# SIEMENS



#### Data sheet

### 3RW5527-3HA06



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

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW55
manufacturer's article number	
<ul> <li>of high feature HMI module usable</li> </ul>	<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>	3VA2216-7MN32-0AA0; Type of coordination 1, Iq = 15 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3VA2216-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3VA2220-7MN32-0AA0: Type of coordination 1, Iq = 15 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	<u>3NA3136-6; Type of coordination 1, Iq = 65 kA</u>
$\bullet$ of the gG fuse usable at inside-delta circuit up to 500 V	<u>3NA3136-6; Type of coordination 1, Iq = 65 kA</u>
<ul> <li>of full range R fuse link for semiconductor protection usable up to 690 V</li> </ul>	<u>3NE1224-0; 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>3NE3227: Type of coordination 2. Iq = 65 kA</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 sets	3
accuracy class according to IEC 61557-12	5 %
certificate of suitability	

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	Yes
<ul> <li>CE marking</li> <li>UL approval</li> </ul>	Yes Yes Yes <b>(p) dientudong</b>
CSA approval	Yes /IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII
product component	- 165
	Yes
HMI-High Feature	Yes
is supported HMI-High Feature	
product feature integrated bypass contact system	Yes 3
number of controlled phases	
trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2
current unbalance limiting value [%]	10 60 %
ground-fault monitoring limiting value [%]	10 95 %
buffering time in the event of power failure	400
for main current circuit	100 ms
for control circuit	100 ms
idle time adjustable	0 255 s
insulation voltage rated value	690 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	8 kV
blocking voltage of the thyristor maximum	1 800 V
service factor	
surge voltage resistance rated value	8 kV
maximum permissible voltage for safe isolation	
between main and auxiliary circuit	690 V; does not apply for thermistor connection
shock resistance	15 g / 11 ms, from 6 g / 11 ms with potential contact lifting
vibration resistance	15 mm up to 6 Hz; 2 g up to 500 Hz
recovery time after overload trip adjustable	60 1 800 s
utilization category according to IEC 60947-4-2	AC 53a
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	02/15/2018
product function	
<ul> <li>ramp-up (soft starting)</li> </ul>	Yes
<ul> <li>ramp-down (soft stop)</li> </ul>	Yes
<ul> <li>breakaway pulse</li> </ul>	Yes
<ul> <li>adjustable current limitation</li> </ul>	Yes
<ul> <li>creep speed in both directions of rotation</li> </ul>	Yes
<ul> <li>pump ramp down</li> </ul>	Yes
DC braking	Yes
<ul> <li>motor heating</li> </ul>	Yes
<ul> <li>slave pointer function</li> </ul>	Yes
trace function	Yes
<ul> <li>intrinsic device protection</li> </ul>	Yes
<ul> <li>motor overload protection</li> </ul>	Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)
<ul> <li>evaluation of thermistor motor protection</li> </ul>	Yes; Type A PTC or Klixon / Thermoclick
inside-delta circuit	Yes; Only up to 600 V operating voltage
auto-RESET	Yes
manual RESET	Yes
remote reset	Yes
<ul> <li>communication function</li> </ul>	Yes
<ul> <li>operating measured value display</li> </ul>	Yes
event list	Yes
error logbook	Yes
<ul> <li>via software parameterizable</li> </ul>	Yes
<ul> <li>via software configurable</li> </ul>	Yes
screw terminal	No
<ul> <li>spring-loaded terminal</li> </ul>	Yes
PROFlenergy	Yes; in connection with the PROFINET Standard and PROFINET High- Feature communication modules
<ul> <li>firmware update</li> </ul>	reature communication modules
• Inniwale upuale	Yes
removable terminal for control circuit	

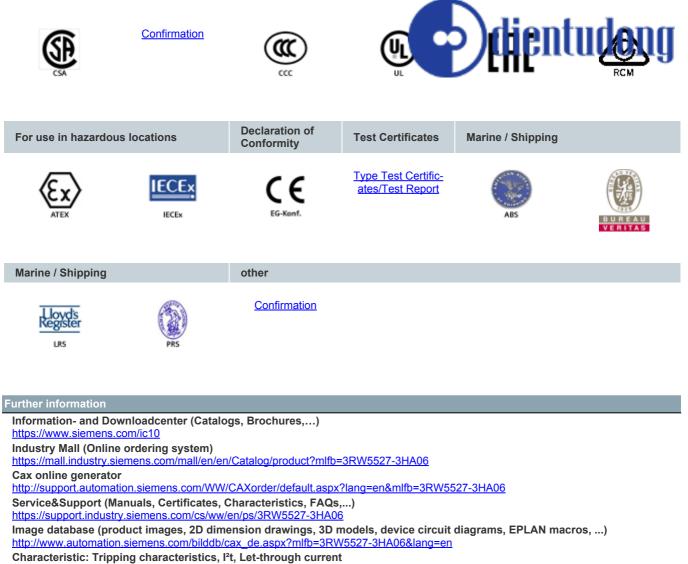
<ul> <li>control banking         <ul> <li>control banking</li> <li>control banking</li></ul></li></ul>		
<ul> <li>programmable control inputsion/puts</li> <li>condition monitoring</li> <li>ves</li> <li>automable parameterisation</li> <li>ves</li> <li>application index</li> <li>ves</li> <li>alternative run-down</li> <li>ves</li> <li>ves</li> <li>alternative run-down</li> <li>ves</li> <li>ves</li></ul>	torque control	Yes diontudong
<ul> <li>programmable control inputsion/puts</li> <li>condition monitoring</li> <li>ves</li> <li>automable parameterisation</li> <li>ves</li> <li>application index</li> <li>ves</li> <li>alternative run-down</li> <li>ves</li> <li>ves</li> <li>alternative run-down</li> <li>ves</li> <li>ves</li></ul>	°	
endoning controls monitoring Yes     endoning yes     endoning controls Yes     endentaive run-down Yes     endoning at heavy stating conditions     endoning at he		
<ul> <li>automatic parameterisation</li> <li>application incards</li> <li>application incards</li> <li>alternative run-down</li> <li>Yes</li> <li>alternative run-down</li> <li>Yes</li> <li>alternative run-down</li> <li>Yes</li> <li>and starting at heavy starting conditions</li> <li>Yes</li> <li>Soft starting at heavy starting conditions</li> <li>Yes</li> <li>Control Value</li> <li>A</li> <li>A<!--</td--><td></td><td></td></li></ul>		
energina viscants     energina operation     energina	5	
adomable run-down     Yes     emergency operation mode     Yes     emergency operation mode     Yes     soft starting at heavy starting conditions     Yes     Yes     yes     Poure Electorate     operational current         if all 0° Crade Value         20 A         if all 0° Crade Value         if all 0° Crade Value         if all 0° Crade Value         20 A         if all 0° Crade Value         20 A         if all 0° Crade Value         if all 0° Crade Value         20 A         if all 0° Crade Value         if all 0° CradeValue	·	
