SIEMENS

Data sheet

3RW5076-2TB05



SIRIUS soft starter 200-600 V 470 A, 24 V AC/DC Spring-loaded terminals Thermistor input

Fi	gu	re	si	mi	lar

product brand name	SIRIUS		
product category	Hybrid switching devices		
product designation	Soft starter		
product type designation	3RW50		
manufacturer's article number			
 of standard HMI module usable 	<u>3RW5980-0HS01</u>		
 of high feature HMI module usable 	<u>3RW5980-0HF00</u>		
 of communication module PROFINET standard usable 	<u>3RW5980-0CS00</u>		
 of communication module PROFIBUS usable 	<u>3RW5980-0CP00</u>		
 of communication module Modbus TCP usable 	<u>3RW5980-0CT00</u>		
 of communication module Modbus RTU usable 	<u>3RW5980-0CR00</u>		
 of communication module Ethernet/IP 	<u>3RW5980-0CE00</u>		
 of circuit breaker usable at 400 V 	<u>3VA2580-6HN32-0AA0: Type of assignment 1, Iq = 65 kA</u>		
 of circuit breaker usable at 500 V 	<u>3VA2580-6HN32-0AA0: Type of assignment 1. Iq = 65 kA</u>		
 of the gG fuse usable up to 690 V 	2x3NA3365-6; Type of coordination 1, Iq = 65 kA		
 of full range R fuse link for semiconductor protection usable up to 690 V 	<u>3NE1 436-2; Type of coordination 2, Iq = 65 kA</u>		
 of back-up R fuse link for semiconductor protection usable up to 690 V 	<u>3NE3 340-8; Type of coordination 2. lq = 65 kA</u>		
 of line contactor usable up to 480 V 	<u>3RT1076</u>		
 of line contactor usable up to 690 V 	<u>3RT1076</u>		
General technical data			
starting voltage [%]	30 100 %		
stopping voltage [%]	50 %; non-adjustable		
start-up ramp time of soft starter	0 20 s		
ramp-down 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	2		
trip class	CLASS 10A / 10E (preset) / 20E; acc. to IEC 60947-4-2		
buffering time in the event of power failure			
for main current circuit	100 ms		

