# SIEMENS

#### Data sheet

### 3RW5513-1HF14



SIRIUS soft starter 200-480 V 13 A, 110-250 V AC, Screw terminals Fail-safe

Figure similar

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Failsafe soft starters
product type designation	3RW55
manufacturer's article number	
<ul> <li>of high feature HMI module usable</li> </ul>	<u>3RW5980-0HF00</u>
<ul> <li>of communication module PROFINET standard usable</li> </ul>	<u>3RW5980-0CS00</u>
<ul> <li>of communication module PROFINET high-feature usable</li> </ul>	<u>3RW5950-0CH00</u>
<ul> <li>of communication module PROFIBUS usable</li> </ul>	<u>3RW5980-0CP00</u>
<ul> <li>of communication module Modbus TCP usable</li> </ul>	<u>3RW5980-0CT00</u>
<ul> <li>of communication module Modbus RTU usable</li> </ul>	<u>3RW5980-0CR00</u>
<ul> <li>of communication module Ethernet/IP</li> </ul>	<u>3RW5980-0CE00</u>
<ul> <li>of circuit breaker usable at 400 V</li> </ul>	3RV2032-4TA10; Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3RV2032-4TA10; Type of coordination 1, Iq = 18 kA, CLASS 10
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3RV2032-4DA10: Type of coordination 1, lq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3RV2032-4DA10; Type of coordination 1, Iq = 18 kA, CLASS 10
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	3NA3820-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of the gG fuse usable at inside-delta circuit up to 500 V</li> </ul>	3NA3820-6; 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>	<u>3NE1815-0: Type of coordination 2. Iq = 65 kA</u>
<ul> <li>of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul>	<u>3NE8017-1: Type of coordination 2. Iq = 65 kA</u>
<ul> <li>of the redundant contactor for applications &gt; SIL 1 according to EN 62061</li> </ul>	<u>3RT2027</u>
<ul> <li>of the redundant contactor for applications &gt; SIL 1 at inside-delta circuit according to EN 62061</li> </ul>	<u>3RT2027</u>
<ul> <li>of the redundant contactor for applications &gt; SIL 1 according to EN ISO 13849-1</li> </ul>	<u>3RT2027</u>
<ul> <li>of the redundant contactor for applications &gt; SIL 1 at inside-delta circuit according to EN ISO 13849-1</li> </ul>	<u>3RT2027</u>
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 coto	3
number of parameter sets accuracy class	5 (based on IEC 61557-12)
certificate of suitability	
• CE marking	Yes
• UL approval	Yes
	Yes
CSA approval	
product component	Vec
HMI-High Feature	Yes
is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes3
number of controlled phases	
trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 10 60 %
current unbalance limiting value [%]	10 95 %
ground-fault monitoring limiting value [%]	10 95 %
buffering time in the event of power failure     for main current circuit	100 ms
for main current circuit     for control circuit	100 ms
idle time adjustable	0 255 s 480 V
insulation voltage rated value	
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	6 kV
blocking voltage of the thyristor maximum	1 600 V
service factor	1.15
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
between main and auxiliary circuit	480 V; does not apply for thermistor connection
shock resistance	15 g / 11 ms, from 6 g / 11 ms with potential contact lifting
vibration resistance	15 mm up to 6 Hz; 2 g up to 500 Hz 60 1 800 s
recovery time after overload trip adjustable	
utilization category according to IEC 60947-4-2	Q
reference code according to IEC 81346-2	11/22/2019
Substance Prohibitance (Date) product function	11/22/2019
• 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
<ul> <li>pump ramp down</li> </ul>	Yes
DC braking	Yes
motor heating	Yes
slave pointer function	Yes
trace function	Yes
intrinsic device protection	Yes
motor overload protection	Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit.
<ul> <li>evaluation of thermistor motor protection</li> </ul>	Yes; Type A PTC or Klixon / Thermoclick
inside-delta circuit	Yes
• auto-RESET	Yes
manual RESET	Yes
remote reset	Yes
communication function	Yes
operating measured value display	Yes
• event list	Yes
• error logbook	Yes
via software parameterizable	Yes
via software configurable	Yes
screw terminal	Yes
spring-loaded terminal	No
PROFlenergy	Yes; in connection with the PROFINET Standard and PROFINET High-Feature communication modules

e firmularo undato	Yes
<ul> <li>firmware update</li> <li>removable terminal for control circuit</li> </ul>	Yes
	Yes
voltage ramp	Yes
<ul><li>torque control</li><li>combined braking</li></ul>	Yes
-	
<ul> <li>analog output</li> <li>programmable control inputs/outputs</li> </ul>	Yes; 4 20 mA (default) / 0 10 V 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	13 A
at 40 °C rated value minimum	2.5 A
at 50 °C rated value	11.5 A
at 60 °C rated value	10.5 A
operational current at inside-delta circuit	
at 40 °C rated value	22.5 A
at 50 °C rated value	19.9 A
at 60 °C rated value	18.2 A
operating voltage	10.2 A
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	3 kW
at 230 V at inside-delta circuit at 40 °C rated value	5.5 kW
<ul> <li>at 400 V at 40 °C rated value</li> </ul>	5.5 kW
<ul> <li>at 400 V at inside-delta circuit at 40 °C rated value</li> </ul>	11 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	4 W
• at 50 °C after startup	3 W
• at 60 °C after startup	3 W
power loss [W] at AC at current limitation 350 %	
• at 40 °C during startup	198 W
• at 50 °C during startup	166 W
● at 60 °C during startup	148 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	-15 %
AC at 50 Hz	40.07
relative positive tolerance of the control supply voltage at AC at 50 Hz	10 %
relative negative tolerance of the control supply voltage at	-15 %

