SIEMENS



Data sheet 3RW5527-1HA06



SIRIUS soft starter 200-690 V 93 A, 24 V AC/DC Screw terminals

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW55
manufacturer's article number	
 of high feature HMI module usable 	3RW5980-0HF00
 of communication module PROFINET standard usable 	3RW5980-0CS00
 of communication module PROFINET high-feature usable 	3RW5950-0CH00
 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 	3VA2216-7MN32-0AA0; Type of coordination 1, Iq = 15 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2216-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 15 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3VA2220-7MN32-0AA0; Type of coordination 1, lq = 10 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3136-6; Type of coordination 1, Iq = 65 kA
 of the gG fuse usable at inside-delta circuit up to 500 V 	3NA3136-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1224-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3227: Type of coordination 2, Iq = 65 kA

General technical data	
starting voltage [%]	20 100 %
stopping voltage [%]	50 %; non-adjustable
start-up ramp time of soft starter	0 360 s
ramp-down time of soft starter	0 360 s
start torque [%]	10 100 %
stopping torque [%]	10 100 %
torque limitation [%]	20 200 %
current limiting value [%] adjustable	125 800 %
breakaway voltage [%] adjustable	40 100 %
breakaway time adjustable	0 2 s
number of parameter sets	3
accuracy class according to IEC 61557-12	5 %
certificate of suitability	

