SIEMENS

Data sheet 3RW5216-3TC14

SIRIUS



SIRIUS soft starter 200-480 V 32 A, 110-250 V AC spring-type terminals Thermistor input



product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW52
manufacturer's article number	
 of standard HMI module usable 	3RW5980-0HS00
 of high feature HMI module usable 	3RW5980-0HF00
 of communication module PROFINET standard usable 	3RW5980-0CS00
 of communication module PROFIBUS usable 	3RW5980-0CP00
 of communication module Modbus TCP usable 	3RW5980-0CT00
 of communication module Modbus RTU usable 	3RW5980-0CR00
 of communication module Ethernet/IP 	3RW5980-0CE00
 of circuit breaker usable at 400 V 	3RV2032-4VA10; Type of coordination 1, Iq = 65 kA, CLASS 10
 of circuit breaker usable at 500 V 	3RV2032-4VA10; Type of coordination 1, Iq = 10 kA, CLASS 10
• of circuit breaker usable at 400 V at inside-delta circuit	3RV2032-4JA10; Type of coordination 1, Iq = 65 kA, CLASS 10
• of circuit breaker usable at 500 V at inside-delta circuit	3RV2032-4JA10; Type of coordination 1, Iq = 10 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3824-6; Type of coordination 1, Iq = 65 kA
• of the gG fuse usable at inside-delta circuit up to 500 V	3NA3824-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1818-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE8022-1; Type of coordination 2, Iq = 65 kA
Seneral technical data	
starting voltage [%]	30 100 %
stopping voltage [%]	50 %; non-adjustable
start-up ramp time of soft starter	0 20 s
current limiting value [%] adjustable	130 700 %
certificate of suitability	
CE marking	Yes
UL approval	Yes
CSA approval	Yes
product component	
HMI-High Feature	No
• is supported HMI-Standard	Yes
• is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
buffering time in the event of power failure	

for main current circuit	100 ms
for control circuit	100 ms
insulation voltage rated value	600 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	6 kV
blocking voltage of the thyristor maximum	1 600 V
service factor	1
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
between main and auxiliary circuit	600 V
shock resistance	15 g / 11 ms, from 12 g / 11 ms with potential contact lifting
utilization category according to IEC 60947-4-2	AC 53a
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	02/15/2018
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol - 79-94-7 1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus") covering any of its individual anti- and syn-isomers or any combination thereof Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4 Dodecamethylcyclohexasiloxane (D6) - 540-97-6 Diboron trioxide - 1303-86-2
product function	
• ramp-up (soft starting)	Yes
• ramp-down (soft stop)	Yes
Soft Torque	Yes
 adjustable current limitation 	Yes
pump ramp down	Yes
 intrinsic device protection 	Yes
motor overload protection	Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)
 evaluation of thermistor motor protection 	Yes; Type A PTC or Klixon / Thermoclick
inside-delta circuit	Yes
• auto-RESET	Yes
• manual RESET	Yes
• remote reset	Yes; By turning off the control supply voltage
communication function constring managinal value display	Yes
operating measured value displayerror logbook	Yes; Only in conjunction with special accessories Yes; Only in conjunction with special accessories
via software parameterizable	No
via software parameterization via software configurable	Yes
PROFlenergy	Yes; in connection with the PROFINET Standard communication module
• firmware update	Yes
removable terminal for control circuit	Yes
• torque control	No
analog output	No
Power Electronics	
operational current	
• at 40 °C rated value	32 A
• at 50 °C rated value	28.4 A
at 60 °C rated value	26 A
operational current at inside-delta circuit	
• at 40 °C rated value	55.4 A
at 50 °C rated value	49 A
at 60 °C rated value	45 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 % -40 %
relative positive tolerance of the operating voltage	10 %
relative negative tolerance of the operating voltage at	-15 %

