SIEMENS



Data sheet 3RW5244-2TC05



SIRIUS soft starter 200-600 V 250 A, 24 V AC/DC spring-type 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 	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of the gG fuse usable up to 690 V 	2x3NA3354-6; Type of coordination 1, Iq = 65 kA
 of the gG fuse usable at inside-delta circuit up to 500 V 	2x3NA3354-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1331-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3336; Type of coordination 2, Iq = 65 kA

General 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 (defaul / 20E, acc. to IEC 60947-4-2
•	120E, acc. to 160 0034 -4-2
buffering time in the event of power failure	100 mg
for main current circuit for control circuit	100 ms
for control circuit insulation valters a rated value	100 ms
insulation voltage rated value	600 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	6 kV
blocking voltage of the thyristor maximum	1 600 V
service factor	1
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	
between main and auxiliary circuit	600 V
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 53a
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	02/15/2018
product function	
ramp-up (soft starting)	Yes
ramp-down (soft stop)	Yes
Soft Torque	Yes
 adjustable current limitation 	Yes
 pump ramp down 	Yes
 intrinsic device protection 	Yes
motor overload protection	Yes; Full motor protection (thermistor motor protection and electronic motor 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	250 A
at 50 °C rated value	220 A
at 60 °C rated value	200 A
operational current at inside-delta circuit	
• at 40 °C rated value	433 A
at 50 °C rated value	381 A
at 50 °C rated value at 60 °C rated value	346 A
operating voltage	VTV /\
• rated value	200 600 V
	200 600 V
at inside-delta circuit rated value relative possible telegrapes of the operating voltage.	
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 %
misido-della circuit	

• at 230 V at 40 °C rated value	132 kW 132 kW
at 230 V at inside-delta circuit at 40 °C rated value	132 kW
at 400 V at 40 °C rated value	
 at 400 V at inside-delta circuit at 40 °C rated value 	250 kW
• at 500 V at 40 °C rated value	160 kW
at 500 V at inside-delta circuit at 40 °C rated value	315 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	400 A
at rotary coding switch on switch position 1	100 A
at rotary coding switch on switch position 2 at rotary coding switch on switch position 2	110 A 120 A
at rotary coding switch on switch position 3	
at rotary coding switch on switch position 4 at rotary coding switch on switch position 5	130 A 140 A
at rotary coding switch on switch position 5 at rotary coding switch on switch position 6	150 A
at rotary coding switch on switch position 6 at rotary coding switch on switch position 7.	
at rotary coding switch on switch position?	160 A 170 A
at rotary coding switch on switch position 8 at rotary coding switch on switch position 9	170 A 180 A
 at rotary coding switch on switch position 9 at rotary coding switch on switch position 10 	190 A
	200 A
 at rotary coding switch on switch position 11 at rotary coding switch on switch position 12 	200 A 210 A
at rotary coding switch on switch position 12 at rotary coding switch on switch position 13	220 A
at rotary coding switch on switch position 14 at rotary coding switch on switch position 14	230 A
at rotary coding switch on switch position 14 at rotary coding switch on switch position 15	240 A
at rotary coding switch on switch position 16 at rotary coding switch on switch position 16	250 A
minimum	100 A
adjustable motor current	100 A
for inside-delta circuit at rotary coding switch on	173 A
switch position 1	
 for inside-delta circuit at rotary coding switch on switch position 2 	191 A
 for inside-delta circuit at rotary coding switch on switch position 3 	208 A
 for inside-delta circuit at rotary coding switch on switch position 4 	225 A
 for inside-delta circuit at rotary coding switch on switch position 5 	242 A
for inside-delta circuit at rotary coding switch on switch position 6 for inside delta circuit at retary coding switch on	260 A
for inside-delta circuit at rotary coding switch on switch position 7 for inside delta circuit at retary coding switch on	277 A
 for inside-delta circuit at rotary coding switch on switch position 8 for inside-delta circuit at rotary coding switch on 	294 A 312 A
ior inside-delta circuit at rotary coding switch on ior inside-delta circuit at rotary coding switch on	329 A
switch position 10 • for inside-delta circuit at rotary coding switch on	346 A
switch position 11 • for inside-delta circuit at rotary coding switch on	364 A
switch position 12 • for inside-delta circuit at rotary coding switch on	381 A
switch position 13 • for inside-delta circuit at rotary coding switch on	398 A
switch position 14 • for inside-delta circuit at rotary coding switch on	416 A
switch position 15for inside-delta circuit at rotary coding switch on	433 A
switch position 16 • at inside-delta circuit minimum	173 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 	78 W dientudong
 at 50 °C after startup 	78 W
at 60 °C after startup	72 W
power loss [W] at AC at current limitation 350 %	
 at 40 °C during startup 	3 818 W
 at 50 °C during startup 	3 188 W
at 60 °C during startup	2 799 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
at 50 Hz rated value	24 V
at 60 Hz rated value	24 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage	
at DC rated value	24 V
relative negative tolerance of the control supply voltage at DC	-20 %
relative positive tolerance of the control supply voltage at DC	20 %
control supply current in standby mode rated value	160 mA
holding current in bypass operation rated value	470 mA
locked-rotor current at close of bypass contact maximum	7.6 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	
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	
• at AC-15 at 250 V rated value	3 A
at DC-13 at 24 V rated value	1 A
Installation/ mounting/ dimensions	
mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
fastening method	screw fixing
height	393 mm
width	210 mm
depth	203 mm
required spacing with side-by-side mounting	40
• forwards	10 mm
backwards	0 mm
• upwards	100 mm

