SIEMENS

product brand name

Data sheet 3RW5243-2TC04

SIRIUS



SIRIUS soft starter 200-480 V 210 A, 24 V AC/DC spring-type terminals Thermistor input

product brand name	Olivioo	
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 	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 circuit	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10	
• of circuit breaker usable at 500 V at inside-delta circuit	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10	
 of the gG fuse usable up to 690 V 	2x3NA3354-6; Type of coordination 1, lq = 65 kA	
• of the gG fuse usable at inside-delta circuit up to 500 V	2x3NA3354-6; Type of coordination 1, lq = 65 kA	
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1230-2; Type of coordination 2, Iq = 65 kA	
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3333; Type of coordination 2, Iq = 65 kA	
eneral 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		
product realure integrated bypass contact system	Yes	
number of controlled phases	Yes 3	
· · · · · · · · · · · · · · · · · · ·		
number of controlled phases	3	
number of controlled phases trip class	3	

inculation voltage rated value	600 V		
insulation voltage rated value degree of pollution			
· ·	3, acc. to IEC 60947-4-2		
impulse voltage rated value	6 kV 1 600 V		
blocking voltage of the thyristor maximum			
service factor	1		
surge voltage resistance rated value	6 kV		
maximum permissible voltage for protective separation	600 V		
between main and auxiliary circuit shock resistance	15 g / 11 ms, from 12 g / 11 ms with potential contact lifting		
vibration resistance			
utilization category according to IEC 60947-4-2	15 mm to 6 Hz; 2g to 500 Hz AC 53a		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	02/15/2018		
product function	02/13/2010		
• ramp-up (soft starting)	Yes		
• ramp-down (soft stop)	Yes		
Soft Torque	Yes		
•	Yes		
adjustable current limitationpump ramp down	Yes		
intrinsic device protection	Yes		
motor overload protection	Yes; Full motor protection (thermistor motor protection and electronic motor		
• motor overload protection	overload protection)		
 evaluation of thermistor motor protection 	Yes; Type A PTC or Klixon / Thermoclick		
• inside-delta circuit	Yes		
auto-RESET	Yes		
manual RESET	Yes		
• remote reset	Yes; By turning off the control supply voltage		
 communication function 	Yes		
 operating measured value display 	Yes; Only in conjunction with special accessories		
 error logbook 	Yes; Only in conjunction with special accessories		
 via software parameterizable 	No		
 via software configurable 	Yes		
 PROFlenergy 	Yes; in connection with the PROFINET Standard communication module		
firmware update	Yes		
 removable terminal for control circuit 	Yes		
• torque control	No		
analog output	No		
Power Electronics			
operational current			
 at 40 °C rated value 	210 A		
• at 50 °C rated value	186 A		
at 60 °C rated value	170 A		
operational 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 3-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		

alative positive telerance of the energing fragrency	10.94
elative positive tolerance of the operating frequency	10 %
idjustable motor current	00 4
at rotary coding switch on switch position 1	90 A
at rotary coding switch on switch position 2	98 A
at rotary coding switch on switch position 3	106 A
at rotary coding switch on switch position 4	114 A
at rotary coding switch on switch position 5	122 A
at rotary coding switch on switch position 6	130 A
at rotary coding switch on switch position 7	138 A
 at rotary coding switch on switch position 8 	146 A
at rotary coding switch on switch position 9	154 A
 at rotary coding switch on switch position 10 	162 A
 at rotary coding switch on switch position 11 	170 A
 at rotary coding switch on switch position 12 	178 A
 at rotary coding switch on switch position 13 	186 A
 at rotary coding switch on switch position 14 	194 A
 at rotary coding switch on switch position 15 	202 A
 at rotary coding switch on switch position 16 	210 A
• minimum	90 A
djustable motor current	
 for inside-delta circuit at rotary coding switch on switch position 1 	156 A
 for inside-delta circuit at rotary coding switch on switch position 2 	170 A
 for inside-delta circuit at rotary coding switch on switch position 3 	184 A
 for inside-delta circuit at rotary coding switch on switch position 4 	197 A
 for inside-delta circuit at rotary coding switch on switch position 5 	211 A
for inside-delta circuit at rotary coding switch on switch position 6	225 A
for inside-delta circuit at rotary coding switch on switch position 7 for inside delta size if at rotary coding switch on switch position 7	239 A
for inside-delta circuit at rotary coding switch on switch position 8 for inside delta circuit at rotary coding switch on switch position 8	253 A
for inside-delta circuit at rotary coding switch on switch position 9 for inside delta size if at rotary coding switch on switch position 9	267 A
 for inside-delta circuit at rotary coding switch on switch position 10 for inside-delta circuit at rotary coding switch on switch 	281 A
position 11	294 A
 for inside-delta circuit at rotary coding switch on switch position 12 for inside-delta circuit at rotary coding switch on switch 	308 A 322 A
position 13 • for inside-delta circuit at rotary coding switch on switch	336 A
position 14 • for inside-delta circuit at rotary coding switch on switch	350 A
position 15 • for inside-delta circuit at rotary coding switch on switch	364 A
position 16 • at inside-delta circuit minimum	156 A
ninimum load [%]	15 %; Relative to smallest settable le
power loss [W] for rated value of the current at AC	
• at 40 °C after startup	75 W
at 50 °C after startup	68 W
• at 60 °C after startup	63 W
power loss [W] at AC at current limitation 350 %	
• at 40 °C during startup	3 562 W
at 40 °C during startup at 50 °C during startup	2 979 W
at 50 °C during startup at 60 °C during startup	2 617 W
- at 00 O during startup	L OII YY