for control circuit insultation voltage rated value 600 V degree of pollution 3, acc. to IEC 60947-4-2 impulse voltage rated value blocking voltage of the thyristor maximum 1 660 V service factor 1 surge voltage resistance rated value 6 KV maximum permissible voltage for protective separation • between main and auxilary circuit shock resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 ms to 6 k2, 20 to 500 Hz utilization category according to IEC 60947-42 AC-S3a reference code according to IEC 60947-42 Q c Substance Prohibitance (Date) 00/23/2019 product function ves of the protection ves full motor protection (thermistor motor protection and electronic motor overload protection ves Full motor protection ves fun	nsulation voltage rated value			
degree of pollution 3, acc. to IEC 609474-2 impulse voltage reter value 6 kV blocking voltage of the thyristor maximum 1600 V service factor 1 surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation 600 V shock resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 16 K2 2g to 500 Hz utilization category according to IEC 609474-2 AC-63a reference code according to IEC 609474-2 Q Substance Prohibitance (Date) 09/23/2019 product function Yes • ramp-down (soft stop) Yes • Soft Torque Yes • adjustable current limitation Yes • pump ramp down Yes • motor overload protection Yes, Type A PTC or Klixon / Thermoclick • auto-RESET Yes • manual RESET Yes • evaluation function Yes; By turing off the control supply voltage • communication function Yes; Donly in conjunction with special accessories • error logbook Yes; In connec				
Impulse voltage rated value 6 kV blocking voltage rated value 6 kV service factor 1 surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation 6 kV • 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 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 16 mm to 6 Hz; 2g to 500 Hz uilization category according to IEC 8047.4-2 AC-3a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 09/32019 product function Yes • ramp-Qu (soft starling) Yes • adjustable current limitation Yes • adjustable current limitation Yes • motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection • motor eveload protection Yes; Full motor protection (thermistor motor protect	legree of pollution			
blocking voltage of the thyristor maximum 1 600 V servico factor 1 surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation 600 V • between main and auxilary 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-S3a reference code according to IEC 61946-2 Q Substance Prohibitance (Date) 09/23/2019 product function Yes • ramp-Joy (soft string) Yes • adjustable current limitation Yes • auto-RESET Yes • motor ovelrad protection Yes; Type A PTC or Klixon / Thermoclick • auto-RESET Yes • remoly-glocok Yes; Only in conjunction with special accessories • operating measured value display Yes; Only in conjunction with special accessories <tr< td=""><td></td><td></td></tr<>				
service factor 1 surge voltage resistance rated value 6 kV maximum permissible voltage for protective separation 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 resistance (Date) 09/23/2019 preference code according to IEC 81346-2 Q Substance Prohibitance (Date) 09/23/2019 product function Yes • andjustable ournet limitation Yes • adjustable ournet limitation Yes • adjustable ournet limitation Yes • motor overload protection Yes • motor overload protection Yes, Fuil motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Fuil motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Fuil motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Si put ming of the control supply voltage • anoual RESET Yes • emole reset <td></td> <td>_</td>		_		
surge voltage resistance rated value 6 KV maximum permissible voltage for protective separation 600 V • 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-S3a preference code according to IEC 81346-2 Q Substance Prohibitance (Date) 09/23/2019 product function Ves • amp-down (soft stop) Yes • Soft Torque Yes • adjustable current limitation Yes • adjustable current limitation Yes • adjustable current limitation 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 • emole reset Yes, Dy turning off the control supply voltage • communication function Yes • analog cuput Yes • operating measured value display Yes; In connjunction with special accessories				
maximum permissible voltage for protective separation • 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 60947-4-2 Q Substance Prohibitance (Date) 09/23/2019 product function Ves • ramp-up (soft starting) Yes • adjustable current limitation Yes • gump ramp down Yes • adjustable current limitation Yes • pump ramp down Yes • adjustable current limitation Yes • adjustable or protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of themistor motor protection Yes; Type A PTC or Klixon / Thermoclick • auto-RESET Yes • manual RESET Yes; Only in conjunction with special accessories • operating measured value display Yes; Only in conjunction with special accessories • via software parameterizable No • vi				
• 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 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 16 G / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 0 Substance Prohibitance (Date) 09/23/2019 product function - • ramp-down (soft stop) Yes • Soft Torque Yes • adjustable current limitation Yes • jump ramp down Yes • intrinsic device protection Yes • notor overload protection Yes • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes, Full motor protection (thermistor motor protection overload protection) • evaluation of thermistor motor protection Yes, Su turning off the control supply voltage • ommunication function Yes • onder reset Yes, Only in conjunction with special accessories • ording rameterizable No				
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) 09/23/2019 product function Ves • ramp-up (soft starting) Yes • adjustable current limitation Yes • adjustable current limitation Yes • pump ramp down Yes • intrinsic device protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • auto-RESET Yes • manual RESET Yes; By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • error logbook Yes; Ion onnection with the PROFINET Standard communication module • via software parameterizable No voltage ramp Yes • via software parameterizable No • via software parameterizable No • via software configurable Yes		600 V		
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) 09/3/2/019 product function Yes • amp-up (soft starting) Yes • adjustable current limitation Yes • attor overload protection Yes • intrinsic device protection Yes • motor overload protection Yes • atto-RESET Yes • manual RESET Yes • ommunication function Yes • atto-Reset Yes, During off the control supply voltage • oommunication function Yes • via software parameterizable No • via software configurable Yes • via software configurable Yes • rora	· · · · · · · · · · · · · · · · · · ·			
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 09/23/2019 product function • • ramp-up (soft starting) Yes • Soft Torque Yes • Soft Torque Yes • adjustable current limitation Yes • up mp 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 • auto-RESET Yes • emotor exert oligbook Yes; Only in conjunction with special accessories • operating measured value display Yes; Only in conjunction with special accessories • via software parameterizable No • via software configurable Yes • via software configurable Yes; in connection with the PROFINET Standard communication module • via software parameterizable No • origue control No	/ibration resistance			
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 09/23/2019 product function Yes • ramp-down (soft staring) Yes • Soft Torque Yes • adjustable current limitation Yes • pump ramp down Yes • intrinsic device protection Yes • motor overload protection Yes • adjustable current limitation Yes • intrinsic device protection Yes • motor overload protection Yes • evaluation of thermistor motor 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 • auto-RESET Yes • manual RESET Yes • emote reset Yes; Only in conjunction with special accessories • error togbook Yes; Only in conjunction with special accessories • via software parameterizable No • origue control <td< td=""><td>itilization category according to IEC 60947-4-2</td><td>AC-53a</td></td<>	itilization category according to IEC 60947-4-2	AC-53a		
product function ramp-up (soft starting) ramp-down (soft stop) Soft Torque adjustable current limitation yes adjustable current imitation Yes adjustable current imitation Yes adjustable current imitation Yes intrinsic device 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 auto-RESET remote reset communication function Yes operating measured value display Yes; Only in conjunction with special accessories error logbook via software parameterizable No via software configurable Yes in connection with the PROFINET Standard communication module voltage ramp erated value 470 A at 60 °C rated value at 60		Q		
• 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 • auto-RESET Yes • manual RESET Yes; By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • error logbook Yes; Ionly in conjunction with special accessories • via software parameterizable No • via software parameterizable No • voltage ramp Yes; in connection with the PROFINET Standard communication module • voltage ramp Yes • analog output No • analog output No • at 40 °C rated value 470 A • at 60 °C rated value 470 A • at 60 °C rated value 380 A • at 60 °C rated value 200 600 V	Substance Prohibitance (Date)	09/23/2019		
