## **SIEMENS**

Data sheet 3RW5527-3HA06



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

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW55
manufacturer's article number	
<ul> <li>of high feature HMI module usable</li> </ul>	3RW5980-0HF00
<ul> <li>of communication module PROFINET standard usable</li> </ul>	3RW5980-0CS00
<ul> <li>of communication module PROFINET high-feature usable</li> </ul>	3RW5950-0CH00
<ul> <li>of communication module PROFIBUS usable</li> </ul>	3RW5980-0CP00
<ul> <li>of communication module Modbus TCP usable</li> </ul>	3RW5980-0CT00
<ul> <li>of communication module Modbus RTU usable</li> </ul>	3RW5980-0CR00
<ul> <li>of communication module Ethernet/IP</li> </ul>	3RW5980-0CE00
<ul> <li>of circuit breaker usable at 400 V</li> </ul>	3VA2216-7MN32-0AA0; Type of coordination 1, lq = 15 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3VA2216-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 15 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	3NA3136-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of the gG fuse usable at inside-delta circuit up to 500 V</li> </ul>	3NA3136-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of full range R fuse link for semiconductor protection usable up to 690 V</li> </ul>	3NE1224-0; Type of coordination 2, Iq = 65 kA
<ul> <li>of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul>	3NE3227: Type of coordination 2, Iq = 65 kA

General technical data	
starting voltage [%]	20 100 %
stopping voltage [%]	50 50 %
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

	F 0/
accuracy class acc. to IEC 61557-12	5 %
certificate of suitability	V
CE marking	Yes
UL approval	Yes
CSA approval	Yes
product component	
HMI-High Feature	Yes
is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2
current unbalance limiting value [%]	10 60 %
ground-fault monitoring limiting value [%]	10 95 %
recovery time after overload trip adjustable	60 1 800 s
buffering time in the event of power failure	
for main current circuit	100 ms
<ul> <li>for control circuit</li> </ul>	100 ms
idle time adjustable	0 255 s
insulation voltage rated value	690 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	8 kV
blocking voltage of the thyristor maximum	1 800 V
service factor	1.15
surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
between main and auxiliary circuit	690 V; does not apply for thermistor connection
utilization category acc. to IEC 60947-4-2	AC 53a
shock resistance	15 g / 11 ms, from 6 g / 11 ms with potential contact lifting
vibration resistance	15 mm up to 6 Hz; 2 g up to 500 Hz
reference code acc. to IEC 81346-2	Q
Substance Prohibitance (Date)	15.02.2018 00:00:00
product function	
•	Yes
• ramp-up (soft starting)	Yes Yes
<ul><li>ramp-up (soft starting)</li><li>ramp-down (soft stop)</li></ul>	
<ul><li>ramp-up (soft starting)</li><li>ramp-down (soft stop)</li><li>breakaway pulse</li></ul>	Yes Yes
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> </ul>	Yes Yes Yes
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> </ul>	Yes Yes
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> </ul>	Yes Yes Yes Yes Yes Yes
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> <li>DC braking</li> </ul>	Yes Yes Yes Yes Yes Yes Yes
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> <li>DC braking</li> <li>motor heating</li> </ul>	Yes Yes Yes Yes Yes Yes Yes Yes Yes
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<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> <li>DC braking</li> <li>motor heating</li> <li>slave pointer function</li> <li>trace function</li> </ul>	Yes
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	Feature communication modules
• firmware update	Yes
removable terminal for control circuit	Yes
voltage ramp	Yes
torque control	Yes
combined braking	Yes
analog output	Yes; 4 20 mA (default) / 0 10 V
programmable control inputs/outputs	Yes
• condition monitoring	Yes
automatic parameterisation	Yes
application wizards	Yes
alternative run-down	Yes
<ul> <li>emergency operation mode</li> </ul>	Yes
reversing operation	Yes
<ul> <li>soft starting at heavy starting conditions</li> </ul>	Yes
Power Electronics	
operational current	
<ul> <li>at 40 °C rated value</li> </ul>	93 A
<ul> <li>at 40 °C rated value minimum</li> </ul>	19 A
<ul> <li>at 50 °C rated value</li> </ul>	82.5 A
at 60 °C rated value	75.5 A
operational current at inside-delta circuit	
<ul> <li>at 40 °C rated value</li> </ul>	161 A
<ul> <li>at 50 °C rated value</li> </ul>	143 A
at 60 °C rated value	131 A
operating voltage	
rated value	200 690 V
at inside-delta circuit rated value	200 600 V
relative negative tolerance of the operating voltage	-15 %
relative positive tolerance of the operating voltage	10 %
relative negative tolerance of the operating voltage at inside-delta circuit	-15 %
relative positive tolerance of the operating voltage at inside-delta circuit	10 %
operating power for 3-phase motors	
<ul> <li>at 230 V at 40 °C rated value</li> </ul>	22 kW
<ul> <li>at 230 V at inside-delta circuit at 40 °C rated value</li> </ul>	45 kW
<ul> <li>at 400 V at 40 °C rated value</li> </ul>	45 kW
<ul> <li>at 400 V at inside-delta circuit at 40 °C rated value</li> </ul>	90 kW
<ul> <li>at 500 V at 40 °C rated value</li> </ul>	55 kW
<ul> <li>at 500 V at inside-delta circuit at 40 °C rated value</li> </ul>	110 kW
at 690 V at 40 °C rated value	90 kW
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
relative negative tolerance of the operating frequency	-10 %
relative positive tolerance of the operating frequency	10 %
minimum load [%]	10 %; Relative to set le
power loss [W] for rated value of the current at AC	28 W
<ul> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> </ul>	25 W
at 50 °C after startup     at 60 °C after startup	23 W
power loss [W] at AC at current limitation 350 %	20 11
• at 40 °C during startup	1 258 W
at 50 °C during startup	1 065 W
at 60 °C during startup     at 60 °C during startup	948 W
type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
Control circuit/ Control	The state of the s
type of voltage of the control supply voltage	AC/DC
	. 10, 2
control supply voltage at AC	

