SIEMENS

product brand name

product category product designation

Data sheet 3RW5536-6HA14

SIRIUS

Soft starter

Hybrid switching devices



SIRIUS soft starter 200-480 V 171 A, 110-250 V AC Screw terminals





F	
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 	3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 30 kA, CLASS 10
 of circuit breaker usable at 500 V 	3VA2325-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
• of circuit breaker usable at 400 V at inside-delta circuit	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 30 kA, CLASS 10
• of circuit breaker usable at 500 V at inside-delta circuit	3VA2440-7MN32-0AA0; Type of coordination 1, lq = 10 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3365-6; Type of coordination 1, Iq = 65 kA
• of the gG fuse usable at inside-delta circuit up to 500 V	3NA3365-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1230-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3334-0B; Type of coordination 2, Iq = 65 kA
General technical data	
starting voltage [%]	20 100 %
stopping voltage [%]	50 %; non-adjustable
start-up ramp time of soft starter	0 360 s
ramp-down time of soft starter	0 360 s
start torque [%]	10 100 %
stopping torque [%]	10 100 %
torque limitation [%]	20 200 %
current limiting value [%] adjustable	125 800 %
breakaway voltage [%] adjustable	40 100 %
breakaway time adjustable	0 2 s
number of parameter sets	3
accuracy class	5 (based on IEC 61557-12)
certificate of suitability	
CE marking	Yes
UL approval	Yes

a CSA approval	Voc
CSA approval	Yes
product component	V
HMI-High Feature	Yes
• is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
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
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)	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 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4 Lead titanium trioxide - 12060-00-3 N,N-dimethylacetamide - 127-19-5
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	
DC braking	Yes
 motor heating 	Yes Yes
min/max pointer	
	Yes
• trace function	Yes Yes
 trace function intrinsic device protection	Yes Yes Yes
	Yes Yes Yes Yes
• intrinsic device protection	Yes Yes Yes Yes Yes Yes Yes Yes Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to
intrinsic device protectionmotor overload protection	Yes Yes Yes Yes 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.
 intrinsic device protection motor overload protection evaluation of thermistor motor protection 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit 	Yes Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET 	Yes Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET 	Yes Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes Yes Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes Yes Yes Yes
 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 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes Yes Yes Yes Yes
 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 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes Yes Yes Yes Yes Yes Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes Yes Yes Yes Yes Yes Yes Yes Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook 	Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick Yes
 intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-delta circuit auto-RESET manual RESET remote reset communication function operating measured value display event list error logbook via software parameterizable via software configurable screw terminal spring-loaded terminal 	Yes Yes Yes Yes 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. Yes; Type A PTC or Klixon / Thermoclick 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 	171 A
 at 40 °C rated value minimum 	34 A
 at 50 °C rated value 	153 A
 at 60 °C rated value 	141 A
operational current at inside-delta circuit	
• at 40 °C rated value	296 A
• at 50 °C rated value	265 A
• at 60 °C rated value	244 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	-15 %
inside-delta circuit	
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 	45 kW
 at 230 V at inside-delta circuit at 40 °C rated value 	90 kW
 at 400 V at 40 °C rated value 	90 kW
at 400 V at inside-delta circuit at 40 °C rated value	160 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	51 W
at 50 °C after startup	46 W
at 60 °C after startup	42 W
power loss [W] at AC at current limitation 350 %	
 at 40 °C during startup 	2 393 W
 at 50 °C during startup 	2 038 W
at 60 °C during startup	1 814 W
type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
Control circuit/ Control	
type of voltage of the control supply voltage	AC
control supply voltage at AC	
● at 50 Hz	110 250 V
● at 60 Hz	110 250 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-15 % -
relative positive tolerance of the control supply voltage at AC at 50 Hz	10 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-15 %
relative positive tolerance of the control supply voltage at	10 %