AL is to the product of the control supply voltage         10 %           control supply voltage frequency         50 = 60 Hz           requency         50 = 60 Hz           requency         10 %           control supply voltage frequency         10 %           requency         10 %           control supply current in standty mode rated value         10 %           index positive coloring to the control supply voltage         10 %           index positive coloring to the control supply voltage         10 %           index positive coloring to the control supply voltage         10 %           index positive coloring to the control supply voltage         10 %           index positive coloring to the control supply voltage         2A A           index positive coloring to the control control supply voltage         4A A           index positive coloring to control control control supply voltage         4A A           index positive coloring to control con	inclusion positive tolerance of the control supply voltage         10 %           control supply voltage frequency         60 60 is2           plative negative tolerance of the control supply voltage         -0 %           requency         10 %           plative negative tolerance of the control supply voltage         -0 %           control supply current in standby mode rated value         100 mA           holding current in bypass operation rated value         100 mA           invash current post at application of control supply voltage         43 A           design of the overvoltage protection         Variator           design of the overvoltage protection or control circuit         4 A           ensume or digital inputs         4           • unthard stade         1           • unthard radigu control state failed         1	AC at 60 Hz	
Ac a for ise         Control supply voltage fragunery         5000 Hz           regionery optive tolerance of the control supply voltage         -10 %           regionery optive tolerance of the control supply voltage         -10 %           regionery optive tolerance of the control supply voltage         10 MA           holding current in standary mode rated value         10 MA           holding current in the parse operation active value         10 MA           holding current in the parse operation active value         10 MA           intrush current by closing the bypess contacts maximum         0.2 A           maximum         45 A           catasis of the control supply voltage         45 A           maximum         44 A           catasis of the control supply voltage         45 A           maximum         4 A           outside of the control supply voltage         4 A           interime of digital inputs         4 A           interime of digital inputs         4 A           interime of digital inputs         4 A           intermed of digital inputs         5 A           intermed of digital inputs	AC at 6 is         control supply voltage frequency         5000 it 2           control supply voltage frequency         10 %           regarery         10 %           control supply current in standby mode rated value         106 mA           holding current in bypass contacts maximum         102 A           maximum         02 A           maximum         43 A           control supply voltage         43 A           maximum         42 A           maximum         43 A           control supply voltage         43 A           maximum         43 A           control supply voltage         43 A           woltage         4           unation of much current peak at application of control supply voltage         4           woltage         4           unation of instructures         4           woltage         5           unation of instructures         5           unation of instructures         5           unation of instructures         5           unation of instructures         5 </td <td></td> <td>10 %</td>		10 %
requery         -10 %           requery         -10 %           requery         10 %           requery         10 %           requery         10 %           control supply current in standay mode rated value         100 mA           hobding current in bypass portacts maximum         02.A           inrush current bypass optaction rated value         02.A           outlator of innah current post at apply outlage         43.A           wateling of innah current post at apply outlage         43.A           outlator of innah current post at apply outlage         4           estign of the overvotage protection         Variator           tasks         1           estign of the overvotage protection         Variator           number of digital inputs         4           estign of the overvotage protection         4           estign of digital outputs         1           estign of digital outputs         3           estign of digital outputs with fields after         1           estign of digital outputs with fields after         3           estign of digital outputs with fields after         1           estign of digital outputs with fields after         1           estign of digital outputs with fields after         1 <td>relative non-structure of the control supply voltage         -10 %           requescy         10 %           requescy         10 %           requescy         10 %           control supply current in standay mode rated value         100 mA           holding current in standay mode rated value         100 mA           holding current in standay mode rated value         100 mA           invalue current by closing the bypass contacts maximum         02 A           design of hort-circuit protection for control supply voltage         43 A           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         4           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         4           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broake</td> <td></td> <td></td>	relative non-structure of the control supply voltage         -10 %           requescy         10 %           requescy         10 %           requescy         10 %           control supply current in standay mode rated value         100 mA           holding current in standay mode rated value         100 mA           holding current in standay mode rated value         100 mA           invalue current by closing the bypass contacts maximum         02 A           design of hort-circuit protection for control supply voltage         43 A           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         4           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         4           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broaker (fou= 500 A), is not part of supply voltage         1           evaluto influence circuit broake		
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frequency         Image: Current is the phase soperation rated value         Image: Current is bypase soperation rated v	requery         Orn A           control supply current in tandy mode rated value         106 mA           holding current in bypass operation rated value         165 mA           meab current by closing the bypass contracts maximum         92.A           meab manufactor of control supply value         43 A           design of the overvoltage protection         Y arsion           design of hort-circuit protection for control circuit         44 A           mumber of digital notation         44 A           number of digital notation         44 A           example in hort-circuit protection for control circuit         44 A           example of digital notation         4           example of digital notation         4           example of digital notation         1           example of digital notation         3           example of digital notation         3           example of digital notation         1           example of digital notation in half-afae         1           example of digital notation in parameterizable         1           example of digital notation in parameterizable         1           example of digital notation in parameterizable         1           example of digital notation in the relay outputs         1           example digital notation in para		-10 %
holding current in bypass operation rated value         165 mA           Innah current by closing the bypass contacts maximum         0.2 A           innah current peak at application of control supply voltage         43 A           design of the overvoltage protection         Variator           design of the overvoltage protection         Variator           design of the overvoltage protection         Variator           design of the overvoltage protection for control circuit         Variator           number of digital inputs         4           • with fail-safe         1           • apartmeterizable         4           • number of digital outputs with fail-safe         1           • number of digital outputs with fail-safe         1           • number of digital outputs with fail-safe         1           • number of digital outputs on parameterizable         2           • number of digital outputs with fail-safe         1           • number of digital outputs on parameterizable         1           • number of analog outputs	holding current in bypass operation rade value         165 mA           Innak current by closing the bypass contacts maximum         0.2 A           Innak current by closing the bypass contacts maximum         0.2 A           Innak current by closing the bypass contacts maximum         0.2 A           Innak current pesk at application of control supply voltage         43 A           design of the overvoltage protection         43 A           design of the overvoltage protection for control circuit         47 Sp (sp (tot-1 AL) 5 A quick acting hore (tot-1 AL) CT miniture circuit the control of the distance           number of digital linputs         4           • with follows         1           • unmber of digital outputs         3           • unmber of digital outputs with fail-safe         1           • unmber of digital outputs parameterizable         1           • unmber of digital outputs parameterizable         1           • unmber of digital outputs parameterizable         1           • arameterizable		10 %
invasio current ty closing the bypass contacts maximum         0.2 A           mean current peak at application of control supply voltage design of the overroltage protection         43 A           design of the overroltage protection         Variator           design of the overroltage protection for control circuit         4 Ag Graps (part MA), 6 A quick acting fuse (part MA), f In milature circuit beaker (icue 300 A), is not part of scope of supply           impute of digital inputs         4           • with fail-safe         1           • quarter of digital outputs with fail-safe         3           • number of digital outputs narmeterizable         2           • number of digital outputs marmeterizable         1           • within graps (part of the relay outputs • and circla to part of the relay outputs         3           • Number of digital output suft fail-safe         1           • withing capacity current of the relay outputs         3           • and circla digital output suft fail-safe         1           • withing capacity current of the relay outputs         3           • all Co-13 at 24 V rated value         3A           • all Co-13 at 24 V rated value         3A           • all Co-13 at 24 V rated value         10 ms           • actortic ingues maximum         10 ms           • actortic ingues maximum         10 mm	Invash current by closing the bypass contacts maximum         0.2 A           maximum         43 A           maximum         43 A           watter of trush current peak at application of control supply voltage         43 A           design of the overvoltage protection         Variator           design of the overvoltage protection for control circuit         Variator           number of digital inputs         4           • with fail-safe         1           • unmber of digital outputs         4           • unmber of digital outputs         4           • unmber of digital outputs         5           • unmber of digital outputs         2           • unmber of digital outputs wit fail-safe         1           • unmber of digital outputs wit fail-safe         2           • unmber of digital outputs wit fail-safe         1           • unmber of digital outputs with fail-safe         1           • unmber of digital outputs with fail-safe         1           • unmber of digital outputs with fail-safe         1 </td <td>control supply current in standby mode rated value</td> <td>100 mA</td>	control supply current in standby mode rated value	100 mA
maximum         43 A           duration of invals numerin peak at application of control supply         1.6 ms           design of the overvoltage protection         Variator           design of short-circuit protection for control circuit         A fight for the store of the store o	number of digital outputs         43 A           quartion of invisite euronic peak at application of control supply         1.6 ms           design of the overvoltage protection         Variator           design of short-circuit protection for control circuit         4.6 (for the overvoltage protection)           number of digital inputs         4           • with file-alite         1           • with file-alite         1           • arrameterizable         4           • with file-alite         1           • with file-alite         1           • arrameterizable         4           • number of digital outputs with fall-alite         1           • number of digital outputs with fall-alite         1           • number of digital outputs with fall-alite         1           • number of digital outputs parameterizable         2           • number of digital outputs         3 A           • all AC-15 at 26 V rited value         3 A           • all AC-15 at 26 V rited value         3 A           • all AC-15 at 26 V rited value         3 A           • all AC-15 at 26 V rited value         1           • all AC-15 at 26 V rited value         3 A           • all AC-15 at 26 V rited value         100 ms           • all AC-16 at 26 V rited value <td>holding current in bypass operation rated value</td> <td>165 mA</td>	holding current in bypass operation rated value	165 mA
maximum         Control of parts           Variation of involves         3 m is           design of the overvoltage protection for control circuit         4 A pG fuse (incurs KA), 6 A quick-acting fuse (incur KA), C1 miniature circuit breaker (incur KA), C1 miniature circuit breaker (incurs KA), C1 miniature circuit breaker (incur KA), C1 miniature circuit breaker (incurs KA), C1 miniatu	maximum         1.6 ms           vortage         1.6 ms           vortage         Vortage           design of the overvoltage protection         Variator           design of the overvoltage protection for control circuit         Variator           number of digital inputs         4           • (with fail-ade)         1	inrush current by closing the bypass contacts maximum	0.2 A
votage         Variator           design of the overvoltage protection         Variator           design of short-circuit protection for control circuit         A Ag G kase (lou-II AA) & A quick-acting fuse (lou-II AA) C A match-acting fuse (lou-II AA) C A match acting fuse (lo	voltage         Variator           design of the overvoltage protection         Variator           design of short-circuit protection for control circuit         A Ag G fue (curr I AA), 6 A quick-acting fues (lour=1 KA), C1 miniature circuit breaker (cur-300 A), is not part of supply.           inumber of digital inputs         4           • with fail-safe         1           • parameterizable         3           • number of digital outputs with fail-safe         1           • number of digital outputs         3           • number of digital outputs         1           • number of digital outputs         3           • a DC-13 at 24 V rated value         3           • a DCF-digt time with safely-related request witen switched off         100 ms           reservicing method         52 mm           height         122 mm           reqoredi		43 A