• ramp-down (soft stop) Yes • Soft Torque Yes • adjustable current limitation Yes • adjustable current limitation Yes • intrinsic device protection Yes • motor overload 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 • auto-RESET Yes • manual RESET Yes • remote reset Yes, Only in conjunction with special accessories • operating measured value display Yes, Only in conjunction with special accessories • via software parameterizable No • via software configurable Yes • via software configurable Yes • voltage ramp Yes • torque control No • analog output No • at 40 °C rated value 470 A • at 60 °C rated value 470 A • at 60 °C rated value 380 A • operating voltage 470 A	product function			
Soft Torque Yes • adjustable current limitation Yes • pump ramp down Yes • intrinsic device protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) • 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 • auto-RESET Yes • manual RESET Yes • remote reset Yes; By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • error logbook Yes; Only in conjunction with special accessories • via software configurable Yes; In connection with the PROFINET Standard communication module • voltage ramp Yes • lorque control No • analog output No Power Electronics 380 A operating voltage 416 A • at 60 °C rated value 380 A operating voltage 200 600 V	 ramp-up (soft starting) 	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 • auto-RESET Yes • manual RESET Yes • remote reset Yes, By turning off the control supply voltage • communication function Yes, Only in conjunction with special accessories • error logbook Yes, in connection with special accessories • via software parameterizable No • voltage ramp Yes • torque control No • analog output No Power Electronics Yes • operating unclasse 470 A • at 60 °C rated value 470 A • at 60 °C rated value 380 A • operating voltage 380 A	• ramp-down (soft stop)	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 • auto-RESET Yes • manual RESET Yes • remote reset Yes, By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • via software parameterizable No • via software configurable Yes; in connection with the PROFINET Standard communication module • voltage ramp Yes; in connection with the PROFINET Standard communication module • voltage ramp Yes • torque control No • analog output No • operational current 416 A • at 40 °C rated value 400 A • at 60 °C rated value 380 A • operationg voltage 380 A		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 • auto-RESET Yes • manual RESET Yes; By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • error logbook Yes; Only in conjunction with special accessories • via software parameterizable No • voltage ramp Yes; in connection with the PROFINET Standard communication module • voltage ramp Yes • torque control No • analog output No Power Electronics 470 A • at 40 °C rated value 470 A • at 50 °C rated value 380 A operating voltage 380 A		Yes		
motor overload protection motor overload protection vealuation of thermistor motor protection evaluation evaluation of thermistor motor protection evaluation evaluation of thermistor evaluation of thermistor motor protection evaluation function evaluation function evaluation function evaluation intervalue evaluation intervalue evaluation evaluatio	-	Yes		
evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • auto-RESET Yes; • manual RESET Yes; • remote reset Yes; By turning off the control supply voltage • communication function Yes; Only in conjunction with special accessories • error logbook Yes; Only in conjunction with special accessories • via software parameterizable No • via software configurable Yes; in connection with the PROFINET Standard communication module • voltage ramp Yes • torque control No • analog output No • aratog output Arot A • at 40 °C rated value 470 A • at 60 °C rated value 380 A • operating voltage 380 A	intrinsic device protection	Yes		
• auto-RESETYes• manual RESETYes• remote resetYes; By turning off the control supply voltage• communication functionYes;• operating measured value displayYes; Only in conjunction with special accessories• error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes;• via software configurableYes; in connection with the PROFINET Standard communication module• voltage rampYes; in connection with the PROFINET Standard communication module• voltage rampYes;• torque controlNo• analog outputNoPower ElectronicsVoltage• at 40 °C rated value470 A• at 50 °C rated value416 A• at 60 °C rated value380 A• operating voltage380 A• rated value200 600 V	 motor overload protection 	Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)		
• manual RESETYes• remote resetYes; By turning off the control supply voltage• communication functionYes• operating measured value displayYes; Only in conjunction with special accessories• error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes; in connection with the PROFINET Standard communication module• voltage rampYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• prever ElectronicsYes• at 40 °C rated value470 A• at 60 °C rated value380 A• ared value380 A	 evaluation of thermistor motor protection 	Yes; Type A PTC or Klixon / Thermoclick		
• remote resetYes; By turning off the control supply voltage• communication functionYes• operating measured value displayYes; Only in conjunction with special accessories• error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes; in connection with the PROFINET Standard communication module• voltage rampYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• operational current470 A• at 40 °C rated value470 A• at 60 °C rated value380 A• rated value200 600 V	auto-RESET	Yes		
• communication functionYes• operating measured value displayYes; Only in conjunction with special accessories• error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNo• at 40 °C rated value470 A• at 60 °C rated value380 A• rated value380 A• rated value200 600 V	manual RESET	Yes		
• operating measured value displayYes; Only in conjunction with special accessories• error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNo• at 40 °C rated value470 A• at 50 °C rated value416 A• at 60 °C rated value380 A• rated value200 600 V	remote reset	Yes; By turning off the control supply voltage		
error logbookYes; Only in conjunction with special accessories• via software parameterizableNo• via software configurableYes• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNo• analog outputNo• at 40 °C rated value470 A• at 50 °C rated value380 A• at 60 °C rated value380 A• rated value200 600 V	 communication function 	Yes		
• via software parameterizableNo• via software configurableYes• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNoPower ElectronicsVes• at 40 °C rated value470 A• at 50 °C rated value416 A• at 60 °C rated value380 A• perating voltage200 600 V	 operating measured value display 	Yes; Only in conjunction with special accessories		
• via software configurableYes• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNoPower ElectronicsVerated value• at 40 °C rated value470 A• at 50 °C rated value416 A• at 60 °C rated value380 A• perating voltage900 600 V	error logbook	Yes; Only in conjunction with special accessories		
• PROFlenergyYes; in connection with the PROFINET Standard communication module• voltage rampYes• torque controlNo• analog outputNo• analog outputNo• power Electronics• at 40 °C rated value470 A• at 50 °C rated value416 A• at 60 °C rated value380 A• perating voltage	 via software parameterizable 	No		
• voltage rampYes• torque controlNo• analog outputNoPower Electronicsoperational current470 A• at 40 °C rated value470 A• at 50 °C rated value380 Aoperating voltage380 A	0			
torque control analog output No analog output No No Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • crated value				
• analog output No Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value				
Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • • at 60 °C rated value				
operational current 470 A • at 40 °C rated value 470 A • at 50 °C rated value 416 A • at 60 °C rated value 380 A operating voltage 200 600 V		No		
• at 40 °C rated value 470 A • at 50 °C rated value 416 A • at 60 °C rated value 380 A operating voltage 200 600 V				
• at 50 °C rated value 416 A • at 60 °C rated value 380 A operating voltage 200 600 V	•			
• at 60 °C rated value 380 A operating voltage 200 600 V				
operating voltage • rated value 200 600 V				
• rated value 200 600 V		380 A		
		200 600 \/		
Telative negative totelatice of the operating voltage -10 /0				
relative positive tolerance of the operating voltage 10 %				
operating power for 3-phase motors	· · · ·			
• at 230 V at 40 °C rated value 132 kW		132 kW		
• at 400 V at 40 °C rated value 250 kW				
• at 500 V 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				
at rotary coding switch on switch position 1 200 A	-	200 A		
• at rotary coding switch on switch position 2 218 A				
• at rotary coding switch on switch position 3 236 A				
• at rotary coding switch on switch position 4 254 A				
• at rotary coding switch on switch position 5 272 A				
• at rotary coding switch on switch position 6 290 A				
at rotary coding switch on switch position 7 308 A				