• at 50 Hz rated value	24 V
at 60 Hz rated value	24 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage	
at DC rated value	24 V
relative negative tolerance of the control supply voltage at DC	-20 %
relative positive tolerance of the control supply voltage at DC	20 %
control supply current in standby mode rated value	440 mA
holding current in bypass operation rated value	870 mA
locked-rotor current at close of bypass contact maximum	6.3 A
inrush current peak at application of control supply voltage maximum	7.5 A
duration of inrush current peak at application of control supply voltage	20 ms
design of the overvoltage protection	Varistor
design of short-circuit protection for control circuit	4 A gG fuse (Icu=1 kA), 6 A quick-acting fuse (Icu=1 kA), C1 miniature circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply
Inputs/ Outputs	
Inputs/ Outputs number of digital inputs	4
	4 4
number of digital inputs	
number of digital inputs  • parameterizable	4
number of digital inputs  • parameterizable  number of inputs for thermistor connection	4 1; Type A PTC or Klixon / Thermoclick
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs	4 1; Type A PTC or Klixon / Thermoclick 4
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable	4 1; Type A PTC or Klixon / Thermoclick 4 3
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable	1; Type A PTC or Klixon / Thermoclick  4 3 1
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  number of analog outputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  number of analog outputs  switching capacity current of the relay outputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  number of analog outputs  switching capacity current of the relay outputs  • at AC-15 at 250 V rated value	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1  3 A 1 A
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1  3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1  3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method  height	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing with side-by-side mounting	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm
number of digital inputs  • parameterizable  number of inputs for thermistor connection  • number of digital outputs  • number of digital outputs parameterizable  • number of digital outputs not parameterizable  digital output version  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  Installation/ mounting/ dimensions  mounting position  fastening method  height  width  depth  required spacing with side-by-side mounting  • forwards	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1  3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm 100 mm 75 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
number of digital inputs	1; Type A PTC or Klixon / Thermoclick  4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)  1 3 A 1 A  Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 306 mm 185 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm

wire length for thermistor connection  with conductor cross-section = 1.5 mm² maximum  with conductor cross-section = 1.5 mm² maximum  with conductor cross-section = 2.5 mm² maximum  type of connectable conductor cross-section  for main contacts for box terminal using the front clamping point solid  of the main contacts for box terminal using the front clamping point standed  of at AWC cables for main contacts for box terminal using the front clamping point standed  of at AWC cables for main contacts for box terminal using the font clamping point standed  of a wind contacts for box terminal using the back clamping point solid  of main contacts for box terminal using both clamping points solid  of main contacts for box terminal using both clamping points fished with core end processing  of or main contacts for box terminal using both clamping points fished stranded with core end processing  of ror main contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded  of romain contacts for box terminal using the back clamping point stranded with core end processing  of romain contacts for box terminal using the back clamping point stranded  of romain contacts with core end processing  of romain contacts with screw-type terminals  of	for control circuit	spring-loaded terminals
with conductor cross-section = 1.5 mm² maximum  vith conductor cross-section = 2.5 mm² maximum  type of connectable conductor cross-sections  • for main contacts for box terminal using the front clamping point finely stranded with core end processing  • for main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the foot clamping point stranded  • or main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the back clamping point stranded  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping point stranded with core end processing  • for main contacts for box terminal using both clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for control circuit scilid  • at AWG cables for control circuit scilid  • at AWG cables for control circuit scilid  • at the digital inputs at DC maximum  • at the digital inputs at DC maximum		- · · ·
with conductor cross-section = 0.5 mm² maximum     with conductor ross-section = 2.5 mm² maximum     type of connectable conductor cross-sections     for main contacts for box terminal using the front clamping point friendly stranded with core end processing     for main contacts for box terminal using the front clamping point sindled     at AWG cables for main contacts for box terminal using the front clamping point sindled     at AWG cables for main contacts for box terminal using the front clamping point stranded     at AWG cables for main contacts for box terminal using the box clamping point solid     or main contacts for box terminal using both clamping points solid     or main contacts for box terminal using both clamping points friendly stranded with core end processing     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts for box terminal using the back clamping point stranded     or main contacts with screw-type terminals     or control circuit solid     or control circuit solid     or control circuit solid     or or control circuit solid     or or main contacts with screw-type terminals     or auxiliary and control contacts with screw-type terminals     or for auxiliary and control contacts with screw-type terminals     or auxiliary and control contacts with screw-type terminals     or auxiliary and control con		25 11111
• with conductor cross-section = 1.5 mm² maximum  type of connectable conductor cross-sections • for main contacts for box terminal using the front clamping point finely stranded with core end processing • for main contacts for box terminal using the front clamping point stranded • at AWG cables for main contacts for box terminal using the front clamping point stranded • at AWG cables for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using both clamping points stranded • for main contacts for box terminal using both clamping point stranded with core end processing • for main contacts for box terminal using both clamping point stranded • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point finely stranded with core end processing •	•	50 m
• with conductor cross-section = 2.5 mm² maximum type of connectable conductor cross-sections • for main contacts for box terminal using the front clamping point stonded • for main contacts for box terminal using the front clamping point stranded • at AWG cables for main contacts for box terminal using the front clamping point stranded • at AWG cables for main contacts for box terminal using the fort clamping point stranded • at AWG cables for main contacts for box terminal using the fort clamping point solid • at AWG cables for main contacts for box terminal using the back clamping point solid • for main contacts for box terminal using both clamping points finely stranded with core end processing • for main contacts for box terminal using both clamping point stranded • for main contacts for box terminal using both clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts for box terminal using the back clamping point stranded • for main contacts with screw-type terminals • for control circuit finely stranded with core end processing  wire length • between soft starler and motor maximum • at the digital inputs at DC maximum  • tightening forcus • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • f		
## of connectable conductor cross-sections ## of or main contacts for box terminal using the front clamping point finely stranded with core end processing ## of main contacts for box terminal using the front clamping point stranded ## of main contacts for box terminal using the front clamping point stranded ## of main contacts for box terminal using the front clamping point stranded ## of main contacts for box terminal using the back clamping point stranded ## of main contacts for box terminal using the back clamping point stranded ## of main contacts for box terminal using both clamping points stranded ## of main contacts for box terminal using the back clamping point stranded ## of or main contacts for box terminal using both clamping points stranded ## of or main contacts for box terminal using the back clamping point stranded ## of or main contacts for box terminal using the back clamping point stranded ## of or main contacts for box terminal using the back clamping point stranded ## of or main contacts for box terminal using the back clamping point stranded ## of or control circuit finely stranded with core end processing ## of or control circuit finely stranded with core end processing ## of or control circuit finely stranded with core end processing ## of or control circuit finely stranded with core end processing ## of or main contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts with screw-type terminals ## of or audializing and control contacts		
• for main contacts for box terminal using the front clamping point finely stranded with core end processing     • for main contacts for box terminal using the front clamping point stranded     • at AWG cables for main contacts for box terminal using the front clamping point stranded     • at AWG cables for main contacts for box terminal using the front clamping point solid     • at AWG cables for main contacts for box terminal using the back clamping point solid     • for main contacts for box terminal using the back clamping point solid     • for main contacts for box terminal using both clamping points finely stranded with core end processing     • for main contacts for box terminal using both clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded     • for control circuit finely stranded with core end processing     • for control circuit solid     • at AWG cables for control circuit finely stranded with core end processing  wire length     • between soft starfer and motor maximum     • at MG cables for control circuit finely stranded with core end processing  wire length     • for auxiliary and control contacts with screw-type terminals     • for auxiliary and control contacts with screw-type terminals     • for main contacts with screw-t		250 111
