SIEMENS

Data sheet

3RW5545-2HF04



SIRIUS soft starter 200-480 V 315 A, 24 V AC/DC spring-type terminals Fail-safe

Fi	gur	esi	mil	ar

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 	<u>3RW5980-0HF00</u>
 of communication module PROFINET standard usable 	<u>3RW5980-0CS00</u>
 of communication module PROFINET high-feature usable 	<u>3RW5950-0CH00</u>
 of communication module PROFIBUS usable 	<u>3RW5980-0CP00</u>
 of communication module Modbus TCP usable 	<u>3RW5980-0CT00</u>
 of communication module Modbus RTU usable 	<u>3RW5980-0CR00</u>
 of communication module Ethernet/IP 	<u>3RW5980-0CE00</u>
 of circuit breaker usable at 400 V 	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2440-7MN32-0AA0; Type of coordination 1, lq = 65 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2580-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V at inside-delta circuit 	3VA2580-6HN32-0AA0; 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 	<u>3NE1334-2: Type of coordination 2. Iq = 65 kA</u>
 of back-up R fuse link for semiconductor protection usable up to 690 V 	<u>3NE3336: Type of coordination 2, lq = 65 kA</u>
 of the redundant contactor for applications > SIL 1 according to EN 62061 	<u>3RT1076</u>
 of the redundant contactor for applications > SIL 1 at inside-delta circuit according to EN 62061 	<u>3RT1076</u>
 of the redundant contactor for applications > SIL 1 according to EN ISO 13849-1 	3TF68
 of the redundant contactor for applications > SIL 1 at inside-delta circuit according to EN ISO 13849-1 	3TF68
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	5 (based on IEC 61557-12)
certificate of suitability	
• CE marking	Yes
• UL approval	Yes
CSA approval	Yes
product component	
HMI-High Feature	Yes
is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
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 95 %
buffering time in the event of power failure	
for main current circuit	100 ms
for control circuit	100 ms
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
service factor	1.15
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
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
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 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
trace function	Yes
intrinsic device 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 	Yes; Type A PTC or Klixon / Thermoclick
• inside-delta circuit	Yes
● auto-RESET	Yes
manual RESET	Yes
remote reset	Yes
 communication function 	Yes
 operating measured value display 	Yes
• event list	Yes
• error logbook	Yes
via software parameterizable	Yes
via software configurable	Yes
screw terminal	No
spring-loaded terminal	Yes
PROFlenergy	Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules

	Vee
firmware update	Yes
removable terminal for control circuit	Yes
voltage ramp	Yes
torque control	Yes
combined braking	Yes
analog output	Yes; 4 20 mA (default) / 0 10 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 	315 A
• at 40 °C rated value minimum	63 A
● at 50 °C rated value	279 A
● at 60 °C rated value	255 A
operational current at inside-delta circuit	
• at 40 °C rated value	546 A
• at 50 °C rated value	483 A
● at 60 °C rated value	442 A
operating voltage	
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 inside-delta circuit	10 %
operating power for 3-phase motors	
 at 230 V at 40 °C rated value 	90 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	160 kW
 at 400 V at 40 °C rated value 	160 kW
 at 400 V at inside-delta circuit at 40 °C rated value 	315 kW
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
relative negative tolerance of the operating frequency	-10 %
relative positive tolerance of the operating frequency	10 %
minimum load [%]	10 %; Relative to set le
power loss [W] for rated value of the current at AC	
• at 40 °C after startup	95 W
● at 50 °C after startup	84 W
● at 60 °C after startup	77 W
power loss [W] at AC at current limitation 350 %	
● at 40 °C during startup	4 966 W
● at 50 °C during startup	4 153 W
● at 60 °C during startup	3 646 W
type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC	
• at 50 Hz rated value	24 V
• at 60 Hz rated value	24 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
relative negative tolerance of the control supply voltage at	-20 %