 at rotary coding switch on switch position 8 	326 A
 at rotary coding switch on switch position 9 	344 A
 at rotary coding switch on switch position 10 	362 A
 at rotary coding switch on switch position 11 	380 A
 at rotary coding switch on switch position 12 	398 A
 at rotary coding switch on switch position 13 	416 A
 at rotary coding switch on switch position 14 	434 A
 at rotary coding switch on switch position 15 	452 A
 at rotary coding switch on switch position 16 	470 A
• minimum	200 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	56 W
● at 50 °C after startup	44 W
● at 60 °C after startup	37 W
power loss [W] at AC at current limitation 350 %	
at 40 °C during startup	5 344 W
• at 50 °C during startup	4 438 W
• at 60 °C during startup	3 876 W
type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
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	490 mA
inrush current by closing the bypass contacts 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	
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
factoring method	+/- 22.5° tiltable to the front and back
fastening method	screw fixing 230 mm
height width	160 mm
depth	282 mm
required spacing with side-by-side mounting	202 11111
forwards	10 mm
backwards	0 mm
• upwards	100 mm
downwards	75 mm
at the side	5 mm
weight without packaging	7.3 kg
Connections/ Terminals	
type of electrical connection	
for main current circuit	busbar connection
for control circuit	spring-loaded terminals
width of connection bar maximum	35 mm; with connection cover 3RT1966-4EA1 maximum length 45 mm
wire length for thermistor connection	
 with conductor cross-section = 0.5 mm² maximum 	50 m
• with conductor cross-section = 1.5 mm ² maximum	150 m
• with conductor cross-section = 2.5 mm ² maximum	250 m
type of connectable conductor cross-sections	
• for main contacts for box terminal using the front clamping point solid	95 300 mm ²
• for main contacts for box terminal using the front clamping point finely stranded with core end processing	70 240 mm ²
for main contacts for box terminal using the front clamping point finely stranded without core end processing	70 240 mm ²
for main contacts for box terminal using the front clamping point stranded	95 300 mm ²
 for main contacts for box terminal using the back clamping point solid for AWG cables for main contacts for box terminal using 	120 240 mm² 250 500 kcmil
 for main contacts for box terminal using both clamping 	min. 2x 70 mm², max. 2x 240 mm²
 for main contacts for box terminal using both clamping 	min. 2x 50 mm², max. 2x 185 mm²
 points finely stranded with core end processing for main contacts for box terminal using both clamping 	min. 2x 50 mm², max. 2x 185 mm²
points finely stranded without core end processingfor main contacts for box terminal using both clamping	min. 2x 70 mm², max. 2x 240 mm²
 points stranded for main contacts for box terminal using the back 	120 185 mm²
 clamping point finely stranded with core end processing for main contacts for box terminal using the back clamping point finely stranded without core end processing 	120 185 mm²
 for main contacts for box terminal using the back clamping point stranded 	120 240 mm²
type of connectable conductor cross-sections	
for AWG cables for main current circuit solid	2/0 500 kcmil
 for DIN cable lug for main contacts stranded 	50 240 mm²
 for DIN cable lug for main contacts finely stranded 	70 240 mm²
type of connectable conductor cross-sections	
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 (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	1 000 m
• for main contacts with screw-type terminals	14 24 N·m
• for main contacts with screw-type terminals	14 24 IVIII