clamping point solid  • for main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the back clamping point storal deal of the standard point storage deal of the standard point standard with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point strandard with core end processing  • for control circuit solid  • at AWG cables for control circuit solid  • at AWG cables for control circuit solid  • at AWG cables for control circuit solid  • for main contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • for main contacts for box terminal using the back clamping point standard with core end processing  • for main c	•	1x (2.5 16 mm²)
clamping point finely stranded with core end processing  • for main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the front clamping point stranded  • at AWG cables for main contacts for box terminal using the back clamping point storid  • at AWG cables for main contacts for box terminal using the back clamping point storid  • at AWG cables for main contacts for box terminal using both clamping points storid  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping point stranded  • for main contacts for box terminal using the back clamping point stranded  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for control circuit still  • at AWG cables for control circuit still  • at AWG cables for control circuit still  • between soft starter and motor maximum  • at the digital inputs at DC maximum  • tightening torque  • for main contacts with screw-type terminals  • for auxillary and control contacts with screw-type terminals  • for auxillary and control contacts with screw-type  • terminals   Anbient conditions  installation altitude at height above sea level maximum  • during operation  • during poperation  • during storage and transport  • during storage and transport  • during operation ac. to IEC 60721  • during storage acc. to IEC 60721  • during operation acc. to IEC 60721	clamping point solid	
clamping point stranded  • at AWG cables for main contacts for box terminal using the front clamping point  • for main contacts for box terminal using the back clamping point solid  • at AWG cables for main contacts for box terminal using the back clamping point solid  • for main contacts for box terminal using both clamping points solid  • for main contacts for box terminal using both clamping points stranded with core end processing  • for main contacts for box terminal using both clamping points stranded  • for main contacts for box terminal using both clamping point stranded  • for main contacts for box terminal using both clamping point stranded  • for main contacts for box terminal using the back clamping point firely stranded with core end processing  • for control circuit solid  • for control circuit solid  • for control circuit finely stranded with core end processing  • at AWG cables for control circuit finely stranded with core end processing  • at the digital inputs at DC maximum  • at the digital inputs at DC maximum  • at the digital inputs at DC maximum  • for main contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • during storage and transport  • during poeration  • during storage and transport  • during storage and transport  • during storage and control contacts with screw-type  • during storage and control contacts with screw-type  • during storage and control contacts with screw-type  • during storage and transport  • during storage and control contacts with screw-type  • during storage and transport  • during storage and transport  • during storage and transport  • during torage and transport  • durin	clamping point finely stranded with core end	1x (2.5 50 mm²)
using the front clamping point  • for main contacts for box terminal using the back clamping point solid  • at AWG cables for main contacts for box terminal using the back clamping points solid  • for main contacts for box terminal using both clamping points solid  • for main contacts for box terminal using both clamping points solid  • for main contacts for box terminal using both clamping points stirld  • for main contacts for box terminal using both clamping point stranded  • for main contacts for box terminal using both clamping point finely stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded  • for main contacts for box terminal using the back clamping point stranded  • for control circuit finely stranded with core end processing  • at AWG cables for control circuit solid  • for control circuit finely stranded with core end processing  • at AWG cables for control circuit solid  • at AWG cables for control circuit finely stranded with core end processing  • at AWG cables for control circuit finely stranded with core end processing  • at AWG cables for control circuit finely stranded with core end processing  • at AWG cables for control circuit solid  • for control circuit solid  • at AWG cables for control circuit solid  • at AWG ca		1x (10 70 mm²)
clamping point solid  at AWG cables for main contacts for box terminal using the back clamping point  of for main contacts for box terminal using both clamping points folid  of or main contacts for box terminal using both clamping points finely stranded with core end processing  of or main contacts for box terminal using both clamping points finely stranded with core end processing  of or main contacts for box terminal using both clamping point stranded  of or main contacts for box terminal using the back clamping point finely stranded with core end processing  of or main contacts for box terminal using the back clamping point finely stranded with core end processing  of control circuit solid  of control circuit finely stranded with core end processing  of at AWG cables for control circuit solid  at AWG cables for control circuit finely stranded with core end processing  of at AWG cables for control circuit finely stranded with core end processing  of at award cables for control circuit finely stranded with core end processing  of at award cables for control circuit finely stranded with core end processing  of at award cables for control circuit finely stranded with core end processing  of an award cables for control circuit finely stranded with core end processing  of an award cables for control circuit finely stranded with core end processing  of a ward cables for control circuit solid  of a control circuit finely stranded with core end processing  of a ward cables for control circuit solid  of a control circuit finely stranded with core end processing  of a ward cables for control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and control contacts with screw-type terminals  of or awariany and co		1x (10 2/0)
using the back clamping point  • for main contacts for box terminal using both clamping points solid  • for main contacts for box terminal using both clamping points finely stranded with core end processing  • for main contacts for box terminal using both clamping points firely stranded with core end processing  • for main contacts for box terminal using the back clamping point firely stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded with core end processing  • for control circuit finely stranded with core end processing  • at AWG cables for control circuit solid  • at AWG cables for control circuit finely stranded with core end processing  • at the digital inputs at DC maximum  • between soft starter and motor maximum  • at the digital inputs at DC maximum  • for main contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and control contacts with screw-type terminals  • for a uxiliary and contro	<u> </u>	1x (2.5 16 mm²)