control supply voltage frequency relative negative tolerance of the control supply voltage frequency relative positive tolerance of the control supply voltage frequency control supply current in standby mode rated value holding current in bypass operation rated value holding current in bypass operation rated value holding 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 design of short-circuit protection for control circuit design of short-circuit protection for control circuit **Parameterizable** **number of digital inputs** **number of digital inputs** **number of digital outputs **number of digital outputs parameterizable **number of algital outputs parameterizable **number of algital outputs parameterizable **a IAC-15 at 250 V rated value **a IAC-15 at 250 V rated value **a IAC-15 at 24 V rated value **a IAC-15 at 250 V rated value **a IAC-15 at	AC at 60 Hz	
Incidence of the control supply voltage frequency 10 % 10 m/m 10 m/	AC at 60 Hz	50 60 Hz
Trequency		
Tenguncy Centrol supply current in standary mode rated value 100 mA		10 /0
control supply current in standary mode rated value 100 mA holding current in bypass operator rated value 180 mA inrush current by closing the bypass contacts maximum 45 A inrush current peak at application of control supply vottage 45 A design of the overvoltage protection Variety design of short-circuit protection for control circuit 4 A g G (tase (tau* I AA). 6 a quick-acting fuse (tou* I XA), C1 ministure circuit breaker (fou* 300 A); is not part of supply vottage • number of digital inputs 4 • number of digital outputs 4 • number of digital outputs parameterizable 3 • at 25 25 V Tated value 3 <	relative positive tolerance of the control supply voltage	10 %
holding current in bypass operation rated value 180 mA 180 m	· •	
invash current by closing the bypass contacts maximum invash current peak at application of control supply vicinage duration of innush current peak at application of control supply duration of innush current peak at application of control supply duration of innush current peak at application of control supply design of short-circuit protection for control circuit elasign of short-circuit protection for control circuit in elasign of short-circuit elasign of short-circuit protection for elasign of short-circuit elasign elasign o		
Muration of minish current peak at application of control supply voltage 1.6 ms		
maximum diaration of inush current peak at application of control supply voltage design of the overvoltage protection design of a hort-circuit protection for control circuit by a factor (cue = 0.0 A), 6.8 ministure circuit breaker (cue = 300 A); Is not part of scope of supply minister Outputs **number of digital inputs **number of digital outputs **number of digital outputs **number of digital outputs parameterizable **number of digital outputs **number of digital ou	<u> </u>	
voltage design of the overvoltage protection of central circuit design of short-circuit protection for control circuit braker (clus = 0.0 A), C.6 ministure circuit tracks (clus = 0.0 A), C.6 ministure circuit (clus = 0.0	maximum	
design of short-circuit protection for control circuit protection Imputs/ Outputs number of digital inputs • parameterizable • number of digital outputs • number of digital outputs parameterizable • number of activate the state of the state of digital outputs not parameterizable • number of activate the state of digital outputs of parameterizable • number of activate the state of digital outputs of parameterizable • number of activate the state of digital outputs of parameterizable • number of activate the state of digital outputs of parameterizable • number of activate the state outputs • at AC-15 at 250 V tradet value • activate of the relax outputs • convariance of the state		1.6 ms
breaker (Leu = 600 A), C8 ministure circuit breaker (Leu = 300 A); Is not part of supplys **protect Outputs** **prameterizable** **number of digital outputs** **number of digital outputs** **number of digital outputs parameterizable** **number of digital outputs parameterizable parameterizable** **number of digital outputs parameterizable** **n	design of the overvoltage protection	
number of digital inputs	design of short-circuit protection for control circuit	breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of
• parameterizable • number of digital outputs • number of digital outputs parameterizable • number of digital outputs parameterizable • number of digital outputs not parameterizable • 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 • acrow thing fastening method height depth required spacing with side-by-side mounting • forwards • backwards • backwards • backwards • backwards • backwards • of ownwards • of ownwards • at the side • at the side • of or main current circuit • for main current circuit • for control circuit solid • with conductor cross-section = 0.5 mm² maximum • for control circuit finely stranded with core end processing • for control circuit finely stranded with core end processing • for control circuit finely stranded with core end processing • for control circuit finely stranded with core end processing • for control ci	Inputs/ Outputs	
• number of digital outputs • number of digital outputs parameterizable • number of digital outputs not parameterizable • number of digital outputs not parameterizable • number of adigital outputs not parameterizable • number of adigital outputs not parameterizable • number of adigital outputs • all output version • all ou	number of digital inputs	4
• number of digital outputs parameterizable 1 digital outputy tersion 3 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 1 switching capacity current of the relay outputs 3 A • at AC-15 at 250 V rated value 3 A • at AC-15 at 24 V rated value 1 A Installation/ mounting/ dimensions Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method screw fixing height 306 mm with the depth 203 mm required spacing with side-by-side mounting 10 mm • backwards 0 mm • lorwards 10 mm • downwards 75 mm • downwards 75 mm • downwards 9 lk g Connections Torminals busbar connection • for main current circuit busbar connection • for main current circuit screw-type terminals with conductor cross-section = 0.5 mm² maximum 50 m • with conductor cross-section = 2.5 mm² maximum 50 m • with conductor cross-section = 2.5 mm² maximum 50 m	parameterizable	4