energency operation     Yes       eversing operation     Yes       power Electronics     93A       etat 40 °C rated value minimum     93A       etat 60 °C rated value minimum     19A       etat 60 °C rated value minimum     19A       etat 60 °C rated value minimum     19A       etat 60 °C rated value     75.5 A       operational current at inside-deta circuit     131 A       etat 60 °C rated value     133 A       etat 60 °C rated value     133 A       etat 60 °C rated value     133 A       etat 60 °C rated value     135 A       etat 60 °C rated value     135 A       etat 60 °C rated value     136 A       etat 60 °C rated value     137 A       operating voltage     15 %       relative negative tolerance of the operating voltage     15 %       relative positive tolerance of the operating voltage at 10 %     16 %       relative positive tolerance of the operating voltage at 10 %     16 %       etat 20 V at 40 °C rated value     22 kW       etat 20 V at 40 °C rated value     45 kW       etat 20 V at 40 °C rated value     56 kW       etat 20 V at 40 °C rated value     56 kW       etat 20 V at 40 °C rated value     60 Hz       etat 20 V at 40 °C rated value     60 Hz       etat 20 V at 40 °C rated value		
• reversion operation     Yes       • soft starting at heavy starting conditions     Yes <b>Power Electronics</b> • • • • • • • • • • • • • • • • • • •		
• soft starting at heavy starting conditions     Yes       Power Electronics     93 A       • at 40 °C rated value minimum     93 A       • at 40 °C rated value minimum     19 A       • at 60 °C rated value minimum     19 A       • at 60 °C rated value     75 5 A       Operational current at inside-detta circuit     61 A       • at 60 °C rated value     131 A       operating at leave value     133 A       • at 60 °C rated value     131 A       operating at leave value     133 A       • at 60 °C rated value     131 A       operating at leave value     200 680 V       • rated value     200 680 V       • rated value     10 %       • rated value     10 %       • relative negative tolerance of the operating voltage     15 %       relative negative tolerance of the operating voltage at inside-detta circuit at 0 °C rated value     45 kW       • at 230 V at inside-detta circuit at 40 °C rated value     45 kW       • at 300 V at inside-detta circuit at 0 °C rated value     56 kW       • at 600 V at 0 °C rated value     56 kW       • at 600 V at 0 °C rated value     56 kW       • at 400 V at 0 °C rated value     56 kW       • at 400 V at inside-detta circuit at 40 °C rated value     50 kW       • at 600 V at 0 °C rated value     60 Hz	0 1 1	
Dower Electronics         993 A           et al 40 °C rated value         93 A           et al 40 °C rated value         19 A           et al 50 °C rated value         82 S A           operational current at inside-delta circuit         161 A           et al 50 °C rated value         133 A           operating voltage         131 A           operating voltage         131 A           operating voltage         15 %           relative negative tolerance of the operating voltage         15 %           relative positive tolerance of the operating voltage         15 %           relative positive tolerance of the operating voltage         15 %           relative positive tolerance of the operating voltage         10 %           relative positive tolerance of the operating voltage         10 %           operating power for 3-phase motors         41 50 °C rated value           et 300 V at 40 °C rated value         10 %           et 300 V at 40 °C rated value         50 kW           et 300 V at 40 °C rated value         50 kW           et 300 V at 40 °C rated value         50 kW           et 300 V at 40 °C rated value         60 kHz           operating frequency 1 rated value         50 kW           et 300 V at 40 °C rated value         60 Hz	- · ·	
operational current     93 A       • at 40 °C rated value minimum     93 A       • at 60 °C rated value     82.5 A       • at 60 °C rated value     75.5 A       operational current at inside-detta circuit     161 A       • at 60 °C rated value     133 A       • at 60 °C rated value     131 A       • at inside-detta circuit rated value     200600 V       • relative negative tolerance of the operating voltage at inside-detta circuit rated value     15 %       relative negative tolerance of the operating voltage at inside-detta circuit aread value     10 %       relative positive tolerance of the operating voltage at inside-detta circuit aread value     10 %       • at 230 V at 40 °C rated value     22 kW       • at 230 V at 40 °C rated value     45 kW       • at 230 V at 40 °C rated value     22 kW       • at 400 V at inside-detta circuit at 40 °C rated value     10 %       • at 200 V at 10 °C rated value     22 kW       • at 200 V at 10 °C rated value     20 kW       • at 200 V at 10 °C rated value     20 kW       • at 400 V at 40 °C rated value     50 kW       • at 400 V at 40 °C rated value     50 kW       • at 60 °C rated value     50 kW		