design of short-circuit protection for control circuit     4. Ag G kase (ku= KA), 6. A quick-acting fuse (ku= KA), C1 ministure circuit breaker (ku= 300 A); is not part of scope of supply.       impute/ Outputs     4       number of digital inputs     4       • quameterizable     4       • number of digital outputs     3       • number of digital outputs with fail-safe     1       • number of digital outputs and parameterizable     1       • number of digital outputs motion parameterizable     1       • number of digital outputs maneterizable     1       • digital outputs terison     2 normality-copen contacts (NO) / 1 normality-closed contact (NC) / 1 changeover       number of allog outputs     1       switching capacity current of the relay outputs     1       • at AC-16 at 250 V rated value     3 A       • at AC-16 at 250 V rated value     3 A       • at AC-16 at 26V rated value     100 ms       • at AC-16 at 26V rated value     100 ms       • at AC-16 at 26V rated value     100 ms       • at AC-16 at 26V rated value     3 A       • at AC-16 at 26V rated value     3 A       • at AC-16 at 26V rated value     100 ms       • at AC-16 at 26V rated value     100 ms       • at AC-16 at 26V rated value     3 A       • at Bactoling method     score value       • at Bactoling method     scor	design of short-circuit protection for control circuit     4. AgG (see (Cur-1 XA), 6.4, audic-acting fues (Cur-1 XA), 6.4, audic-acting (Cur-1 XA), 6.4, audic-acting fues (Cur-1 XA), 6.4, audic-acting fues (Cur-1 XA), 6.		1.6 ms
breaker (fcu= 600 A), C6 miniature circuit breaker (fcu= 300 A); is not part of sope of supply           number of digital inputs         4           • with finit-aire         1           • number of digital outputs         3           • number of digital outputs         3           • number of digital outputs and parameterizable         2           • number of digital outputs and parameterizable         2           • number of digital outputs not parameterizable         1           • digital outputs and parameterizable         1           • number of digital outputs         1           • number of digital outputs not parameterizable         2           • number of digital outputs         1           • attroch at 250 V rated value         3 A           • attroch at 250 V rated value         3 A           • attroch at 250 V rated value         100 ms           • attroch at 250 V rated value         100 ms           • at occh at 250 V rated value         100 ms           • at occh at 250 V rated value         100 ms           • at occh at 250 V rated value         100 ms           • at occh at 250 V rated value         100 ms           • at occh at 250 V rated value         100 ms           • at occh at 250 V rated value         275 mm <t< td=""><td>breaker (ac)= 600 A); C6 miniature circuit breaker (bcu= 300 A); Is not part of           Inputted Outputs         4           number of digital inputs         4           o with fail-safe         1           e parameterizable         4           number of digital outputs with fail-safe         3           Number of digital outputs parameterizable         2           o number of digital outputs parameterizable         1           o number of analgo outputs         3 A           o at AC-15 at 250 V trade value         3 A           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o addexnards         0 mm         100 ms           o addexnar</td><td>design of the overvoltage protection</td><td>Varistor</td></t<>	breaker (ac)= 600 A); C6 miniature circuit breaker (bcu= 300 A); Is not part of           Inputted Outputs         4           number of digital inputs         4           o with fail-safe         1           e parameterizable         4           number of digital outputs with fail-safe         3           Number of digital outputs parameterizable         2           o number of digital outputs parameterizable         1           o number of analgo outputs         3 A           o at AC-15 at 250 V trade value         3 A           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o at AC-15 at 250 V trade value         100 ms           o addexnards         0 mm         100 ms           o addexnar	design of the overvoltage protection	Varistor
number of digital inputs     4       • with full-safe     1       • parameterizable     4       • number of digital outputs     3       • Number of digital outputs with fail-safe     1       • number of digital outputs parameterizable     2       • number of digital outputs parameterizable     1       • digital output version     2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CC)       number of analog outputs     1       • at AC-15 at 250 V rated value     3 A       • at DC-13 at 24 V rated value     1A       • at DC-13 at 24 V rated value     100 ms       • orbit inputs maximum     100 ms       Installation/ mounting/ dimensions     100 ms       mounting position     Vertical (can be rotated +/- 90' and titted forward or backward +/- 22.5')       fastening method     screw fixing       height     170 mm       eight     125 mm       required spacing with side-by-side mounting     10 mm       • forwards     0 mm       • downwards     75 mm       • downwards     75 mm       • downwards     75 mm       • for control circuit     screw-type terminals       • for control circuit     screw-type terminals       • for control circuit     screw-type terminals       • for ma	number of digital inputs     4       • with full-safe     1       • parameterizable     4       • number of digital outputs     3       • Number of digital outputs with fail-safe     1       • number of digital outputs sprameterizable     2       • number of digital outputs sprameterizable     1       • digital output version     2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)       number of analog outputs     1       • at AC-15 at 250 V rated value     3 A       • at AC-15 at 250 V rated value     1 A       Presponse times     100 ms       • ortion linputs maximum     100 ms       Verical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)       fastening method     screw fixing       height     275 mm       width     170 nm       depth     152 mm       required spacing with side-by-side mounting     100 ms       • forwards     0 mm       • upwards     0 mm       • upwards     2.3 kg       Contections/ Terminats     screw-type terminats       • for main current circuit     screw-type terminats       • for main current circuit     screw-type terminats       • for main current circuit     50 m       • for main current circuit     50 m	design of short-circuit protection for control circuit	breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of
• with fail-safe1• parameterizable4• number of digital outputs3• number of digital outputs with fail-safe1• number of digital outputs not parameterizable2• number of digital outputs not parameterizable2• digital outputs not parameterizable1digital outputs not parameterizable1• at AC-15 at 280 V rated value3 A• at DC-13 at 28V rated value3 A• at DC-13 at 28V rated value1• at DC-13 at 28V rated value100 msvia control inguits maximum275 marequired spacing with side-by-side request when switched off100 msvia control inguits maximum275 mmrequired spacing with side-by-side mounting50 mrequired spacing with side-by-side mounting100 mmrequired spacing with side-by-side mounting10 mm• forwards00 mm• forwards00 mm• or control required spacing with side-by-side mounting10 mm• forwards100 mm• of or anio current (cruchscrew-type terminals• of or anio current (cruchscrew-type terminals• for main current (cruchscrew-type terminals• for main current (cruchscrew-type terminals• for or contol circuitscrew-type terminals• for or contol circuitscrew-type terminals• for or contol circuitscrew-type terminals• for main contacts2.0 m• with conductor cross-section = 2.5 mm <sup>3</sup> maximum50 m• for main c	• with fail-safe1• number of digital outputs3• Number of digital outputs parameterizable1• number of digital outputs parameterizable2• number of digital outputs parameterizable1digital outputs parameterizable1• number of digital outputs not parameterizable1• number of digital outputs mot parameterizable1• number of digital outputs mot parameterizable1• number of aligital outputs1• al DC-15 at 250 V rated value3A• al DC-15 at 25V value value1AResponse times100 ms• actor of inputs maximum100 ms• actor of inputs maximum152 mmvidth170 mm• depth152 mm• depth152 mm• forwards0 mm• outputs depacing with side-by-side mounting• forwards0 mm• outputs depacing23 kgConnections/ Termination50 m• outputs depacing50 m <t< td=""><td>Inputs/ Outputs</td><td></td></t<>	Inputs/ Outputs	
		number of digital inputs	4
Number of digital outputs     Number of digital outputs with fail-safe     number of digital outputs parameterizable     number of digital outputs parameterizable     number of digital outputs parameterizable     number of digital outputs not parameterizable     2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover     contact (CO)     number of analog outputs     at AC-15 at 250 V rated value     at AC-15 V rated value     at AC-15 AT 250 V rated value     at AC-15 V rated value		• with fail-safe	1
• Number of digital outputs with fail-safe       1         • number of digital outputs parameterizable       2         • number of analog outputs not parameterizable       1         digital output version       2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)         number of analog outputs       1         • at AC-15 at 250 V rated value       3 A         • at AC-15 at 250 V rated value       1 A         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 mo       Vertical (can be rotated +- 90° and tilted forward or backward +/- 22.5°)         f astening method       50 m         height       276 mm         • dott       170 mm         • dopth       170 mm         • forwards       0 mm         • forwards       0 mm         • forwards       100 mm         • downwards<	Number of digital outputs with fail-safe     in umber of digital outputs parameterizable     in umber of digital outputs parameterizable     in umber of digital outputs parameterizable     if digital output version     contact (CO)     unther of analog outputs     it also analog output	parameterizable	4
• Number of digital outputs with fail-safe       1         • number of digital outputs parameterizable       2         • number of analog outputs not parameterizable       1         digital output version       2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)         number of analog outputs       1         • at AC-15 at 250 V rated value       3 A         • at AC-15 at 250 V rated value       1 A         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-15 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 V rated value       100 ms         • at AC-16 at 250 mo       Vertical (can be rotated +- 90° and tilted forward or backward +/- 22.5°)         f astening method       50 m         height       276 mm         • dott       170 mm         • dopth       170 mm         • forwards       0 mm         • forwards       0 mm         • forwards       100 mm         • downwards<	Number of digital outputs with fail-safe     in umber of digital outputs parameterizable     in umber of digital outputs parameterizable     in umber of digital outputs parameterizable     if digital output version     contact (CO)     unther of analog outputs     it also analog output		
• number of digital outputs not parameterizable       2         • number of digital outputs not parameterizable       1         • digital outputs rot parameterizable       1         • digital outputs       1         • anabog outputs       1         • at AC-15 at 250 V rated value       3 A         • at DC-13 at 24 V rated value       1 A         • at DC-13 at 24 V rated value       1 A         • at DC-13 at 24 V rated value       100 ms         • <b>Vertical (can be rotated +/- 90* and tilted forward or backward +/- 22.5*) Fe-delay time with safety-related request when switched off</b> 100 ms         • <b>Vertical (can be rotated +/- 90* and tilted forward or backward +/- 22.5*) fastening method</b> screw foxing         • bright       125 mm         • downwards       0 mm         • of orwards       0 mm         • upwards       0 mm         • downwards       23 kg <b>Connectical Forminals</b> screw-type terminals         • for or ant 0 icruit       screw-type terminals         • downwards       0 mm         • downwards       23 kg <b>Connectical Forminals</b> screw-type terminals         • for or ant 0 icruit       screw-type terminals	• number of digital outputs parameterizable         2           • number of digital outputs not parameterizable         1           • digital outputs not parameterizable         2           • digital outputs resion         2           • number of analog outputs         1           switching capacity current of the relay outputs         1           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/ mounting/ dimensions         100 ms           mounting position         Vertical (can be rotated 1/- 90° and tilted forward or backward 1/- 22.5°)           fastening method         sorew fixing           height         170 mm           depth         152 mm           required spacing with side-by-side mounting         100 mm           • forwards         00 mm           • upwards         100 mm           • downwards         57 mm           • at the side         5 mm           • for main current circuit         screw-type terminals           • for onal current circuit         screw-type terminals           • for onal current	<ul> <li>number of digital outputs</li> </ul>	3
• number of digital outputs not parameterizable         1           digital output version         2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)                e a DC-13 at 24 V rated value         3 A               e a the close netwith safety-related request when switched off via control inputs maximum             for wards               mounting position             tert site for man contacts               forwards             for man               equired spacing with side-by-side mounting             for man               elight             275 mm               elight             275 mm               elight for thermised connection <tr< td=""><td>• number of digital outputs not parameterizable         1           digital output version         2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 c</td><td><ul> <li>Number of digital outputs with fail-safe</li> </ul></td><td>1</td></tr<>	• number of digital outputs not parameterizable         1           digital output version         2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 changeover contact (NC) / 1 normally-closed contact (NC) / 1 changeover contact (NC) / 1 c	<ul> <li>Number of digital outputs with fail-safe</li> </ul>	1
digital output version       2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)         number of analog outputs       1         switching capacity current of the relay outputs       1         • at AC-15 at 250 V rated value       3 A         • at DC-13 at 24 V rated value       1 A         Response times       0EF-delay time with safety-related request when switched off via control inputs maximum         Installation/ mounting/ dimensions       100 ms         mounting position       Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)         fastening method       screw fixing         height       152 mm         width       170 mm         depth       152 mm         • forwards       0 mm         • jourwards       0 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/       screw-type terminals         with conductor cross-section = 0.5 mm* maximum       50 m         • with conductor cross-section = 2.5 mm* maximum       50 m         • with conductor cross-section = 2.5 mm* maximum       50 m         • with conductor cross-section = 2.5 mm* maximum       50 m         • with conductor	digital output version       2 normally-open contacts (NO) / 1 normally-closed contact (NC) / 1 changeover contact (CO)         number of analog outputs       1         switching capacity current of the relay outputs       1         e at AC-15 at 250 V rated value       3 A         e at DC-15 at 250 V rated value       1 A         Response times       100 ms         OFF-fedlay time with safety-related request when switched off via control inputs maximum       100 ms         Installation/ mounting/ dimensions       Vertical (can be rotated +/- 90° and titled forward or backward +/- 22.5°)         fastening method       screw fixing         height       275 mn         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       0 mm         • forwards       0 mm         • upwards       100 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connection/1 Circuit       screw-type terminals         • for contocl circuit       screw-type terminals         • for contocl circuit       screw-type terminals         • for contocl circuit       50 m         • with conductor cross-section = 2.5 mm* maximum       50 m </td <td><ul> <li>number of digital outputs parameterizable</li> </ul></td> <td>2</td>	<ul> <li>number of digital outputs parameterizable</li> </ul>	2