nside-delta circuit	
relative positive tolerance of the operating voltage at nside-delta circuit	10 %
operating power for 3-phase motors	
 at 230 V at 40 °C rated value 	7.5 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	15 kW
 at 400 V at 40 °C rated value 	15 kW
• at 400 V at inside-delta circuit at 40 °C rated value	22 kW
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
relative negative tolerance of the operating frequency	-10 %
relative positive tolerance of the operating frequency	10 %
adjustable motor current	
 at rotary coding switch on switch position 1 	14 A
 at rotary coding switch on switch position 2 	15.2 A
 at rotary coding switch on switch position 3 	16.4 A
at rotary coding switch on switch position 4	17.6 A
at rotary coding switch on switch position 5	18.8 A
at rotary coding switch on switch position 6	20 A
at rotary coding switch on switch position 7 at rotary coding switch on switch position 7	21.2 A
	22.4 A
at rotary coding switch on switch position 8 at rotary coding switch on switch position 9	23.6 A
at rotary coding switch on switch position 9 at rotary coding switch on switch position 10.	23.6 A 24.8 A
at rotary coding switch on switch position 10	
at rotary coding switch on switch position 11	26 A
at rotary coding switch on switch position 12	27.2 A
at rotary coding switch on switch position 13	28.4 A
at rotary coding switch on switch position 14	29.6 A
 at rotary coding switch on switch position 15 	30.8 A
 at rotary coding switch on switch position 16 	32 A
• minimum	14 A
adjustable motor current	
 for inside-delta circuit at rotary coding switch on switch position 1 	24.2 A
 for inside-delta circuit at rotary coding switch on switch position 2 	26.3 A
 for inside-delta circuit at rotary coding switch on switch position 3 	28.4 A
 for inside-delta circuit at rotary coding switch on switch position 4 	30.5 A
 for inside-delta circuit at rotary coding switch on switch position 5 	32.6 A
 for inside-delta circuit at rotary coding switch on switch position 6 	34.6 A
 for inside-delta circuit at rotary coding switch on switch position 7 	36.7 A
 for inside-delta circuit at rotary coding switch on switch position 8 	38.8 A
 for inside-delta circuit at rotary coding switch on switch position 9 	40.9 A
 for inside-delta circuit at rotary coding switch on switch position 10 	43 A
 for inside-delta circuit at rotary coding switch on switch position 11 	45 A
 for inside-delta circuit at rotary coding switch on switch position 12 	47.1 A
 for inside-delta circuit at rotary coding switch on switch position 13 	49.2 A
 for inside-delta circuit at rotary coding switch on switch position 14 	51.3 A
 for inside-delta circuit at rotary coding switch on switch position 15 	53.3 A
• for inside-delta circuit at rotary coding switch on switch	55.4 A
position 16	
position 16 ■ at inside-delta circuit minimum	24.2 A

