SIEMENS

3RW5075-2TB14 **Data sheet**



SIRIUS soft starter 200-480 V 370 A, 110-250 V AC Spring-loaded terminals Thermistor input

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 	3RW5980-0HS01
 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 	3VA2580-6HN32-0AA0; Type of assignment 1, Iq = 65 kA
 of circuit breaker usable at 500 V 	3VA2580-6HN32-0AA0; Type of assignment 1, Iq = 65 kA
 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 	3NE1 334-2; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3 336; Type of coordination 2, Iq = 65 kA
 of line contactor usable up to 480 V 	<u>3RT1075</u>
 of line contactor usable up to 690 V 	<u>3RT1075</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 %
accuracy class according to IEC 61557-12	5 %
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 rounted circuit • for control circuit • for control circuit • for control circuit 100 ms 100 Lacch 100 ms 100 ms 100 Lacch 100 ms 100 lacch 100 ms 100 lacch		
for control circuit 100 ms 100 m	buffering time in the event of power failure	
Insulation voltage rated value George of pollution Sac. to IEC 60047.4-2 AC-Sac. t	 for main current circuit 	100 ms
degree of politution 3, acc. to IEC 60947-4-2	for control circuit	100 ms
Impulse voltage rated value 6 kV	insulation voltage rated value	600 V
blocking voltage of the thyristor maximum	degree of pollution	3, acc. to IEC 60947-4-2
surge voltage resistance rated value 6 kW warding remissible voltage for safe isolation 6 kW w between main and surliary circuit 500 W shock resistance 15 g/11 ms, from 12 g/11 ms with potential contact lifting wibration resistance 15 mm to 6 Hz; 2g to 500 Hz utilization category according to IEC 60947-42 AC-58a Substance Prohibitance (Date) 9023/2019 ** ramp-up (soft starting) Yes ** ramp-down (soft stop) Yes ** adjustable current limitation Yes ** pump ramp down Yes ** evaluation of themister motor protection Yes ** evaluation of themister motor protection Yes, Full motor protection (thermistor motor protection and electronic motor everload protection) ** evaluation of themister motor protection Yes, Full motor protection (thermistor motor protection and electronic motor everload protection) ** evaluation of themister motor protection Yes, Full motor protection (thermistor motor protection and electronic motor everload protection) ** evaluation of themister motor protection Yes, Full motor protection (thermistor motor protection and electronic motor everlead protection) ** evaluation of themister motor protection Yes, Full motor protectio	impulse voltage rated value	6 kV
surge voltage resistance rated value maximum permissible voltage for safe isolation	blocking voltage of the thyristor maximum	1 600 V
without permissible voltage for safe isolation between main and auxiliary circuit block resistance vibration vibration vibration versistance vibration vibration vibration vibration vibration resistance vibration of thermistor motor protection vibration versistance vibration vibration vibration vibration versistance protection (thermistor motor protection and electronic motor oversioad protection) vibration versistance vibration vibration versistance protection (thermistor motor protection and electronic motor oversioad protection) vibration versistance vibration of thermistor motor protection vibration versistance vibration versistance vibration of thermistor motor protection vibration versistance vibratio	service factor	1
	surge voltage resistance rated value	6 kV
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 69147-4-2 AC-53a reference code according to IEC 81346-2 Q Substance Prohibitance (Pate) 90/23/2019 product function Yes • ramp-down (soft storting) 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; Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes; Fup A PTC or Klixon / Thermodick • auto-RESET Yes • manual RESET Yes • remote reset Yes; By turning off the control supply voltage • remote reset Yes; Unity in conjunction with special accessories • rated value display Yes; Only in conjunction with special accessories • R	maximum permissible voltage for safe isolation	
vibration resistance 15 mm to 6 Hz; 2g to 500 Hz utilization category according to IEC 60947-4-2 reference code according to IEC 61346-2 Q AC-53a Substance Prohibitance (Date) 9923/2019 product function Framp-down (soft stop) Yes • Soft Torque Yes • Soft Torque Yes • adjustable current limitation Yes • pump ramp down Yes • intrinsic device protection Yes • motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • availuation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • availuation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • availuation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • availuation of thermistor motor protection Yes; Dys burning off the control supply voitage • cremote reset Yes; Dys burning off the control supply voitage • communication function Yes Y	 between main and auxiliary circuit 	600 V
utilization category according to IEC 60947-4-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) product function • ramp-up (soft starting) • samp-down (soft stop) • Soft Torque • yes • Soft Torque • yes • John Torque • pump ramp down • intrinsic device protection • evaluation of thermistor motor protection • workload protection • evaluation of thermistor motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection • yes; Torly in conjunction with special accessories • valuation of the protection • yes; Only in conjunction with special accessories • yes; Only in conjunction w	shock resistance	15 g / 11 ms, from 12 g / 11 ms with potential contact lifting
reference code according to IEC 81346-2 Substance Prohibitance (Date) • ramp-toy (soft starting) • ramp-down (soft stop) • samp-down (soft stop) • soft Torque • adjustable current limitation • pump ramp down • intrinsic device protection • nutor overload protection • nutor overload protection • evaluation of thermistor motor protection • auto-RESET • manual RESET • remote reset • communication function • operating measured value display • resort oppose • via software configurable • via software configurable • via software configurable • voltage ramp • torque control • at 40 °C rated value • at 60 °C rated value • at 230 V at 40 °C rated value • calvance of the operating requency relative positive tolerance of the operating frequency relative negative tolerance of the operating frequency at retary coding switch on switch position 2 relative negative	vibration resistance	15 mm to 6 Hz; 2g to 500 Hz
Substance Prohibitance (Date) product function * (amp-up (soft starting) * (amp-down (soft stop) * (soft Torque * adjustable current limitation * pump ramp down * inthrissed device protection * motor overload protection * motor overload protection * evaluation of thermistor motor protection * auto-RESET * (manual RESET * (memola reset) * (memola reset)	utilization category according to IEC 60947-4-2	AC-53a
product function • ramp-up (soft starting) • ramp-down (soft stop) • Soft Torque • adjustable current limitation • pump ramp down • Intrinsic device protection • motor overload protection • evaluation of thermistor motor protection • analual RESET • manual RESET • yes • communication function • continuous function • continu	reference code according to IEC 81346-2	Q
• ramp-up (soft starting) • ramp-down (soft stop) • Soft Torque • adjustable current limitation • pump ramp down • motor overload protection • motor overload protection • evaluation of thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection and electronic motor overload protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection and electronic motor overload protection (thermistor motor protection (thermistor motor overload protection) and electronic motor overload protection (themistor motor overload protection (themistor decircle) • rated value • at 40 °C rated value • at 200 °C rated valu	Substance Prohibitance (Date)	09/23/2019