• at 40 °C trated value     93 Å       • at 40 °C trated value     93 Å       • at 40 °C trated value     92 5 Å       • at 60 °C trated value     75 5 Å       operational current at inside-deta circuit     161 Å       • at 60 °C trated value     161 Å       • at 60 °C trated value     161 Å       • at 60 °C trated value     131 Å       operating voltage     131 Å       operating voltage     131 Å       operating voltage     15 %       • relative negative tolerance of the operating voltage at inside-deta circuit rated value     200 690 V       • at at 30 °C trated value     10 %       relative negative tolerance of the operating voltage at inside-deta circuit at 40 °C trated value     10 %       relative positive tolerance of the operating voltage at inside-deta circuit at 40 °C trated value     10 %       operating power for 3-phase motors     22 kW       • at 230 V at inside-deta circuit at 40 °C trated value     45 kW       • at 230 V at inside-deta circuit at 40 °C trated value     56 kW       • at 300 V at 140 °C trated value     50 kW       • at 600 V at 140 °C trated value     50 kW       • at 600 V at 140 °C trated value     50 kW       • at 400 V at 140 °C trated value     50 kW       • at 600 V at 140 °C trated value     50 kW       • at 600 V at 140 °C trated value     60		
• at 40 °C rated value     19 A       • at 60 °C rated value     82.5 A       • at 60 °C rated value     75.5 A       • operational current at inside-delta circuit     161 A       • at 60 °C rated value     143 A       • at 60 °C rated value     143 A       • at 60 °C rated value     131 A       • operating voltage     200 600 V       • rated value     200 600 V       • at inside-delta circuit rated value     200 600 V       • at inside-delta circuit rated value     200 600 V       • relative positive tolerance of the operating voltage     15 %       relative positive tolerance of the operating voltage     15 %       relative operating voltage     10 %       • at 230 V at 10 °C rated value     22 kW       • at 230 V at 10 °C rated value     24 kW       • at 230 V at 10 °C rated value     25 kW       • at 230 V at 10 °C rated value     56 kW       • at 230 V at 10 °C rated value     56 kW       • at 230 V at 10 °C rated value     56 kW       • at 230 V at 10 °C rated value     50 kW       • at 600 V at inside-delta circuit at 40 °C rated value     50 kW       • at 600 V at 160 °C rated value     50 kW       • at 600 V at 160 °C rated value     60 Hz       • at 600 V at 160 °C rated value     60 Hz       • at 60 °C ather	•	93 A
• at 50 °C rated value     82.5 Å       • at 60 °C rated value     75.5 Å       • operational current at inside-deta circuit     161 Å       • at 60 °C rated value     161 Å       • at 60 °C rated value     161 Å       • at 60 °C rated value     131 Å       • at 60 °C rated value     131 Å       • at 60 °C rated value     131 Å       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     200 690 V       • at 60 °C rated value     10 %       relative negative tolerance of the operating voltage at 1 °S %     10 %       relative positive tolerance of the operating voltage at 1 °S %     10 %       • at 230 V at 14 °C rated value     22 kW       • at 230 V at 14 °C rated value     22 kW       • at 230 V at 14 °C rated value     55 kW       • at 60 V at 40 °C rated value     50 kW       • at 60 V at 40 °C rated value     50 kZ       Operating frequency 1 rated value     50 Hz       Operating frequency 1 rated value     50 Hz		
operational current at inside-delta circuit       161 A         • at 40 °C rated value       161 A         • at 60 °C rated value       133 A         • at 60 °C rated value       131 A         operating voltage       131 A         • atte value       200 690 V         • atte value       200 690 V         • atte value       15 %         relative negative tolerance of the operating voltage at inside-delta circuit       15 %         relative negative tolerance of the operating voltage at inside-delta circuit       10 %         relative positive tolerance of the operating voltage at inside-delta circuit at 40 °C rated value       45 KW         • at 230 V at inside-delta circuit at 40 °C rated value       45 KW         • at 230 V at inside-delta circuit at 40 °C rated value       56 KW         • at 400 V at 40 °C rated value       45 KW         • at 500 V at inside-delta circuit at 40 °C rated value       50 KW         • at 500 V at inside-delta circuit at 40 °C rated value       50 KW         • at 500 V at at 0° C rated value       60 Hz         • at 60 V at at 0° C rated value       60 Hz         relative positive tolerance of the operating frequency       10 %         • at 60 °C after startup       25 W         • at 60 °C after startup       28 W	• at 50 °C rated value	82.5 A
• at 40 °C rated value       161 A         • at 50 °C rated value       133 A         operating voltage       133 A         • rated value       200 690 V         • at inside-delta circuit rated value       200 690 V         relative negative tolerance of the operating voltage       15 %         relative negative tolerance of the operating voltage       15 %         relative negative tolerance of the operating voltage at inside-delta circuit       10 %         relative negative tolerance of the operating voltage at inside-delta circuit       10 %         relative negative tolerance of the operating voltage at inside-delta circuit       10 %         relative negative tolerance of the operating voltage at inside-delta circuit       10 %         • at 230 V at 40 °C rated value       22 kW         • at 400 V at no °C rated value       45 kW         • at 400 V at at 0 °C rated value       55 kW         • at 400 V at at 0 °C rated value       90 kW         • at 600 V at at 0 °C rated value       90 kW         • at 600 V at at 0 °C rated value       60 Hz         relative negative tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         • at 40 °C ra	• at 60 °C rated value	75.5 A