contact (CO)         contact (CO)           number of analog outputs         1           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/ mounting / dimensions         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         0 mm           • downwards         75 mm           • at the side         5 mm           weight without packaging         2.3 kg           Connections/ Torminals         screw-type terminals           with conductor cross-section = 0.5 mm <sup>2</sup> maximum         150 m           • with conductor cross-section = 1.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 1.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 1.5 mm <sup>2</sup> maximum         50 m	contact (CO)         contact (CO)           number of analog outputs         1           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/ mounting/ dimensions         mounting outputs         5 corew fixing           fastening method         screw fixing         100 mm           fastening with side-by-side mounting         170 mm         6 depth           • forwards         0 mm         100 mm         6 depth           • forwards         0 mm         100 mm         6 depth           • at the side         5 mm         6 mm         6 mm           • upwards         100 mm         5 corew-type terminals         6 mm           • downwards         75 mm         5 mm         6 mm           • downwards         5 mm         5 mm         6 mm <t< td=""><td><ul> <li>number of digital outputs not parameterizable</li> </ul></td><td>1</td></t<>	<ul> <li>number of digital outputs not parameterizable</li> </ul>	1
switching capacity current of the relay outputs         3 A           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V trated value         1 A           Response times         OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/ mounting/ dimensions         mounting position           Vertical (can be rotated +/- 90" and tilted forward or backward +/- 22.5")         fastening method           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mn           required spacing with side-by-side mounting         0 mm           • forwards         00 mm           • downwards         75 mm           • downwards         2.3 kg           Connections/Terminals         Screw-type terminals           weight without packaging         2.3 kg           Connections/Terminals         screw-type terminals           with conductor cross-section = 0.5 mm² maximum         50 m           • for main current circuit         screw-type terminals           with conductor cross-section = 2.5 mm² maximum         250 m </td <td>switching capacity current of the relay outputs         3 A           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         0CFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation mounting/dimensions         100 ms           mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mn           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         0 mm           • upwards         100 mm           • downwards         75 mm           • at the side         5 mm           velight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           • for control circuit         screw-type terminals           • for control circuit         screw-type terminals           • for control circuit         50 m           • with conductor cross-section = 0.5 mm<sup>2</sup> maximum<!--</td--><td>digital output version</td><td></td></td>	switching capacity current of the relay outputs         3 A           • at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         0CFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation mounting/dimensions         100 ms           mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mn           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         0 mm           • upwards         100 mm           • downwards         75 mm           • at the side         5 mm           velight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           • for control circuit         screw-type terminals           • for control circuit         screw-type terminals           • for control circuit         50 m           • with conductor cross-section = 0.5 mm <sup>2</sup> maximum </td <td>digital output version</td> <td></td>	digital output version	
• at AC-15 at 250 V rated value       3 A         • at DC-13 at 24 V rated value       1 A         Response times       00 ms         OFF-delay time with safety-related request when switched off via control inputs maximum       100 ms         Installator/ mounting dimensions       00 ms         mounting position       vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)         fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       100 mm         • forwards       0 mm         • backwards       0 mm         • ourwards       75 mm         • at the side       5 mm         • at the side       5 mm         • ourwards       2.3 kg         Connections/ Terminals       screw-type terminals         wire length for thermistor connection       screw-type terminals         • for main current circuit       screw-type terminals         with conductor cross-section = 0.5 mm² maximum       50 m         • with conductor cross-section = 0.5 mm² maximum       50 m         • with conductor cross-section = 2.5 mm² maximum       250 m         • with conductor cross-section	• at AC-15 at 250 V rated value         3 A           • at DC-13 at 24 V rated value         1 A           Response times         100 ms           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation mounting dimensions         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         0 mm           • upwards         100 mm           • of orwards         0 mm           • upwards         100 mm           • of monwords         75 mm           • at the side         5 mm           weight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           • for main current circuit         screw-type terminals           • for main current circuit         screw-type terminals           • for control circuit         screw-type terminals           • for control circuit         screw-type terminals           • for main current circuit         screw-type terminals <td>number of analog outputs</td> <td>1</td>	number of analog outputs	1
• at DC-13 at 24 V rated value       1 A         Response times	• at DC-13 at 24 V rated value       1 A         Response times       100 ms         OFF-delay time with safety-related request when switched off via control inputs maximum       100 ms         Installation/ mounting/ dimensions       Vertical (can be rotated +/- 90" and tilted forward or backward +/- 22.5")         fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       0 mm         • forwards       0 mm         • backwards       0 mm         • upwards       100 mm         • downwards       5 mm         • at the side       5 mm         • at the side       5 mm         • of or main current circuit       screw-type terminals         • for control circuit       screw-type terminals         • for control circuit       screw-type terminals         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         • for main contacts       - solid         - solid <t< td=""><td>switching capacity current of the relay outputs</td><td></td></t<>	switching capacity current of the relay outputs	
Response times           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/ mounting/ dimensions         Installation/ mounting/ dimensions           mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         10 mm           • backwards         0 mm           • upwards         100 mm           • downwards         75 mm           • at the side         5 mm           weight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           wire length for thermistor connection         screw-type terminals           wire length for thermistor connection         50 m           • with conductor cross-section = 0.5 mm <sup>3</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m	Response times         IDER           OFF-delay time with safety-related request when switched off via control inputs maximum         100 ms           Installation/mounting/dimensions         100 ms           mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           • forwards         0 mm           • backwards         0 mm           • downwards         75 mm           • downwards         75 mm           • at the side         5 mm           • at the side         5 mm           • for main current circuit         screw-type terminals           • for main current circuit         screw-type terminals           • for control circuit         screw-type terminals           with conductor cross-section = 0.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 0.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>2</sup> maximum         50 m           • with conductor cross	<ul> <li>at AC-15 at 250 V rated value</li> </ul>	3 A
OFF-delay time with safety-related request when switched off       100 ms         Installation/ mounting/ dimensions       installation/ mounting/ dimensions         mounting position       Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)         fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       0 mm         • forwards       0 mm         • backwards       0 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/ Terminals       screw-type terminals         wire length for thermistor connection       screw-type terminals         • 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       250 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • of on main contacts       200 m         - solid       2x (1.0 2.5 mm³), 2x (2.5 10 mm²)	OFF-delay time with safety-related request when switched off via control inputs maximum       100 ms         Installation/ mounting/ dimensions       Installation/ mounting/ dimensions         mounting position       Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)         fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       0 mm         • forwards       0 mm         • backwards       0 mm         • upwards       100 mm         • downwards       5 mm         • at the side       5 mm         • at the side       5 mm         • for control circuit       screw-type terminals         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       50 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • of or main current circuit       screw-type terminals         with conductor cross-section = 2.5 mm² maximum <td><ul> <li>at DC-13 at 24 V rated value</li> </ul></td> <td>1 A</td>	<ul> <li>at DC-13 at 24 V rated value</li> </ul>	1 A
via control inputs maximum         Installation/ mounting/ dimensions           Installation/ mounting/ dimensions         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           mounting position         Screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           o forwards         0 mm           o backwards         0 mm           o downwards         75 mm           o downwards         5 mm           o for ratin current circuit         screw-type terminals           of or control circuit         screw-type terminals           of or control circuit         screw-type terminals           with conductor cross-section = 0.5 mm <sup>2</sup> maximum         50 m           with conductor cross-section = 1.5 mm <sup>2</sup> maximum         250 m           with conductor cross-section = 2.5 mm <sup>2</sup> maximum         250 m           with conductor cross-section = 2.5 mm <sup>2</sup> maximum         250 m           o for	via control inputs maximum         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           mounting position         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting           of orwards         00 mm           obackwards         00 mm           obackwards         00 mm           odownwards         35 mm           odownwards         23 kg           connections / Terminals         5 mm           weight without packaging         screw-type terminals           of or onain current circuit         screw-type terminals           of or onain current circuit         screw-type terminals           with conductor cross-section = 0.5 mm <sup>2</sup> maximum         50 m           with conductor cross-section = 1.5 mm <sup>2</sup> maximum         50 m           with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           with conductor cross-section = 2.5 mm <sup>3</sup> maximum         50 m           of or main contacts </td <td>Response times</td> <td></td>	Response times	
mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         interval           • forwards         0 mm           • backwards         0 mm           • upwards         100 mm           • downwards         5 mm           • at the side         5 mm           weight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           type of electrical connection         screw-type terminals           with conductor cross-section = 0.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 1.5 mm <sup>2</sup> maximum         50 m           • with conductor cross-section = 2.5 mm <sup>2</sup> maximum         50 m           • for main contacts         250 m           • for main contacts         2.5 mm <sup>2</sup> , 2x (2.5 10 mm <sup>2</sup> )	mounting position         Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)           fastening method         screw fixing           height         275 mm           width         170 mm           depth         152 mm           required spacing with side-by-side mounting         0 mm           • backwards         0 mm           • backwards         0 mm           • upwards         100 mm           • downwards         55 mm           • at the side         5 mm           weight without packaging         2.3 kg           Connections/ Terminals         screw-type terminals           wire length for thermistor connection         screw-type terminals           with conductor cross-section = 0.5 mm² maximum         50 m           • with conductor cross-section = 2.5 mm² maximum         150 m           • with conductor cross-section = 2.5 mm² maximum         150 m           • with conductor cross-section = 2.5 mm² maximum         250 m           • type of connectable conductor cross-sections         - solid           - solid         2x (1.0 2.5 mm²), 2x (2.5 10 mm²)           - finely stranded with core end processing         2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)		100 ms
fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       -         • forwards       10 mm         • backwards       00 mm         • upwards       100 mm         • downwards       575 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/ Terminals       screw-type terminals         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         with conductor cross-section = 0.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 2.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 2.5 mm <sup>a</sup> maximum       50 m         • with conductor cross-sections       250 m         • for main contacts       - solid         2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )	fastening method       screw fixing         height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       0 mm         • backwards       0 mm         • upwards       100 mm         • downwards       75 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/ Terminals       screw-type terminals         • for control circuit       screw-type terminals         wire length for thermistor connection       screw-type terminals         • with conductor cross-section = 0.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 2.5 mm <sup>2</sup> maximum       250 m         type of connectable conductor cross-sections       - solid         - solid       2x (1.0 2.5 mm <sup>3</sup> ), 2x (2.5 10 mm <sup>3</sup> )         - solid       2x (1.0 2.5 mm <sup>3</sup> ), 2x (2.5 6.0 mm <sup>3</sup> )	Installation/ mounting/ dimensions	