• dithe side • at the side • at the side • at the side weight without packaging Contactions if reminals Verye of electrical connection • for main current circuit • for control circuit • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-sections • for DIX cable lug for main contacts straded • for DIX cable lug for main contacts straded • for FOIN cable lug for main contacts straded • for control circuit solid • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing wire length • between soft starfar and motor maximum • at the digital inputs at AC maximum • at the digital inputs at AC maximum • at the digital inputs at BC maximum • at the digital inputs at DC maximum • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type terminals • for anucliarly and control contacts with screw-type • during peration • during storage and transport • during peration • during peration • during peration according to IEC 60721 • during storage according to IEC 60721 • during peration according to IEC 60721 • during peration according to IEC 60721 • during pe		
Section Control circuit Spring	downwards	75 mm
Section Control circuit Spring		5 mm
type of electrical connection		9.9 kg
• for main current circuit • for control circuit width of connection bar maximum with length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts stranded • for control circuit finely stranded with core end • for control circuit finely stranded with core end • for control circuit finely stranded with core end • for control circuit finely stranded with core end • for control circuit finely stranded with • for control circuit finely stranded with • for control circuit finely stranded with • core end processing • at AWG cables for control circuit finely stranded with • core end processing • wire length • between soft starter and motor maximum • at the digital inputs at DC maximum		
e for control circuit width of connection be maximum wife length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts finely stranded • for DIN cable lug for main contacts finely stranded • for DIN cable lug for main contacts finely stranded • for control circuit solid • at AWG cables for control circuit finely stranded with core end processing wire length • between soft starter and motor maximum • at the digital inputs at DC maximum • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type • terminals ### Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during operation • during operation • during storage according to IEC 60721 • during operation • during storage according to IEC 60721 • during operation according to IEC 60721		
with of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 1.5 mm² maximum type of connectable conductor cross-sections of ro INI cable lug for main contacts fired ystranded for DIN cable lug for main contacts fired ystranded for DIN cable lug for main contacts fired ystranded fype of connectable conductor cross-sections of control circuit solid of control circuit solid of croutrol circuit firely stranded with core end processing of at AWG cables for control circuit finely stranded with core end processing wire length between soft starter and motor maximum of at the digital inputs at AC maximum of a the digital inputs at AC maximum of a maximum of a maximum short for the maximum of a maximum short for main contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of a rauxiliary and control contacts with screw-type of terminals Italiation altitude at height above sea level maximum of during operation of during operation of during operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing operation according to IEC 60721 of maximum the processing o		
wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections for control circuit finely stranded with core end processing at AWG cables for control circuit finely stranded with core end processing wire length between soft starter and motor maximum at the digital inputs at AC maximum at the digital inputs at AC maximum of ror auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type during operation during operation during operation according to IEC 60721 wing poperation		
with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-sections of ror IN cable lug for main contacts stranded of or DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded for Control circuit finely stranded with core end processing at AWG cables for control circuit solid at AWG cables for control circuit finely stranded with core end processing wire length between soft starter and motor maximum at the digital inputs at AC maximum at the digital inputs at AC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at the digital inputs at DC maximum at during torque [Ibf-in] for main contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals during torque [Ibf-in] for main contacts with screw-type terminals for auxiliary and control contacts with		45 11111
