SIEMENS



Data sheet 3RW5547-2HF04



SIRIUS soft starter 200-480 V 470 A, 24 V AC/DC spring-type terminals Fail-safe

Figure similar

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Failsafe soft starters
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 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2510-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3VA2510-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of the gG fuse usable up to 690 V 	2x3NA3365-6; Type of coordination 1, Iq = 65 kA
 of the gG fuse usable at inside-delta circuit up to 500 V 	2x3NA3365-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1436-2; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3340-8; Type of coordination 2, Iq = 65 kA
 of the redundant contactor for applications > SIL 1 according to EN 62061 	3TF69
 of the redundant contactor for applications > SIL 1 at inside-delta circuit according to EN 62061 	3TF69
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 fine adjustable accuracy class according to IEC 61557-12 5 % accuracy class according to IEC 61557-12 5 % - CE marking - CE marking - Ves - CSA approval - CSA approval - CSA approval - HMI-High Feature - Is supported HMI-High Feature - Is supp	harden all the	
certificate of suitability Yes • U. I. approval Yes • C. Sa Approval Yes • C. Sa Approval Yes • HMI-High Feature Yes • I. HMI-High Feature Yes • I. Supported HMI-High Feature Yes • I. Supported HMI-High Feature Yes • I. High Feature Yes • I. Supported HMI-High Feature Yes • I. High Feature Yes • Introduction the passes CLASS 100 / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 Current unbalance limiting value [%] 10		- 02s diontudona
certificate of suitability Yes • U. I. approval Yes • C. Sa Approval Yes • C. Sa Approval Yes • HMI-High Feature Yes • I. HMI-High Feature Yes • I. Supported HMI-High Feature Yes • I. Supported HMI-High Feature Yes • I. High Feature Yes • I. Supported HMI-High Feature Yes • I. High Feature Yes • Introduction the passes CLASS 100 / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 Current unbalance limiting value [%] 10	·	_ 3
CEA approval Usaproval Usaproval CEA approval Ves Usaproval Ves Supported HMM-High Feature Ves Supported HMM-High Feature Ves Supported HMM-High Feature Supported High Feature Supported HMM-High Feature Supported High Feature Sup		5%
Built approval CSA approval PCS CSA approval PCS PODUCT Component HHI-High Feature Sis supported HIM-High Feature Sis supported Him-Him-Him-Him-Him-Him-Him-Him-Him-Him-	-	N. Control of the con
Product component Hill-ligh feature s is supported Hill-ligh Feature Tyes number of controlled phases Trip class CLASS 10A / 10E (default) / 20E / 30E; acc, to IEC 60947-4-2 Current unbalance limiting value [½] To 80 % ground-fault monitoring limiting value [½] To 80 % Supported from the event of power failure for main current circuit f	<u> </u>	
Product component Yes Ye		
HiM-High Feature Yes		Yes
ves	•	· ·
product feature integrated bypass contact system number of controlled phases trip class CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 current unbalance limiting value (%) 10 60 % ground-fault monitoring limiting value (%) 10 60 % 100 ms	_	
Immber of Controlled phases S		
Intp class CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 current unbalance limiting value [%] 10 60 % 5% bufforing time in the event of power failure		
current unbalance limiting value [%] 10 60 % ground-fault monitoring limiting value [%] 10 95 % buffering time in the event of power failure 6 or control circuit 100 ms ide time adjustable 9 255 s insulation voltage rated value 480 V degree of pollution 3, acc. to IEC 80947-4-2 impulse voltage rated value 6 kV blocking voltage of the thyristor maximum 1400 V service factor 4.15 surge voltage resistance rated value 6 kV maximum permissible voltage for safe isolation 4 between main and auxiliary circuit 480 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 8 Hz; 2 g up to 500 Hz vibration resistance 15 mm up to 8 Hz; 2 g up to 500 Hz vibration resistance 15 mm up to 8 Hz; 2 g up to 500 Hz vibration resistance 15 mm up to 8 Hz; 2 g up to 500 Hz vibration resistance 15 mm up to 8 Hz; 2 g up to 500 Hz vibration resistance 16 y mm up to 8 Hz; 2 g up to 500 Hz vibration resistance 15 mm up to 8 Hz		
ground-fault monitoring limiting value [%] 10 95 % buffering time in the event of power failure	•	
buffering time in the event of power failure • for main current clicuit • for control circuit for a month of the mission of current		
• for main current circuit del time adjustable 0 255 s insulation voltage rated value 480 V degree of pollution 3, acc. to IEC 60947-4-2 impulse voltage rated value 6kV blocking voltage of the thyristor maximum 1400 V service factor 1.15 surge voltage resistance rated value 6kV maximum permissible voltage for safe isolation between main and auxiliary circuit 480 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 mm up to 6 Hz; 2 g up to 500 Hz recovery time after overload trip adjustable 60 1 800 s recovery time after overload trip adjustable 60 1 800 s reference code according to IEC 60947-4-2 AC 53a remp-down (soft stor) Yes remp-down (soft stor) Yes remote resistance (very provided protection (thermistor motor protection and electronic according to ATEX, an upstream contactor is required in inside-delta		10 95 %
• for control circuit 100 ms 10de time adjustable 0 255 s 10de time adjustable 480 V	·	400
Idle time adjustable 0 255 s insulation voltage rated value 480 V degree of pollution 3, acc, to IEC 60947-4-2 impulse voltage rated value 6 kV blocking voltage of the thyristor maximum 1 400 V surge voltage resistance rated value 6 kV maximum permissible voltage for safe isolation 6 kV a between main and auxiliary circuit 480 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 1 800 s 40 mm up to 6 Hz; 2 g up to 500 Hz 20 Substance Prohibitance (Date) 11/22/2019 reference code according to IEC 80947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 11/22/2019 product function Yes • ramp-up (soft starting) Yes <tr< td=""><td></td><td></td></tr<>		