 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 	7 10.3 lbf·in	
terminals		
mbient conditions		
installation altitude at height above sea level maximum	5 000 m; derating as of 1000 m, see Manual	
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 ge 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	
ommunication/ Protocol		
communication module is supported		
PROFINET standard	Yes	
EtherNet/IP	Yes	
Modbus RTU	Yes	
Modbus TCP	Yes	
PROFIBUS	Yes	
L/CSA ratings		
manufacturer's article number		
of the fuse		
 — usable for Standard Faults up to 575/600 V according to UL 	Type: Class L, max. 1600 A; lq = 30 kA	
— usable for High Faults up to 575/600 V according to UL	Type: Class L, max. 1200 A; lq = 100 kA	
operating power [hp] for 3-phase motors		
 at 200/208 V at 50 °C rated value 	150 hp	
 at 220/230 V at 50 °C rated value 	150 hp	
• at 460/480 V at 50 °C rated value	350 hp	
 at 575/600 V at 50 °C rated value 	450 hp	
afety 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	
TEX		
certificate of suitability		
• ATEX	Yes	
• IECEx	Yes	
• UKEX	Yes	
hardware fault tolerance according to IEC 61508 relating to ATEX	0	
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.09	
PFHD with high demand rate according to EN 62061 relating to ATEX	9E-6 1/h	
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1	
T1 value for proof test interval or service life according to IEC 61508 relating to ATEX	3 a	
ertificates/ approvals		
	For use in hazard-	
General Product Approval	ous locations	