control supply voltage at AC 44 V at 60 Hz rated value 24 V AC at 50 Hz 25 % retailve regative belerance of the control supply voltage at AC at 50 Hz 20 % retailve positive telerance of the control supply voltage at Teather negative belerance of the control supply voltage at Teather negative telerance of the control supply voltage at Teather negative telerance of the control supply voltage frequency 20 % retailve positive telerance of the control supply voltage frequency 50 00 ½ retailve positive telerance of the control supply voltage frequency 10 % retailve positive telerance of the control supply voltage frequency 20 % * at DC rated value 40 mA * at DC rated value 40 mA * at DC rated value 40 mA * at DC rated value preventive telerance of the control supply voltage at DC rated value positive telerance of the control supply voltage at DC rated value preventive telerance of the control supply voltage at DC rated value preventive telerance of the control supply voltage at DC rated value preventive telerance of the control supply voltage at DC rated value preventive telerance televative telerance televative		
a 10 Hz ratind value		
	at 50 Hz rated value	
AC at 50 HZ relative positive tolerance of the control supply voltage at AC at 50 HZ relative positive tolerance of the control supply voltage at AC at 50 HZ relative negative tolerance of the control supply voltage at AC at 50 HZ relative negative tolerance of the control supply voltage at AC at 50 HZ relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC control supply current in standby mode rated value AC at 50 MA holding current in supplace sometime at the positive tolerance of the control supply voltage at DC control supply current in standby mode rated value AC at 50 MA holding current in bypass operation rated value AC at 50 MA holding current in bypass operation rated value AC at 50 MA holding current in bypass operation rated value AC at 50 MA holding current peak at application of control supply voltage maximum Act 50 MA holding current peak at application of control supply voltage maximum Act 50 MA holding current peak at application of control supply voltage maximum Act 50 MA holding current peak at application of control supply voltage A positive of supply voltage maximum A positive of supply voltage A positive (supply supply supp	at 60 Hz rated value	24 V
AC at 50 Hz **Tealative negative tolerance of the control supply voltage at AC at 60 Hz **Tealative negative tolerance of the control supply voltage at AC at 60 Hz **Tealative negative tolerance of the control supply voltage frequency **Tealative positive tolerance of the control supply voltage frequency **Tealative positive tolerance of the control supply voltage frequency **Tealative positive tolerance of the control supply voltage frequency **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of the control supply voltage at DC **Tealative positive tolerance of supply voltage at DC **Tealative positive tolerance of supply voltage at DC **Tealative positive tolerance at application of control supply voltage at DC **Tealative positive tolerance at DC **		-20 %
AC at 60 HZ relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC relative negative tolerance of the control supply voltage at DC control supply current in standby mode rated value to DC control supply current in standby mode rated value to DC control supply current in standby mode rated value to DC control supply current in standby mode rated value to DC control supply voltage at DC control supply voltage at DC control supply voltage at DC control supply voltage to DC control supply voltage at DC control supply voltage to DC control supply voltage at DC control supply voltage to		20 %
AC at 60 kz control supply voltage frequency relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage a at DC grated value a at DC grated value positive tolerance of the control supply voltage at CC control supply cortent in standby mode rated value incompanies of the control supply voltage at CC control supply current in standby mode rated value incompanies of the control supply voltage at CC control supply current in standby mode rated value incompanies of the control supply voltage at CC control supply current in standby mode rated value incompanies of the control supply voltage at CC control supply current in standby mode rated value incompanies of the control supply voltage maximum duration of innah current peak at application of control supply voltage design of the overvoltage protection design of short-circuit protection for control circuit breaker (fue Goo A), CS miniature circuit		-20 %
Incidence regardive tolerance of the control supply voltage requency 10 %		20 %
frequency or least we positive tolerance of the control supply voltage at DC rated value	control supply voltage frequency	50 60 Hz
frequency		-10 %
A CD C rated value		10 %
Incidence Inci	control supply voltage	
Teletive positive tolerance of the control supply voltage at DC control supply current in standby mode rated value inrush current by closing the bypass contacts maximum inrush current by closing the bypass contacts maximum inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage design of the overvoltage protection design of short-circuit protection for control circuit breaker (clu= 000 A), C6 miniature circuit breaker	at DC rated value	24 V
control supply current in standby mode rated value holding current in bypass operation rated value inrush current by closing the bypass contacts maximum 7.6 A inrush current peak at application of control supply voltage maximum dering of insush current peak at application of control supply voltage maximum design of the overvoltage protection design of the overvoltage protection design of the overvoltage protection for control circuit design of short-circuit protection for control circuit assign of short-circuit protection for control circuit breaker (lou= 800 A), C6 miniature circuit breaker (lou= 300 A), is not part of society of supply mumber of digital inputs 1 1 number of digital outputs 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1		-20 %
holding current in bypass operation rated value inrush current by closing the bypass contacts maximum inrush current pack at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage duration of inrush current peak at application of control supply voltage duration of inrush current peak at application of control supply voltage design of the overvoltage protection 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 number of digital outputs • not parameterizable digital output version • not parameterizable • at AC-15 at 250 V rated value • beaching method festening method depth • forwards • forwards • forwards • lowards • lowards • lowards • downwards • formal current circuit • for control circuit • with conductor cross-section = 0.5 mm² maximum soult as a special current circuit • for control circuit		20 %
Inrush current by closing the bypass contacts maximum 7.6 A	control supply current in standby mode rated value	160 mA
inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage design of short-circuit protection for control circuit design of short-circuit protection for control circuit design of short-circuit protection for control circuit protection of supply number of digital inputs number of digital inputs number of digital outputs number of digital outputs on top parameterizable 2 and digital output version a tal Cal-5 at 250 V rated value otal Cal-5 at 250 V rated value at AC-15 at 250 V rated value begint in puts of the felay outputs with vertical mounting surface +/-90° rotatable, with vertical mounting surface fastening method screw fixing height 393 mm width depth convards belowards belowards cupwards cupwards cupwards at the side side side formands parameterizable cupwards cupwar	holding current in bypass operation rated value	470 mA
maximum duration of inrush current peak at application of control supply voltage design of the overvoltage protection design of short-circuit protection for control circuit breaker (Cu= 600 A), C6 miniature circuit breaker (Cu= 300 A); Is not part of scope of supply nputs/ Outputs number of digital inputs in number of digital outputs in ot parameterizable in ot parameterizable in other of analog outputs in at AC-15 at 250 V rated value in at AC-15 at 250 V rated value in at DC-13 at 24 V rated value in at DC-13 at 24 V rated value in at DC-13 at 24 V rated value in at DC-13 at 250 V rated value	inrush current by closing the bypass contacts maximum	7.6 A
design of the overvoltage protection		3.3 A
design of short-circuit protection for control circuit breaker (lcu= 800 A), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit breaker (lcu= 300 A); Is not part of scope of supply number of digital inputs 1 number of digital outputs 3 not parameterizable 2 digital output version 2 number of analog outputs 0 switching capacity current of the relay outputs 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3 A 3	the state of the s	12.1 ms