insulation voltage rated value degree of pollution 3, acc. to IEC 60947-4-2 impulse voltage rated value 6 kV blocking voltage of the thyristor maximum 1400 V service factor 2, 1,15 surge voltage resistance rated value 6 kV 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 15 mm up to 6 Hz, 2 g up to 500 Hz recovery time after overload trip adjustable 6 slullization category according to IEC 80947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (bate) 11/22/2019 product function • ramp-up (soft starting) • ramp-down (soft stop) • breakaway pulse • adjustable current limitation • creep speed in both directions of rotation • pump ramp down • Corbaking • motor heating • slave pointer function • trace function • intrinsic device protection • intrinsic device protection • motor overfoad protection • motor overfoad protection • motor overfoad protection • manual RESET • emanual RESET • remote reset • communication function • crear passarred value display • event list • evia software configurable • via software configurable		
degree of pollution 3, acc. to IEC 60947-4-2		
Impulse voltage rated value 6 kV blocking voltage of the thyristor maximum 1 400 V service factor 1.15 surge voltage resistance rated value 6 kV service factor 480 V; does not apply for thermistor connection 480 V; does not		
blocking voltage of the thyristor maximum service factor		
surge voltage resistance rated value maximum permissible voltage for safe isolation		
surge voltage resistance rated value maximum permissible voltage for safe Isolation • between main and auxiliary circuit shock resistance vibration resistance recovery time after overload trip adjustable dillization category according to IEC 60947-4-2 reference code according to IEC 81346-2 Q Substance Prohibitance (Date) rorduct function • ramp-up (soft starting) • 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 • intrinsic device protection • motor overload protection • motor overload protection • motor overload protection • evaluation of thermistor motor protection • inside-delta circuit • auto-RESET • manual RESET • remote reset • communication function • ves • ves • ves • ves • communication function • operating measured value display • ves • via software parameterizable • via software configurable		
maximum permissible voltage for safe isolation		
between main and auxiliary circuit shock resistance 15 // 11 ms, from 6 g // 11 ms with potential contact lifting vibration resistance recovery time after overload trip adjustable of 0 1 800 s utilization category according to IEC 60947-4-2 reference code according to IEC 60947-4-2 reference rode according to IEC 81346-2 Q Substance Prohibitance (Date) ramp-up (soft starting) • ramp-down (soft storp) • breakaway pulse • adjustable current limitation • creep speed in both directions of rotation • pump ramp down • DC braking • slave pointer function • intrinsic device protection • motor overload protection • motor overload protection • motor overload protection • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • auto-RESET • manual RESET • remote reset • communication function • operating measured value display • ves • via software parameterizable • via software configurable • via software parameterizable • via software configurable Ves • via software configurable Ves • via software configurable 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 15 mm up to 6 Hz; 2 g up to 500 Hz 11 mm to 500 Hz 11 mm trom to 500 Hz 12 up to 500 Hz 11 mm trom to 500 Hz 12 up to 500 Hz 11 mm trom to 500 Hz 12 up to 500 Hz 12 up to 500 Hz 11 mm trom to 500 Hz 12 up to		O KV
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 1 800 s utilization category according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 11/22/2019 product function ** * ramp-up (soft storp) 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 * motor overload protection Yes; Full motor protection (When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit * evaluation of thermistor motor protection Yes <t< td=""><td></td><td>480 V: does not apply for thermistor connection</td></t<>		480 V: does not apply for thermistor connection
vibration resistance 15 mm up to 6 Hz; 2 g up to 500 Hz recovery time after overload trip adjustable 60 1 800 s utilization category according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 11/22/2019 product function *** • 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 • frace function Yes • motor overload protection Yes • motor overload protection Yes; Full motor protection (thermistor motor protection according to ATEX, an upstream contactor is required in inside-delta circuit • evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • inside-delta circuit Yes • remote reset Yes • remote reset Yes		
recovery time after overload trip adjustable 60 1 800 s utilization category according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 11/22/2019 product function Yes • ramp-up (soft starting) Yes • ramp-down (soft stop) Yes • breakaway pulse Yes • adjustable current limitation Yes • pump ramp down Yes • DC braking Yes • motor heating Yes • slave pointer function Yes • slave pointer function 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 • communication function Yes • operating measured value display Yes • via software parameterizable		
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) - breakaway pulse - adjustable current limitation - creep speed in both directions of rotation - pump ramp down - DC braking - motor heating - slave pointer function - trace function - trace function - trace function - motor overload protection - motor overload protection - motor overload protection - motor overload protection - initinisic device protection - evaluation of thermistor motor protection - iniside-delta circuit - evaluation of thermistor motor protection - iniside-delta circuit - evaluation of thermistor motor protection - iniside-delta circuit - remote reset - communication function - operating measured value display - event list - event list - event software parameterizable - via software configurable - via software configurable - via software configurable - via software configurable - AC 53a - Ves - via software parameterizable - via software configurable - AC 53a - Ves - via software parameterizable - via software configurable - AC 53a - Ves - via software parameterizable - via software parameterizable - via software configurable - Ves - via software parameterizable - via softwar		
reference code according to IEC 81346-2 Q Substance Prohibitance (Date) 11/22/2019 product function Yes • ramp-up (soft starting) 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 • trace function Yes • intrinsic device protection Yes • motor overload protection Yes; Full motor protection (thermistor motor protection according to ATEX, an upstream contactor is required in inside-delta circuit. • evaluation of thermistor motor protection Yes; Type A PTC or Klixon / Thermoclick • inside-delta circuit Yes • auto-RESET Yes • remote reset Yes • communication function Yes • operating measured value display Yes • event list Yes • vis software parameterizable Yes • vis software configurable		