CE marking U approval CSA approval Pvs CSA approval CSA		
# HMH-High Feature Yes	CE marking	Yes
# HMH-High Feature Yes	 UL approval 	Yes
# HMH-High Feature Yes	CSA approval	Yes
is supported HMLHigh Feature Yes number of controlled phases 3 trip class CLAS 10A / 10E (default) / 20E / 30E; aco. to IEC 60947-4-2 current unbalance limiting value [½] 10 60 % ground-fault monitoring limiting value [½] 10 95 % buffering time in the event of power failure 6 or main current circuit 100 ms if or control circuit 100 ms if or con	product component	
product feature integrated bypass contact system number of controlled phases 1 1 current unbalance limiting value [½] 10 80 % 10 80 % 10 80 % 10 ms 10	 HMI-High Feature 	Yes
Impulse 3	is supported HMI-High Feature	Yes
trip class current unbalance limiting value [%] ground-fault monitoring limiting value [%] buffering time in the event of power failure for main current circuit for main current current for main	product feature integrated bypass contact system	Yes
current unbalance limiting value [%] pround-fault monitoring limiting value [%] of main current circuit for main and surface for pollution for service factor for main current circuit for main and audilary circuit for pollution for service factor for main and audilary circuit for pollution for seistance for self service for self solution for self-time for for fath solution for for for for for self-time for for self-time for	number of controlled phases	3
ground-fault monitoring limiting value [%] buffering time in the event of power failure • for main current circuit • for control circuit • for main current circuit • for control circuit • for control circuit • for control circuit • for main current circuit • for main current circuit • for control circuit • for c	trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2
buffering time in the event of power failure • for main current circuit • for main c	current unbalance limiting value [%]	10 60 %
for main current circuit 100 ms	ground-fault monitoring limiting value [%]	10 95 %
of control circuit	buffering time in the event of power failure	
Idle time adjustable 0 255 s	 for main current circuit 	100 ms
Insulation voltage rated value degree of pollution 3, acc. to IEC 60947-4-2 impulse voltage rated value Bicking voltage of the thyristor maximum 1800 V service factor 1.15 surge voltage resistance rated value Bicking voltage resistance voltage for safe isolation between main and auxiliary circuit Bio (90 V; does not apply for thermistor connection shock resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 g / 11 ms, from 6 g / 11 ms with potential l	for control circuit	100 ms
degree of pollution 3, acc. to IEC 60947-4-2	idle time adjustable	0 255 s
Impulse voltage rated value Biocking voltage of the thyristor maximum 1800 V	insulation voltage rated value	690 V
blocking voltage of the thyristor maximum service factor surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit shock resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance recovery time after overload trip adjustable encovery time after overload trip adjustable dutilization category according to IEC 60947-4-2 AC 53a reference code according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) product function • ramp-up (soft starting) • ramp-up (soft starting) • ramp-up (soft starting) • ramp-down (soft stop) • breakaway pulse • adjustable current limitation • creep speed in both directions of rotation • pump ramp down • Creep speed in both directions of rotation • pump ramp down • Creep speed in both directions of rotation • pump ramp down • Creep speed in both directions • Irace function • Infance function • Infance device protection • motor overfoad protection • motor overfoad protection • motor overfoad protection • motor overfoad protection • reside-delta circuit • vesculuation of thermistor motor protection • reside-delta circuit • vesculuation of thermistor motor protection • remote reset • communication function • yes • ceren tist • cernot reset • communication function • yes • vent list • error logbook • via software parameterizable • via software parameterizable • via software configurable • via software configurable • via software configurable • via software configurable • screw terminal • principle terminal for control circuit • removable terminal for control circuit • residuate terminal • removable terminal for control circuit • residuation modules • removable terminal for control circuit • residuation modules • removable terminal for control circuit • residuation modules	degree of pollution	3, acc. to IEC 60947-4-2
service factor surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit 690 V: does not apply for thermistor connection 690 V: does not apply for thermistor onbetwell 690 V: does not apply for thermistor onbetwell 690 V: does not apply for thermistor onbetwell filting 690 V: does not apply for thermistor connection 690 V: does not apply for thermistor onbetwell filting 790 V: does not apply for thermistor onbetwell filting 790 Ves 790 Ves 9 purp resident filting 9 purp reproduct function 9 purp ramp down 9 purp ramp	impulse voltage rated value	8 kV
surge voltage resistance rated value maximum permissible voltage for safe isolation	blocking voltage of the thyristor maximum	1 800 V
maximum permissible voltage for safe Isolation • between main and auxiliary circuit 690 V; does not apply for thermistor connection shock resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance 15 mm up to 6 Hz; 2 g up to 500 Hz recovery time after overload trip adjustable 60 1800 s dituitization category according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) roduct function • ramp-up (soft starting) • ramp-down (soft stop) • brackaway pulse • adjustable current limitation • creep speed in both directions of rotation • pmp ramp down • DC braking • motor heating • motor heating • slave pointer function • trace function • Intrinsic device protection • intrinsic device protection • motor overload protection • wesiluation of thermistor motor protection • revaluation of thermistor motor protection • sincide-delta circuit • auto-RESET • manual RESET • remote reset • communication function • yes • event list • error logbook • via software parameterizable • via software configurable • screw terminal • primave update • firmware update • firmware update • removable terminal for control circuit • firmware update • removable terminal for control circuit • Ves	service factor	1.15
between main and auxiliary circuit shock resistance	surge voltage resistance rated value	8 kV
Shock resistance 15 g / 11 ms, from 6 g / 11 ms with potential contact lifting	maximum permissible voltage for safe isolation	
vibration resistance 15 mm up to 6 Hz; 2 g up to 500 Hz recovery time after overload trip adjustable 60 1800 s vibilization 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 ** breakaway pulse Yes ** adjustable current limitation Yes ** creep speed in both directions of rotation Yes ** pump ramp down Yes ** DC braking Yes ** motor heating Yes ** slave pointer function Yes ** slave pointer function 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; Full motor protection (thermistor motor protection and electronic motor overload protection) ** evaluation of thermistor motor prot	 between main and auxiliary circuit 	690 V; does not apply for thermistor connection
recovery time after overload trip adjustable 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 • adjustable current limitation Yes • adjustable current limitation Yes • adjustable current limitation Yes • pump ramp down Yes • DC braking Yes • alous pointer function Yes • motor heating Yes • alove pointer function Yes • motor heating Yes • slave pointer function Yes • motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) • evaluation of thermistor motor protection Yes; Only up to 600 V operating voltage • auto-RESET Yes • communication function Yes • communic	shock resistance	15 g / 11 ms, from 6 g / 11 ms with potential contact lifting
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) • ramp-down (soft stop) • ramp down • pump ramp down • race function	vibration resistance	15 mm up to 6 Hz; 2 g up to 500 Hz
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 02/15/2018 product function Pres a ramp-up (soft starting) Yes b reakway pulse Yes a djustable current limitation Yes o creep speed in both directions of rotation Yes pump ramp down Yes DC braking Yes motor heating Yes slave pointer function Yes trace function Yes intrinsic device 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; 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; Full motor protection (thermistor motor protection and electronic motor overload protection) evaluation of thermistor motor protection Yes	recovery time after overload trip adjustable	60 1 800 s
Substance Prohibitance (Date) O2/15/2018	utilization category according to IEC 60947-4-2	AC 53a
ramp-up (soft starting) ramp-up (soft starting) ramp-up (soft starting) ramp-up (soft starting) ramp-down (soft stop) readway pulse readjustable current limitation recep speed in both directions of rotation recep speed speed in both directions of rotation recep speed	reference code according to IEC 81346-2	Q
e ramp-up (soft starting) e ramp-down (soft stop) breakaway pulse adjustable current limitation creep speed in both directions of rotation pump ramp down DC braking motor heating slave pointer function ves intrinsic device protection ves; Full motor protection (thermistor motor protection and electronic motor overload protection) e valuation of thermistor motor protection ves; Type A PTC or Klixon / Thermoclick inside-delta circuit ves communication function ves communication function operating measured value display event list error logbook via software parameterizable via software parameterizable error workload terminal PROFInergy efirmware update removable terminal for control circuit ves ves	Substance Prohibitance (Date)	02/15/2018
ramp-down (soft stop) breakaway pulse adjustable current limitation creep speed in both directions of rotation pump ramp down pump ramp down DC braking motor heating slave pointer function trace function trace function trace function intrinsic device protection motor overload protection motor overload protection wes; Type A PTC or Klixon / Thermoclick inside-delta circuit ves; Only up to 600 V operating voltage auto-RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software parameterizable screw terminal PROFlenergy firmware update removable terminal for control circuit res removable terminal for control circuit	product function	
 breakaway pulse adjustable current limitation creep speed in both directions of rotation pump ramp down DC braking motor heating stave pointer function trace function trace function trace function trace function trace function tres intrinsic device protection evaluation of thermistor motor protection evaluation of thermistor motor protection evaluation of thermistor motor protection tinside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list event list error logbook via software parameterizable via software configurable ves screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes 	ramp-up (soft starting)	Yes
 adjustable current limitation creep speed in both directions of rotation pump ramp down DC braking motor heating slave pointer function trace function intrinsic device protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function yes evernor ligade yes evernor ligade yes yes perating measured value display evernor logbook via software parameterizable via software parameterizable screw terminal spring-loaded terminal firmware update removo heating yes removable terminal for control circuit Yes removable terminal for control circuit Yes 	ramp-down (soft stop)	Yes
creep speed in both directions of rotation pump ramp down Pes DC braking motor heating slave pointer function trace function trace function intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET manual RESET remote reset communication function operating measured value display event list event list event list via software parameterizable via software configurable spring-loaded terminal PROFInerry firmware update removable terminal for control circuit yes removable terminal for control circuit yes removable terminal for control circuit yes removable terminal for control circuit yes yes yes yes yes yes yes removable terminal for control circuit yes	breakaway pulse	Yes
 pump ramp down DC braking motor heating slave pointer function trace function intrinsic device protection motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list event list evror logbook via software parameterizable via software configurable via software configurable spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes removable terminal for control circuit Yes 	 adjustable current limitation 	Yes
 DC braking motor heating slave pointer function trace function tres motor overload protection tres tryes try	 creep speed in both directions of rotation 	Yes
 motor heating slave pointer function trace function intrinsic device protection motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list event list error logbook via software parameterizable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes removable terminal for control circuit Yes 	 pump ramp down 	Yes
 slave pointer function trace function trace function intrinsic device protection motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection inside-delta circuit inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy removable terminal for control circuit Yes removable terminal for control circuit 	DC braking	Yes
 trace function intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable screw terminal spring-loaded terminal PROFlenergy intrinside-delta circuit Yes Yes; Type A PTC or Klixon / Thermoclick Yes; Only up to 600 V operating voltage Yes yes es emanual RESET Yes communication function Yes event list Yes event list Yes error logbook Yes via software parameterizable Yes screw terminal No PROFlenergy firmware update removable terminal for control circuit Yes 	•	Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit Yes; Only up to 600 V operating voltage auto-RESET remote reset remote reset remote reset communication function yes operating measured value display event list reror logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes 	 slave pointer function 	Yes
 motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable screw terminal spring-loaded terminal PROFlenergy firmware update remotor protection (thermistor motor protection and electronic motor overload protection) Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) Yes; Type A PTC or Klixon / Thermoclick Yes; Only up to 600 V operating voltage Yes 	trace function	Yes
motor overload protection) e evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy motor overload protection) Yes; Type A PTC or Klixon / Thermoclick Yes; Only up to 600 V operating voltage Yes Yes Yes Yes Yes Yes Yes Y	 intrinsic device protection 	Yes
 inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes yes removable terminal for control circuit Yes yes 	 motor overload protection 	
 auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes yes removable terminal for control circuit 	 evaluation of thermistor motor protection 	
 manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes Yes Yes To connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes 	• inside-delta circuit	Yes; Only up to 600 V operating voltage
 remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes 	• auto-RESET	Yes
 communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes 	manual RESET	Yes
 operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes 	remote reset	Yes
 event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes Yes Yes Yes Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes 	 communication function 	Yes
 error logbook via software parameterizable via software configurable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes yes Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes 	 operating measured value display 	Yes
 via software parameterizable via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes Yes yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes 	• event list	Yes
 via software configurable screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes Yes 	error logbook	Yes
 screw terminal spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit Yes Yes in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes Yes 	 via software parameterizable 	Yes
 spring-loaded terminal PROFlenergy firmware update removable terminal for control circuit No Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules Yes 	 via software configurable 	Yes
 PROFlenergy Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules firmware update removable terminal for control circuit Yes Yes	• screw terminal	Yes
Feature communication modules • firmware update • removable terminal for control circuit Yes	 spring-loaded terminal 	No
• removable terminal for control circuit Yes	PROFlenergy	
• removable terminal for control circuit Yes	• firmware update	Yes
• voltage ramp Yes		Yes
	voltage ramp	Yes