• for main contacts for box terminal using both clamping points solld     • for main contacts for box terminal using both clamping points finely stranded with core end processing     • for main contacts for box terminal using both clamping points stranded     • for main contacts for box terminal using both clamping point stranded     • for main contacts for box terminal using the back clamping point it finely stranded with core end processing     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded with core end processing     • for control circuit solid     • for control circuit solid     • for control circuit solid     • at AWG cables for control circuit solid     • at AWG cables for control circuit finely stranded with core end processing  wire length     • between soft starter and motor maximum     • at the digital inputs at DC maximum     • to re main contacts with screw-type terminals     • for auxiliary and control contacts with screw-type terminals     • for main contacts with screw-type terminals     • for auxiliary and control contacts with screw-type terminals     • for main contacts with screw-type terminals     • for main contacts with screw-type terminals     • for one control contacts with screw-type terminals     • for main contacts with screw-type terminals     • for main contacts with screw-type terminals     • for main contacts with screw-type terminals     • for one control contacts with screw-type terminals     • for main contacts with screw-t		1x (10 2/0)
• for main contacts for box terminal using both clamping points inferly stranded with core end processing     • for main contacts for box terminal using both clamping points stranded     • for main contacts for box terminal using the back clamping point stranded     • for main contacts for box terminal using the back clamping point stranded with core end processing     • for main contacts for box terminal using the back clamping point stranded with core end processing     • for control circuit solid	for main contacts for box terminal using both	2x (2.5 16 mm²)
• for main contacts for box terminal using both clamping points stranded • for main contacts for box terminal using the back clamping point finely stranded with core end processing • for main contacts for box terminal using the back clamping point stranded  type of connectable conductor cross-sections • for control circuit solid • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type • during operation • during operation • during storage and transport • during operation • during operation acc. to IEC 60721 • during storage acc. to IEC 60721	clamping points finely stranded with core end	2x (2.5 35 mm²)
clamping point finely stranded with core end processing  • for main contacts for box terminal using the back clamping point stranded  type of connectable conductor cross-sections  • for control circuit solid • for control circuit solid • at AWG cables for control circuit finely stranded with core end processing  • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum  • tightening torque • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Molecular Auxiliary and control contacts with screw-type terminals  **On Mole		2x (6 16 mm²), 2x (10 50 mm²)
type of connectable conductor cross-sections  • for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for during torque [lbf-in] • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type • during operation  **Ambient conditions**  installation altitude at height above sea level maximum  ambient temperature • during operation • during operation acc. to IEC 60721  **AGE (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6  **IK6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	clamping point finely stranded with core end	1x (2.5 50 mm²)
• for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit finely stranded with core end processing • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and contr		1x (10 70 mm²)
• for control circuit finely stranded with core end processing  • at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals • for auxiliary and con	type of connectable conductor cross-sections	
• at AWG cables for control circuit solid • at AWG cables for control circuit finely stranded with core end processing  wire length • between soft starter and motor maximum • at the digital inputs at DC maximum  • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum • during operation • during storage and transport • during storage acc. to IEC 60721 • during storage acc. to IEC 60721  **Star Ho 0 **C; Please observe derating at temperatures of 40 **C or above  - 40 +80 **C  **Environmental category • during storage acc. to IEC 60721  **A G (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6  **A G (noly occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	<ul> <li>for control circuit solid</li> </ul>	2x (0.25 1.5 mm²)
at AWG cables for control circuit finely stranded with core end processing  wire length     between soft starter and motor maximum     at the digital inputs at DC maximum     1 000 m  tightening torque     for main contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals  tightening torque [lbf-in]     for auxiliary and control contacts with screw-type terminals  for auxiliary and control contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum     ambient temperature     during operation     during storage and transport  during storage and transport  evidence of the condition of the condition altitude at the condition of the con		2x (0.25 1.5 mm²)
wire length  • between soft starter and motor maximum • at the digital inputs at DC maximum  • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type • during operation • during storage and transport • during operation • during storage and transport • during operation acc. to IEC 60721 • during operation acc. to IEC 60721 • during storage acc. to IEC 60721 • during storage acc. to IEC 60721 • during operation acc. to IEC 60721 • during storage acc. to IEC 60721	<ul> <li>at AWG cables for control circuit solid</li> </ul>	2x (24 16)
between soft starter and motor maximum     at the digital inputs at DC maximum      tightening torque     for main contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals     for main contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature     during operation     during storage and transport     during operation acc. to IEC 60721     during storage acc. to IEC 60721     during to get inside the devices), 1M4   800 m  1 000 m  1 000 m  4.5 6 N·m  0.8 1.2 N·m  1 0.0 53 lbf-in  7 10.3 lbf-in  2 000 m; Derating as of 1000 m, see catalog  2 000 m; Derating as of 1000 m, see catalog  3 catalogs  4 0 53 lbf-in  5 catalogs  4 0 53 lbf-in  7 10.3 lbf-in  5 catalogs  6 catalogs  6 catalogs  6 catalogs  6 catalogs  6 catalogs  6 catalogs  7 catalogs  6 catalogs  6 catalogs  6 catalogs  6 catalogs  6 catalogs  7		2x (24 16)
between soft starter and motor maximum     at the digital inputs at DC maximum      tightening torque     for main contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals     for main contacts with screw-type terminals     for main contacts with screw-type terminals     for main contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals     for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum  ambient temperature     during operation      during storage and transport     during operation acc. to IEC 60721  during storage acc. to IEC 60721  during storage acc. to IEC 60721  fixed input to the devices in t		