Substance Prohibitance (Date) 11/22/2019		
product function ramp-up (soft starting) ramp-down (soft stop) reamp-up (soft starting) ramp-down (soft stop) reamp-down (yes adjustable current limitation (yes repepaged in both directions of rotation (yes pump ramp down (yes DC braking (yes motor heating (yes race function (yes race function (yes ritace function (yes ritace function (yes motor overload protection (thermistor motor protection and electronic motor overload protection (thermistor motor protection and electronic motor overload protection) rotor overload protection (yes; Full motor protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. revaluation of thermistor motor protection (yes; Type A PTC or Klixon / Thermoclick rinside-delta circuit (yes auto-RESET (yes manual RESET (yes remote reset (yes communication function (yes communication (yes communication function (yes communication function (yes com		
ramp-up (soft starting) ramp-down (soft stop) breakaway pulse adjustable current limitation creep speed in both directions of rotation pump ramp down pump ramp down DC braking rading rading slave pointer function trace function trace function roter overload protection motor overload protection roter overload protection rote evaluation of thermistor motor protection initrinsic device protection roter overload protection roter overload protection evaluation of thermistor motor protection iniside-delta circuit ves auto-RESET remote reset remote reset communication function ves event list evernt list evern list evern logbook via software parameterizable via software configurable Yes Ves Ves Ves Ves Ves Ves Ve		
 ramp-down (soft stop) breakaway pulse adjustable current limitation yes creep speed in both directions of rotation pump ramp down DC braking motor heating slave pointer function trace function intrinsic device protection motor overload protection e waluation of thermistor motor protection e valuation of thermistor motor protection inside-delta circuit e auto-RESET manual RESET remote reset communication function yes event list event list evernt list yes ves via software parameterizable vias ves via software parameterizable ves 	•	Yes
 breakaway pulse adjustable current limitation creep speed in both directions of rotation pump ramp down DC braking motor heating slave pointer function trace function motor overload protection motor overload protection yes intrinsic device protection motor overload protection yes, all motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list evror logbook via software parameterizable via software configurable 		Yes
 adjustable current limitation creep speed in both directions of rotation pump ramp down Pes DC braking motor heating slave pointer function trace function intrinsic device protection motor overload protection motor overload protection yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. evaluation of thermistor motor protection inside-delta circuit evaluation of thermistor motor protection yes; Type A PTC or Klixon / Thermoclick inside-delta circuit yes auto-RESET manual RESET remote reset communication function operating measured value display event list event list error logbook via software parameterizable via software configurable 		Yes
 pump ramp down DC braking motor heating slave pointer function trace function intrinsic device protection motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. evaluation of thermistor motor protection inside-delta circuit eauto-RESET manual RESET remote reset communication function operating measured value display event list event list yes event list ves via software parameterizable via software configurable 		Yes
 pump ramp down DC braking motor heating slave pointer function trace function intrinsic device protection motor overload protection motor overload protection wes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. evaluation of thermistor motor protection inside-delta circuit <l< td=""><td> creep speed in both directions of rotation </td><td>Yes</td></l<>	 creep speed in both directions of rotation 	Yes
 motor heating slave pointer function trace function intrinsic device protection motor overload protection Yes motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. 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 		Yes
 motor heating slave pointer function trace function intrinsic device protection motor overload protection Yes motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. 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 		Yes
 slave pointer function 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 event list yes ves via software parameterizable ves 	5	Yes
 trace function intrinsic device protection motor overload protection Yes Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. evaluation of thermistor motor protection inside-delta circuit yes auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable Yes 	_	Yes
 motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. 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 		Yes
 motor overload protection Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit. 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 	 intrinsic device protection 	Yes
 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 Yes 		motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta
 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 	 evaluation of thermistor motor protection 	
 auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable Yes	·	
 manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable Yes		
 remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable Yes Yes Yes Yes Yes Yes Yes Yes		
 communication function operating measured value display event list error logbook via software parameterizable via software configurable Yes 		
 operating measured value display event list error logbook via software parameterizable via software configurable Yes 		
 event list error logbook via software parameterizable via software configurable Yes Yes 		
 error logbook via software parameterizable via software configurable Yes Yes 		
 via software parameterizable via software configurable Yes 		
• via software configurable Yes	_	