breaker (lou= 600 A), C6 miniature circuit breaker (lou= 300 A); Is not part of scope of supply 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 analog outputs 0 switching capacity current of the relay outputs 1 at DC-13 at 250 V rated value 1 at DC-13 at 24 V rated value 1 A 1 at DC-13 at 24 V rated value 1 A 1 at DC-13 at 24 V rated value 2 screw fixing mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface 4/- 22.5° tiltable to the front and back fastening method 5 screw fixing width 2 10 mm depth 203 mm required spacing with side-by-side mounting • forwards • backwards • 0 mm • backwards • 0 mm • 100 mm • 100 mm • 100 mm • 200 mm weight without packaging • 39 kg - connections/ Terminals - formain current circuit • for orantic circuit • for for main current circuit • for for therministor connection • with conductor cross-section = 0.5 mm² maximum withelength for thermistor connection • with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum ### A 50 m with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 0.5 mm² maximum	design of the overvoltage protection	Varistor
number of digital inputs 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	design of short-circuit protection for control circuit	breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of
number of digital outputs	Inputs/ Outputs	
e not parameterizable 2 digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 0 switching capacity current of the relay outputs e at AC-15 at 250 V rated value 3 A e 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 fastening method screw fixing height 393 mm width 210 mm depth 203 mm required spacing with side-by-side mounting ending en	number of digital inputs	1
digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 0 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 +/-2.5° tiltable to the front and back fastening method screw fixing some screw fixing screw fi	number of digital outputs	3
number of analog outputs 0 switching capacity current of the relay outputs	not parameterizable	2
switching capacity current of the relay outputs at AC-15 at 250 V rated value at DC-13 at 24 V rated value with vertical mounting vimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing width depth 210 mm depth e forwards forwards backwards backwards downwards downwards at the side state is side state is side state in the side in the si	digital output version	2 normally-open contacts (NO) / 1 changeover contact (CO)
at AC-15 at 250 V rated value 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 fastening method screw fixing height 393 mm width depth 203 mm required spacing with side-by-side mounting forwards backwards backwards upwards downwards - 4 the side weight without packaging of or main current circuit for main current circuit of or main current circuit of or control circuit width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 3 A 1 A 1 A 1 A 1 A 1 A 1 A 1 A	number of analog outputs	0
• at DC-13 at 24 V rated value nstallation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method screw fixing height 393 mm required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • downwards • at the side connections/ Terminals type of electrical connection • for main current circuit • for control circuit • for connection bar maximum with conductor cross-section = 0.5 mm² maximum 50 m with conductor cross-section = 0.5 mm² maximum 10 A munting surface +/-90° rotatable, with vertical mounting surface +/-20° rotatable, with vertical mounting surface +/-20° rotatable, with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-20° titable, with vertic	switching capacity current of the relay outputs	
mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method 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 weight without packaging 9.9 kg Connections/ Terminals type of electrical connection • for main current circuit busbar connection • for main current circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	• at AC-15 at 250 V rated value	3 A
mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method screw fixing height 393 mm width 210 mm depth 203 mm required spacing with side-by-side mounting 10 mm o forwards 0 mm o backwards 0 mm o downwards 75 mm o at the side 5 mm weight without packaging 9.9 kg connections/ Terminals Terminals type of electrical connection busbar connection of or control circuit busbar connection of or control circuit spring-loaded terminals width of connection bar maximum 45 mm with conductor cross-section = 0.5 mm² maximum 50 m	• at DC-13 at 24 V rated value	1 A
#/- 22.5° tiltable to the front and back fastening method screw fixing height 393 mm width 210 mm depth 203 mm required spacing with side-by-side mounting • forwards • backwards • backwards • upwards • downwards • at the side 5 mm weight without packaging connections/ Terminals type of electrical connection • for control circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum ### 100 mm	nstallation/ mounting/ dimensions	
height 393 mm width 210 mm depth 203 mm required spacing with side-by-side mounting 10 mm • forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 9.9 kg connections/ Terminals type of electrical connection 6 for main current circuit • for control circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection 60 mm • with conductor cross-section = 0.5 mm² maximum 50 mm	mounting position	
width 210 mm depth 203 mm required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • downwards • at the side veight without packaging connections/ Terminals type of electrical connection • for control circuit • for control circuit width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 210 mm 203 mm 10 mm 6 mm 9 mm	fastening method	screw fixing
depth 203 mm required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side vertical connections for main current circuit • for control circuit • for control circuit width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 mm 203 mm 10 mm 10 mm 75 mm 75 mm 9.9 kg 9.9 kg 9.9 kg 10 mm 10	height	393 mm
required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side • at the side connections/ Terminals type of electrical connection • for main current circuit • for control circuit • for connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 100 mm 75 mm 75 mm 9.9 kg Connections/ Terminals type of electrical connection • for main current circuit • for control circuit spring-loaded terminals 45 mm	width	210 mm
 forwards backwards upwards upwards downwards at the side 5 mm weight without packaging 9.9 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 50 m 	depth	203 mm
 backwards upwards downwards at the side 5 mm weight without packaging 9.9 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 50 m	required spacing with side-by-side mounting	
 upwards downwards at the side 5 mm weight without packaging 9.9 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 50 m 	• forwards	10 mm
downwards at the side 5 mm weight without packaging 9.9 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit for control circuit width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 50 m	backwards	0 mm
at the side 5 mm weight without packaging 9.9 kg Connections/ Terminals type of electrical connection for main current circuit busbar connection for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum 50 m	• upwards	100 mm
weight without packaging 9.9 kg Connections/ Terminals type of electrical connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	downwards	75 mm
type of electrical connection • for main current circuit • for control circuit • for control circuit width of connection bar maximum 45 mm wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	at the side	5 mm
type of electrical connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	weight without packaging	9.9 kg
• for main current circuit • for control circuit • for control circuit width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	Connections/ Terminals	
● for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection ● with conductor cross-section = 0.5 mm² maximum 50 m	type of electrical connection	
width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	• for main current circuit	busbar connection
wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m	• for control circuit	spring-loaded terminals
• with conductor cross-section = 0.5 mm² maximum 50 m	width of connection bar maximum	· •
• with conductor cross-section = 0.5 mm² maximum 50 m	wire length for thermistor connection	
• with conductor cross-section = 1.5 mm² maximum 150 m	_	
		50 m