type of voltage of the control supply voltage at AC * at 50 Hz * at 60 Hz * a		
a sit 80" C after startup power loss (W] at AC at current limitation 350 % at 40" C during startup 449 W 491	 at 40 °C after startup 	22 W
	at 50 °C after startup	21 W
a st 0 °C during startup	• at 60 °C after startup	20 W
** at 40 °C during startup	·	
* at 50 °C during startup * at 80 °C during startup yop of voltage of the control supply voltage control supply voltage at AC * at 50 Hz * at 50 Hz * at 50 Hz * at 50 Hz * at 60 Hz * relative negative tolerance of the control supply voltage at AC at 50 Hz * at 60 Hz * at 60 Hz * at 60 Hz * relative positive tolerance of the control supply voltage at AC at 50 Hz * at 60 Hz * at 60 Hz * relative positive tolerance of the control supply voltage at AC at 50 Hz * at 60 Hz * relative positive tolerance of the control supply voltage at AC at 60 Hz * relative positive tolerance of the control supply voltage at AC at 60 Hz * relative positive tolerance of the control supply voltage at AC at 60 Hz * relative positive tolerance of the control supply voltage at AC at 60 Hz * relative positive tolerance of the control supply voltage frequency * relative positive tolerance of the control supply voltage frequency * 10 %		521 W
* at 60 °C during startup type of voltage of the control supply voltage * at 60 Hz * at	· ·	
	• at 50 °C during startup	449 W
ype of voltage of the control supply voltage at AC * at 50 Hz * at 60 Hz * a	at 60 °C during startup	395 W
control supply voltage at AC * at 50 Hz * at 60 Hz	Control circuit/ Control	
150 12 110 250 V	type of voltage of the control supply voltage	AC
150 12 110 250 V	control supply voltage at AC	
+ at 60 Hz		110 250 V
Section Process Proc		
AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative notified positive tolerance of the control supply voltage at AC at 60 Hz relative negative tolerance of the control supply voltage at AC at 60 Hz relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage requency relative positive tolerance of the control supply voltage representation of invish current peak at application of control supply voltage remarkment remarkment remarkment peak at application of control supply voltage remarkment relation of invish current peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relation of invish current peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak at application of control supply voltage relative positive tolerance peak a		
AC at 50 Hz relative negative tolerance of the centrol supply voltage at AC at 50 Hz relative positive tolerance of the centrol supply voltage at AC at 50 Hz control supply voltage frequency relative positive tolerance of the centrol supply voltage frequency relative negative tolerance of the centrol supply voltage frequency relative negative tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of tentrol supply voltage frequency 10 % relative positive tolerance of tentrol supply voltage frequency 10 % relative positive tolerance of tentrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative positive tolerance of the centrol supply voltage frequency 10 % relative frequency 10 % relativ		
AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz Control supply voltage frequency relative negative tolerance of the control supply voltage frequency relative negative tolerance of the control supply voltage frequency relative negative tolerance of the control supply voltage frequency 10 % Manual Countrol supply current in standby mode rated value 30 mA holding current in bypass operation rated value 10 % Inrush current by closing the bypass contacts maximum 10 duration of inrush current peak at application of control supply voltage design of investourent peak at application of control supply voltage design of short-circuit protection for control circuit design of short-circuit protection for control circuit 20 Ag Gruse ((cu=1 kA), 6 A quick-acting fuse ((cu=1 kA), C1 ministure circuit breaker ((cu=300 A), C6 ministure circuit breaker ((cu=300 A), is not part of scope of supply poputs Outputs number of digital outputs 3		10 %
Control supply voltage frequency relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency control supply current in standby mode rated value linrush current in bypass operation rated value inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage maximum design of the overvoltage protection design of short-circuit protection for control circuit breaker (fcue 800 A), C6 miniature circuit breaker (fcue 300 A), Is not part of scope of supply publication of parameterizable digital output version at DC-13 at 24 V rated value at DC-13 at 250 V rate		-15 %
relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency 30 mA Noting current in standby mode rated value 30 mA Noting current in bypass operation rated value 175 mA Inrush current bye closing the bypass contacts maximum Inrush current peak at application of control supply voltage maximum 4		10 %
relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency 30 mA Noting current in standby mode rated value 30 mA Noting current in bypass operation rated value 175 mA Inrush current bye closing the bypass contacts maximum Inrush current peak at application of control supply voltage maximum 4	control supply voltage frequency	50 60 Hz
relative positive tolerance of the control supply voltage frequency control supply current in standby mode rated value Abolding current in bypass operation rated value Inrush current by closing the bypass contacts maximum Inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage maximum design of short-circuit protection for control circuit design of short-circuit protection for control circuit design of short-circuit protection for control circuit treaker ((cu=800 A), 65 quick-acting fuse ((cu=1 kA), 61 quick-acting fuse ((cu=1 kA)	relative negative tolerance of the control supply voltage	
control supply current in standby mode rated value 30 mA holding current in bypase operation rated value 75 mA inrush current by closing the bypase contacts maximum 0.17 A inrush current peak at application of control supply voltage maximum 12.2 A design of the overvoltage protection Varistor design of short-circuit protection for control circuit 4 A gG fuse (lcu=1 kA), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit breaker (lcu=000 A), C6 miniature circuit breaker (lcu=300 A), is not part of scape of supply imputs/ Outputs 1 number of digital inputs 1 number of digital outputs 3 • not parameterizable 2 digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 3 A • at AC-15 at 250 V rated value 3 A • at AC-15 at 250 V rated value 3 A • at AC-15 at 250 V rated value 4 A gG ruse (lcu=1 kA), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit breaker (lcu=300 A), is not part of the part of supply (lcu=1 kA), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit breaker (lcu=300 A), is not part of supply (lcu=1 kA), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit breaker (lcu=600 A), C6 miniature dircuit breaker (lcu=1 kA), 6 A quick-acting fuse (lcu=1 kA), C1 miniature circuit bre	relative positive tolerance of the control supply voltage	10 %