spring-loaded terminal	Yes				
PROFlenergy	Yes; in connection the PhOF N E Standard PROFNET High- Feature communic				
• firmware update	Yes				
removable terminal for control circuit					
	Yes Yes				
voltage ramptorque control					
·	Yes Yes				
combined braking angles output					
analog output programmable control inputs/outputs	Yes; 4 20 mA (default) / 0 10 V				
programmable control inputs/outputscondition monitoring	Yes Yes				
3	Yes				
automatic parameterisation	Yes				
application wizardsalternative run-down	Yes				
emergency operation mode	Yes				
reversing operation	Yes				
soft starting at heavy starting conditions	Yes				
Power Electronics					
operational current	470 A				
• at 40 °C rated value	470 A				
• at 40 °C rated value minimum	94 A				
• at 50 °C rated value	416 A				
at 60 °C rated value	380 A				
operational current at inside-delta circuit					
• at 40 °C rated value	814 A				
at 50 °C rated value	721 A				
at 60 °C rated value	658 A				
operating voltage	000 400 1/				
• rated value	200 480 V				
at inside-delta circuit rated value	200 480 V				
relative negative tolerance of the operating voltage	-15 %				
relative positive tolerance of the operating voltage	10 %				
relative negative tolerance of the operating voltage at inside-delta circuit	-15 %				
relative positive tolerance of the operating voltage at	10 %				
inside-delta circuit					
operating power for 3-phase motors					
 at 230 V at 40 °C rated value 	132 kW				
 at 230 V at inside-delta circuit at 40 °C rated value 	250 kW				
 at 400 V at 40 °C rated value 	250 kW				
at 400 V at inside-delta circuit at 40 °C rated value	400 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	444 W				
• at 40 °C after startup	141 W				
• at 50 °C after startup	125 W				
• at 60 °C after startup	114 W				
power loss [W] at AC at current limitation 350 %	7.654.\\				
• at 40 °C during startup	7 651 W				
at 50 °C during startup of 60 °C during startup	6 400 W				
at 60 °C during startup tune of the meter protection.	5 620 W				
type of the motor protection	Electronic, tripping in the event of thermal overload of the motor				
Control circuit/ Control	10/00				
type of voltage of the control supply voltage	AC/DC				
control supply voltage at AC	244				
at 50 Hz rated value	24 V				
at 60 Hz rated value relative negative tolerance of the control supply	24 V				
	-20 %				