 with conductor cross-section = 2.5 mm² maximum 	250 m	
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 stranded	2x (70 240 mm²)	
type of connectable conductor cross-sections	EX (10 210 mm)	
for control circuit solid	2x (0.25 1.5 mm²)	
for control circuit finely stranded with core end processing	2x (0.25 1.5 mm²)	
for AWG cables for control circuit solid	2x (0.25 1.5 mm²) 2x (24 16)	
for AWG cables for control circuit finely stranded with core end processing	2x (24 16)	
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	14 24 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	124 210 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		
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)	
during transport according to IEC 60721 EMC emitted interference		
	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)	
EMC emitted interference	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)	
EMC emitted interference Communication/ Protocol	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)	
EMC emitted interference Communication/ Protocol communication module is supported	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number • of circuit breaker — usable for Standard Faults at 460/480 V according	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number • of circuit breaker — usable for Standard Faults at 460/480 V according to UL	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes	
EMC emitted interference Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number • of circuit breaker — usable for Standard Faults at 460/480 V according to UL — usable for High Faults at 460/480 V at inside-	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL according to UL softhe fuse usable for Standard Faults up to 575/600 V	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 10 kA	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V at insidedelta circuit according to UL usable for Standard Faults up to 575/600 V 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	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	
EMC emitted interference Communication/ Protocol communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at insidedelta circuit according to UL usable for High Faults at 460/480 V at insidedelta circuit according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults at 575/600 V according to UL usable for Standard Faults up to 575/600 V according to UL 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 High 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	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes Yes Yes Yes Yes Ye	