holding current in bypass operation rated value inrush current by closing the bypass contacts maximum Innsh current peak at application of control supply voltage maximum 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 design of short-circuit protection for control circuit breaker (Icu= 800 A), C6 miniature circuit breaker (Icu= 300 A); is not part of scape of supply mumber of digital inputs 1 number of digital inputs 2 not parameterizable 2 digital output version 1 parameterizable 2 at AC-15 at 250 V rated value 3 a A 4 at DC-13 at 24 V rated value 4 at DC-13 at 24 V rated value 1 at Installation/ mounting/ dimensions mounting position # vite vertical mounting surface +/-90° rotatable, with vertical mounting surface festening method # screw fixing # forwards backwards cupwards cupwards at the side weight without packaging Connections/ Terminals * type of electrical connection for control circuit screw-type terminals spring-loaded terminals		30 mA
Inrush current by closing the bypass contacts maximum inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage design of the overvoltage protection 12.2 A design of the overvoltage protection Varistor design of short-circuit protection for control circuit breaker (lou=600 A), 6 A quick-acting fuse (lou=1 kA), C1 miniature circuit breaker (lou=600 A), C6 miniature circuit breaker (lou=300 A); Is not part of scope of supply number of digital inputs 1 number of digital outputs 3 • not parameterizable 2 normally-open contacts (NO) / 1 changeover contact (CO) unumber of analog outputs 0 • at AC-15 at 250 V rated value 3 A • at DC-13 at 24 V rated value 1 A • at DC-13 at 24 V rated value 1 A • at DC-13 at 24 V rated value 1 A • at DC-13 at 24 V rated value 1 A • at DC-13 at 24 V rated value 1 A • at DC-15 at 250 V rated value 1 A • at DC-15 at 250 V rated value 1 A • at Example of the foot and back 1 Control of the foot and back fastening method 5 F m • forwards 0 mm • packwards		
Inrush current peak at application of control supply voltage maximum duration of inrush current peak at application of control supply voltage design of the overvoltage protection design of short-circuit protection for control circuit threaker (Icu= 800 A), C6 miniature circuit breaker (Icu= 300 A), is not part of scope of supply unush of digital inputs number of digital inputs number of digital outputs number of analog outputs at AC-15 at 250 V rated value at AC-15 at 250 V rated value at DC-13 at 24 V rated value at DC-13 at 24 V rated value fastening method fastening method fastening method for main digital method screw fixing forwards obsckwards obsckwards other invariant other invariant		
maximum duration of inrush current peak at application of control supply voltage design of the overvoltage protection design of short-circuit protection for control circuit breaker (icu= 600 A), C6 miniature circuit breaker (icu= 300 A), is not part of scope of supply number of digital inputs number of digital outputs number of digital outputs number of analog outputs number of analog outputs o 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs o 1 AC-15 at 250 V rated value o 1 AC-15 at 250 V rated value o 1 AC-15 at 250 V rated value of at AC-15 at 250 V rated value of stening method hoight width 170 mm depth forwards o backwards o the more of the side o the side o the side of ownwards o the side of ownwards of the side of ormains vipe of electrical connection of for main current circuit of or control circuit serwel-ype terminals type of electrical connection of for main current circuit of or control circuit serwel-ype terminals for control circuit of promain current circuit of or control circuit of promain current circuit of or control circuit of promain current circui	inrush current by closing the bypass contacts maximum	0.17 A
design of the overvoltage protection Varietor design of short-circuit protection for control circuit breaker (Lou= 800 A), C8 miniature circuit breaker (Lou= 300 A); Is not part of scope of supply number of digital inputs 1 number of digital inputs 2 not parameterizable 2 digital output version 2 not parameterizable 2 digital output version 2 not parameterizable 3 not parameterizable 4 not parameterizable 4 not parameterizable 5 not parameterizable 5 not parameterizable 6 not parameterizable 6 not parameterizable 7 number of analog outputs 8 not parameterizable 9 number of analog outputs 9 number of analog 9 number of analo		12.2 A
design of short-circuit protection for control circuit breaker (Icu= 600 A), C8 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply Inputs/ Outputs number of digital inputs 1 number of digital outputs 2 digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 0 digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 0 at AC-15 at 250 V rated value 1 A Installation/ mounting/ dimensions mounting position version 225 mm with vertical mounting surface +/-90* rotatable, with vertical mounting surface +/-22.5* tiltable to the front and back fastening method screw fixing 152 mm required spacing with side-by-side mounting of mm required spacing with side-by-side mounting of mm e backwards 0 mm e towards 100 mm e backwards 100 mm e downwards 75 mm e at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection e for main current circuit spring-loaded terminals e for control circuit spring-loaded terminals		2.2 ms
breaker (lou= 600 A), C6 miniature circuit breaker (lou= 300 A); Is not part of sope of supply Inputs/ Outputs number of digital inputs number of digital outputs • not parameterizable digital output version number of analog outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value • backwards • forwards • forwards • downwards • downwards • downwards • downwards • downwards • at the side weight without packaging Contections/ Terminals type of electrical connection • for main current circuit • for control circuit • spring-loaded terminals	design of the overvoltage protection	Varistor
Injusts Outputs number of digital inputs number of digital outputs on to parameterizable digital output version number of analog outputs other of analog outputs oth	design of short-circuit protection for control circuit	breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of
number of digital inputs number of digital outputs on to parameterizable 2 digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs o at AC-15 at 250 V rated value at DC-13 at 24 V rated value at DC-13 at 24 V rated value bisallation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing height 275 mm required spacing with side-by-side mounting of forwards outpwards	Inputs/ Outputs	
number of digital outputs		1