voltage at AC at 50 Hz	dientudena
relative positive tolerance of the control supply voltage at AC at 50 Hz	²⁰ % (3) dientudong
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 relative negative tolerance of the control supply	-20 %
voltage at DC relative positive tolerance of the control supply	20 %
voltage at DC	
control supply current in standby mode rated value	440 mA
holding current in bypass operation rated value	720 mA
locked-rotor current at close of bypass contact maximum	6.7 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	20 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	4
with fail-safe	1
parameterizable	4
• number of digital outputs	3
 Number of digital outputs with fail-safe 	1
 number of digital outputs parameterizable 	2
 number of digital outputs not parameterizable 	1
digital output version	2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 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
Response times	
OFF-delay time with safety-related request when switched off via control inputs maximum	100 ms
Installation/ mounting/ dimensions	
mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
fastening method	screw fixing
height	393 mm
width	210 mm
depth	203 mm
required spacing with side-by-side mounting	
• forwards	10 mm
• backwards	0 mm
• upwards	100 mm
• downwards	75 mm
• at the side	5 mm
weight without packaging	10.9 kg
Connections/ Terminals	
type of electrical connection	
for main current circuit	busbar connection

• for control circuit spring-loaded termi width of connection bar maximum wire length for thermistor connection 45 mm				
wire length for thermistor connection	ma			
	ж			
• with conductor cross-section = 0.5 mm² maximum 50 m	U			
• with conductor cross-section = 1.5 mm² maximum 150 m				
• with conductor cross-section = 2.5 mm² maximum 250 m				
type of connectable conductor cross-sections				
• for DIN cable lug for main contacts stranded 2x (50 240 mm²)				
• for DIN cable lug for main contacts finely stranded 2x (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 2x (0.25 1.5 mm²)				
processing				
• at AWG cables for control circuit solid 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 DC maximum 1 000 m				
tightening torque				
• for main contacts with screw-type terminals 14 24 N·m				
• for auxiliary and control contacts with screw-type 0.8 1.2 N·m				
terminals				
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 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	C or			
above				
• during storage and transport -40 +80 °C				
environmental category	o alt			
 during operation according to IEC 60721 3K6 (no ice formation, only occasional condensation), 3C3 (no mist), 3S2 (sand must not get into the devices), 3M6 	Sail			
• during storage according to IEC 60721 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sa	and must			
not get inside the devices), 1M4				
• during transport according to IEC 60721 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)				
EMC emitted interference acc. to IEC 60947-4-2: Class A				
Communication/ Protocol				
communication module is supported				
PROFINET standard Yes				
PROFINET high-feature Yes				
• EtherNet/IP Yes				
Modbus RTU Yes				
Modbus TCP Yes				
• PROFIBUS Yes				
UL/CSA ratings				
manufacturer's article number				
• of the fuse				
— usable for Standard Faults up to 575/600 V Type: Class J / L, max. 1600 A; Iq = 30 kA				
according to UL				
— usable for High Faults up to 575/600 V Type: Class J / L, max. 1200 A; Iq = 100 kA according to UL				
— usable for High Faults up to 575/600 V Type: Class J / L, max. 1200 A; Iq = 100 kA				
 usable for High Faults up to 575/600 V according to UL usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL usable for High Faults at inside-delta circuit up to 575/600 V according to UL Type: Class J / L, max. 1200 A; Iq = 100 kA Type: Class J / L, max. 1200 A; Iq = 30 kA Type: Class J / L, max. 1200 A; Iq = 100 kA 				
 usable for High Faults up to 575/600 V according to UL usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL usable for High Faults at inside-delta circuit up to 575/600 V according to UL Type: Class J / L, max. 1200 A; Iq = 100 kA Type: Class J / L, max. 1600 A; Iq = 30 kA Type: Class J / L, max. 1200 A; Iq = 100 kA 				
 usable for High Faults up to 575/600 V according to UL usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL usable for High Faults at inside-delta circuit up to 575/600 V according to UL Type: Class J / L, max. 1200 A; Iq = 100 kA Type: Class J / L, max. 1200 A; Iq = 30 kA Type: Class J / L, max. 1200 A; Iq = 100 kA 				