height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       -         • forwards       10 mm         • backwards       0 mm         • backwards       0 mm         • downwards       75 mm         • downwards       5 mm         • at the side       5 mm         Weight without packaging       2.3 kg         Connections/ Terminals       -         type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         with conductor cross-section = 0.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 1.5 mm <sup>2</sup> maximum       150 m         • with conductor cross-section = 2.5 mm <sup>2</sup> maximum       250 m         type of connectable conductor cross-sections       - solid         • for main contacts       - solid	height       275 mm         width       170 mm         depth       152 mm         required spacing with side-by-side mounting       -         • forwards       10 mm         • backwards       0 mm         • backwards       0 mm         • downwards       100 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/ Terminals       -         type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         wirle length for thermistor connection       -         • with conductor cross-section = 0.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 2.5 mm <sup>2</sup> maximum       250 m         type of connectable conductor cross-sections       -         • for main contacts       -         - solid       2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )         - finely stranded with core end processing       2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 6.0 mm <sup>2</sup> )	mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
width170 mmdepth152 mmrequired spacing with side-by-side mounting0 mm• forwards0 mm• backwards0 mm• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for main current circuitscrew-type terminalswire length for thermistor connection50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum50 m• with conductor cross-sections50 m• for main currents250 m• polid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	width       170 mm         depth       152 mm         required spacing with side-by-side mounting       -         • forwards       10 mm         • backwards       0 mm         • upwards       100 mm         • downwards       75 mm         • at the side       5 mm         weight without packaging       2.3 kg         Connections/ Terminals       -         type of electrical connection       -         • for main current circuit       screw-type terminals         wire length for thermistor connection       -         • with conductor cross-section = 0.5 mm <sup>2</sup> maximum       50 m         • with conductor cross-section = 1.5 mm <sup>2</sup> maximum       150 m         • with conductor cross-section = 2.5 mm <sup>2</sup> maximum       250 m         type of connectable conductor cross-sections       -         • for main contacts       -         - solid       2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )	fastening method	screw fixing
depth152 mmrequired spacing with side-by-side mounting0 mm• forwards0 mm• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side5 mmweight without packaging2.3 kgConnections/Terminalstype of electrical connection• for control circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 mtype of connectable conductor cross-sections2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	depth152 mmrequired spacing with side-by-side mounting10 mm• forwards10 mm• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side2.3 kgConnections/Terminals5 mmtype of electrical connectionscrew-type terminals• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswith conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum50 m• for main curtacts250 m- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	height	275 mm
required spacing with side-by-side mounting• forwards10 mm• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side5 mmweight without packaging2.3 kgConnections/ Terminals• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuit50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 m• type of connectable conductor cross-sections250 m• for main curtats250 m• for main contacts2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	required spacing with side-by-side mounting         • forwards       10 mm         • backwards       0 mm         • upwards       100 mm         • downwards       75 mm         • at the side       5 mm         • at the side       5 mm         • odownwards       2.3 kg         Connections/Terminals       5 mm         type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         wire length for thermistor connection       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       50 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • with conductor cross-section = 2.5 mm² maximum       50 m         • with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections       -         • for main contacts       -         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	width	170 mm
forwards10 mmbackwards0 mmupwards100 mmdownwards75 mma the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 mtype of connectable conductor cross-sections • for main contacts - solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	forwards10 mmbackwards0 mmupwards100 mmdownwards75 mma the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 mtype of connectable conductor cross-sections2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	depth	152 mm
• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side2.3 kgConnections/ TerminalsConnections/ Terminalstype of electrical connectionscrew-type terminals• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuit50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 m• with conductor cross-sections-• for main contacts solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	• backwards0 mm• upwards100 mm• downwards75 mm• at the side5 mm• at the side2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuit50 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 main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	required spacing with side-by-side mounting	
• upwards100 mm• downwards75 mm• at the side5 mm• at the side2.3 kgConnections/ Terminals2.3 kgtype of electrical connectionscrew-type terminals• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection50 m• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 m• with conductor cross-section = 2.5 mm² maximum250 m• for main contacts- solid• for main contacts2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	upwards100 mm• downwards75 mm• at the side5 mm• at the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 mtype of connectable conductor cross-sections250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	• forwards	10 mm
• downwards75 mm• at the side5 mm• at the side5 mm• weight without packaging2.3 kgConnections/Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuitscrew-type terminals• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 mtype of connectable conductor cross-sections250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)		backwards	0 mm
• at the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuitscrew-type terminals• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 m• type of connectable conductor cross-sections250 m• for main contacts- solid• for main contacts- solid	• at the side5 mmweight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuitscrew-type terminals• with conductor cross-section = 0.5 mm² maximum50 m• with conductor cross-section = 1.5 mm² maximum50 m• with conductor cross-section = 2.5 mm² maximum250 m• with conductor cross-section = 2.5 mm² maximum250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	• upwards	100 mm
weight without packaging2.3 kgConnections/ Terminalstype of electrical connection• for main current circuitscrew-type terminals• for control circuitscrew-type terminals• for control circuitscrew-type terminals• 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 mtype of connectable conductor cross-sections250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	weight without packaging       2.3 kg         Connections/ Terminals          type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         wire length for thermistor connection       screw-type terminals         • 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         type of connectable conductor cross-sections       250 m         • for main contacts       - solid         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	downwards	75 mm
Connections/ Terminals         type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         wire length for thermistor connection       screw-type terminals         • 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         type of connectable conductor cross-sections       - solid         2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	Connections/ Terminals         type of electrical connection         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         wire length for thermistor connection       screw-type terminals         • 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         type of connectable conductor cross-sections       - solid         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	at the side	5 mm
type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         wire length for thermistor connection          • 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       150 m         • with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections          • for main contacts          — solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	type of electrical connection       screw-type terminals         • for main current circuit       screw-type terminals         • for control circuit       screw-type terminals         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         type of connectable conductor cross-sections          • for main contacts       - solid         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	weight without packaging	2.3 kg
• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection• 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• with conductor cross-sections250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	• for main current circuitscrew-type terminals• for control circuitscrew-type terminalswire length for thermistor connection• 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• with conductor cross-sections250 m• for main contacts- solid- solid2x (1.0 2.5 mm²), 2x (2.5 10 mm²)- finely stranded with core end processing2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	Connections/ Terminals	
• for control circuit     screw-type terminals       wire length for thermistor connection     screw-type terminals       • 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       • type of connectable conductor cross-sections     - solid       • for main contacts     - solid       - solid     2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	• for control circuit       screw-type terminals         wire length for thermistor connection       screw-type terminals         • 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-sections       250 m         • for main contacts       - solid         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)		
wire length for thermistor connection       50 m         • 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-sections       250 m         • for main contacts       - solid         2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	wire length for thermistor connection       50 m         • 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-sections       250 m         • for main contacts       - solid         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)		
• 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         type of connectable conductor cross-sections       - solid         • solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	• 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• type of connectable conductor cross-sections	<ul> <li>for main current circuit</li> </ul>	screw-type terminals
• with conductor cross-section = 1.5 mm² maximum       150 m         • with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections	• with conductor cross-section = 1.5 mm² maximum       150 m         • with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections		
• with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections       -         • for main contacts       -         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	• with conductor cross-section = 2.5 mm² maximum       250 m         type of connectable conductor cross-sections	for control circuit	
type of connectable conductor cross-sections         • for main contacts         — solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)	type of connectable conductor cross-sections       •         • for main contacts       -         - solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         - finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	for control circuit     wire length for thermistor connection	screw-type terminals
• for main contacts — solid 2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )	• for main contacts	<ul> <li>for control circuit</li> <li>wire length for thermistor connection</li> <li>with conductor cross-section = 0.5 mm<sup>2</sup> maximum</li> </ul>	screw-type terminals 50 m
— solid 2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )	— solid       2x (1.0 2.5 mm²), 2x (2.5 10 mm²)         — finely stranded with core end processing       2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)	<ul> <li>for control circuit</li> <li>wire length for thermistor connection</li> <li>with conductor cross-section = 0.5 mm<sup>2</sup> maximum</li> <li>with conductor cross-section = 1.5 mm<sup>2</sup> maximum</li> </ul>	screw-type terminals 50 m 150 m
	- finely stranded with core end processing 2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 6.0 mm <sup>2</sup> )	<ul> <li>for control circuit</li> <li>wire length for thermistor connection</li> <li>with conductor cross-section = 0.5 mm<sup>2</sup> maximum</li> <li>with conductor cross-section = 1.5 mm<sup>2</sup> maximum</li> <li>with conductor cross-section = 2.5 mm<sup>2</sup> maximum</li> </ul>	screw-type terminals 50 m 150 m
- finely stranded with core end processing 2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 6.0 mm <sup>2</sup> )		for control circuit      wire length for thermistor connection      with conductor cross-section = 0.5 mm <sup>2</sup> maximum      with conductor cross-section = 1.5 mm <sup>2</sup> maximum      with conductor cross-section = 2.5 mm <sup>2</sup> maximum      type of connectable conductor cross-sections	screw-type terminals 50 m 150 m
	• for AWG cables for main current circuit solid 2x (16 12) 2x (14 8)	for control circuit      wire length for thermistor connection      with conductor cross-section = 0.5 mm <sup>2</sup> maximum      with conductor cross-section = 1.5 mm <sup>2</sup> maximum      with conductor cross-section = 2.5 mm <sup>2</sup> maximum      type of connectable conductor cross-sections          for main contacts	screw-type terminals 50 m 150 m 250 m
• for AWG cables for main current circuit solid 2x (16 12), 2x (14 8)		for control circuit      wire length for thermistor connection      with conductor cross-section = 0.5 mm <sup>2</sup> maximum      with conductor cross-section = 1.5 mm <sup>2</sup> maximum      with conductor cross-section = 2.5 mm <sup>2</sup> maximum      type of connectable conductor cross-sections      for main contacts      — solid	screw-type terminals 50 m 150 m 250 m 2x (1.0 2.5 mm <sup>2</sup> ), 2x (2.5 10 mm <sup>2</sup> )