torque control	Yes Yes Yes; 4 20 mA (de Pr 10 Valentudong
 combined braking 	Yes
analog output	Yes; 4 20 mA (de) 16 V
 programmable control inputs/outputs 	Yes
 condition monitoring 	Yes
 automatic parameterisation 	Yes
 application wizards 	Yes
 alternative run-down 	Yes
 emergency operation mode 	Yes
reversing operation	Yes
 soft starting at heavy starting conditions 	Yes
Power Electronics	
operational current	
 at 40 °C rated value 	93 A
 at 40 °C rated value minimum 	19 A
 at 50 °C rated value 	82.5 A
at 60 °C rated value	75.5 A
operational current at inside-delta circuit	
• at 40 °C rated value	161 A
 at 50 °C rated value 	143 A
at 60 °C rated value	131 A
operating voltage	
rated value	200 690 V
 at inside-delta circuit rated value 	200 600 V
relative negative tolerance of the operating voltage	-15 %
relative positive tolerance of the operating voltage	10 %
relative negative tolerance of the operating voltage at inside-delta circuit	-15 %
relative positive tolerance of the operating voltage at	10 %
inside-delta circuit	10 /0
operating power for 3-phase motors	
 at 230 V at 40 °C rated value 	22 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	45 kW
 at 400 V at 40 °C rated value 	45 kW
 at 400 V at inside-delta circuit at 40 °C rated value 	90 kW
 at 500 V at 40 °C rated value 	55 kW
 at 500 V at inside-delta circuit at 40 °C rated value 	110 kW
 at 690 V at 40 °C rated value 	90 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 %
minimum load [%]	10 %; Relative to set le
power loss [W] for rated value of the current at AC	
 at 40 °C after startup 	28 W
 at 50 °C after startup 	25 W
• at 60 °C after startup	23 W
power loss [W] at AC at current limitation 350 %	
 at 40 °C during startup 	1 258 W
 at 50 °C during startup 	1 065 W
at 60 °C during startup	948 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	Z+ V
voltage at AC at 50 Hz	-20 %