• at 50 °C rated value     143 A       • at 60 °C rated value     131 A       operating voltage     200 690 V       • atted value     200 690 V       • atted value     200 690 V       • relative negative tolerance of the operating voltage     15 %       relative positive tolerance of the operating voltage at inside-delta circuit     15 %       relative positive tolerance of the operating voltage at inside-delta circuit     10 %       relative positive tolerance of the operating voltage at inside-delta circuit at 0° C rated value     21 %       • at 230 V at inside-delta circuit at 40 °C rated value     22 kW       • at 230 V at inside-delta circuit at 40 °C rated value     28 kW       • at 400 V at 40 °C rated value     90 kW       • at 500 V at 0°C rated value     56 kW       • at 600 V at 0°C rated value     50 Hz       Operating frequency 1 rated value     50 Hz       Operating frequency 2 rated value     50 Hz       Operating frequency 1 rated value     50 Hz       Operating frequency 2 rated value     10 %       relative positive tolerance of the operating frequency     10 %       relative nositive tolerance of the operating frequency     10 %       relative nositive tolerance of the operating frequency     10 %       relative nositive tolerance of the operating frequency     10 %       relative nositive tole	operational current at inside-delta circuit	
• at 60 °C rated value     131 A       operating voltage     200 690 V       • at inside-delta circuit rated value     200 690 V       relative negative tolerance of the operating voltage     15 %       relative negative tolerance of the operating voltage at inside-delta circuit     15 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       operating power for 3-phase motors     10 %       • at 230 V at 40 °C rated value     22 kW       • at 230 V at 40 °C rated value     45 kW       • at 400 V at inside-delta circuit at 40 °C rated value     90 kW       • at 600 V at inside-delta circuit at 40 °C rated value     90 kW       • at 600 V at inside-delta circuit at 40 °C rated value     90 kW       • at 600 V at inside-delta circuit at 40 °C rated value     90 kW       • at 600 V at inside-delta circuit at 40 °C rated value     90 kW       • at 600 V at ating frequency     10 %       relative negative tolerance of the operating frequency     10 %       relative negative tolerance of the operating frequency     10 %       relative negative tolerance of the current at AC     28 W       • at 40 °C after startup     25 W       • at 60 °C after startup     25 W       • at 60 °C after startup     28 W	• at 40 °C rated value	161 A
operating voltage     200690 V       • relative location instead value     200600 V       relative negative tolerance of the operating voltage     15 %       relative positive tolerance of the operating voltage     10 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       operating power for 3-phase motors     22 kW       • at 230 V at 40 °C rated value     22 kW       • at 230 V at 10°C rated value     45 kW       • at 200 V at 10°C rated value     90 kW       • at 400 V at 10°C rated value     90 kW       • at 600 V at 40 °C rated value     55 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 60 °C after startup     10 %       • at 60 °C after startup     23 W       • at 60 °C after startup     25 W       • at 60 °C during startup     1258 W       • at 60 °C during startup     125	• at 50 °C rated value	143 A
• rated value     200 600 V       • at inside-deta circuit rated value     200 600 V       relative negative tolerance of the operating voltage     15 %       relative negative tolerance of the operating voltage at inside-deta circuit     10 %       relative negative tolerance of the operating voltage at inside-deta circuit     10 %       relative positive tolerance of the operating voltage at inside-deta circuit     10 %       • at 230 V at 40 °C rated value     22 kW       • at 230 V at 40 °C rated value     45 kW       • at 400 V at 40 °C rated value     45 kW       • at 400 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 600 V at 40 °C rated value     90 kW       • at 60 V at a inside-deta circuit at 40 °C rated value     90 kW       • at 60 °C at inside for poerating frequency     10 %       relative negative tolerance of the operating frequency     10 %       minimum load [%]     10 %; Relative to set le       power loss [W] for rated value of the current at AC     28 W       • at 40 °C during startup     28 W       • at 60 °C ather startup     25 W	• at 60 °C rated value	131 A
• at inside-delta circuit rated value     200 600 V       relative positive tolerance of the operating voltage     15 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       relative negative tolerance of the operating voltage at inside-delta circuit     10 %       operating power for 3-phase motors     10 %       • at 230 V at 40 °C rated value     22 kW       • at 230 V at 40 °C rated value     45 kW       • at 230 V at 40 °C rated value     45 kW       • at 400 V at inside-delta circuit at 40 °C rated value     45 kW       • at 500 V at 40 °C rated value     55 kW       • at 500 V at 40 °C rated value     56 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     50 kW       • at 600 V at 40 °C rated value     60 Hz       Operating frequency 1 rated value     50 Hz       Operating frequency 2 rated value     60 Hz       relative positive tolerance of the operating frequency     10 %       relative positive tolerance of the current at AC     28 W       • at 40 °C after starup     23 W       • at 60 °C during starup     1065 W       • at 60 °C during starup <td< td=""><td>operating voltage</td><td></td></td<>	operating voltage	