with conductor cross-section = 1.5 mm² maximum	_	50 m
with conductor cross-sections = 2.5 mm² maximum type of connectable conductor cross-sections of for IDIN cable lug for main contacts stranded for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections of cro control circuit did for control circuit finely stranded with core end processing at AWG cables for control circuit solid at AWG cables for control circuit finely stranded with core end processing at the digital inputs at AC maximum for main contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type during operation during storage and transport during operation during storage according to IEC 60721 during storage according to IEC 60721 during transport according to IEC 60721 during transport according to IEC 60721 during transport according to IEC 60721 ethernhelib et		
• for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts interly stranded • for DIN cable lug for main contacts finely stranded • for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing wire length • between soft starter and motor maximum • at the digital inputs at AC maximum • at the digital inputs at DC maximum • at the digital inputs at DC maximum • at the digital inputs at DC maximum • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals **Notional conditions** installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • Communication Module is supported • PROFINET standard • PROFINET standard • PROFIBUS *Yes • PROFIBUS **Yes *Yes **Yes *Yes *		100
type of connectable lug for main contacts finely stranded type of connectable conductor cross-sections of ro control circuit solid of or control circuit solid at AWG cables for control circuit solid at AWG cables for control circuit finely stranded with core end processing wire length between soft starter and motor maximum at the digital inputs at AC maximum at the digital inputs at AC maximum tightening torque of or main contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals of or auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum ambient temperature of during operation of during storage and transport of during storage and transport of during storage according to IEC 60721 of during storage according to IEC 60721 of during storage according to IEC 60721 of during transport according to IEC 60721 of the during transport according to IEC 60721 of the during transport according to IEC 60721 of the during trans	type of connectable conductor cross-sections	
type of connectable conductor cross-sections	for DIN cable lug for main contacts stranded	2x (50 240 mm²)
• for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit solid • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing wire length • between soft starter and motor maximum • at the digital inputs at AC maximum • at the digital inputs at DC maximum • at the digital inputs at DC maximum • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-typ	• for DIN cable lug for main contacts finely stranded	2x (70 240 mm²)
For control circuit finely stranded with core end processing at AWG cables for control circuit solid at AWG cables for control circuit finely stranded with core end processing wire length between soft starter and motor maximum at the digital inputs at AC maximum at the digital inputs at DC maximum 100 m at the digital inputs at DC maximum 100 m at the digital inputs at DC maximum 100 m 100	type of connectable conductor cross-sections	
e at AWG cables for control circuit solid e at AWG cables for control circuit finely stranded with core end processing wire length • between soft starter and motor maximum e at the digital inputs at AC maximum 100 m tightening torque • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals tightening torque [lib-fin] • for maxiliary and control contacts with screw-type terminals * for auxiliary and control contacts with screw-type terminals * for auxiliary and control contacts with screw-type terminals * for auxiliary and control contacts with screw-type * during storage and transport • during storage and transport • during storage and transport • during operation according to IEC 60721 * during storage according to IEC 60721 * during storage according to IEC 60721 * during transport according to IEC 60721 * during transport according to IEC 60721 * during transport according to IEC 60721 * EMC emitted interference communication module is supported • PROFINET standard • PROFINET standard • PROFIBUS * Yes • PROFIBUS	 for control circuit solid 	2x (0.25 1.5 mm²)
