SIEMENS

Data sheet 3RW5216-1TC14



SIRIUS soft starter 200-480 V 32 A, 110-250 V AC Screw terminals Thermistor input

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW52
manufacturer's article number	
 of standard HMI module usable 	3RW5980-0HS00
 of high feature HMI module usable 	3RW5980-0HF00
 of communication module PROFINET standard usable 	3RW5980-0CS00
 of communication module PROFIBUS usable 	3RW5980-0CP00
 of communication module Modbus TCP usable 	3RW5980-0CT00
 of communication module Modbus RTU usable 	3RW5980-0CR00
 of communication module Ethernet/IP 	3RW5980-0CE00
 of circuit breaker usable at 400 V 	3RV2032-4VA10; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3RV2032-4VA10; Type of coordination 1, Iq = 10 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3RV2032-4JA10; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3RV2032-4JA10; Type of coordination 1, Iq = 10 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3824-6; Type of coordination 1, Iq = 65 kA
 of the gG fuse usable at inside-delta circuit up to 500 V 	3NA3824-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1818-0: Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE8022-1; Type of coordination 2, Iq = 65 kA
General technical data	
starting voltage [%]	30 100 %
otoming voltogo F0/1	FO FO 9/

General technical data	
starting voltage [%]	30 100 %
stopping voltage [%]	50 50 %
start-up ramp time of soft starter	0 20 s
current limiting value [%] adjustable	130 700 %
certificate of suitability	
CE marking	Yes
 UL approval 	Yes
CSA approval	Yes
product component is supported	
HMI-Standard	Yes
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

For control circuit 100 ms	buffering time in the event of power failure	
Insulation voltage rated value 600 V 6 kgree of pollution 3, soc. to IEC 60947-4-2	for main current circuit	100 ms
degree of pollution imputes voltage of the thyristor maximum service factor service factor service factor solution professible voltage for safe isolation between man and auxiliary circuit shock realstance shock realstance shock realstance vibration resistance shock realstance vibration resistance sulfuzation category acc. to IEC 60947-4-2 reference code acc. to IEC 81346-2 quilization category acc. to I		
Impulse voltage rated value 6 kV 5 kV		600 V
blocking voltage of the thyristor maximum surge voltage resistance rated value 6 kV		3, acc. to IEC 60947-4-2
		6 kV
Surge voltage resistance rated value		
between main and auxiliary circuit file g/ 11 ms, from 12 g / 11 ms with potential contact lifting 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting 15 mm 16 B Hz. 2g to 500 Hz		
600 V 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance		6 kV
shock resistance 15 g/11 ms, from 12 g/11 ms with potential contact lifting vibitation resistance 15 mm to 6 Hz; 2g to 500 Hz vibration resistance 15 mm to 6 Hz; 2g to 500 Hz vibration category acc, to IEC 60947-4-2 AC S3a reference code acc, to IEC 81346-2 Q Substance Prohibitance (Date) 15 02.2018 00:00:00 ramp-down (soft storp) Yes s Soft Torque Yes adjustable current limitation Yes pump ramp down Yes intrinsic device protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) inside-delta circuit Yes evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) inside-delta circuit Yes e manual RESET Yes e manual RESET Yes e remote reset Yes e remote reset Yes e remote reset Yes e rem	•	
vibration resistance 15 mm to 6 Hz; 2g to 500 Hz utilization category acc. to IEC 60947-4-2 AC 53a reference code acc. to IEC 81346-2 0 Substance Prohibitance (Date) 15.02.2018 00:00:00 product function Yes • ramp-up (soft starting) Yes • soft Torque Yes • Soft Torque Yes • pump ramp down Yes • intrinsic device protection Yes • worklaud not feeting in the ministor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection of the controil supply voltage • remode reset	between main and auxiliary circuit	
utilization category acc. to IEC 60947-42 AC 53a reference code acc. to IEC 81348-2 Q Substance Prohibitance (Date) 15.02.2018 00.00:00 ramp-up (soft starting) Yes e ramp-up (soft starting) Yes s Soft Torque Yes adjustable current limitation Yes in pump ramp down Yes in intrinsic device protection Yes evaluation of themistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of themistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of themistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of themistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of themistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) e remote reset Yes; By turning off the control supply voltage e remote reset Yes; By turning off the control supply voltage e remote reset Yes; Dy In conjunctio		
Interest Profession Profe		
Substance Prohibitance (Date) 15.02.2018 00.00:00 product function *** * ramp-up (soft starting) Yes * soft Torque Yes * adjustable current limitation Yes * pump ramp down Yes * pump ramp down Yes * evaluation of thermistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) * inside-delta circuit Yes * evaluation of thermistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) * inside-delta circuit Yes * evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick * remote reset Yes Yes * emonulication function Yes Pyes (manufacture) * error logbook Yes; Duly in conjunction with special accessories * via software parameterizable Yes No * via software parameterizable Yes No * firmware update Yes Professor * forceptage and propertional current Yes Yes * to		AC 53a
Product function Framp-up (soft starting)		
ramp-up (soft starting) ramp-down (soft stop) ramp-down (soft stop) Soft Torque adjustable current limitation pump ramp down intrinsic device protection reduction of thermistor motor protection evaluation of thermistor motor protection inside-delta circuit auto-RESET remote reset remote reset remote reset remote reset remote reset remote reset remote replace of the operating voltage removable terminal for control circuit removable terminal for control circuit refor a said og output removable terminal for control circuit auto-ROSCORDE removable terminal for control circuit removable terminal for control ci		15.02.2018 00:00:00
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inside-delta circuit operating power for 3-phase motors		-13 /0
		10 %
• at 230 V at 40 °C rated value 7.5 kW		
	• at 230 V at 40 °C rated value	7.5 kW