• number of digital outputs parameterizable 1 digital outputy tersion 3 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 1 switching capacity current of the relay outputs 3 A • at AC-15 at 250 V rated value 3 A • at AC-15 at 24 V rated value 1 A Installation/ mounting/ dimensions Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method screw fixing height 306 mm with the depth 203 mm required spacing with side-by-side mounting 10 mm • backwards 0 mm • lorwards 10 mm • downwards 75 mm • downwards 75 mm • downwards 9 lk g Connections Torminals busbar connection • for main current circuit busbar connection • for main current circuit screw-type terminals with conductor cross-section = 0.5 mm² maximum 50 m • with conductor cross-section = 2.5 mm² maximum 50 m • with conductor cross-section = 2.5 mm² maximum 50 m		
• number of digital outputs not parameterizable 1 3 1 1 1 1 1 1 1 1	• number of digital outputs	4
digital output version 3 normally-open contacts (NO) / 1 changeover contact (CO) number of analog outputs 1 switching capacity current of the relay outputs 3 A at AC-15 at 250 V rated value 1 A at DC-13 at 24 V rated value 1 A Installation/mounting/ dimensions Vertical (can be rotated +/- 90" and tilted forward or backward +/- 22.5") fastening method screw fixing height 306 mm vidth 185 mm depth 203 mm required spacing with side-by-side mounting 10 mm - backwards 0 mm - backwards 0 mm - downwards 75 mm - at the side 5 mm weight without packaging 9.1 kg Connections/Terminals 1 type of electrical connection vipe of electrical connection 25 mm of or sin numer circuit busber connection of or control circuit busber connection with conductor cross-section = 0.5 mm² maximum 250 m with conductor cross-section = 2.5 mm² maximum 250 m vipe of connectable	 number of digital outputs parameterizable 	3
number of analog outputs 1 switching capacity current of the relay outputs a at AC-13 at 250 V rated value 3 A • at DC-13 at 24 V rated value 1 A Installation/ mounting (dimensions) Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method screw fixing height 306 mm width 485 mm detpth 203 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 volleght without packaging 9.1 kg Connections/ Terminals 5 mm type of electrical connection 5 mm vill of control circuit screw-type terminals width of connection bar maximum 50 m with conductor cross-section = 0.5 mm² maximum 50 m with conductor cross-section = 1.5 mm² maximum 50 m with conductor cross-section = 2.5 mm² maximum 20 m with conductor cross-section = 2.5 mm² m	number of digital outputs not parameterizable	1
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 fastening method screw fixing width depth 306 mm vidth depth 203 mm required spacing with side-by-side mounting backwards backwards backwards backwards backwards backwards commards at the side screw fixing backwards back	digital output version	3 normally-open contacts (NO) / 1 changeover contact (CO)
• at AC-15 at 250 V rated value • at DC-13 at 24 V rated value • at DC-13 at 24 V rated value Installation mounting dimensions mounting position Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method • screw fixing width • 185 mm depth • 203 mm required spacing with side-by-side mounting • forwards • backwards • backwards • backwards • 100 mm • backwards • downwards • at the side • for main current circuit • for control circuit without packaging view length for thermistor connection • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts stranded • for Control circuit solid • for AWG cables for control circuit solid • between soft starter and motor maximum • at the digital inputs at DC maximum	· ·	1
***at DC-13 at 24 V rated value** ***instalization/ mounting dimensions** **mounting position** fastening method** fastening method** fastening method** **beight** **width** depth** **consmittering spacing with side-by-side mounting** **forwards** **backwards** **backwards** **backwards** **backwards** **backwards** **backwards** **commands** **commands** **at the side** **sommands** **at the side** **sommands** **sommands** **type of electrical connection** **for main current circuit* **of control circuit* **of ronant current circuit* **of ronant current circuit* **of ronant current circuit* **of with conductor cross-section = 1.5 mm² maximum **with conductor cross-section = 2.5 mm² maximum **of DIN cable lug for main contacts stranded		
mounting position Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) fastening method screw fixing width 185 mm depth 203 mm required spacing with side-by-side mounting • forwards 100 mm • backwards 0 mm • upwards 100 mm • downwards 5 mm • at the side 5 mm weight without packaging 5 mm weight without packaging 5 mm verticotions/ Torminals type of electrical connection • for control circuit solid 100 mm • with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum 250 m • with conductor cross-section = 2.5 mm² maximum 250 m • for DIN cable lug for main contacts stranded • for Control circuit finely stranded with core end processing • for Control circuit finely stranded with core end processing • for Control circuit finely stranded with core ond processing • for Control circuit finely stranded with core end processing • for Control circuit finely stranded with core end processing • for AWG cables for control circuit solid 1x (2012, 2x (2014) wire length • evel the conductor cross-sections • for AWG cables for control circuit solid 1x (2012, 2x (2014) wire length • between soft starter and motor maximum 800 m • at the digital inputs at DC maximum 6 and 1000 m		
mounting position Vertical (can be rotated +/- 90" and tilled forward or backward +/- 22.5") fastening method screw fixing height 306 mm width 185 mm depth 203 mm required spacing with side-by-side mounting 100 mm orowards 0 mm a backwards 0 mm outwards 5 mm downwards 5 mm at the side 5 mm weight without packaging 9.1 kg connections/ Torminals 5 mm type of electrical connection 5 mm of or anian current circuit busbar connection of or control circuit screw-type terminals width of connection bar maximum 25 mm wire length for thermistor connection 50 m with conductor cross-section = 0.5 mm² maximum 50 m with conductor cross-section = 2.5 mm² maximum 250 m type of connectable conductor cross-sections 2x (16 95 mm²) of or DIN cable lug for main contacts stranded 2x (25 120 mm²) for control circuit finely stranded with core end processing		1 A