relative negative tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz 20 %	na
relative positive tolerance of the control supply	
VOILAGE AL AO AL OU 112	ıng
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	
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 440 mA	
holding current in bypass operation rated value 870 mA	
locked-rotor current at close of bypass contact maximum 6.3 A	
inrush current peak at application of control supply voltage maximum 7.5 A	
duration of inrush current peak at application of control supply voltage	
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 mir circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 3 not part of scope of supply	
Inputs/ Outputs	
number of digital inputs 4	
• parameterizable 4	
• number of digital outputs 4	
• number of digital outputs parameterizable 3	
• number of digital outputs not parameterizable 1	
digital output version 3 normally-open contacts (NO) / 1 changeover contact (CO)	
number of analog outputs 1	
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 Vertical (can be rotated +/- 90° and tilted forward or backward +/-	/- 22 5°)
fastening method screw fixing	22.5)
height 306 mm	
width 185 mm	
depth 203 mm	
required spacing with side-by-side mounting	
• forwards 10 mm	
backwards 0 mm	
• upwards 100 mm	
• downwards 75 mm	
• at the side 5 mm	
weight without packaging 7.15 kg	
Connections/ Terminals	
type of electrical connection • for main current circuit box terminal	
• for control circuit screw-type terminals	
width of connection bar maximum 25 mm	
width of connection bar maximum wire length for thermistor connection	
with conductor cross-section = 0.5 mm² maximum 50 m	
₩ WILL COTTUDE CLOSS-SECTION - C.S THILL HIGKITION SO III	
• with conductor cross section = 1.5 mm² maximum 450 m	
with conductor cross-section = 1.5 mm² maximum 150 m 250 m	
 with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections 	