Famp-down (soft stop) Soft Torque Adjustable current limitation Pump ramp down Intrinsic device protection Pes Indin overload protection Pes Per overload protection Pes Per overload protection and electronic motor overload protection and electronic motor overload protection and electronic motor overload protection Pes Per overload protection Pes Per overload protection Pes Per overload protection and electronic motor overload protection and electronic well and electronic we	product function	
Famp-down (soft stop) Soft Torque Adjustable current limitation Pump ramp down Intrinsic device protection Pes Indin overload protection Pes Per overload protection Pes Per overload protection and electronic motor overload protection and electronic motor overload protection and electronic motor overload protection Pes Per overload protection Pes Per overload protection Pes Per overload protection and electronic motor overload protection and electronic well and electronic we	• ramp-up (soft starting)	Yes
Soft Torque adjustable current limitation pump ramp down printinsic device protection printinsic device protection protor overload protection ves: Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of thermistor motor protection protor verload protection ves: Type A PTC or Klixon / Thermoclick ves: Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of thermistor motor protection ves: Type A PTC or Klixon / Thermoclick ves: Type A PTC or Klixon / Thermoc		Yes
adjustable current limitation pump ramp down pramp down printings device protection protor overload protection evaluation of thermistor motor protection protor overload protection (thermistor motor protection and electronic motor overload protection) evaluation of thermistor motor protection protor overload protection ves; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of thermistor motor protection protor overload protor overload protection protor overload pr		Yes
• Intrinsic device protection • motor overload protection • motor overload protection • resistance of the mistor motor protection • evaluation of thermistor motor protection • auto-RESET • manual RESET • manual RESET • remote reset • communication function • operating measured value display • error logbook • via software parameterizable • via software parameterizable • via software parameterizable • voltage ramp • voltage ramp • voltage ramp • torque control • analog output • voltage ramp • torque control • analog output • voltage ramp • torque control • analog output • or Trated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at 230 V at 40 °C rated value • at 40 °C rated v	adjustable current limitation	Yes
intrinsic device protection motor overload protection motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection auto-RESET emanual RESET emanual RESET rese remote reset communication function eperating measured value display error logbook via software parameterizable via software configurable evaluation voltage ramp voltage rated value e at 40 °C rated value e at 60 °C rated value e at 230 V at 40 °C rated value e at 400 °C rated value	pump ramp down	Yes
motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection euato-RESET manual RESET *manual RESET *remote reset *cember reset *communication function *eyes; By turning off the control supply voltage *communication function *ves *communication function *ves *communication function *ves *ves *ves; Only in conjunction with special accessories *via software parameterizable *via software parameterizable *via software configurable *ves *PROFlenergy *voltage ramp *voltage ra		Yes
auto-RESET manual RESET remote reset remote reset communication function operating measured value display error logbook via software parameterizable via software configurable voltage ramp torque control analog output Power Electronics operating voltage at 60 °C rated value at 60 °C rated value operating voltage relative positive tolerance of the operating voltage relative positive tolerance of the operating frequency relative negative tolerance of the operating frequency relative relative tolerance of the operating frequency relative positive tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3	motor overload protection	
auto-RESET manual RESET remote reset remote reset communication function operating measured value display error logbook via software parameterizable via software configurable voltage ramp torque control analog output Power Electronics operating voltage at 60 °C rated value at 60 °C rated value operating voltage relative positive tolerance of the operating voltage relative positive tolerance of the operating frequency relative negative tolerance of the operating frequency relative relative tolerance of the operating frequency relative positive tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3	 evaluation of thermistor motor protection 	
remote reset	auto-RESET	Yes
communication function operating measured value display error logbook via software parameterizable via software parameterizable via software configurable voltage ramp Ves ves; in connection with the PROFINET Standard communication module voltage ramp Ves torque control analog output No No analog output Power Electronics Operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value are davalue orated value erated value erated value erated value erated value operating voltage erated value relative positive tolerance of the operating voltage at 230 V at 40 °C rated value at 230 V at 40 °C rated value at 230 V at 40 °C rated value operating frequency 1 rated value operating frequency 1 rated value operating frequency 2 rated value eat 400 V at 40 °C rated value operating frequency 1 rated value operating frequency 2 rated value operating frequency 2 rated value operating frequency 2 rated value at 700 W relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A	manual RESET	Yes
operating measured value display error logbook via software parameterizable via software configurable via software configurable via software configurable via software configurable ves in connection with the PROFINET Standard communication module voltage ramp voltage ramp voltage ramp torque control analog output No analog output Power Electronics Operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value are do value verated val	remote reset	Yes; By turning off the control supply voltage
 error logbook via software parameterizable via software configurable PROFlenergy PROFlenergy Ves; in connection with the PROFINET Standard communication module voltage ramp torque control analog output No analog output No at 40 °C rated value at 50 °C rated value at 60 °C rated value at 50 °C rated value at 50 °C rated value at 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage at 230 V at 40 °C rated value at 200 kW Operating frequency 1 rated value at 40 °C rated value 60 Hz relative negative tolerance of the operating frequency at 40 °C rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative negative tolerance of the operating frequency at 70 % relative negative tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	communication function	Yes
 error logbook via software parameterizable via software configurable PROFlenergy PROFlenergy Ves; in connection with the PROFINET Standard communication module voltage ramp torque control analog output No analog output No at 40 °C rated value at 50 °C rated value at 60 °C rated value at 50 °C rated value at 50 °C rated value at 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage at 230 V at 40 °C rated value at 200 kW Operating frequency 1 rated value at 40 °C rated value 60 Hz relative negative tolerance of the operating frequency at 40 °C rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative negative tolerance of the operating frequency at 70 % relative negative tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	operating measured value display	Yes; Only in conjunction with special accessories