• at the digital inputs at DC maximum  tightening torque • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  tightening torque [lbf-in] • for main contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals • for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum ambient temperature • during operation • during storage and transport  • during storage and transport  • during operation acc. to IEC 60721 • during storage acc. to IEC 60721  • during storage acc. to IEC 60721  1 K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	_	800 m
tightening torque  • for main contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  tightening torque [lbf-in]  • for main contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • du 53 lbf-in  • for auxiliary and control contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  • du 53 lbf-in  • du		1 000 m
<ul> <li>for main contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>tightening torque [lbf·in]</li> <li>for main contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage and transport</li> <li>during operation acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>t 6 N·m</li> <li>0.8 1.2 N·m</li> <li>40 53 lbf·in</li> <li>7 10.3 lbf·in</li> <li>2 000 m; Derating as of 1000 m, see catalog</li> <li>-25 +60 °C; Please observe derating at temperatures of 40 °C or above</li> <li>40 +80 °C</li> <li>3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</li> <li>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>		
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> <li>tightening torque [lbf-in]         <ul> <li>for main contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> </ul> </li> <li>Ambient conditions         <ul> <li>installation altitude at height above sea level maximum</li> <li>during operation</li> <li>during storage and transport</li> <li>during operation acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> </ul> </li> <li>MK6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>		4.5 6 N·m
tightening torque [lbf·in]  • for main contacts with screw-type terminals  • for auxiliary and control contacts with screw-type terminals  Ambient conditions  installation altitude at height above sea level maximum  • during operation  • during storage and transport  • during operation acc. to IEC 60721  • during storage acc. to IEC 60721  • during storage acc. to IEC 60721  • during storage acc. to IEC 60721  • for main contacts with screw-type terminals  40 53 lbf·in  7 10.3 lbf·in  2 000 m; Derating as of 1000 m, see catalog  -25 +60 °C; Please observe derating at temperatures of 40 °C or above  -40 +80 °C		
<ul> <li>for main contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage and transport</li> <li>during operation acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>10.3 lbf-in</li> <li>10.3 lbf-in</li> <li>10.3 lbf-in</li> <li>10.4 lbf-in</li> <li>10.5 lbf-in</li> <li>10.6 lbf-in</li> <li>10.7 lbf-in</li> <li>10.8 lbf-in</li> <li>10.9 lb</li></ul>	,	// <u>L</u> (
<ul> <li>for main contacts with screw-type terminals</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>during operation</li> <li>during storage and transport</li> <li>during operation acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>for auxiliary and control contacts with screw-type terminals</li> <li>10.3 lbf-in</li> <li>10.3 lbf-in</li> <li>10.3 lbf-in</li> <li>7 10.3 lbf-in</li> <li>8 10.3 lbf-in</li> <li>8 10.3 lbf-in</li> <li>8 10.3 lbf-in</li> <li>9 10.3 lbf-in</li> <li>9 10.3 lbf-in</li> <li>9 10.3 lbf-in</li> <li>10.3 lbf-in</li></ul>	tightening torque [lbf·in]	
<ul> <li>◆ for auxiliary and control contacts with screw-type terminals</li> <li>Ambient conditions</li> <li>installation altitude at height above sea level maximum</li> <li>ambient temperature</li> <li>◆ during operation</li> <li>→ during storage and transport</li> <li>← during operation acc. to IEC 60721</li> <li>★ during storage acc. to IEC 60721</li> <li>★ during storage acc. to IEC 60721</li> <li>★ G (only occasional condensation), 1C2 (no salt mist), 1S2 (sand mot get inside the devices), 1M4</li> </ul>		40 53 lbf·in
installation altitude at height above sea level maximum  ambient temperature  during operation  during storage and transport  during operation acc. to IEC 60721  during storage acc. to IEC 60721  during storage acc. to IEC 60721  during storage acc. to IEC 60721  Alto one installation altitude at height above sea level maximum  2 000 m; Derating as of 1000 m, see catalog  -25 +60 °C; Please observe derating at temperatures of 40 °C or above  -40 +80 °C  3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6  Alto one installation altitude at height above sea level maximum  -2 000 m; Derating as of 1000 m, see catalog  -25 +60 °C; Please observe derating at temperatures of 40 °C or above  -40 +80 °C  3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6  Alto one installation at temperatures of 40 °C or above  -40 +80 °C	<ul> <li>for auxiliary and control contacts with screw-type</li> </ul>	7 10.3 lbf·in
installation altitude at height above sea level maximum  ambient temperature  during operation  during storage and transport  during operation acc. to IEC 60721  during storage acc. to IEC 60721  during storage acc. to IEC 60721  during storage acc. to IEC 60721  Alto one installation altitude at height above sea level maximum  2 000 m; Derating as of 1000 m, see catalog  -25 +60 °C; Please observe derating at temperatures of 40 °C or above  -40 +80 °C  3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6  4 K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	Ambient conditions	
<ul> <li>ambient temperature</li> <li>during operation</li> <li>during storage and transport</li> <li>during storage and transport</li> <li>40 +80 °C</li> <li>environmental category</li> <li>during operation acc. to IEC 60721</li> <li>3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</li> <li>during storage acc. to IEC 60721</li> <li>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>		2 000 m; Derating as of 1000 m, see catalog
<ul> <li>during operation</li> <li>during storage and transport</li> <li>during storage and transport</li> <li>environmental category</li> <li>during operation acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>during storage acc. to IEC 60721</li> <li>MK6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</li> <li>MK6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>	-	
environmental category  • during operation acc. 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 acc. to IEC 60721  1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	•	
<ul> <li>during operation acc. to IEC 60721</li> <li>3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6</li> <li>during storage acc. to IEC 60721</li> <li>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>	<ul> <li>during storage and transport</li> </ul>	-40 +80 °C
mist), 3S2 (sand must not get into the devices), 3M6  • during storage acc. to IEC 60721  1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4	environmental category	
<ul> <li>during storage acc. to IEC 60721</li> <li>1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand not get inside the devices), 1M4</li> </ul>		
• during transport acc. to IEC 60721 2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)	• during storage acc. to IEC 60721	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must
	<ul> <li>during transport acc. to IEC 60721</li> </ul>	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
EMC emitted interference acc. to IEC 60947-4-2: Class A		

