SIEMENS

product brand name

Data sheet 3RW5213-1TC04

SIRIUS



SIRIUS soft starter 200-480 V 13 A, 24 V AC/DC Screw terminals Thermistor input

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 	3RV2032-4TA10; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3RV2032-4TA10; Type of coordination 1, Iq = 18 kA, CLASS 10
• of circuit breaker usable at 400 V at inside-delta circuit	3RV2032-4DA10; Type of coordination 1, Iq = 65 kA, CLASS 10
• of circuit breaker usable at 500 V at inside-delta circuit	3RV2032-4DA10; Type of coordination 1, Iq = 18 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3820-6; Type of coordination 1, Iq = 65 kA
• of the gG fuse usable at inside-delta circuit up to 500 V	3NA3820-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1815-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE8017-1; Type of coordination 2, Iq = 65 kA
Seneral technical data	
starting voltage [%]	30 100 %
stopping voltage [%]	50 %; non-adjustable
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	
HMI-High Feature	No
• 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
buffering time in the event of power failure	
buffering time in the event of power failure • for main current circuit	100 ms

impulse voltage rated value Selve	inculation voltage reted value	600 \/		
Impute so voltage retet value 5 kV 5 k	insulation voltage rated value	600 V		
surge voltage realstance rated value				
Surgiciant Sur				
- between main and auxiliary circuit 600 V 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 utilization category according to IEC 60947-4-2 AC 538 reference code according to IEC 618484-2 Q Substance Prohibitance (Date) Yes - ramp-down (out stop) Yes - Still Torque Yes - Still Torque Yes - still state (ministed device protection) Yes - will will be device protection Yes Full motor protection (thermistor motor protection and electronic motor overload protection - walluation of thermistor motor protection Yes: Full motor protection (thermistor motor protection and electronic motor overload protection - walluation of thermistor motor protection Yes: Full motor protection (thermistor motor protection and electronic motor overload protection) - walluation of thermistor motor protection Yes: Full motor protection (thermistor motor protection and electronic motor overload protection (thermistor motor protection and electronic motor overload protection (thermistor motor protection and electronic motor overload protection) - walluation of thermistor motor protection Yes: Full motor protection (thermistor motor protection and electronic motor protection and electronic motor		6 kV		
Shock resistance		00014		
ublization resistance 18 mm to 8 Hz; 2g to 500 Hz ublization calegory according to IEC 8047-4-2 AC 538 reference code according to IEC 81348-2 Q Substance Prohibitance (Date) Ves - ramp-out (soft starting) Yes - ramp-down (soft starting) Yes - Solf Torque Yes - solid torque Yes - solid torque Yes - pump ramp down Yes - will action of themistor motor protection Yes Full motor protection (thermistor motor protection and electronic motor overload protection - will action of themistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection (thermistor motor protection and electronic motor overload protection) - was action of themistor motor protection Yes - was action of the control of the contro	·			
unitation category according to IEC 81346-2 Q Substance Prohibitance (Date) 02/19/2018 rampuly (soft starting) Yes * rampuly (soft starting) Yes * Soft Torque Yes * Soft Torque Yes * Soft Torque Yes * Soft Torque Yes * pump ramp down Yes * intrinsic device protection Yes * evaluation of thermistor motor protection Yes; Full motor protection (thermistor motor protection and electronic motor overlaad protection) * evaluation of thermistor motor protection Yes; Type A PTC or Klison / Thermoclick * evaluation of thermistor motor protection Yes; Type A PTC or Klison / Thermoclick * evaluation of thermistor motor protection Yes; Sy PV Cor Klison / Thermoclick * evaluation of thermistor motor protection Yes; Sy PV Cor Klison / Thermoclick * evaluation of thermistor motor protection Yes; Sy PV Cor Klison / Thermoclick * evaluation of thermistor motor protection Yes; Sy PV Cor Klison / Thermoclick * evaluation of thermistor motor protection Yes * evaluation of thermistor motor Yes; Sy PV Cor Klison / Thermoclick <				
Marchanic Code according to IEC 81346-2 02/15/2018				
Substance Prohibitance (Date) 02/15/2018 product function Yes * ramp-up (soft starting) Yes * Soft Torque Yes • Soft Torque Yes • adjustable current limitation Yes • pump ramp down Yes • intrinsic device protection Yes • motor overload protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Type A PTC or Klixon / Thermoclick • inside-deflac circuit Yes • autio-RESET Yes • remote reset Yes, Sull ming off the control supply voltage • communication function Yes • permote reset Yes, Only in conjunction with special accessories • via sortivare configurable Yes • Via sortivare configurable Yes • PROFlenergy Yes • Informace update Yes • torque control Yes • torque control Yes • at al 0 °C rated value 15.A • at 50 °C rated value 15.5 <th></th> <th></th>				
product function * ramp-up (soft starting) * ramp-up (soft starting) * soft Torque * adjustable current limitation * pump ramp down * pump ramp down * pump ramp down * intrinsic device protection * evaluation of thermistor motor protection * resided calcicult * yes * auto-RESET * yes * namual RESET * yes * namual RESET * yes * emmula RESET * yes * yes * origination with special accessories * yes * origination with special accessories * yes * emmula reserve configurable * yes * yes * in connection with special accessories * yes * removable terminal for control circuit * yes * removable terminal for control circuit * yes * removable terminal for control circuit * at anotic group * at anotic devalue * at 50 °C rated value * at 60 °C rated	<u> </u>			