type of connectable conductor cross-sections	
for control circuit solid	1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )
<ul> <li>for control circuit finely stranded with core end processing</li> </ul>	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
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	2 2.5 N·m
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> </ul>	0.8 1.2 N·m
tightening torque [lbf·in]	
for main contacts with screw-type terminals	18 22 lbf·in
<ul> <li>for auxiliary and control contacts with screw-type</li> </ul>	7 10.3 lbf-in
terminals	
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m; Derating as of 1000 m, see catalog
ambient temperature	
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
<ul> <li>during storage and transport</li> </ul>	-40 +80 °C
environmental category	
<ul> <li>during operation according to IEC 60721</li> </ul>	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
<ul> <li>during storage according to IEC 60721</li> </ul>	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 $$
<ul> <li>during transport according 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, Class B on request
Communication/ Protocol	
communication module is supported	
<ul> <li>PROFINET standard</li> </ul>	Yes
<ul> <li>PROFINET high-feature</li> </ul>	Yes
EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
<ul> <li>of circuit breaker</li> </ul>	
<ul> <li>— usable for Standard Faults at 460/480 V according to UL</li> </ul>	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; lq = 5 kA
<ul> <li>— usable for High Faults at 460/480 V according to UL</li> </ul>	Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; lq max = 65 kA
<ul> <li>— usable for Standard Faults at 460/480 V at inside- delta circuit according to UL</li> </ul>	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA
<ul> <li>— usable for High Faults at 460/480 V at inside-delta circuit according to UL</li> </ul>	Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; lq max = 65 kA
<ul> <li>— usable for Standard Faults at 575/600 V according to UL</li> </ul>	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 kA
<ul> <li>— usable for High Faults at 575/600 V at inside-delta circuit according to UL</li> </ul>	Siemens type: 3RV2742, max. 30 A or 3VA51, max. 35 A; lq max = 65 kA
<ul> <li>— usable for Standard Faults at 575/600 V at inside- delta circuit according to UL</li> </ul>	Siemens type: 3RV2742, max. 40 A or 3VA51, max. 40 A; Iq = 5 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. 50 A; lq = 5 kA
— usable for High Faults up to 575/600 V according to UL	Type: Class J / L, max. 50 A; lq = 100 kA
<ul> <li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul>	Type: Class RK5 / K5, max. 50 A; lq = 5 kA
<ul> <li>— usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 50 A; lq = 100 kA
operating power [hp] for 3-phase motors	
• at 200/208 V at 50 °C rated value	2 hp
• at 220/230 V at 50 °C rated value	3 hp
<ul> <li>at 460/480 V at 50 °C rated value</li> </ul>	7.5 has
<ul> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> </ul>	7.5 hp 5 hp