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• 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 Installation/ mounting/ dimensions mounting position Yertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method height With depth 203 mm width depth 10 mm depth equired spacing with side-by-side mounting • forwards 0 mm • downwards 0 mm • downwards 0 mm • downwards • forwards 0 mm • downwards • forwards • downwards • forwards • downwards • of metions/ Terminals weight without packaging • downwards • for control circuit <		1
• 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 10.2 kg Connections/ Terminals tupser connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection 50 m		
Response times OFF-delay time with safety-related request when switched off via control inputs maximum 100 ms Installation/ mounting/ dimensions Installation/ mounting/ dimensions Installation/ mounting/ dimensions mounting position Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method height 393 mm width 210 mm depth 203 mm edited spacing with side-by-side mounting • forwards 10 mm edited spacing with side-by-side mounting • upwards 100 mm edited spacing with side-by-side mounting • forwards 0 mm edited spacing with side-by-side mounting • forwards 0 mm edited spacing with side-by-side mounting • forwards 100 mm edited spacing with side-by-side mounting • forwards 0 mm edited spacing with side-by-side mounting • forwards 100 mm for mail • downwards 75 mm for mail • at the side 5 mm busbar connection • for control circuit busbar connection for control circuit • for control circuit spring-		
OFF-delay time with safety-related request when switched off via control inputs maximum 100 ms Installation/ mounting/ dimensions 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 0 mm • forwards 0 mm • upwards 100 mm • downwards 5 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals type of electrical connection • for control circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm with conductor cross-section = 0.5 mm² maximum 50 m	• at DC-13 at 24 V rated value	1 A
via control inputs maximum 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 10 mm of orwards 0 mm obackwards 0 mm obackwards 0 mm eduymards 100 mm eduymards 50 mm the ight without packaging 10.2 kg	Response times	
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 0 mm • forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals type of electrical connection • for control circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm		100 ms
fastening method screw fixing height 393 mm width 210 mm depth 203 mm required spacing with side-by-side mounting 0 mm • forwards 10 mm • backwards 0 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals busbar connection • for control circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm with conductor cross-section = 0.5 mm ² maximum 50 m	Installation/ mounting/ dimensions	
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width 210 mm depth 203 mm required spacing with side-by-side mounting 10 mm • forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals busbar connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm with conductor cross-section = 0.5 mm² maximum 50 m	fastening method	screw fixing
depth 203 mm required spacing with side-by-side mounting 10 mm • forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals 50 mm width of connection bar maximum 45 mm width of connection 50 m	height	393 mm
required spacing with side-by-side mounting 10 mm • forwards 0 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals 100 mm • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm with conductor cross-section = 0.5 mm² maximum 50 m	width	210 mm
• forwards10 mm• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side5 mm• of electrical connection10.2 kg• for main current circuitbusbar connection• for control circuitbusbar connection• for control circuitspring-loaded terminalswidth of connection bar maximum45 mm• with conductor cross-section = 0.5 mm² maximum50 m		203 mm
backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side10.2 kgConnections/ Terminalstype of electrical connection• for main current circuitbusbar connection• for control circuitspring-loaded terminalswidth of connection bar maximum45 mmwire length for thermistor connection50 m	required spacing with side-by-side mounting	
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• downwards75 mm• at the side5 mm• weight without packaging10.2 kgConnections/ Terminalstype of electrical connectionbusbar connection• for main current circuitbusbar connection• for control circuitspring-loaded terminalswidth of connection bar maximum45 mmwire length for thermistor connection50 m	 backwards 	0 mm
• at the side 5 mm weight without packaging 10.2 kg Connections/ Terminals type of electrical connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection 50 m	• upwards	100 mm
weight without packaging 10.2 kg Connections/Terminals	downwards	75 mm
Connections/ Terminals type of electrical connection busbar connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection so m • with conductor cross-section = 0.5 mm² maximum 50 m		
type of electrical connection busbar connection • for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection on the spring for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m		10.2 kg
• for main current circuit busbar connection • for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection spring-loaded terminals • with conductor cross-section = 0.5 mm² maximum 50 m		
• for control circuit spring-loaded terminals width of connection bar maximum 45 mm wire length for thermistor connection 50 m		
width of connection bar maximum 45 mm wire length for thermistor connection 50 m		
wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m		
• with conductor cross-section = 0.5 mm ² maximum 50 m		45 mm
	-	
• with conductor cross-section = 1.5 mm ² maximum 150 m		
	 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 mm ²)
type of connectable conductor cross-sections	
for control circuit solid	2x (0.25 1.5 mm²)
 for control circuit finely stranded with core end processing 	2x (0.25 1.5 mm ²)
 for AWG cables for control circuit solid 	2x (24 16)
 for AWG cables for control circuit finely stranded with core end processing 	2x (24 16)
wire length	
 between soft starter and motor maximum 	800 m
 at the digital inputs at DC maximum 	1 000 m
tightening torque	
for main contacts with screw-type terminalsfor auxiliary and control contacts with screw-type	14 24 N·m 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 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
EMC emitted interference Communication/ Protocol	acc. to IEC 60947-4-2: Class A
	acc. to IEC 60947-4-2: Class A
Communication/ Protocol	acc. to IEC 60947-4-2: Class A Yes
Communication/ Protocol communication module is supported	
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP	Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU	Yes Yes Yes Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU • Modbus TCP	Yes Yes Yes Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS	Yes Yes Yes Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings	Yes Yes Yes Yes
Communication/ Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number	Yes Yes Yes Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number • of circuit breaker — usable for Standard Faults at 460/480 V according	Yes Yes Yes Yes
Communication/ Protocol communication module is supported • PROFINET standard • PROFINET high-feature • EtherNet/IP • Modbus RTU • Modbus RTU • Modbus TCP • PROFIBUS UL/CSA ratings manufacturer's article number • of circuit breaker — usable for Standard Faults at 460/480 V according to UL	Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq = 18 kA
Communication/ Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V at inside-	Yes Yes Yes Yes Yes
Communication/ Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for High Faults at 460/480 V at inside-delta	Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq = 18 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq max = 65 kA
Communication/ Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker — usable for Standard Faults at 460/480 V according to UL — usable for High Faults at 460/480 V at inside-delta circuit according to UL	Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq = 18 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq max = 65 kA Siemens type: 3VA54, max. 600 A; lq = 18 kA
Communication/ Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V according	Yes Yes Yes Yes Yes Yes Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq = 18 kA Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; lq max = 65 kA Siemens type: 3VA54, max. 600 A; lq = 18 kA Siemens type: 3VA54, max. 600 A; lq max = 65 kA
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Communication / Protocol communication module is supported PROFINET standard PROFINET high-feature EtherNet/IP Modbus RTU Modbus RTU Modbus TCP PROFIBUS UL/CSA ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V according to UL usable for Standard Faults at 460/480 V at inside-delta circuit according to UL usable for High Faults at 460/480 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for High Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults at 575/600 V at inside-delta circuit according to UL usable for Standard Faults up to 575/600 V at inside-delta circuit according to UL usable for Standard Faults up to 575/600 V according to UL usable for Standard Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for High Faults up to 575/600 V according to UL usable for	Yes Yes Yes Yes Yes Yes Yes Yes Yes Yes