Communication/ Protocol	
communication module is supported	
PROFINET standard	Yes
PROFINET high-feature	Yes
• EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
PROFIBUS	Yes
UL/CSA ratings	165
manufacturer's article number	
<ul> <li>of circuit breaker         <ul> <li>usable for Standard Faults at 460/480 V</li> </ul> </li> <li>according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
usable for High Faults at 460/480 V according to UL	Siemens type: 3VA51, max. 125 A; Iq max = 65 kA
usable for Standard Faults at 460/480 V at inside-delta circuit according to UL	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
<ul> <li>usable for High Faults at 460/480 V at inside- delta circuit according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; Iq max = 65 kA
<ul> <li>usable for Standard Faults at 575/600 V according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
<ul> <li>usable for High Faults at 575/600 V at insidedelta circuit according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; Iq max = 65 kA
<ul> <li>usable for Standard Faults at 575/600 V at inside-delta circuit according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; Iq = 10 kA
• of the fuse	
<ul> <li>usable for Standard Faults up to 575/600 V according to UL</li> </ul>	Type: Class RK5 / K5, max. 300 A; Iq = 10 kA
— usable for High Faults up to 575/600 V according to UL	Type: Class J / L, max. 250 A; Iq = 100 kA
usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL	Type: Class RK5 / K5, max. 300 A; Iq = 10 kA
usable for High Faults at inside-delta circuit up to 575/600 V according to UL	Type: Class J / L, max. 250 A; Iq = 100 kA
operating power [hp] for 3-phase motors	
• at 200/208 V at 50 °C rated value	25 hp
• at 220/230 V at 50 °C rated value	30 hp
● at 460/480 V at 50 °C rated value	60 hp
<ul> <li>at 575/600 V at 50 °C rated value</li> </ul>	75 hp
<ul> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> </ul>	40 hp
<ul> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>	50 hp
<ul> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> </ul>	100 hp
at 575/600 V at inside-delta circuit at 50 °C rated value	125 hp
contact rating of auxiliary contacts according to UL	R300-B300
Safety related data	
protection class IP on the front acc. to IEC 60529	IP00; IP20 with cover
touch protection on the front acc. to IEC 60529	finger-safe, for vertical contact from the front with cover
electromagnetic compatibility	acc. to IEC 60947-4-2
ATEX	
certificate of suitability	
• ATEX	Yes
• IECEx	Yes
<ul> <li>according to ATEX directive 2014/34/EU</li> </ul>	BVS 18 ATEX F 003 X
type of protection according to ATEX directive 2014/34/EU	II (2)G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb], II (2)D [Ex tb Db] [Ex pxb Db], I (M2) [Ex db Mb]
hardware fault tolerance acc. to IEC 61508 relating to ATEX	0
PFDavg with low demand rate acc. to IEC 61508	0.008