clamping point solid	\diantudana
 for main contacts for box terminal using the front clamping point finely stranded with core end processing 	1x (2.5 50 mm²) dientudong
 for main contacts for box terminal using the front clamping point stranded 	1x (10 70 mm²)
 at AWG cables for main contacts for box terminal using the front clamping point 	1x (10 2/0)
 for main contacts for box terminal using the back clamping point solid 	1x (2.5 16 mm²)
 at AWG cables for main contacts for box terminal using the back clamping point 	1x (10 2/0)
 for main contacts for box terminal using both clamping points solid 	2x (2.5 16 mm²)
 for main contacts for box terminal using both clamping points finely stranded with core end processing 	2x (2.5 35 mm²)
 for main contacts for box terminal using both clamping points stranded 	2x (6 16 mm²), 2x (10 50 mm²)
 for main contacts for box terminal using the back clamping point finely stranded with core end processing 	1x (2.5 50 mm²)
for main contacts for box terminal using the back clamping point stranded	1x (10 70 mm²)
type of connectable conductor cross-sections	
for control circuit solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
 for control circuit finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
at AWG cables for control circuit solid	1x (20 12), 2x (20 14)
wire length	
 between soft starter and motor maximum 	800 m
at the digital inputs at DC maximum	1 000 m
tightening torque	
 for main contacts with screw-type terminals 	4.5 6 N·m
 for auxiliary and control contacts with screw-type terminals 	0.8 1.2 N·m
tightening torque [lbf·in]	
 for main contacts with screw-type terminals 	40 53 lbf·in
 for auxiliary and control contacts with screw-type terminals 	7 10.3 lbf·in
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m; Derating as of 1000 m, see catalog
ambient temperature	
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
during storage and transport	-40 +80 °C
environmental category	
 during operation according to IEC 60721 	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
 during storage according to IEC 60721 	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
during transport according to IEC 60721	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
EMC emitted interference	acc. to IEC 60947-4-2: Class A
Communication/ Protocol	
communication module is supported	Voo
PROFINET standard PROFINET high feature.	Yes
PROFINET high-feature SthorNot/IP	Yes
EtherNet/IP Modbus RTU	Yes Yes
Modbus RTU Modbus TCP	Yes
PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
of circuit breaker	