type of protection according to ATEX directive 2014/34/EU hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX Cartificates/ approvals General Product Approval Confirmation Confirmation Confirmation FMC	II (2)G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb], II (2)D [Ex tb Db] [Ex pxb Db], I [Ex db Mb] 0 0.008 5E-7 1/h SIL1 3 a Declaration of Con- formity Test Certificates Marine / Shippi
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX T1 value for proof test interval or service life according to IEC 61508 relating to ATEX Certificates/ approvals General Product Approval	[Ex db Mb] 0 0.008 5E-7 1/h SIL1 3 a
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX T1 value for proof test interval or service life according to IEC 61508 relating to ATEX Certificates/ approvals	[Ex db Mb] 0 0.008 5E-7 1/h SIL1
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX T1 value for proof test interval or service life according to IEC 61508 relating to ATEX Certificates/ approvals	[Ex db Mb] 0 0.008 5E-7 1/h SIL1
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX T1 value for proof test interval or service life according to	[Ex db Mb] 0 0.008 5E-7 1/h SIL1
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating to ATEX Safety Integrity Level (SIL) according to IEC 61508 relating	[Ex db Mb] 0 0.008 5E-7 1/h
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508 relating to ATEX PFHD with high demand rate according to EN 62061 relating	[Ex db Mb] 0 0.008
hardware fault tolerance according to IEC 61508 relating to ATEX PFDavg with low demand rate according to IEC 61508	[Ex db Mb] 0
	[Ex db Mb]
type of protection according to ATEV directive 2014/24/EU	II (2) C [Ex ab Ch] [Ex db Ch] [Ex avb Ch] II (2) D [Ex th Dh] [Ex avb Dh] I
 according to ATEX directive 2014/34/EU 	BVS 18 ATEX F 003 X
IECEx ATEX discritics 2044/04/511	Yes
• ATEX	Yes
certificate of suitability	
TEX	
electromagnetic compatibility	acc. to IEC 60947-4-2
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
protection class IP on the front according to IEC 60529	IP00; IP20 with cover
safe state	Open load circuit
T1 value for proof test interval or service life according to IEC 61508	20 a
hardware fault tolerance according to IEC 61508	0
PFDavg with low demand rate according to IEC 61508	0.09
PFHD with high demand rate according to EN 62061	1E-6 1/h
diagnostics test interval by internal test function maximum	1 000 s
average diagnostic coverage level (DCavg)	90 %
Safe failure fraction (SFF)	60 %
stop category according to EN 60204-1	0
category according to EN ISO 13849-1	2
performance level (PL) according to EN ISO 13849-1	c
SIL Claim Limit (subsystem) according to EN 62061	SIL 1
according to IEC 61508	SIL1
Safety Integrity Level (SIL)	
B10d value	147 000
safety device type according to IEC 61508-2	Туре В
contact rating of auxiliary contacts according to UL Safety related data	K300-B300
• at 460/480 V at inside-delta circuit at 50 °C rated value	_ 400 hp R300-B300
• at 220/230 V at inside-delta circuit at 50 °C rated value	200 hp
• at 200/208 V at inside-delta circuit at 50 °C rated value	150 hp
• at 460/480 V at 50 °C rated value	200 hp
	100 hp
 at 220/230 V at 50 °C rated value 	75 hp
 at 200/208 V at 50 °C rated value at 220/230 V at 50 °C rated value 	

