SIEMENS

Data sheet 3RW5215-1AC04

> SIRIUS soft starter 200-480 V 25 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 	3RV2032-4EA10; Type of coordination 1, lq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3RV2032-4EA10; Type of coordination 1, lq = 15 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3RV2032-4VA10; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3RV2032-4VA10; Type of coordination 1, Iq = 15 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3822-6; 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

3NA3822-6; Type of coordination 1, Iq = 65 kA

3NE1817-0; Type of coordination 2, Iq = 65 kA

3NE8021-1; Type of coordination 2, Iq = 65 kA

Starting voltage [%]	30 100 %
Start-up ramp time of soft starter	0 20 s
Product component	
• 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	IP20
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
Manual RESET	Yes
• 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	25 A
• at 50 °C rated value	22.3 A
• at 60 °C rated value	19.6 A
Operating current at inside-delta circuit	
• at 40 °C rated value	43.3 A
• at 50 °C rated value	39 A
• at 60 °C rated value	33.9 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	5.5 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	11 kW
• at 400 V at 40 °C rated value	11 kW
• at 400 V at inside-delta circuit at 40 °C rated value	18.5 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	11.5 A
at inside-delta circuit minimum	19.9 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	20 W
	19 W

18 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 voltage at AC at 50 Hz	-20 %
Relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
Relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
Relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %
Control supply voltage frequency	50 60 Hz
Relative negative tolerance of the control supply voltage frequency	-10 %
Relative positive tolerance of the control supply voltage frequency	10 %
Control supply voltage	
• at DC rated value	24 V
Relative negative tolerance of the control supply voltage at DC	-20 %
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 value	360 mA
Starting current at close of by-pass contact maximum	0.75 A
Inrush current peak at connect of control supply voltage maximum	3.3 A
Duration of inrush current peak at connect of control supply voltage	12.1 ms
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

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

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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
nstallation/ mounting/ dimensions	
Mounting position	+/- 10° rotation possible and can be tilted forward or backward on
	vertical mounting surface
Mounting type	screw fixing
Height	275 mm
Width	170 mm
Depth	152 mm
Required spacing with side-by-side mounting	40
• forwards	10 mm
Backwards	0 mm
• upwards	100 mm
downwards	75 mm
• at the side	5 mm
Installation altitude at height above sea level maximum	5 000 m; Derating as of 1000 m, see catalog
Weight without packaging	2.1 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 main contacts	
— solid	2x (1.0 2.5 mm²), 2x (2.5 10 mm²)
— finely stranded with core end processing	2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)
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

mmunication 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 RK5 / K5, max. 100 A; Standard fault, Iq = 5 kA
 of the fuse usable at inside-delta circuit up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 100 A
Operating power [hp] for three-phase motors	
• at 200/208 V at 50 °C rated value	5 hp
• at 220/230 V at 50 °C rated value	7.5 hp
• at 460/480 V at 50 °C rated value	15 hp
 at 200/208 V at inside-delta circuit at 50 °C rated value 	10 hp
 at 220/230 V at inside-delta circuit at 50 °C rated value 	10 hp
 at 460/480 V at inside-delta circuit at 50 °C rated value 	25 hp

Contact rating of auxiliary contacts according to UL

General Product Approval

R300-B300

other

Conformity

Declaration of









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=3RW5215-1AC04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5215-1AC04

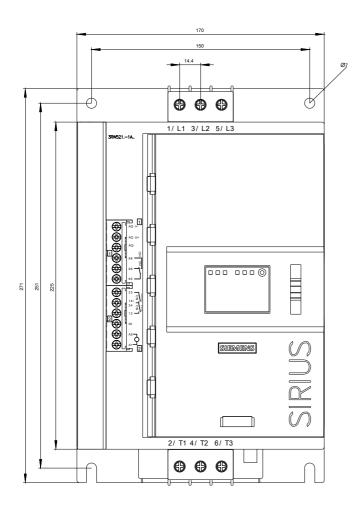
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

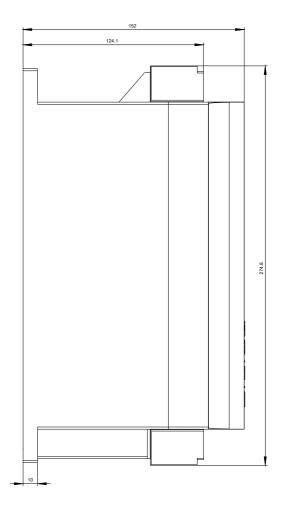
https://support.industry.siemens.com/cs/ww/en/ps/3RW5215-1AC04

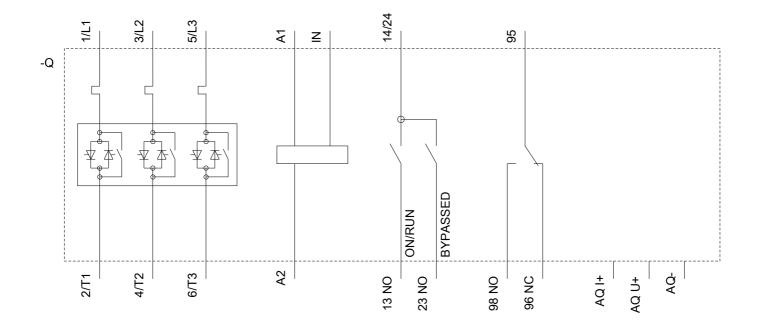
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5215-1AC04&lang=en

Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5215-1AC04&objecttype=14&gridview=view1







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