relative negative tolerance of the operating voltage     -15 %       relative positive tolerance of the operating voltage at inside-delta circuit     -15 %       relative positive tolerance of the operating voltage at inside-delta circuit     -15 %       relative positive tolerance of the operating voltage at inside-delta circuit     -15 %       operating power for 3-phase motors     -15 %       et 23 0V at 40 °C rated value     22 kW       et 23 0V at 40 °C rated value     45 kW       et 400 V at alside-delta circuit at 40 °C rated value     45 kW       et at 500 V at 40 °C rated value     90 kW       et at 600 V at inside-delta circuit at 40 °C rated value     90 kW       et at 600 V at inside-delta circuit at 40 °C rated value     90 kW       et at 600 V at 40 °C rated value     55 kW       et at 600 V at 40 °C rated value     60 Hz       relative negative tolerance of the operating frequency     -10 %       relative negative tolerance of the operating frequency     -10 %       relative negative tolerance of the operating frequency     -10 %       relative negative tolerance of the current at AC     -10 %       et at 0 °C after startup     28 W       et at 0 °C during startup     28 W       et at 0 °C during startup     10 65 W       et at 0 °C during startup     10 65 W       et at 0 °C during startup     94 W       type	rated value	200 690 V
relative positive tolerance of the operating voltage       10 %         relative negative tolerance of the operating voltage at inside-deta circuit       -15 %         relative positive tolerance of the operating voltage at inside-deta circuit       10 %         operating power for 3-phase motors       10 %         • at 230 V at 40 °C rated value       22 kW         • at 230 V at 40 °C rated value       45 kW         • at 400 V at 40 °C rated value       45 kW         • at 400 V at 40 °C rated value       56 kW         • at 500 V at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       90 kW         optimum load [%]       100 %         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 [M] for rated value of the current at AC       28 W         • at 40 °C after startup       28 W         • at 60 °C after startup       25 W         • at 60 °C during startup	<ul> <li>at inside-delta circuit rated value</li> </ul>	200 600 V
relative negative tolerance of the operating voltage at inside-delta circuit       -15 %         relative positive tolerance of the operating voltage at inside-delta circuit       10 %         operating power for 3-phase motors       22 kW         • at 230 V at inside-delta circuit at 40 °C rated value       24 kW         • at 400 V at 40 °C rated value       45 kW         • at 400 V at 40 °C rated value       45 kW         • at 400 V at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       60 Hz         Operating frequency 1 rated value       60 Hz         • operating frequency 1 rated value       10 %         minimum load [%]       10 %         power loss [W] for rated value of the current at AC       10 %         • at 40 °C dring startup       28 W         • at 50 °C dring startup       28 W         • at 50 °C dring startup       1258 W         • at 60 °C dring startu	relative negative tolerance of the operating voltage	-15 %
inside-delta circuit       10 %         operating power for 3-phase motors       10 %         • at 230 V at 40 °C rated value       22 kW         • at 230 V at 10 °C rated value       45 kW         • at 40 °C rated value       45 kW         • at 40 °C rated value       45 kW         • at 400 V at 0 °C rated value       55 kW         • at 600 V at 40 °C rated value       55 kW         • at 500 V at 10 °C rated value       50 kW         • at 500 V at 40 °C rated value       50 kW         • at 600 V at 40 °C rated value       60 Hz         Operating frequency 1 rated value       60 Hz         Operating frequency 2 rated value       60 Hz         relative negative tolerance of the operating frequency       -10 %         relative negative tolerance of the operating frequency       -10 %         relative negative tolerance of the current at AC       28 W         • at 40 °C after startup       28 W         • at 60 °C after startup       28 W         • at 50 °C during startup       105 W         • at 50 °C during startup       105 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       1065 W         • at 60 °C during st	relative positive tolerance of the operating voltage	10 %
inside-delta circuit         operating power for 3-phase motors         at 230 V at 40 °C rated value       22 kW         at 230 V at 40 °C rated value       45 kW         at 400 V at 40 °C rated value       45 kW         at 400 V at 40 °C rated value       45 kW         at 400 V at 40 °C rated value       56 kW         at 500 V at 40 °C rated value       50 kW         at 500 V at 40 °C rated value       50 kW         at 600 V at inside-delta circuit at 40 °C rated value       90 kW         Operating frequency 1 rated value       60 Hz         relative negative tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         at 40 °C after startup       28 W         at 60 °C after startup       23 W         power loss [W] at Ac at current limitation 350 %       1258 W         at 40 °C during startup       1258 W         at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       24 V         at 60 °C during startup       24		-15 %