ont parameterizable digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs o switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value 1 A Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting • forwards • backwards • backwards • upwards • downwards • at the side verified the side weight without packaging type of electrical connection • for main current circuit • for control circuit • for control circuit spring-loaded terminals		
digital output version 2 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 0 switching capacity current of the relay outputs • at AC-15 at 250 V rated value 3 A • at DC-13 at 24 V rated value 1 A Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting • forwards 10 mm • backwards 0 mm • upwards • upwards 100 mm • downwards • at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • for control circuit spring-loaded terminals		
number of analog outputs switching capacity current of the relay outputs at AC-15 at 250 V rated value at DC-13 at 24 V rated value thistallation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting forwards upwards upwards downwards downwards downwards at the side strew fixing 10 mm 10 mm 25 mm width 15 mm 25 mm width 15 mm commands downwards backwards commands downwards commands at the side 5 mm weight without packaging Connections/ Terminals type of electrical connection for main current circuit for control circuit screw-type terminals spring-loaded terminals		2
switching capacity current of the relay outputs • at AC-15 at 250 V rated value • at DC-13 at 24 V rated value 1 A Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting • forwards • backwards • buywards • downwards • downwards • at the side weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit • for control circuit • for control circuit spring-loaded terminals	digital output version	2 normally-open contacts (NO) / 1 changeover contact (CO)
at AC-15 at 250 V rated value at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting • forrwards • backwards • upwards • upwards • downwards • at the side tilt he side tilt he side for control circuit • for control circuit screw-type terminals spring-loaded terminals	number of analog outputs	0
• at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting forwards backwards backwards upwards downwards tupwards tupwards tube downwards 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals	switching capacity current of the relay outputs	
• at DC-13 at 24 V rated value Installation/ mounting/ dimensions mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting forwards backwards backwards upwards downwards tupwards tupwards tube downwards 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals		3 A
mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/-22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting • forwards • backwards • backwards • upwards • downwards • at the side weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit • for control circuit • for control circuit • for control circuit screw-type terminals		
mounting position with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting forwards backwards backwards upwards downwards downwards downwards 3 the side 5 mm weight without packaging connections/ Terminals type of electrical connection for main current circuit for control circuit for control circuit spring-loaded terminals		
### 22.5° tiltable to the front and back fastening method screw fixing height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting		
height 275 mm width 170 mm depth 152 mm required spacing with side-by-side mounting 6 mm • forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 75 mm • at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection 5 crew-type terminals • for main current circuit 5 screw-type terminals • for control circuit 5 spring-loaded terminals	mounting position	
width 170 mm depth 152 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 2.3 kg Connections/ Terminals type of electrical connection • for main current circuit screw-type terminals • for control circuit spring-loaded terminals		
depth 152 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 2.3 kg Connections/ Terminals type of electrical connection screw-type terminals • for main current circuit screw-type terminals • for control circuit spring-loaded terminals	fastening method	screw fixing
required spacing with side-by-side mounting • forwards • backwards • upwards • upwards • downwards • at the side • at the side weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit spring-loaded terminals		·
required spacing with side-by-side mounting • forwards • backwards • upwards • upwards • downwards • at the side • at the side weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit spring-loaded terminals	height	275 mm
 forwards backwards upwards downwards downwards at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit screw-type terminals for control circuit spring-loaded terminals 	height width	275 mm 170 mm
 backwards upwards downwards downwards at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit screw-type terminals for control circuit spring-loaded terminals 	height width depth	275 mm 170 mm
 upwards downwards at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals 	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm
odwnwards at the side 5 mm weight without packaging 2.3 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting • forwards	275 mm 170 mm 152 mm
at the side begin to weight without packaging 2.3 kg Connections/ Terminals type of electrical connection of or main current circuit for control circuit soriew-type terminals of or control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting • forwards • backwards	275 mm 170 mm 152 mm 10 mm 0 mm
weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit screw-type terminals spring-loaded terminals	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm
type of electrical connection • for main current circuit • for control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm
type of electrical connection • for main current circuit screw-type terminals • for control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm
type of electrical connection • for main current circuit screw-type terminals • for control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
 for main current circuit for control circuit screw-type terminals spring-loaded terminals 	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
for control circuit spring-loaded terminals	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm
	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.3 kg
wire length for thermistor connection	height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging Connections/ Terminals type of electrical connection • for main current circuit	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.3 kg
	height width depth required spacing with side-by-side mounting	275 mm 170 mm 152 mm 10 mm 0 mm 100 mm 75 mm 5 mm 2.3 kg