 usable for Standard Faults at 460/480 V according to UL 	Siemens type: 3VA
 — usable for High Faults at 460/480 V according to UL 	Siemens type: 3VA
 usable for Standard Faults at 460/480 V at inside-delta circuit according to UL 	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
 usable for High Faults at 460/480 V at insidedelta circuit according to UL 	Siemens type: 3VA51, max. 125 A; Iq max = 65 kA
 usable for Standard Faults at 575/600 V according to UL 	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
 usable for High Faults at 575/600 V at inside- delta circuit according to UL 	Siemens type: 3VA51, max. 125 A; Iq max = 65 kA
 usable for Standard Faults at 575/600 V at inside-delta circuit according to UL 	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
of the fuse	
 usable for Standard Faults up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 300 A; Iq = 10 kA
 usable for High Faults up to 575/600 V according to UL 	Type: Class J / L, max. 250 A; Iq = 100 kA
 usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 300 A; Iq = 10 kA
— usable for High Faults at inside-delta circuit up to 575/600 V according to UL	Type: Class J / L, max. 250 A; Iq = 100 kA
operating power [hp] for 3-phase motors	
 at 200/208 V at 50 °C rated value 	25 hp
at 220/230 V at 50 °C rated value	30 hp
 at 460/480 V at 50 °C rated value 	60 hp
at 575/600 V at 50 °C rated value	75 hp
 at 200/208 V at inside-delta circuit at 50 °C rated value 	40 hp
 at 220/230 V at inside-delta circuit at 50 °C rated value 	50 hp
 at 460/480 V at inside-delta circuit at 50 °C rated value 	100 hp
at 575/600 V at inside-delta circuit at 50 °C rated value	125 hp
contact rating of auxiliary contacts according to UL	R300-B300
Safety related data	
protection class IP on the front according to IEC 60529	IP00; IP20 with cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
electromagnetic compatibility	acc. to IEC 60947-4-2
ATEX	
certificate of suitability	
ATEX	Yes
• IECEX	Yes
according to ATEX directive 2014/34/EU type of protection according to ATEX directive 2014/34/EU	BVS 18 ATEX F 003 X II (2)G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb], II (2)D [Ex tb Db] [Ex pxb Db], I (M2) [Ex db Mb]
hardware fault tolerance according to IEC 61508 relating to ATEX	0
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.008
PFHD with high demand rate according to EN 62061 relating to ATEX	5E-7 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 s
Certificates/ approvals	
General Product Approval	EMC
Constant Toddot Approval	Lino





Confirmation



For use in hazardous locations

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)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5527-1HA06

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5527-1HA06

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5527-1HA06

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5527-1HA06&lang=en

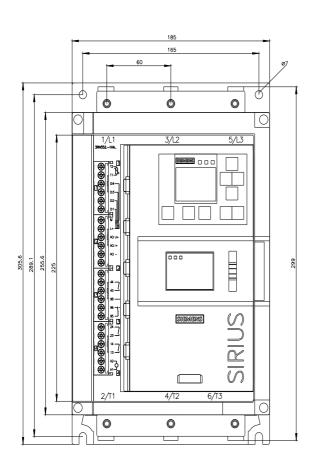
Characteristic: Tripping characteristics, I2t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RW5527-1HA06/char

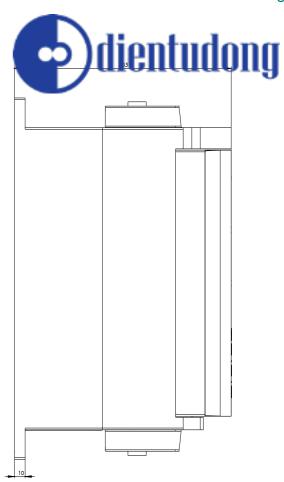
Characteristic: Installation altitude

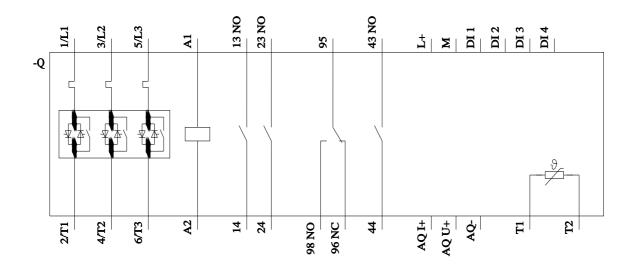
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5527-1HA06&objecttype=14&gridview=view1

Simulation Tool for Soft Starters (STS)

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







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