fastening method screw fixing height 306 mm width 185 mm depth 203 mm required spacing with side-by-side mounting 10 mm o forwards 10 mm • backwards 0 mm • upwards 100 mm • downwards 5 mm • at the side 5 mm weight without packaging 9.1 kg Connections/ Torminals 5 mm type of electrical connection 6 or aniin current circuit busbar connection • for main current circuit busbar connection • for control circuit screw-type terminals width of connection bar maximum 55 m • with conductor cross-section = 0.5 mm² maximum 150 m • with conductor cross-section = 0.5 mm² maximum 150 m • with conductor cross-section = 2.5 mm² maximum 250 m type of connectable conductor cross-sections 6 or DIN cable lug for main contacts stranded 2x (25 120 mm²) • for DIN cable lug for main contacts stranded 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • for control circuit finely stranded with	Installation/ mounting/ dimensions	
height 306 mm width 185 mm depth 203 mm required spacing with side-by-side mounting 10 mm e forwards 10 mm e backwards 0 mm e downwards 75 mm e at the side 5 mm weight without packaging 9.1 kg Connections/ Torminals type of electrical connection 6 for main current circuit 5 mm e for control circuit screw-type terminals width of connection bar maximum 25 mm witle length for thermistor connection 50 m e with conductor cross-section = 0.5 mm² maximum 150 m with conductor cross-section = 0.5 mm² maximum 250 m type of connectable conductor cross-sections 2x (16 95 mm²) e for DIN cable lug for main contacts stranded 2x (25 120 mm²) type of connectable conductor cross-sections 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) e for control circuit finely stranded with core end processing 1x (0.5 4.0 mm²), 2x (0.5 1.5 mm²) e for AWG cables for control circuit solid 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) <td>mounting position</td> <td>Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)</td>	mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
width 185 mm depth 203 mm required spacing with side-by-side mounting Forwards o forwards 10 mm o backwards 0 mm o downwards 75 mm o at the side 5 mm weight without packaging 9.1 kg Connections/ Terminals type of electrical connection of or main current circuit busbar connection of or ontrol circuit screw-type terminals width of connection bar maximum 25 mm with conductor cross-section = 0.5 mm² maximum 50 m with conductor cross-section = 1.5 mm² maximum 150 m with conductor cross-section = 1.5 mm² maximum 250 m type of connectable conductor cross-sections 2x (16 95 mm²) of ro INI cable lug for main contacts stranded 2x (25 120 mm²) type of connectable conductor cross-sections 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) of or control circuit finely stranded with core end processing 1x (0.5 4.0 mm²), 2x (0.5 1.5 mm²) of or AWG cables for control circuit solid 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)	fastening method	screw fixing
required spacing with side-by-side mounting forwards forwards backwards omm downwards downwards at the side at the side selectrical connection for control circuit with conductor cross-sections with conductor cross-sections of p DIN cable lug for main contacts finely stranded for control circuit finely stranded with core end processing of a Wise length for AWG cables for control circuit slaid wise length of a WG cables for control circuit started and motor maximum of or AWG cables for control circuit slide wise length of a WG cables for control circuit slide of or OAWG cables for control circuit slide of or AWG cables for control circuit slide of the Wise connectable conductor cross-sections of or AWG cables for control circuit solid of a WHC cables for control circuit solid of a WHC cables for control circuit solid of or AWG cables for control circuit solid of a WHC cables for control circuit solid	height	306 mm
required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side • downwards • at the side • formections/ Terminals type of electrical connection • for control circuit solid • with conductor cross-section = 0.5 mm² maximum • with conductor cross-sections • for DIN cable lug for main contacts straded • for control circuit tsidi • for control circuit straded with core end processing • for control circuit straded with core end processing • for AWG cables for control circuit sloid • for control circuit staff can be sold in the s	width	185 mm
• forwards • backwards • upwards • upwards • at the side • at the side • at the side • brownections/ Terminals type of electrical connection • for main current circuit • for control circuit • for control circuit with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded • for control circuit for control circuit stranded • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded • for control circuit solid • for AWG cables for control circuit solid • to AWG cables for control circuit solid • to AWG cables for control circuit solid • to AWG cables for control circuit solid • between soft starter and motor maximum • at the digital inputs at DC maximum 100 mm	depth	203 mm
backwards upwards upwards downwards form at the side form weight without packaging of electrical connection for main current circuit for control circuit with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum for DIN cable lug for main contacts finely stranded for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for cownectable for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum both communications for maximum form form form form maximum form form form form maximum form form form form form form form for	required spacing with side-by-side mounting	
 upwards downwards at the side 5 mm weight without packaging 9.1 kg Connections/ Terminals type of electrical connection for main current circuit for control circuit screw-type terminals width of connection bar maximum with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded for control circuit solid for control circuit solid for control circuit finely stranded with core end processing for control circuit finely stranded with core end processing for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1000 m 	• forwards	10 mm
odwnwards		
• at the side 5 mm weight without packaging 9.1 kg Connections/ Terminals type of electrical connection • for main current circuit sufficiently screw-type terminals width of connection bar maximum 25 mm wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum 50 m • with conductor cross-section = 1.5 mm² maximum 150 m • with conductor cross-section = 2.5 mm² maximum 250 m with conductor cross-section = 2.5 mm² maximum 250 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 (16 95 mm²) • for DIN cable lug for main contacts finely stranded 2x (25 120 mm²) type of connectable conductor cross-sections • for control circuit solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • for control circuit finely stranded with core end processing 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) • for AWG cables for control circuit solid 1x (20 12), 2x (20 14) wire length • between soft starter and motor maximum 800 m • at the digital inputs at DC maximum 1 000 m	·	