• at 230 V at 40 °C rated value       22 kW         • at 230 V at inside-delta circuit at 40 °C rated value       45 kW         • at 400 V at inside-delta circuit at 40 °C rated value       45 kW         • at 400 V at inside-delta circuit at 40 °C rated value       90 kW         • at 500 V at inside-delta circuit at 40 °C rated value       55 kW         • at 500 V at inside-delta circuit at 40 °C rated value       50 kW         • at 690 V at 40 °C rated value       50 kW         • at 690 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       60 Hz         relative negative tolerance of the operating frequency       -10 %         relative negative tolerance of the operating frequency       -10 %         relative nositive tolerance of the operating frequency       10 %; Relative to set le         power loss [W] for rated value of the current at AC       - at 40 °C after startup         • at 60 °C after startup       25 W         • at 60 °C during startup       1258 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control supply voltage at AC       - at 60 Hz rated value       24 V        • at 60 Hz rated value       24 V </td <td></td> <td>10 %</td>		10 %
• at 230 V at inside-delta circuit at 40 °C rated value       45 kW         • at 400 V at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       55 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         • at 600 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       50 Hz         Operating frequency 2 rated value       60 Hz         relative positive tolerance of the operating frequency       -10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       28 W         • at 50 °C after startup       28 W         • at 60 °C after startup       28 W         • at 60 °C after startup       28 W         • at 60 °C during startup       1 258 W         • at 60 °C during startup       1 258 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control supply voltage at AC       64 °C 40 °C 4	operating power for 3-phase motors	
• at 400 V at 40 °C rated value       45 kW         • at 400 V at inside-delta circuit at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       55 kW         • at 500 V at inside-delta circuit at 40 °C rated value       90 kW         • at 690 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       90 kW         Operating frequency 2 rated value       60 Hz         relative negative tolerance of the operating frequency       10 %         relative negative tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 60 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1 258 W         • at 40 °C dring startup       1 258 W         • at 40 °C dring startup       9 48 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control supply voltage at AC       eat 50 Hz rated value         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         • at 60 Hz rated value       24 V         • at 60 Hz rated value <t< td=""><td><ul> <li>at 230 V at 40 °C rated value</li> </ul></td><td>22 kW</td></t<>	<ul> <li>at 230 V at 40 °C rated value</li> </ul>	22 kW
• at 400 V at inside-delta circuit at 40 °C rated value       90 kW         • at 500 V at 40 °C rated value       55 kW         • at 500 V at 40 °C rated value       110 kW         • at 690 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       50 Hz         Operating frequency 2 rated value       60 Hz         relative negative tolerance of the operating frequency       10 %         minimum load [%]       10 %         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1258 W         • at 40 °C during startup       1065 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       24 W         • at 60 °C during startup       24 W         • at 50 °C during startup       24 W         • at 60 °C during startup       24 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control supply voltage at AC	<ul> <li>at 230 V at inside-delta circuit at 40 °C rated value</li> </ul>	45 kW
• at 500 V at 40 °C rated value       55 kW         • at 500 V at inside-delta circuit at 40 °C rated value       110 kW         • at 690 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       50 Hz         Operating frequency 2 rated value       60 Hz         relative negative tolerance of the operating frequency       10 %         relative positive tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1 258 W         • at 60 °C during startup       1 065 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       24 V         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         • at 60 Hz rated value       24 V         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         • at 60 Hz rated value       24 V        • at 60 Hz rated value		45 kW
• at 500 V at inside-delta circuit at 40 °C rated value       110 kW         • at 690 V at 40 °C rated value       90 kW         Operating frequency 1 rated value       50 Hz         Operating frequency 2 rated value       60 Hz         relative negative tolerance of the operating frequency       -10 %         relative positive tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1258 W         • at 60 °C during startup       1 055 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       24 V         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V           • at 60 Hz r		