Subject to change without notice © Copyright Siemens



Further information

1 RS

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=3RW5076-2TB05

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5076-2TB05

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5076-2TB05

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5076-2TB05&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

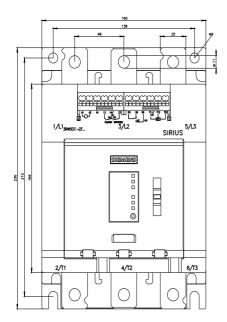
https://support.industry.siemens.com/cs/ww/en/ps/3RW5076-2TB05/char

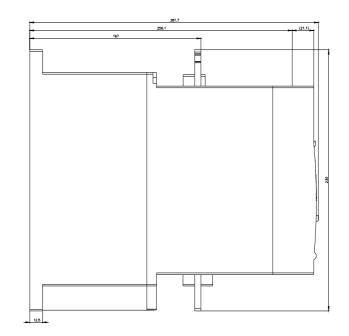
Characteristic: Installation altitude

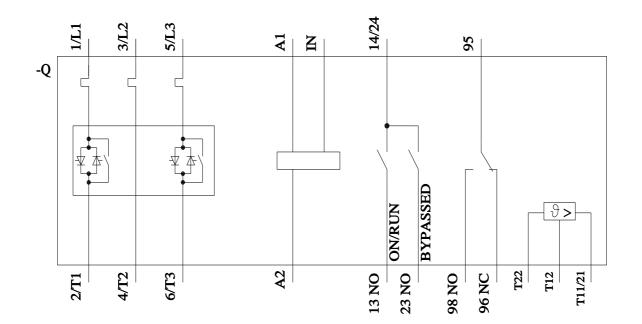
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5076-2TB05&objecttype=14&gridview=view1

Simulation Tool for Soft Starters (STS)

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







1/14/2023 🖸

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Siemens: 3RW50762TB05