weight without packaging Connections/ Terminals type of electrical connection • for main current circuit • for control circuit width of connection bar maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts stranded • for control circuit solid • for control circuit finely stranded with core end processing • for AWG cables for control circuit solid • between soft starter and motor maximum • at the digital inputs at DC maximum 1000 m busbar connection bu		75 mm
type of electrical connection • for main current circuit • for control circuit width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded • for control circuit solid type of connectable conductor cross-sections • for control circuit solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • for control circuit finely stranded with core end processing • for AWG cables for control circuit solid wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1 000 m	***************************************	
type of electrical connection • for main current circuit • for control circuit • for control circuit width of connection bar maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded • for control circuit solid • for control circuit solid • for control circuit finely stranded with core end processing • for AWG cables for control circuit solid wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1000 m busbar connection screw-type terminals 25 mm busbar connection screw-type terminals busbar connectale. busbar connec		9.1 kg
 for main current circuit for control circuit screw-type terminals width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded 2x (16 95 mm²) type of connectable conductor cross-sections for control circuit solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) for control circuit finely stranded with core end processing for AWG cables for control circuit solid x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) wire length between soft starter and motor maximum at the digital inputs at DC maximum 1000 m 	Connections/ Terminals	
 for control circuit width of connection bar maximum wire length for thermistor connection with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded 2x (16 95 mm²) type of connectable conductor cross-sections for control circuit solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) for control circuit finely stranded with core end processing for AWG cables for control circuit solid 1x (20 12), 2x (20 14) wire length between soft starter and motor maximum at the digital inputs at DC maximum 1 000 m 	•	
width of connection bar maximum25 mmwire length for thermistor connection50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum150 m• with conductor cross-section = 2.5 mm² maximum250 m• for DIN cable lug for main contacts stranded2x (16 95 mm²)• for DIN cable lug for main contacts finely stranded2x (25 120 mm²)• for connectable conductor cross-sections1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)• for control circuit solid1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)• for AWG cables for control circuit solid1x (20 12), 2x (20 14)wire length800 m• at the digital inputs at DC maximum800 m• at the digital inputs at DC maximum1 000 m		
wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum 250 m type of connectable conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded 2x (16 95 mm²) 2x (25 120 mm²) type of connectable conductor cross-sections • for control circuit solid 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) • for AWG cables for control circuit solid 1x (20 12), 2x (20 14) wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1000 m		· ·
 with conductor cross-section = 0.5 mm² maximum with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1000 m 		25 mm
 with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 150 m 250 m 2x (16 95 mm²) 2x (25 120 mm²) 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 		
 with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid tx (0.5 4.0 mm²), 2x (0.5 2.5 mm²) for AWG cables for control circuit solid tx (0.5 2.5 mm²), 2x (0.5 1.5 mm²) tx (20 12), 2x (20 14) wire length between soft starter and motor maximum at the digital inputs at DC maximum 1 000 m 		
type of connectable conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections • for control circuit solid • for control circuit finely stranded with core end processing • for AWG cables for control circuit solid type of connectable conductor cross-sections 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1 000 m		
 for DIN cable lug for main contacts stranded for DIN cable lug for main contacts finely stranded 2x (16 95 mm²) type of connectable conductor cross-sections for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1000 m 		250 m
 for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 2x (25 120 mm²) 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (20 12), 2x (20 14) 800 m 1000 m 	••	
type of connectable conductor cross-sections • for control circuit solid • for control circuit finely stranded with core end processing • for AWG cables for control circuit solid tx (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1 000 m	-	
 for control circuit solid for control circuit finely stranded with core end processing for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1x (0.5 4.0 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 800 m 1 000 m	·	2x (25 120 mm²)
 for control circuit finely stranded with core end processing for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 12), 2x (20 14) 800 m 1 000 m		
 for AWG cables for control circuit solid wire length between soft starter and motor maximum at the digital inputs at DC maximum 1 000 m 	for control circuit solid	
wire length • between soft starter and motor maximum • at the digital inputs at DC maximum 1 000 m	• for control circuit finely stranded with core end processing	
 between soft starter and motor maximum at the digital inputs at DC maximum 1 000 m 	for AWG cables for control circuit solid	1x (20 12), 2x (20 14)
at the digital inputs at DC maximum 1 000 m	wire length	
	 between soft starter and motor maximum 	800 m
tightening torque	at the digital inputs at DC maximum	1 000 m
	tightening torque	