e at AWG cables for control circuit finely stranded with core end processing wire length • between soft starter and motor maximum • at the digital inputs at AC maximum • at the digital inputs at DC maximum • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type • for main contacts with screw-type terminals 124 210 lbf-in 7 10.3 lbf-in 5 000 m; Derating as of 1000 m, see catalog arbient temperature • during operation • during operation • during operation according to IEC 60721 3KG (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get inside the devices), 3M6 • during storage according to IEC 60721 4KG (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 Communication Protocol communicati		2x (0.25 1.5 mm²)
core end processing wire length		
between soft starter and motor maximum at the digital inputs at AC maximum at the digital inputs at DC maximum 100 m tightening torque for main contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals tightening torque [lbf-in] for main contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage and transport during storage and transport during operation according to IEC 60721 during operation according to IEC 60721 during transport according to IEC 60721 EMC emitted interference communication module is supported PROFINET standard PROFINET standard PROFINET standard PROFINET standard PROFINET standard PROFINET standard PROFINED PROFIBUS	core end processing	2x (24 16)
at the digital inputs at AC maximum at the digital inputs at DC maximum 1000 m 1000	•	900 m
tightening torque for main contacts with screw-type terminals for auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum ambient temperature during operation during storage and transport environmental category during operation according to IEC 60721 during storage according to IEC 60721 during storage according to IEC 60721 during transport according to IEC 60721 during transport according to IEC 60721 during transport according to IEC 60721 EMC emitted interference acc to IEC 60947-4-2: Class A Communication/ Protocol communication module is supported PROFINET standard PROFINET standard PROFINET standard PROFIBUS 1000 m 14 24 N·m 124 210 lbf-in 7 10.3 lbf-in 124 210 lbf-in 125 460 °C; Please observe derating at tempe		
tightening torque • for main contacts with screw-type terminals • for auxillary and control contacts with screw-type terminals tightening torque [lbf-in] • for main contacts with screw-type terminals • for auxillary and control contacts with screw-type terminals • for auxillary and control contacts with screw-type terminals • for auxillary and control contacts with screw-type terminals Amblent conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 EMC emitted interference communication/ Protocol communication Module is supported • PROFINET standard • PROFINET standard • PROFIBUS 14 24 N·m 0.8 1.2 N·m 124 210 lbf-in 7 10.3 lbf-in 124 210 lbf-in		
• for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals tightening torque [lbf-in] • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 EMC emitted interference communication / Protocol communication rodule is supported • PROFINET standard • PROFIBUS 14 24 N·m 0 8 1.2 N·m 124 210 lbf-in 7 10.3 lbf-in 124 210 lbf-in 7 10.3 lbf-in 125 +60 °C; Please observe derating at temperatures of 40 °C or above -40 +80 °C -40 +80 °C 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Communication Protocol communication module is supported • PROFINET standard • PROFIBUS Yes • Modbus TCP • PROFIBUS		- 1 000 111
for auxiliary and control contacts with screw-type terminals tightening torque [lbf-in]		14 24 N⋅m
terminals tightening torque [lbf-in]		
• for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals Ambient conditions Installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • Communication/ Protocol communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus TTU • Modbus TCP • PROFIBUS	,	
for auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • EMC emitted interference • communication/ Protocol • Communication/ Protocol • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus RTU • Modbus TCP • PROFIBUS	tightening torque [lbf·in]	
Ambient conditions installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • EMC emitted interference communication/Protocol communication/Protocol communication module is supported • PROFINET standard • PROFINET standard • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus RTU • Modbus TCP • PROFIBUS 5 000 m; Derating as of 1000 m, see catalog -25 +60 °C; Please observe derating at temperatures of 40 °C or above -40 +80 °C -40	• • • • • • • • • • • • • • • • • • • •	124 210 lbf·in
installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 EMC emitted interference communication / Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS • Our maximum 5 000 m; Derating as of 1000 m, see catalog 25 +60 °C; Please observe derating at temperatures of 40 °C or above -25 +60 °C; Please observe derating at temperatures of 40 °C or above -25 +60 °C; Please observe derating at temperatures of 40 °C or above -25 +60 °C; Please observe derating at temperatures of 40 °C or above -40 +80 °C -25 +60 °C; Please observe derating at temperatures of 40 °C or above -40 +80 °C -80 °C SK6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 3M6 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Communication module is supported • PROFINET standard • Yes • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS		7 10.3 lbf·in
ambient temperature • during operation • during storage and transport • during storage and transport • during operation • during storage and transport • during operation according to IEC 60721 • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • EMC emitted interference • communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS • PROFIBUS	Ambient conditions	
 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 Communication module is supported PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS Yes PROFIBUS 		5 000 m; Derating as of 1000 m, see catalog
above -40 +80 °C environmental category • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • during transport according to IEC 60721 • EMC emitted interference • Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS	•	0F
environmental category • during operation according to IEC 60721 • during storage according to IEC 60721 • during storage according to IEC 60721 • during transport according to IEC 60721 EMC emitted interference communication / Protocol communication module is supported • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS AK6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 3C3 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 3C3 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 3C3 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 • Lether (solly occasional condensation), 1		above
 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 PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS Yes PROFIBUS Yes PROFIBUS Yes PROFIBUS AK6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A 		+v rou C
mist), 3S2 (sand must not get into the devices), 3M6 • during storage according to IEC 60721 • during transport according to IEC 60721 EMC emitted interference communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS mist), 3S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 3M6 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Communication module is supported • PROFINET standard Yes • Modbus RTU • Modbus TCP • PROFIBUS		3K6 (no ice formation, only occasional condensation), 3C3 (no salt
not get inside the devices), 1M4 • during transport according to IEC 60721 EMC emitted interference acc. to IEC 60947-4-2: Class A Communication/ Protocol communication module is supported • PROFINET standard • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS not get inside the devices), 1M4 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m) acc. to IEC 60947-4-2: Class A Yes Yes Yes Yes Yes PROFINET standard Yes Yes Yes Yes		mist), 3S2 (sand must not get into the devices), 3M6
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 • PROFIBUS Yes		not get inside the devices), 1M4
Communication/ Protocol communication module is supported • PROFINET standard Yes • EtherNet/IP Yes • Modbus RTU Yes • Modbus TCP Yes • PROFIBUS Yes		· · · · · · · · · · · · · · · · · · ·
communication module is supported • PROFINET standard Yes • EtherNet/IP Yes • Modbus RTU Yes • Modbus TCP Yes • PROFIBUS Yes		
 PROFINET standard EtherNet/IP Modbus RTU Modbus TCP PROFIBUS Yes Yes Yes 		
 EtherNet/IP Modbus RTU Modbus TCP PROFIBUS Yes Yes 		Yes
 Modbus RTU Modbus TCP PROFIBUS Yes Yes 		
PROFIBUS Yes		
	Modbus TCP	Yes
UL/CSA ratings	• PROFIBUS	Yes
	UL/CSA ratings	
manufacturer's article number	manufacturer's article number	
of circuit breaker	of circuit breaker	
— usable for Standard Faults at 460/480 V Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 18 kA according to UL		Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 18 kA
— usable for High Faults at 460/480 V according to UL Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 kA		
— usable for Standard Faults at 460/480 V at Siemens type: 3VA54, max. 600 A; lq = 18 kA	 usable for Standard Faults at 460/480 V at 	Siemens type: 3VA54, max. 600 A; Iq = 18 kA