<ul> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>	5 hp
• at 460/480 V at inside-delta circuit at 50 °C rated value	
	10 hp R300-B300
contact rating of auxiliary contacts according to UL Safety related data	K300-D300
	Turo D
safety device type according to IEC 61508-2	Type B 1 588 000
B10d value	1 566 000
Safety Integrity Level (SIL)	SIL1
according to IEC 61508	SIL 1
SIL Claim Limit (subsystem) according to EN 62061	
performance level (PL) according to EN ISO 13849-1	c 2
category according to EN ISO 13849-1	0
stop category according to EN 60204-1	-
Safe failure fraction (SFF)	60 %
average diagnostic coverage level (DCavg)	90 %
diagnostics test interval by internal test function maximum	1 000 s
PFHD with high demand rate according to EN 62061	1E-6 1/h
PFDavg with low demand rate according to IEC 61508	0.09
hardware fault tolerance according to IEC 61508	0
T1 value for proof test interval or service life according to IEC 61508	20 a
safe state	Open load circuit
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
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 according to IEC 61508 relating to ATEX	0
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.008
PFHD with high demand rate according to EN 62061 relating to ATEX	5E-7 1/h
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1
T1 value for proof test interval or service life according to IEC 61508 relating to ATEX	3 a
Certificates/ approvals	
General Product Approval	

