW5980-0CS00
usable	
 of communication module PROFIBUS usable 	3RW5980-0CP00
• of communication module Modbus TCP usable	3RW5980-0CT00
 of circuit breaker usable at 400 V 	3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
• of circuit breaker usable at 400 V at inside-delta	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
circuit	
• of circuit breaker usable at 500 V at inside-delta	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
circuit	
 of the gG fuse usable up to 690 V 	2x3NA3354-6; Type of coordination 1, Iq = 65 kA

• of the gG fuse usable at inside-delta circuit up to 500 V

• of full range R fuse link for semiconductor protection usable up to 690 V

• of back-up R fuse link for semiconductor protection usable up to 690 V

2x3NA3354-6; Type of coordination 1, Iq = 65 kA

3NE1230-2; Type of coordination 2, Iq = 65 kA

3NE3333; Type of coordination 2, Iq = 65 kA

Starting voltage [%]	30 100 %
	0 20 s
Start-up ramp time of soft starter	0 20 \$
Product component	Voc
• is supported HMI-Standard	Yes
is supported HMI-High Feature	Yes
Product feature integrated bypass contact system	Yes
Number of controlled phases	3
Trip class	CLASS 10A (default) / 10E / 20E; acc. to IEC 60947-4-2
Insulation voltage	
• rated value	600 V
Degree of pollution	3
Impulse voltage rated value	6 kV
Blocking voltage of the thyristor maximum	1 600 V
Service factor	1
Surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
between main and auxiliary circuit	600 V
Protection class IP	IP00; IP20 with additional terminal covers for vertical touching from the front
Usage category acc. to IEC 60947-4-2	AC 53a
Shock resistance	15 g / 11 ms, from 12 g / 11 ms with potential contact lifting
Vibration resistance	15 mm to 6 Hz; 2g to 500 Hz
Reference code acc. to DIN EN 81346-2	Q
Product function	
• ramp-up (soft starting)	Yes
• ramp-down (soft stop)	Yes
Soft Torque	Yes
Adjustable current limitation	Yes
pump ramp down	Yes
Intrinsic device protection	Yes
motor overload protection	Yes; Electronic motor overload protection
Evaluation of thermistor motor protection	No
inside-delta circuit	Yes
Auto-reset	Yes
▼ Aut0-16561	100

• remote reset	Yes; By turning off the control supply voltage
• communication function	Yes
• via software configurable	Yes
• firmware update	Yes
• removable terminal for control circuit	Yes
analog output	Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)

Power Electronics	
Operating current	
• at 40 °C rated value	210 A
● at 50 °C rated value	186 A
• at 60 °C rated value	170 A
Operating current at inside-delta circuit	
● at 40 °C rated value	364 A
• at 50 °C rated value	322 A
• at 60 °C rated value	294 A
Operating voltage	
• rated value	200 480 V
 at inside-delta circuit rated value 	200 480 V
Relative negative tolerance of the operating voltage	-15 %
Relative positive tolerance of the operating voltage	10 %
Relative negative tolerance of the operating voltage at inside-delta circuit	-15 %
Relative positive tolerance of the operating voltage at inside-delta circuit	10 %
Operating power for three-phase motors	
• at 230 V at 40 °C rated value	55 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	110 kW
• at 400 V at 40 °C rated value	110 kW
 at 400 V at inside-delta circuit at 40 °C rated value 	200 kW
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
Relative negative tolerance of the operating frequency	-10 %
Relative positive tolerance of the operating frequency	10 %
Adjustable motor current	
• minimum	90 A
at inside-delta circuit minimum	156 A
Minimum load [%]	15 %; Relative to smallest settable le
Power loss [W] for rated value of the current at AC	
● at 40 °C to power-up	75 W

● at 50 °C to power-up	68 W
• at 60 °C to power-up	63 W

Control circuit/ Control	
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	
● at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
Relative negative tolerance of the control supply	-20 %
voltage at AC at 50 Hz	
Relative positive tolerance of the control supply	20 %
voltage at AC at 50 Hz	00.07
Relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
Relative positive tolerance of the control supply	20 %
voltage at AC at 60 Hz	<i>'</i>
Control supply voltage frequency	50 60 Hz
Relative negative tolerance of the control supply	-10 %
voltage frequency	
Relative positive tolerance of the control supply	10 %
voltage frequency	
Control supply voltage	
• at DC rated value	24 V
Relative negative tolerance of the control supply	-20 %
voltage at DC	00.07
Relative positive tolerance of the control supply voltage at DC	20 %
Control supply current in standby mode rated value	160 mA
Holding current in the by-pass mode operating rated	470 mA
value	
Starting current at close of by-pass contact maximum	7.6 A
Inrush current peak at connect of control supply	3.3 A
voltage maximum	
Duration of inrush current peak at connect of control	12.1 ms
supply voltage	
Design of the overvoltage protection	Varistor
Design of short-circuit protection for control circuit	4 A gG fuse (Icu=1 kA), 6 A quick-acting fuse (Icu=1 kA), C1
	miniature circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply
	(1.52 300 / 1/3, 10 flot part of doops of duppiy
Inputs/ Outputs	
Number of digital inputs	1
Number of digital outputs	3
not parameterizable	2
Digital output version	2 normally-open contacts (NO) / 1 changeover contact (CO)