• at 690 V at 40 °C rated value90 kWOperating frequency 1 rated value50 HzOperating frequency 2 rated value60 Hzrelative negative tolerance of the operating frequency-10 %relative positive tolerance of the operating frequency10 %minimum load [%]10 %; Relative to set lepower loss [W] for rated value of the current at AC28 W• at 40 °C after startup25 W• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %1 258 W• at 40 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ Control24 V• at 50 Hz rated value24 V• at 60 Hz rated value24 V• at 60 Hz rated value24 V• at 50 Hz rated value24 V• at 50 Hz rated value24 V• at 50 Hz rated value24 V• at 60 Hz rated value <th></th> <th></th>		
Operating frequency 1 rated value50 HzOperating frequency 2 rated value60 Hzrelative negative tolerance of the operating frequency-10 %relative positive tolerance of the operating frequency10 %minimum load [%]10 %; Relative to set lepower loss [W] for rated value of the current at AC• at 40 °C after startup28 W• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %• at 40 °C during startup1 258 W• at 60 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ Control24 V• at 60 Hz rated value24 V• at 6		
Operating frequency 2 rated value60 Hzrelative negative tolerance of the operating frequency-10 %relative positive tolerance of the operating frequency10 %minimum load [%]10 %; Relative to set lepower loss [W] for rated value of the current at AC28 W• at 40 °C after startup23 W• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %1 258 W• at 40 °C during startup1 065 W• at 60 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ Control24 V• at 50 Hz rated value24 V• at 60 Hz rated value20 %		
relative negative tolerance of the operating frequency       -10 %         relative positive tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1258 W         • at 40 °C during startup       1065 W         • at 60 °C during startup       1065 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       AC/DC         type of voltage of the control supply voltage       AC/DC         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V		
relative positive tolerance of the operating frequency       10 %         minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       1 258 W         • at 40 °C during startup       1 065 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       AC/DC         type of voltage of the control supply voltage       AC/DC         • at 50 Hz rated value       24 V         • at 60 Hz rated value		
minimum load [%]       10 %; Relative to set le         power loss [W] for rated value of the current at AC       28 W         • at 40 °C after startup       25 W         • at 60 °C after startup       23 W         power loss [W] at AC at current limitation 350 %       23 W         • at 40 °C during startup       1 258 W         • at 40 °C during startup       1 065 W         • at 60 °C during startup       1 065 W         • at 60 °C during startup       948 W         type of the motor protection       Electronic, tripping in the event of thermal overload of the motor         Control circuit/ Control       4C/DC         • at 50 Hz rated value       24 V         • at 60 Hz rated value       20 %		
power loss [W] for rated value of the current at AC <ul> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>23 W</li> </ul> power loss [W] at AC at current limitation 350 % <ul> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>by eat 60 °C during startup</li> <li>control circuit/ Control</li> </ul> type of voltage of the control supply voltage         AC/DC           control supply voltage at AC         at 60 Hz rated value           • at 50 Hz rated value         24 V           • at 60 Hz rated value         24 V           relative negative tolerance of the control supply <li>co0 %</li> <li>voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply</li> <li>20 %</li> <li>at control supply</li> <li>at control supply</li> <		
• at 40 °C after startup28 W• at 50 °C after startup25 W• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %1 258 W• at 40 °C during startup1 065 W• at 50 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ ControlControl supply voltagetype of voltage of the control supply voltageAC/DCcontrol supply voltage at AC24 V• at 50 Hz rated value24 V• at 60 Hz rated value24 V• at 50 Hz-20 %		
• at 50 °C after startup25 W• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %1 258 W• at 40 °C during startup1 265 W• at 50 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ Controltype of voltage of the control supply voltage• at 50 Hz rated value24 V• at 60 Hz rated value20 %		28 W
• at 60 °C after startup23 Wpower loss [W] at AC at current limitation 350 %.• at 40 °C during startup1 258 W• at 50 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DC• at 50 Hz rated value24 V• at 60 Hz rated value20 %	•	
power loss [W] at AC at current limitation 350 %• at 40 °C during startup1 258 W• at 50 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ ControlControl supply voltage at AC• at 50 Hz rated value24 V• at 60 Hz rated value24 V• at 50 Hz20 %		
<ul> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>948 W</li> <li>type of the motor protection</li> <li>Electronic, tripping in the event of thermal overload of the motor</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>AC/DC</li> <li>control supply voltage at AC</li> <li>at 50 Hz rated value</li> <li>24 V</li> <li>at 60 Hz rated value</li> <li>24 V</li> <li>relative negative tolerance of the control supply</li> <li>20 %</li> </ul>	· · · · · · · · · · · · · · · · · · ·	