at 220 V at incide delte dissett at 40 00 v v	45 IAM
at 230 V at inside-delta circuit at 40 °C rated value t 400 V at 40 °C rated value	15 kW
at 400 V at 40 °C rated value	15 kW
at 400 V at inside-delta circuit at 40 °C rated value	22 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	
 at rotary coding switch on switch position 1 	14 A
 at rotary coding switch on switch position 2 	15.2 A
 at rotary coding switch on switch position 3 	16.4 A
 at rotary coding switch on switch position 4 	17.6 A
 at rotary coding switch on switch position 5 	18.8 A
 at rotary coding switch on switch position 6 	20 A
 at rotary coding switch on switch position 7 	21.2 A
 at rotary coding switch on switch position 8 	22.4 A
 at rotary coding switch on switch position 9 	23.6 A
 at rotary coding switch on switch position 10 	24.8 A
 at rotary coding switch on switch position 11 	26 A
 at rotary coding switch on switch position 12 	27.2 A
 at rotary coding switch on switch position 13 	28.4 A
 at rotary coding switch on switch position 14 	29.6 A
 at rotary coding switch on switch position 15 	30.8 A
 at rotary coding switch on switch position 16 	32 A
minimum	14 A
adjustable motor current	
 for inside-delta circuit at rotary coding switch on switch position 1 	24.2 A
 for inside-delta circuit at rotary coding switch on switch position 2 	26.3 A
 for inside-delta circuit at rotary coding switch on switch position 3 	28.4 A
 for inside-delta circuit at rotary coding switch on switch position 4 	30.5 A
 for inside-delta circuit at rotary coding switch on switch position 5 	32.6 A
 for inside-delta circuit at rotary coding switch on switch position 6 	34.6 A
 for inside-delta circuit at rotary coding switch on switch position 7 	36.7 A
 for inside-delta circuit at rotary coding switch on switch position 8 	38.8 A
 for inside-delta circuit at rotary coding switch on switch position 9 	40.9 A
 for inside-delta circuit at rotary coding switch on switch position 10 	43 A
 for inside-delta circuit at rotary coding switch on switch position 11 	45 A
 for inside-delta circuit at rotary coding switch on switch position 12 	47.1 A
 for inside-delta circuit at rotary coding switch on switch position 13 	49.2 A
for inside-delta circuit at rotary coding switch on switch position 14	51.3 A
for inside-delta circuit at rotary coding switch on switch position 15 for inside delta circuit at rotary coding switch on	53.3 A
for inside-delta circuit at rotary coding switch on switch position 16 A finite delta circuit religious. The same of the circuit religious.	55.4 A
at inside-delta circuit minimum	24.2 A
minimum load [%]	15 %; Relative to smallest settable le
power loss [W] for rated value of the current at AC	22.14/
• at 40 °C after startup	22 W
• at 50 °C after startup	21 W
at 60 °C after startup	20 W

power loss [W] at AC at current limitation 350 %	
 at 40 °C during startup 	531 W
 at 50 °C during startup 	449 W
at 60 °C during startup	395 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
● at 50 Hz	110 250 V
● at 60 Hz	110 250 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-15 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	10 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-15 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	10 %
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 current in standby mode rated value	30 mA
holding current in bypass operation rated value	75 mA
locked-rotor current at close of bypass contact maximum	0.17 A
inrush current peak at application of control supply voltage maximum	12.2 A
duration of inrush current peak at application of control supply voltage	2.2 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
accigii oi ciica ciicani protecticii icii cominei ciicani	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply
Inputs/ Outputs	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is
Inputs/ Outputs	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is
Inputs/ Outputs number of digital inputs	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 number of inputs for thermistor connection	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO)
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 0 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging Connections/ Terminals	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging Connections/ Terminals type of electrical connection	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.3 kg
Inputs/ Outputs number of digital inputs number of inputs for thermistor connection number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging Connections/ Terminals	circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply 1 1; Type A PTC or Klixon / Thermoclick 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm

wire length for thermistor connection	
 with conductor cross-section = 0.5 mm² maximum 	50 m
 with conductor cross-section = 1.5 mm² maximum 	150 m
with conductor cross-section = 2.5 mm² maximum	250 m
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)
at AWG cables for main current circuit solid	2x (16 12), 2x (14 8)
type of connectable conductor cross-sections	
 for control circuit solid 	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
 for control circuit finely stranded with core end 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
processing	4 (00 40) 0 (00 44)
at AWG cables 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
tightening torque	
for main contacts with screw-type terminals	2 2.5 N·m
 for auxiliary and control contacts with screw-type terminals 	0.8 1.2 N·m
terminals	
tightening torque [lbf-in]	40 22 lbf in
for main contacts with screw-type terminals for auxiliary and control contacts with screw type	18 22 lbf·in
 for auxiliary and control contacts with screw-type terminals 	7 10.3 lbf·in
Ambient conditions	
installation altitude at height above sea level maximum	5 000 m; Derating as of 1000 m, see catalog
ambient temperature	o ooo m, boraang as or roos m, oos satalog
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or
• during operation	above
 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 60947-4-2: Class A
Communication/ Protocol	
communication module is supported	
 PROFINET standard 	Yes
EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
• PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
of circuit breaker	
 usable for Standard Faults at 460/480 V according to UL 	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA
 usable for High Faults at 460/480 V according to UL 	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA
 usable for Standard Faults at 460/480 V at inside-delta circuit according to UL 	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA
 usable for High Faults at 460/480 V at inside- delta circuit according to UL 	Siemens type: 3VA51, max. 60 A; Iq max = 65 kA
 usable for Standard Faults at 575/600 V according to UL 	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA
usable for Standard Faults at 575/600 V at inside-delta circuit according to UL	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA
of the fuse	
 usable for Standard Faults up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 125 A; Iq = 5 kA

- usable for High Faults up to 575/600 V Type: Class J / L, max. 125 A; Iq = 100 kA according to UL - usable for Standard Faults at inside-delta Type: Class RK5 / K5, max. 125 A; Iq = 5 kA circuit up to 575/600 V according to UL - usable for High Faults at inside-delta circuit up Type: Class J / L, max. 125 A; Iq = 100 kA to 575/600 V according to UL operating power [hp] for 3-phase motors • at 200/208 V at 50 °C rated value 7.5 hp • at 220/230 V at 50 °C rated value 10 hp • at 460/480 V at 50 °C rated value 20 hp • at 200/208 V at inside-delta circuit at 50 °C rated 15 hp value • at 220/230 V at inside-delta circuit at 50 °C rated 15 hp value • at 460/480 V at inside-delta circuit at 50 °C rated 30 hp value contact rating of auxiliary contacts according to UL R300-B300 Safety related data protection class IP on the front acc. to IEC 60529 IP20 touch protection on the front acc. to IEC 60529 finger-safe, for vertical contact from the front electromagnetic compatibility in accordance with IEC 60947-4-2

Certificates/ approvals

General Product Approval

EMC

Declaration of Conformity













Test Certificates

Marine / Shipping

Type Test Certificates/Test Report











other

Confirmation

Further information

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=3RW5216-1TC14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5216-1TC14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-1TC14

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5216-1TC14\&lang=en}}$

Characteristic: Tripping characteristics, I²t, Let-through current

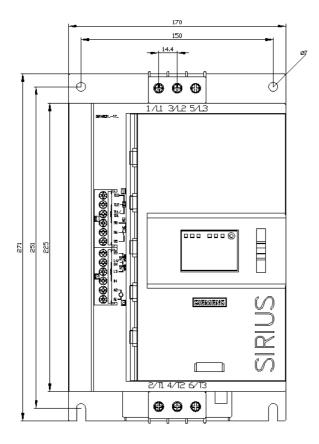
https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-1TC14/char

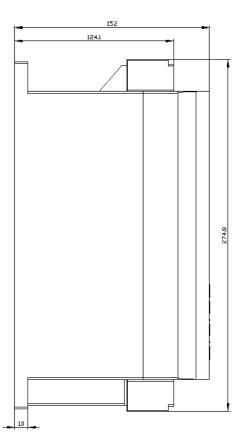
Characteristic: Installation altitude

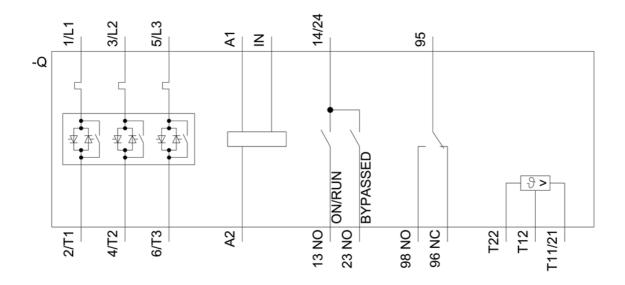
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5216-1TC14\&objecttype=14\&gridview=view1}$

Simulation Tool for Soft Starters (STS)

https://support.industry.siemens.com/cs/ww/en/view/101494917







last modified: 8/10/2021 🖸