 at 460/480 V at 50 °C rated value 	350 hp
 at 200/208 V at inside-delta circuit at 50 °C rated value 	350 hp 250 hp dientudong
 at 220/230 V at inside-delta circuit at 50 °C rated value 	250 hp
 at 460/480 V at inside-delta circuit at 50 °C rated value 	600 hp
contact rating of auxiliary contacts according to UL	R300-B300
Safety related data	
safety device type according to IEC 61508-2	Type B
B10d value	648 000
Safety Integrity Level (SIL)	
according to IEC 61508	SIL1
SIL Claim Limit (subsystem) according to EN 62061	SIL 1
performance level (PL) according to EN ISO 13849-1	С
category according to EN ISO 13849-1	2
stop category according to EN 60204-1	0
Safe failure fraction (SFF)	60 %
average diagnostic coverage level (DCavg)	90 %
diagnostics test interval by internal test function maximum	1 000 s
PFHD with high demand rate according to EN 62061	1E-6 1/h
PFDavg with low demand rate according to IEC 61508	0.09
hardware fault tolerance according to IEC 61508	0
T1 value for proof test interval or service life according to IEC 61508	20 y
safe state	Open load circuit
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 	BVS 18 ATEX F 003 X
type of protection according to ATEX directive 2014/34/EU	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





Confirmation







EMC	For use in hazardous locations	Declaration of Conformity	Test Certificates	Marine / Shipping	
-----	--------------------------------	------------------------------	-------------------	-------------------	--









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=3RW5547-2HF04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5547-2HF04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5547-2HF04

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5547-2HF04&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

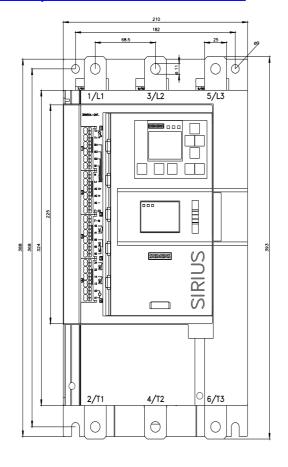
https://support.industry.siemens.com/cs/ww/en/ps/3RW5547-2HF04/char

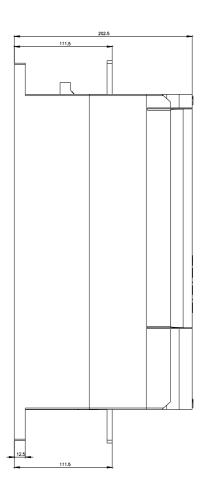
Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5547-2HF04&objecttype=14&gridview=view1

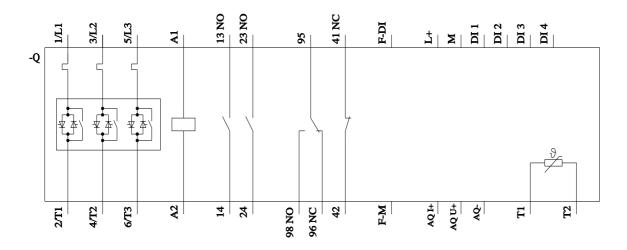
Simulation Tool for Soft Starters (STS)

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









last modified: 5/13/2022 **C**

Hotline: 0909000786 - lam@dientudong.com