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pump ramp down intrinsic device protection roterobland protection and electronic motor overiod protection and electronic motor overiod protection roterobland roterob	Soft Torque	· · · · ·		
Intrinsic device protection Intoider overload protection Inside-detta circuit Inside	•			
• motor overload protection				
evaluation of thermistor motor protection inside delta circuit ves auto-RESET ves auto-RESET ves amanua RESET ves emote reset communication function coperating measured value display error logbook via software parameterizable ves ves; Only in conjunction with special accessories very some configurable ves PROFlenergy ves; Only in conjunction with special accessories ves via software configurable ves PROFlenergy ves; in connection with the PROFINET Standard communication module ves removable terminal for control circuit ves torque control voa analog output ves very Electronies operational current ent 40 °C rated value valu	•			
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Power Electronics operational current	torque control	No		
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operating voltage	• at 50 °C rated value	19.9 A		
rated value at inside-delta circuit rated value 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage 10 % relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors at 230 V at 40 °C rated value at 230 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at inside-delta circuit at 50 °C rated value at 400 V at 40 °C rated value at 400 V at 40 °C rated value at 400 V at 40 °C rated value	• at 60 °C rated value	18.2 A		
 at inside-delta circuit rated value 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors at 230 V at 40 °C rated value at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value bt 10 W coperating frequency 1 rated value 50 Hz 	operating voltage			
relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value	• rated value	200 480 V		
relative positive tolerance of the operating voltage relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 5.5 kW • at 400 V at inside-delta circuit at 5.5 kW • at 400 V at inside-delta circuit at 5.5 kW • at 400 V at inside-delta circuit at 5.5 kW	at inside-delta circuit rated value	200 480 V		
relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value • at 400 V at inside-delta circuit at 50 °C rated value	relative negative tolerance of the operating voltage	-15 %		
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value Operating frequency 1 rated value 50 Hz	relative positive tolerance of the operating voltage	10 %		
inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value 3 kW • at 230 V at inside-delta circuit at 40 °C rated value 5.5 kW • at 400 V at 40 °C rated value 5.5 kW • at 400 V at inside-delta circuit at 40 °C rated value 11 kW Operating frequency 1 rated value 50 Hz		-15 %		
 at 230 V at 40 °C rated value at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value 11 kW Operating frequency 1 rated value 50 Hz 		10 %		
 at 230 V at 40 °C rated value at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value 11 kW Operating frequency 1 rated value 50 Hz 	operating power for 3-phase motors			
 at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value 11 kW Operating frequency 1 rated value 50 Hz 		3 kW		
 at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value be at 400 V at inside-delta circuit at 40 °C rated value be at 400 V at inside-delta circuit at 40 °C rated value be at 400 V at inside-delta circuit at 40 °C rated value be at 400 V at inside-delta circuit at 40 °C rated value be at 400 V at inside-delta circuit at 40 °C rated value comparating frequency 1 rated value 		5.5 kW		
Operating frequency 1 rated value 50 Hz		5.5 kW		
Operating frequency 1 rated value 50 Hz	• at 400 V at inside-delta circuit at 40 °C rated value	11 kW		
		50 Hz		
		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 	5.5 A
 at rotary coding switch on switch position 2 	6 A
 at rotary coding switch on switch position 3 	6.5 A
 at rotary coding switch on switch position 4 	7 A
 at rotary coding switch on switch position 5 	7.5 A
 at rotary coding switch on switch position 6 	8 A
 at rotary coding switch on switch position 7 	8.5 A
 at rotary coding switch on switch position 8 	9 A
 at rotary coding switch on switch position 9 	9.5 A
 at rotary coding switch on switch position 10 	10 A
 at rotary coding switch on switch position 11 	10.5 A
 at rotary coding switch on switch position 12 	11 A
 at rotary coding switch on switch position 13 	11.5 A
at rotary coding switch on switch position 14	12 A
at rotary coding switch on switch position 15	12.5 A
at rotary coding switch on switch position 16	13 A
• minimum	5.5 A
adjustable motor current	
for inside-delta circuit at rotary coding switch on switch position 1	9.5 A
 for inside-delta circuit at rotary coding switch on switch position 2 	10.4 A
 for inside-delta circuit at rotary coding switch on switch position 3 	11.3 A
 for inside-delta circuit at rotary coding switch on switch position 4 	12.1 A
for inside-delta circuit at rotary coding switch on switch position 5	13 A
 for inside-delta circuit at rotary coding switch on switch position 6 for inside-delta circuit at rotary coding switch on switch 	13.9 A 14.7 A
position 7 • for inside-delta circuit at rotary coding switch on switch	15.6 A