 for main contacts with screw-type terminals 	10 14 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 	89 124 lbf·in
for auxiliary and control contacts with screw-type	7 10.3 lbf·in
terminals	
Ambient conditions	
installation altitude at height above sea level maximum	5 000 m; Derating as of 1000 m, see 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	
during transport according to IEC 60721	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
Environmental footprint	Oi-man FacTark
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
 PROFINET high-feature 	Yes
EtherNet/IP	Yes
 Modbus RTU 	Yes
 Modbus TCP 	Yes
• PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
of circuit breaker usable for Standard Faults	
— at 460/480 V according to UL	Siemens type: 3VA52, max. 250 A; lq = 10 kA
— 60/480 V according to UL	Siemens type: 3VA52, max. 250 A; Iq max = 65 kA
— at 460/480 V at inside-delta circuit according to UL	Siemens type: 3VA52, max. 250 A; Iq = 10 kA
— 60/480 V at inside-delta circuit according to UL	Siemens type: 3VA52, max. 250 A; Iq max = 65 kA
— at 575/600 V according to UL	Siemens type: 3VA52, max. 250 A; Iq = 10 kA
— 75/600 V at inside-delta circuit according to UL	Siemens type: 3VA52, max. 250 A; Iq max = 65 kA
— at 575/600 V at inside-delta circuit according to UL	Siemens type: 3VA52, max. 250 A; Iq = 10 kA
ŭ	Siemens type: 3VA52, max. 250 A; iq = 10 kA
 of the fuse usable for Standard Faults up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 400 A; Iq = 10 kA
— usable for High Faults up to 575/600 V according to	Type: Class J / L, max. 350 A; Iq = 100 kA
UL	. , j. 2. 31000 0 / 2, max. 000 / , iq 100 ld (
 usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL 	Type: Class RK5 / K5, max. 400 A; Iq = 10 kA
 usable for High Faults at inside-delta circuit up to 575/600 V according to UL 	Type: Class J / L, max. 350 A; Iq = 100 kA
operating power [hp] for 3-phase motors	
• at 200/208 V at 50 °C rated value	50 hp
• at 220/230 V at 50 °C rated value	50 hp
 at 460/480 V at 50 °C rated value 	100 hp
• at 200/208 V at inside-delta circuit at 50 °C rated value	75 hp
• at 220/230 V at inside-delta circuit at 50 °C rated value	100 hp
• at 460/480 V at inside-delta circuit at 50 °C rated value	200 hp
contact rating of auxiliary contacts according to UL	R300-B300
Electrical Safety	
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
ATEX	
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1
PFHD with high demand rate according to IEC 61508	5E-7 1/h
<u> </u>	