inside-delta 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 inside-delta circuit 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 Standard Faults at inside-delta circuit up to 575/600 V according to UL

- usable for High Faults at inside-delta circuit up to 575/600 V according to UL

Siemens type: 3VA

Siemens type: 3VA5



Siemens type: 3VA54, max. 600 A; Iq = 18 kA

Type: Class J / L, max. 800 A; Iq = 18 kA

Type: Class J / L, max. 800 A; Iq = 100 kA

Type: Class J / L, max. 800 A; Iq = 18 kA

Type: Class J / L, max. 800 A; Iq = 100 kA

operating power [hp] for 3-phase motors

• at 200/208 V at 50 °C rated value

• at 220/230 V at 50 °C rated value

at 460/480 V at 50 °C rated value

• at 575/600 V at 50 °C rated value

• at 200/208 V at inside-delta circuit at 50 °C rated

• at 220/230 V at inside-delta circuit at 50 °C rated

• at 460/480 V at inside-delta circuit at 50 °C rated value

• at 575/600 V at inside-delta circuit at 50 °C rated value

60 hp

75 hp

150 hp 200 hp

125 hp

150 hp

300 hp

350 hp

R300-B300

contact rating of auxiliary contacts according to UL

Safety related data

protection class IP on the front according to IEC 60529

touch protection on the front according to IEC 60529 electromagnetic compatibility

IP00; IP20 with cover

finger-safe, for vertical contact from the front with cover 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

Information- and Downloadcenter (Catalogs, Brochures,...) https://www.siemens.com/ic10

Industry Mall (Online ordering system)

dientudong

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5244-2TQ

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlft

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RW5244-2TC05

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RW5244-2TC05&lang=en

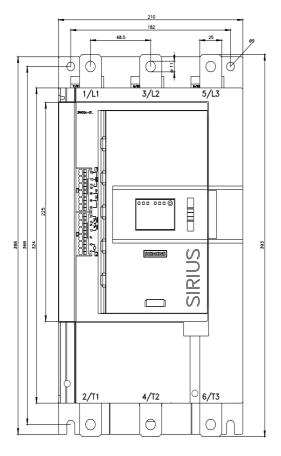
Characteristic: Tripping characteristics, I²t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RW5244-2TC05/char

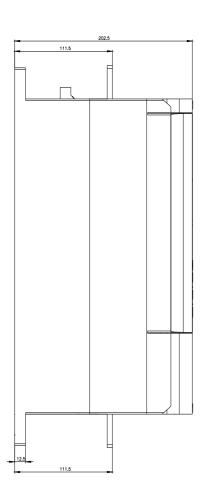
Characteristic: Installation altitude

 $\underline{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5244-2TC05\&objecttype=14\&gridview=view1}$

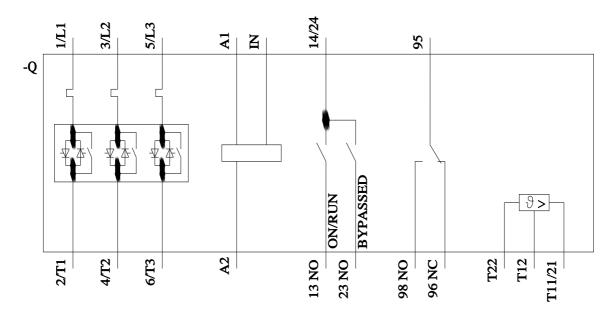
Simulation Tool for Soft Starters (STS)

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









last modified: 4/10/2022 **C**

Hotline: 0909000786 - lam@dientudong.com