position 8 • for inside-delta circuit at rotary coding switch on switch	16.5 A
position 9 • for inside-delta circuit at rotary coding switch on switch	17.3 A
 position 10 for inside-delta circuit at rotary coding switch on switch 	18.2 A
 position 11 for inside-delta circuit at rotary coding switch on switch position 12 	19.1 A
for inside-delta circuit at rotary coding switch on switch position 13	19.9 A
 for inside-delta circuit at rotary coding switch on switch position 14 	20.8 A
 for inside-delta circuit at rotary coding switch on switch position 15 	21.7 A
 for inside-delta circuit at rotary coding switch on switch position 16 	22.5 A
at inside-delta circuit minimum	9.5 A
minimum load [%]	15 %; Relative to smallest settable le
power loss [W] for rated value of the current at AC	
• at 40 °C after startup	16 W
at 50 °C after startup	15 W
at 60 °C after startup	15 W
power loss [W] at AC at current limitation 350 %	
• at 40 °C during startup	210 W
• at 50 °C during startup	178 W
 at 60 °C during startup 	161 W
ontrol 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 bypass operation rated value	360 mA
inrush current by closing the bypass contacts maximum	0.75 A
inrush current peak at application of control supply voltage maximum	3.3 A
duration of inrush current peak at application 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	
Inputs/ Outputs number of digital inputs	1
number of digital inputs	1
number of digital inputs number of digital outputs	1 3
number of digital inputs number of digital outputs • not parameterizable	1 3 2
number of digital inputs number of digital outputs • not parameterizable digital output version	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO)
number of digital inputs number of digital outputs • not parameterizable digital output version number of analog outputs	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO)
number of digital inputs number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs 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	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 5 mm 2.1 kg
number of digital inputs 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 • for main current circuit	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.1 kg
number of digital inputs 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 • for main current circuit • for control circuit	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.1 kg
number of digital inputs 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 • for control circuit • for control circuit wire length for thermistor connection	1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0 3 A 1 A +/- 10° rotation possible and can be tilted forward or backward on vertical mounting surface screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.1 kg screw-type terminals 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)
for 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 processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
for 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
at the digital inputs at DC maximum	1 000 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
tightening torque [lbf·in]	
 for main contacts with screw-type terminals 	18 22 lbf·in
 for auxiliary and control contacts with screw-type 	7 10.3 lbf·in
terminals	
Ambient conditions	
installation altitude at height above sea level maximum	5 000 m; Derating as of 1000 m, see catalog
ambient temperature	
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
during storage and transport	-40 +80 °C
environmental category	
 during operation according 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 according to IEC 60721 	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
 during transport according 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	430. to 120 000 in 1 21 01000 / 1
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	
	Signand type: 3D\/2742 may 40 A or 2\/A51 may 40 A la = 5 kA
— usable for Standard Faults at 460/480 V according to UL — usable for Uish Faults at 460/480 V according to UI.	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA
— usable for High Faults at 460/480 V according to UL	Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; Iq max = 65 kA
— usable for Standard Faults at 460/480 V at inside- delta circuit according to UL	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA
usable for High Faults at 460/480 V at inside-delta circuit according to UL	Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; Iq max = 65 kA
 usable for Standard Faults at 575/600 V according to UL 	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; lq = 5 kA
 usable for Standard Faults at 575/600 V at inside- 	
delta circuit according to UL	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; lq = 5 kA
delta circuit according to UL of the fuse	
delta circuit according to UL of the fuse usable for Standard Faults up to 575/600 V according to UL	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; lq = 5 kA Type: Class RK5 / K5, max. 50 A; lq = 5 kA
delta circuit according to UL of the fuse usable for Standard Faults up to 575/600 V	
delta circuit according to UL • of the fuse — usable for Standard Faults up to 575/600 V according to UL — usable for High Faults up to 575/600 V according to	Type: Class RK5 / K5, max. 50 A; Iq = 5 kA
delta circuit according to UL of the fuse usable for Standard Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for Standard Faults at inside-delta circuit up	Type: Class RK5 / K5, max. 50 A; lq = 5 kA Type: Class J / L, max. 50 A; lq = 100 kA