via software configurable PROFlenergy Yes; in connection with the PROFINET Standard communication module voltage ramp • torque control • analog output No Power Electronics operational current • at 40 °C rated value • at 60 °C rated value • at 230 °C rated value • relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage • at 230 °C rated value • at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value Go Hz relative negative tolerance of the operating frequency relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 • at rotary coding switch on switch position 3 • at rotary coding switch on switch position 3		Yes; Only in conjunction with special accessories
PROFlenergy Yes; in connection with the PROFINET Standard communication module Yes torque control analog output No Power Electronics Operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value 300 A Operating voltage a rated value 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage at 230 V at 40 °C rated value 110 kW at 400 °C rated value 200 kW Operating frequency 1 rated value 200 kW Operating frequency 2 rated value 400 V at 40 °C rated value 50 Hz Operating frequency 2 rated value 40 V at 40 °C rated value 50 Hz Operating frequency 2 rated value 40 V at 40 °C rated value 50 Hz Operating frequency 2 rated value 41 V W 42 V V V V V V V V V V V V V V V V V V V	 via software parameterizable 	No
module • voltage ramp • torque control • analog output Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at 40 °C rated value • at 40 °C rated value • at 60 °C rated value • at 60 °C rated value • relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage 10 % operating power for 3-phase motors • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value of 0 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	 via software configurable 	Yes
 torque control analog output No Power Electronics operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value operating voltage rated value relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage at 230 V at 40 °C rated value operating power for 3-phase motors at 230 V at 40 °C rated value operating frequency 1 rated value operating frequency 1 rated value operating frequency 2 rated value operative negative tolerance of the operating frequency relative negative tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 at rotary coding switch on switch position 3 	PROFlenergy	and a short a
analog output No Power Electronics operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value at 60 °C rated value operating voltage erated value relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage operating power for 3-phase motors eat 230 V at 40 °C rated value at 400 V at 40 °C rated value operating frequency 1 rated value operating frequency 2 rated value operating frequency 3 rated value operating frequency 4 rated value operating frequency 50 Hz operating frequency 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current e at rotary coding switch on switch position 1 e at rotary coding switch on switch position 2 e at rotary coding switch on switch position 3 188 A	voltage ramp	Yes
power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value operating voltage • rated value relative negative tolerance of the operating voltage operating power for 3-phase motors • at 230 V at 40 °C rated value operating frequency 1 rated value Operating frequency 2 rated value folo Hz relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 • at rotary coding switch on switch position 3 • at rotary coding switch on switch position 3	 torque control 	No
operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • rated value • rated value • rated value • relative negative tolerance of the operating voltage operating power for 3-phase motors • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value operating requency 2 rated value operating frequency 3 rated value operating frequency 4 rated value operating frequency 50 Hz Operating frequency 60 Hz relative negative tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	analog output	No
 at 40 °C rated value at 50 °C rated value 328 A at 60 °C rated value 300 A Operating voltage rated value 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage operating power for 3-phase motors at 230 V at 40 °C rated value at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	Power Electronics	
 at 50 °C rated value at 60 °C rated value 300 A Operating voltage rated value 200 480 V relative negative tolerance of the operating voltage -15 % relative positive tolerance of the operating voltage 0 % Operating power for 3-phase motors at 230 V at 40 °C rated value at 400 V at 40 °C rated value 50 Hz 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 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	operational current	
 at 60 °C rated value operating voltage rated value 200 480 V relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage 10 % operating power for 3-phase motors at 230 V at 40 °C rated value at 400 V at 40 °C rated value 50 Hz Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	• at 40 °C rated value	370 A
operating voltage	• at 50 °C rated value	328 A
e rated value relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage operating power for 3-phase motors e at 230 V at 40 °C rated value ot 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value ot 200 kW Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current e at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 e at rotary coding switch on switch position 3 188 A	• at 60 °C rated value	300 A
relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage operating power for 3-phase motors • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value foo Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	operating voltage	
relative positive tolerance of the operating voltage operating power for 3-phase motors • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value felative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	rated value	200 480 V
operating power for 3-phase motors • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value 200 kW Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	relative negative tolerance of the operating voltage	-15 %
 at 230 V at 40 °C rated value at 400 V at 40 °C rated value 200 kW Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	relative positive tolerance of the operating voltage	10 %
 at 400 V at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	operating power for 3-phase motors	
Operating frequency 1 rated value Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	 at 230 V at 40 °C rated value 	110 kW
Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 188 A	at 400 V at 40 °C rated value	200 kW
relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 160 A • at rotary coding switch on switch position 2 174 A • at rotary coding switch on switch position 3 188 A	Operating frequency 1 rated value	50 Hz
relative positive tolerance of the operating frequency adjustable motor current • at rotary coding switch on switch position 1 • at rotary coding switch on switch position 2 • at rotary coding switch on switch position 3 • at rotary coding switch on switch position 3	Operating frequency 2 rated value	60 Hz
 adjustable motor current at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 188 A 	relative negative tolerance of the operating frequency	-10 %
 at rotary coding switch on switch position 1 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 160 A 174 A 188 A 	relative positive tolerance of the operating frequency	10 %
 at rotary coding switch on switch position 2 at rotary coding switch on switch position 3 174 A 188 A 	adjustable motor current	
• at rotary coding switch on switch position 3 188 A	 at rotary coding switch on switch position 1 	160 A
	 at rotary coding switch on switch position 2 	174 A
• at rotary coding switch on switch position 4 202 A	 at rotary coding switch on switch position 3 	188 A
	 at rotary coding switch on switch position 4 	202 A