relating to ATEX	
PFHD with high demand rate acc. to EN 62061 relating to ATEX	0.0000005 1/h
Safety Integrity Level (SIL) acc. to IEC 61508 relating to ATEX	SIL1
T1 value for proof test interval or service life acc. to IEC 61508 relating to ATEX	3 y

Certificates/ approvals

**General Product Approval** 

EMC

For use in hazardous locations













For use in hazardous locations **Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







other

Confirmation

## **Further information**

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

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

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW5527-3HA06}}$ 

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

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

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

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

Characteristic: Tripping characteristics, I2t, Let-through current

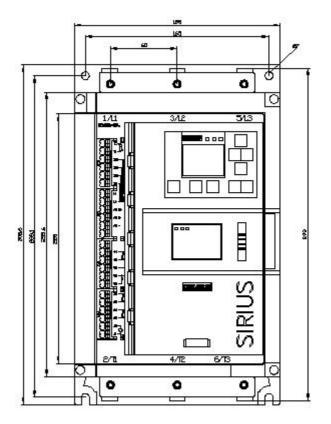
https://support.industry.siemens.com/cs/ww/en/ps/3RW5527-3HA06/char

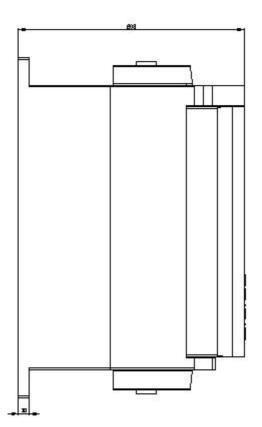
Characteristic: Installation altitude

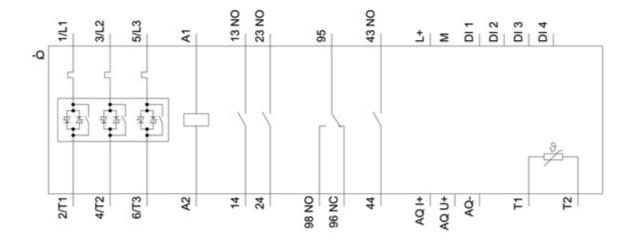
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5527-3HA06\&objecttype=14\&gridview=view1}$ 

Simulation Tool for Soft Starters (STS)

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







last modified: 3/9/2021 🖸