• at 200/208 V at 50 °C rated value	2 hp		
• at 220/230 V at 50 °C rated value	3 hp		
 at 460/480 V at 50 °C rated value 	7.5 hp		
• at 200/208 V at inside-delta circuit at 50 °C rated value	5 hp		
• at 220/230 V at inside-delta circuit at 50 °C rated value	5 hp		
• at 460/480 V at inside-delta circuit at 50 °C rated value	10 hp		
contact rating of auxiliary contacts according to UL	R300-B300		
Safety related data			
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		
electromagnetic compatibility	in accordance with IEC 60947-4-2		
Certificates/ approvals			
General Product Approval		EMC	



Confirmation









Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other



Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3RW5213-1TC04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5213-1TC04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5213-1TC04

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04\&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04\&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5213-1TC04&lang=endersetation.siemens.com/bilddb/cax_de.aspx.com/bildd$

Characteristic: Tripping characteristics, I²t, Let-through current

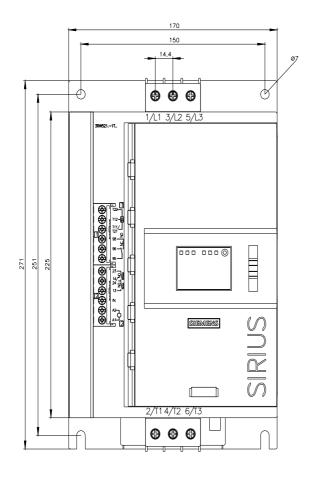
https://support.industry.siemens.com/cs/ww/en/ps/3RW5213-1TC04/char

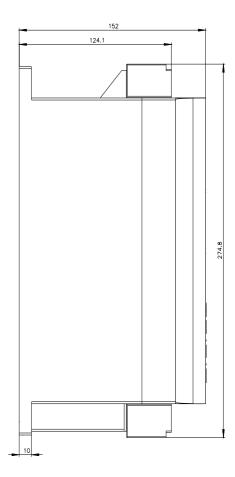
Characteristic: Installation altitude

 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5213-1TC04\&objecttype=14\&gridview=view1}$

Simulation Tool for Soft Starters (STS)

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





last modified: 1/14/2023 🖸