 at rotary coding switch on switch position 5 	216 A
 at rotary coding switch on switch position 6 	230 A
at rotary coding switch on switch position 7	244 A
at rotary coding switch on switch position 8	258 A
at rotary coding switch on switch position 9	272 A
 at rotary coding switch on switch position 10 	286 A
 at rotary coding switch on switch position 11 	300 A
 at rotary coding switch on switch position 12 	314 A
 at rotary coding switch on switch position 13 	328 A
 at rotary coding switch on switch position 14 	342 A
 at rotary coding switch on switch position 15 	356 A
 at rotary coding switch on switch position 16 	370 A
• minimum	160 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	36 W
at 50 °C after startup	29 W
at 60 °C after startup	24 W
	24 VV
power loss [W] at AC at current limitation 350 %	2.726.14
• at 40 °C during startup	3 726 W
 at 50 °C during startup 	3 124 W
at 60 °C during startup	2 748 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
control supply voltage at AC	
● at 50 Hz	110 250 V
● at 60 Hz	110 250 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-15 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	10 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-15 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	10 %
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply current in standby mode rated value	30 mA
holding current in bypass operation rated value	105 mA
locked-rotor current at close of bypass contact maximum	2.2 A
inrush current peak at application of control supply voltage maximum	12.2 A
duration of inrush current peak at application of control supply voltage	2.2 ms
design of the evenueltage protection	
design of the overvoltage protection	Varistor
design of the overvoltage protection design of short-circuit protection for control circuit	Varistor 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
	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
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
design of short-circuit protection for control circuit Inputs/ Outputs	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 number of digital outputs	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 number of digital outputs not parameterizable	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 1 3 2
Inputs/ Outputs number of digital inputs number of digital outputs not parameterizable digital output version	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 1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO)
Inputs/ Outputs number of digital inputs number of digital outputs not parameterizable digital output version number of analog outputs	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 1 3 2
Inputs/ Outputs number of digital inputs number of digital outputs • not parameterizable digital output version number of analog outputs switching capacity current of the relay outputs	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 1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO) 0
Inputs/ Outputs number of digital inputs number of digital outputs ont parameterizable digital output version number of analog outputs	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 1 3 2 2 normally-open contacts (NO) / 1 changeover contact (CO)