General Product Approval





Confirmation







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

 Image: RCM
 Imag







**Confirmation** 

#### Further information

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

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

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

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

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5513-1HF14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5513-1HF14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5513-1HF14

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW5513-1HF14&lang=en

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

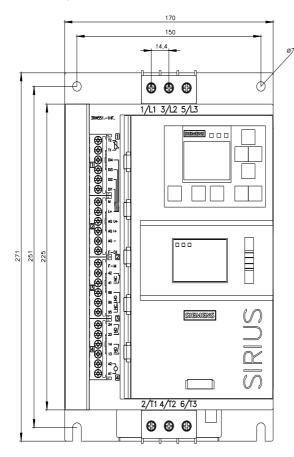
https://support.industry.siemens.com/cs/ww/en/ps/3RW5513-1HF14/char

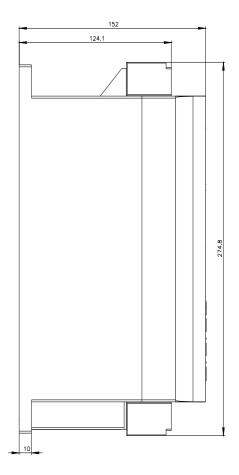
Characteristic: Installation altitude

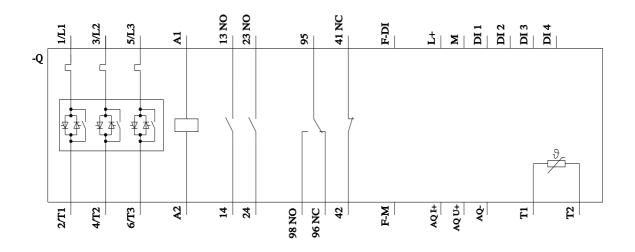
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5513-1HF14&objecttype=14&gridview=view1

Simulation Tool for Soft Starters (STS)

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







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