Number of inputs for thermistor connection

0

Number of analog outputs	1
Switching capacity current of the relay outputs	
• at AC-15 at 250 V rated value	3 A
• at DC-13 at 24 V rated value	1 A

Installation/ mounting/ dimensions	
Mounting position	with vertical mounting surface +/-90° rotatable, with vertical
	mounting surface +/- 22.5° tiltable to the front and back
Mounting type	screw fixing
Height	393 mm
Width	210 mm
Depth	203 mm
Required spacing with side-by-side mounting	
• forwards	10 mm
Backwards	0 mm
• upwards	100 mm
downwards	75 mm
• at the side	5 mm
Installation altitude at height above sea level	5 000 m; Derating as of 1000 m, see catalog
maximum	
Weight without packaging	9.9 kg

Connections/Terminals	
Type of electrical connection	
for main current circuit	screw-type terminals
• for control circuit	screw-type terminals
Type of connectable conductor cross-sections	
 for DIN cable lug for main contacts stranded 	2x (50 240 mm²)
 for DIN cable lug for main contacts finely 	2x (70 240 mm²)
stranded	
Type of connectable conductor cross-sections at	
AWG conductors for control circuit	
• solid	1x (20 12), 2x (20 14)
Wire length	
 between soft starter and motor maximum 	800 m
 at the digital inputs at AC maximum 	100 m
 at the digital inputs at DC maximum 	1 000 m

Ambient conditions	
Ambient temperature	
during operation	-25 +60 °C
 during storage and transport 	-40 +80 °C
Environmental category	
 during operation acc. to IEC 60721 	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6

● during storage acc. to IEC 60721	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 during transport acc. to IEC 60721 	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
EMC emitted interference acc. to IEC 60947-1	CISPR11, ambience A (industrial sector)

Communication/ Protocol		
	Communication module is supported	
	 PROFINET standard 	Yes
	Modbus TCP	Yes
	• PROFIBUS	Yes

UL/CSA ratings	
Manufacturer's article number	
 of the fuse usable up to 575/600 V according to UL 	Type: Class J / L, max. 700 A; Standard fault, Iq = 10 kA
 of the fuse usable at inside-delta circuit up to 575/600 V according to UL 	Type: Class J / L, max. 700 A
Operating power [hp] for three-phase motors	
• at 200/208 V at 50 °C rated value	60 hp
• at 220/230 V at 50 °C rated value	60 hp
• at 460/480 V at 50 °C rated value	150 hp
 at 200/208 V at inside-delta circuit at 50 °C rated value 	100 hp
 at 220/230 V at inside-delta circuit at 50 °C rated value 	125 hp
 at 460/480 V at inside-delta circuit at 50 °C rated value 	250 hp
Contact rating of auxiliary contacts according to UL	R300-B300

General Product Approval Declaration of Other
Conformity









Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5243-6AC04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5243-6AC04

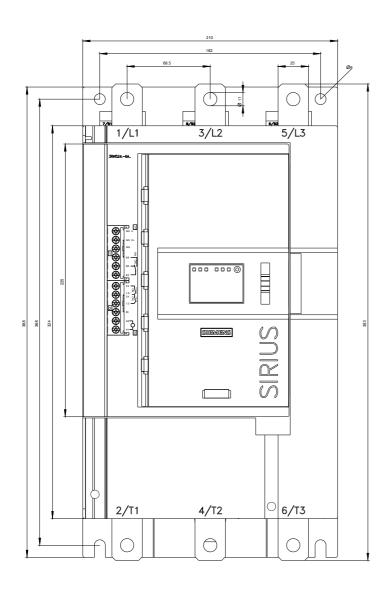
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

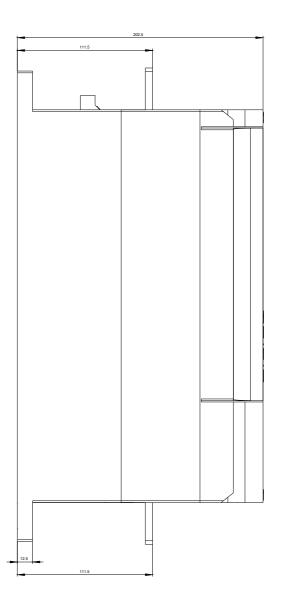
https://support.industry.siemens.com/cs/ww/en/ps/3RW5243-6AC04

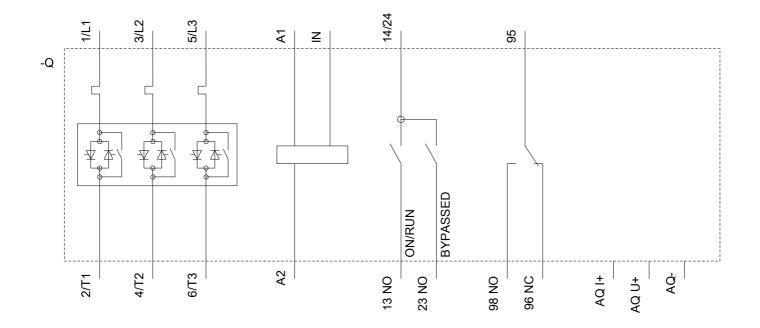
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5243-6AC04&lang=en

Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5243-6AC04&objecttype=14&gridview=view1







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