• with conductor cross section = 0.5 mm² maximum	50 m
with conductor cross-section = 0.5 mm² maximum with conductor cross section = 1.5 mm² maximum	50 m
with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum	150 m
with conductor cross-section = 2.5 mm² maximum	250 m
type of connectable conductor cross-sections	
for main contacts	
— solid	2x (1.0 2.5 mm²), 2x (2.5 10 mm²)
 finely stranded with core end processing 	2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)
for AWG cables for main current circuit solid	2x (16 12), 2x (14 8)
type of connectable conductor cross-sections	
 for control circuit solid 	2x (0.25 1.5 mm²)
 for control circuit finely stranded with core end processing 	2x (0.25 1.5 mm²)
 for AWG cables for control circuit solid 	2x (24 16)
 for AWG cables for control circuit finely stranded with core end processing 	2x (24 16)
wire length	
 between soft starter and motor maximum 	800 m
 at the digital inputs at AC maximum 	100 m
tightening torque	
 for main contacts with screw-type terminals 	2 2.5 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 	18 22 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	5 000 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)
Environmental footprint	
Siemens Eco Profile (SEP)	Siemens EcoTech
EMC emitted interference	acc. to IEC 60947-4-2: Class A
Communication/ Protocol	
communication module is supported	
PROFINET standard	Yes
• EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
PROFIBUS	Yes
	100
UL/CSA ratings	
manufacturer's article number	
of circuit breaker usable for Standard Faults	
— at 460/480 V according to UL	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; lq = 5 kA
— 60/480 V according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA
 — at 460/480 V at inside-delta circuit according to UL 	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; lq = 5 kA
 — 60/480 V at inside-delta circuit according to UL 	Siemens type: 3VA51, max. 60 A; Iq max = 65 kA
— at 575/600 V according to UL	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; lq = 5 kA
 — at 575/600 V at inside-delta circuit according to UL 	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 100 A; Iq = 5 kA
of the fuse	
 usable for Standard Faults up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 125 A; Iq = 5 kA
— usable for High Faults up to 575/600 V according to UL	Type: Class J / L, max. 125 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. 125 A; Iq = 5 kA
 usable for High Faults at inside-delta circuit up to 	Type: Class J / L, max. 125 A; Iq = 100 kA