• at 200/208 V at 50 °C rated value	60 hp		
• at 200/200 v at 50 C rated value			
 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		
Safety related data			
protection class IP on the front according to IEC 60529	IP00; IP20 with cover		
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover		
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=3RW5243-2TC04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5243-2TC04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5243-2TC04

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5243-2TC04\&lang=en}$

Characteristic: Tripping characteristics, I²t, Let-through current

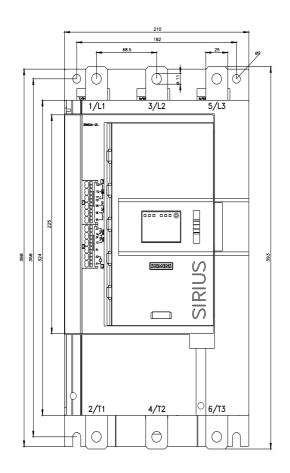
https://support.industry.siemens.com/cs/ww/en/ps/3RW5243-2TC04/char

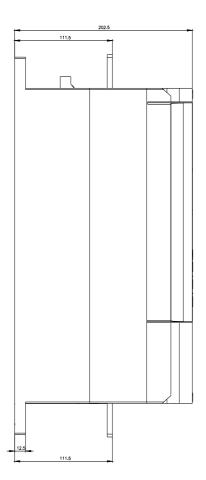
Characteristic: Installation altitude

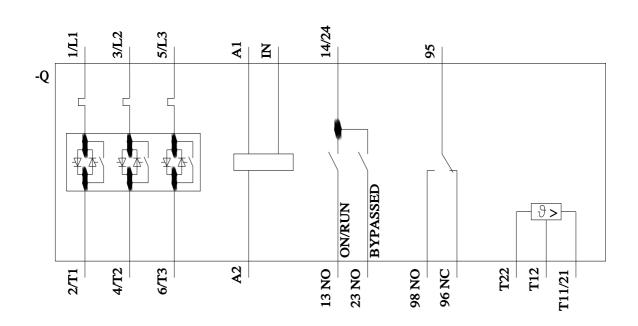
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5243-2TC04\&objecttype=14\&gridview=view1}$

Simulation Tool for Soft Starters (STS)

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







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