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other

Confirmation

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5545-2HF04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5545-2HF04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5545-2HF04

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5545-2HF04&lang=en

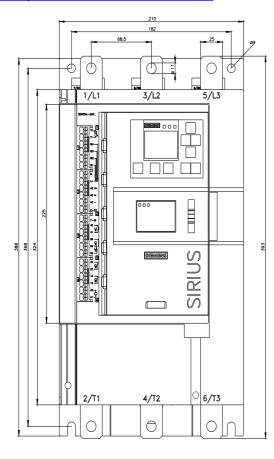
Characteristic: Tripping characteristics, I2t, Let-through current

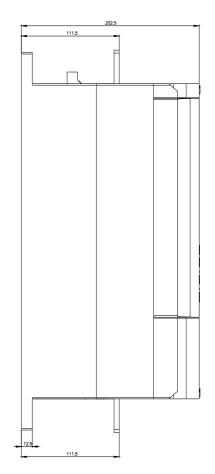
https://support.industry.siemens.com/cs/ww/en/ps/3RW5545-2HF04/char

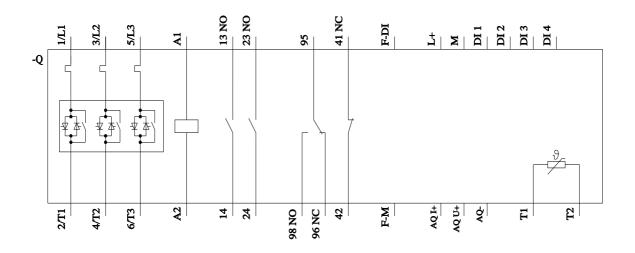
Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5545-2HF04&objecttype=14&gridview=view1 Simulation Tool for Soft Starters (STS)

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







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