nstallation/ mounting/ dimensions	with vertical mounting ourface 1/00° retable with water and
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	230 mm
width	160 mm
depth	282 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	7.3 kg
onnections/ Terminals	
ype of electrical connection	
for main current circuit	busbar connection
for control circuit	spring-loaded terminals
vidth 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 mm² maximum	150 m
• with conductor cross-section = 2.5 mm² maximum	250 m
ype of connectable conductor cross-sections	
for main contacts for box terminal using the front	95 300 mm²
clamping point solid	TO 040 2
 for main contacts for box terminal using the front clamping point finely stranded with core end processing 	70 240 mm²
 for main contacts for box terminal using the front clamping point finely stranded without core end processing 	70 240 mm²
for main contacts for box terminal using the front clamping point stranded	95 300 mm²
 at AWG cables for main contacts for box terminal using the front clamping point 	3/0 600 kcmil
 for main contacts for box terminal using the back clamping point solid 	120 240 mm²
at AWG cables for main contacts for box terminal using the back clamping point	250 500 kcmil
for main contacts for box terminal using both clamping points solid	min. 2x 70 mm², max. 2x 240 mm²
 for main contacts for box terminal using both clamping points finely stranded with core end processing 	min. 2x 50 mm², max. 2x 185 mm²
 for main contacts for box terminal using both clamping points finely stranded without core end processing 	min. 2x 50 mm², max. 2x 185 mm²
 for main contacts for box terminal using both clamping points stranded 	min. 2x 70 mm², max. 2x 240 mm²
 for main contacts for box terminal using the back clamping point finely stranded with core end processing 	120 185 mm²
 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
ype of connectable conductor cross-sections	
 at 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
ype of connectable conductor cross-sections	
 for control circuit solid 	2x (0.25 1.5 mm²)
 for control circuit finely stranded with core end 	2x (0.25 1.5 mm²)