relating to ATEX	
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.008
hardware fault tolerance according to IEC 61508 relating to ATEX	0
T1 value for proof test interval or service life according to IEC 61508 relating to ATEX	3 a
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]

Approvals Certificates

General Product Approval



Confirmation









EMV For use in hazardous locations Test Certificates Marine / Shipping



<u>KC</u>





Type Test Certificates/Test Report



Marine / Shipping other Environment







Confirmation



Siemens EcoTech



Environment

Environmental Confirmations

Further information

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=3RW5536-6HA14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5536-6HA14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5536-6HA14

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RW5536-6HA14&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

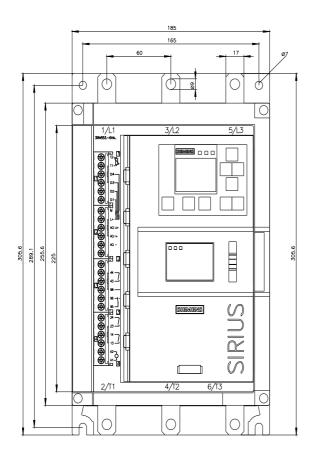
https://support.industry.siemens.com/cs/ww/en/ps/3RW5536-6HA14/char

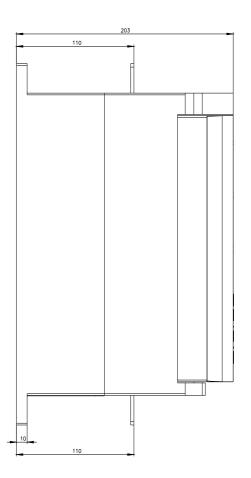
Characteristic: Installation altitude

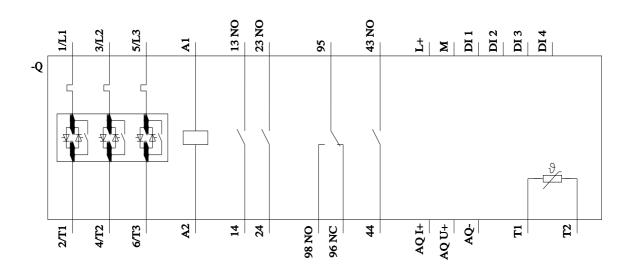
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5536-6HA14\&objecttype=14\&gridview=view1}$

Simulation Tool for Soft Starters (STS)

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







last modified: 6/6/2024 🖸