575/600 V according to UL	
operating power [hp] for 3-phase motors	
• at 200/208 V at 50 °C rated value	7.5 hp
• at 220/230 V at 50 °C rated value	10 hp
• at 460/480 V at 50 °C rated value	20 hp
• at 200/208 V at inside-delta circuit at 50 °C rated value	15 hp
• at 220/230 V at inside-delta circuit at 50 °C rated value	15 hp
• at 460/480 V at inside-delta circuit at 50 °C rated value	30 hp
contact rating of auxiliary contacts according to UL	R300-B300
Electrical Safety	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
Approvals Certificates	

General Product Approval





Confirmation







General Product Approval

EMV

Test Certificates

Marine / Shipping





<u>KC</u>

Type Test Certificates/Test Report





Marine / Shipping

other

Environment





Confirmation

Siemens **EcoTech**



Environmental Confirmations

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=3RW5216-3TC14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5216-3TC14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-3TC14

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5216-3TC14&lang=en

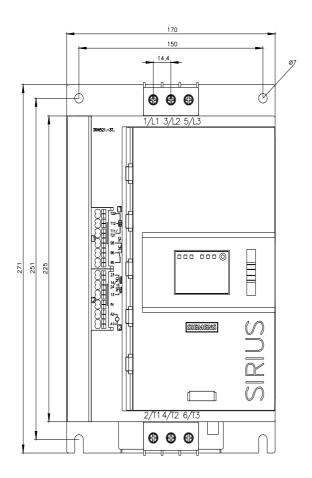
Characteristic: Tripping characteristics, I2t, Let-through current

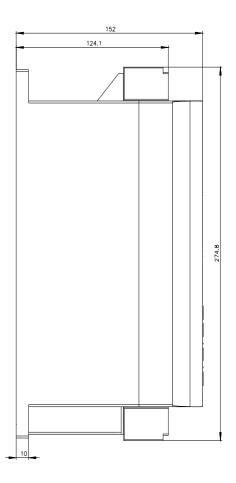
https://support.industry.siemens.com/cs/ww/en/ps/3RW5216-3TC14/char

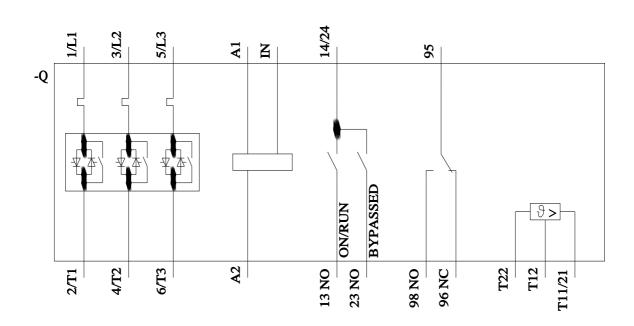
Characteristic: Installation altitude

Simulation Tool for Soft Starters (STS)

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







last modified: 4/19/2024 🖸