nua accesina	
processing	0:: (04 40)
at AWG cables for control circuit solid at AWG cables for control circuit finally atranded with	2x (24 16)
 at 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
tightening torque	1 000 111
for main contacts with screw-type terminals	14 24 N·m
for auxiliary and control contacts with screw-type	0.8 1.2 N·m
terminals	0.0 1.2 N III
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	
Ambient 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 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
	acc. to IEO 00347-4-2. Olass A
Communication/ Protocol	
communication module is supported	V
PROFINET standard Fth and a till D	Yes
• EtherNet/IP	Yes
Modbus RTU Madbus TOP	Yes
Modbus TCP PROFIDED	Yes
PROFIBUS	Yes
UL/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. 1200 A; Iq = 18 kA
— usable for High Faults up to 575/600 V	Type: Class L, max. 1200 A; Iq = 100 kA
according to UL	Type. Class L, Illax. 1200 A, Iq - 100 KA
operating power [hp] for 3-phase motors	
• at 200/208 V at 50 °C rated value	100 hp
• at 220/230 V at 50 °C rated value	125 hp
• at 460/480 V at 50 °C rated value	250 hp
Safety related data	
protection class IP on the front according to IEC	IP00; IP20 with cover
60529	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
ATEX	
certificate of suitability	
• ATEX	Yes
• IECEx	Yes
hardware fault tolerance according to IEC 61508	0
relating to ATEX	
PFDavg with low demand rate according to IEC 61508	0.09
relating to ATEX PEHD with high demand rate according to EN 62061	9E-6 1/h
PFHD with high demand rate according to EN 62061 relating to ATEX	9E-0 1/II
Safety Integrity Level (SIL) according to IEC 61508	SIL1
relating to ATEX	

Certificates/ approvals

General Product Approval

For use in hazardous locations



Confirmation









For use in hazardous locations Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







other

Confirmation

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5075-2TB14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5075-2TB14

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

 $\underline{https://support.industry.siemens.com/cs/ww/en/ps/3RW5075-2TB14}$

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5075-2TB14&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

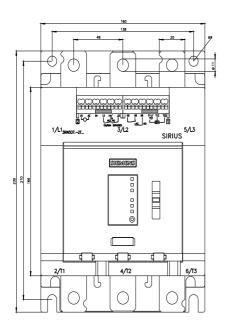
https://support.industry.siemens.com/cs/ww/en/ps/3RW5075-2TB14/char

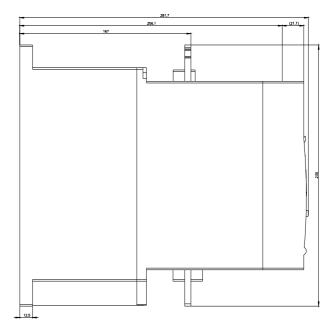
Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5075-2TB14&objecttype=14&gridview=view1

Simulation Tool for Soft Starters (STS)

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





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