• at 50 °C during startup1 065 W• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DCcontrol supply voltage at AC24 V• at 50 Hz rated value24 V• at 60 Hz rated value24 Vrelative negative tolerance of the control supply-20 %relative positive tolerance of the control supply20 %		1 258 W
• at 60 °C during startup948 Wtype of the motor protectionElectronic, tripping in the event of thermal overload of the motorControl circuit/ ControlAC/DCtype of voltage of the control supply voltageAC/DCcontrol supply voltage at AC24 V• at 50 Hz rated value24 V• at 60 Hz rated value24 Vrelative negative tolerance of the control supply-20 %relative positive tolerance of the control supply20 %		1 065 W
Control circuit/ Control         type of voltage of the control supply voltage       AC/DC         control supply voltage at AC          • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         relative negative tolerance of the control supply       -20 %         relative positive tolerance of the control supply       20 %		948 W
type of voltage of the control supply voltage       AC/DC         control supply voltage at AC       -         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         relative negative tolerance of the control supply       -20 %         relative positive tolerance of the control supply       20 %	type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
control supply voltage at AC       24 V         • at 50 Hz rated value       24 V         • at 60 Hz rated value       24 V         relative negative tolerance of the control supply voltage at AC at 50 Hz       -20 %         relative positive tolerance of the control supply       20 %	Control circuit/ Control	
• at 50 Hz rated value       24 ∨         • at 60 Hz rated value       24 ∨         relative negative tolerance of the control supply voltage at AC at 50 Hz       -20 %         relative positive tolerance of the control supply       20 %	type of voltage of the control supply voltage	AC/DC
• at 60 Hz rated value       24 V         relative negative tolerance of the control supply voltage at AC at 50 Hz       -20 %         relative positive tolerance of the control supply       20 %	control supply voltage at AC	
relative negative tolerance of the control supply voltage at AC at 50 Hz-20 %relative positive tolerance of the control supply20 %	• at 50 Hz rated value	24 V
voltage at AC at 50 Hz       relative positive tolerance of the control supply       20 %	• at 60 Hz rated value	24 V
		-20 %
		20 %

relative negative tolerance of the control supply voltage at AC at 60 Hz	<sup>-20 %</sup> (c) dientudong
relative positive tolerance of the control supply voltage at AC at 60 Hz	
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage	
<ul> <li>at DC rated value</li> </ul>	24 V
relative negative tolerance of the control supply voltage at DC	-20 %
relative positive tolerance of the control supply voltage at DC	20 %
control supply current in standby mode rated value	440 mA
holding current in bypass operation rated value	870 mA
locked-rotor current at close of bypass contact maximum	6.3 A
inrush current peak at application of control supply voltage maximum	7.5 A
duration of inrush current peak at application of control supply voltage	20 ms
design of the overvoltage protection	Varistor
design of short-circuit protection for control circuit	4 A gG fuse (Icu=1 kA), 6 A quick-acting fuse (Icu=1 kA), C1 miniature circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply
Inputs/ Outputs	
number of digital inputs	4
parameterizable	4
number of digital outputs	4
number of digital outputs parameterizable	3
number of digital outputs not parameterizable	1
digital output version	3 normally-open contacts (NO) / 1 changeover contact (CO)
number of analog outputs	1
switching capacity current of the relay outputs	
• at AC-15 at 250 V rated value	3 A
• at DC-13 at 24 V rated value	1A
Installation/ mounting/ dimensions	
mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
fastening method	screw fixing
height	306 mm
width	185 mm
depth	203 mm
required spacing with side-by-side mounting	
forwards	10 mm
backwards	0 mm
• upwards	100 mm
downwards	75 mm
at the side	5 mm
weight without packaging	7.15 kg
Connections/ Terminals	
type of electrical connection	
for main current circuit	box terminal
for control circuit	spring-loaded terminals
width of connection bar maximum	25 mm
wire length for thermistor connection	
with conductor cross-section = 0.5 mm <sup>2</sup> maximum	50 m
• with conductor cross-section = 0.5 mm maximum	150 m
<ul> <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>	250 m
	200 111
<ul> <li>type of connectable conductor cross-sections</li> <li>for main contacts for box terminal using the front</li> </ul>	1x (2.5 16 mm²)

clamping point solid	
<ul> <li>for main contacts for box terminal using the front clamping point finely stranded with core end processing</li> </ul>	1x (2.5 50 mm <sup>2</sup> ) dientudong
<ul> <li>for main contacts for box terminal using the front clamping point stranded</li> </ul>	1x (10 70 mm²)
<ul> <li>at AWG cables for main contacts for box terminal using the front clamping point</li> </ul>	1x (10 2/0)
<ul> <li>for main contacts for box terminal using the back clamping point solid</li> </ul>	1x (2.5 16 mm²)
<ul> <li>at AWG cables for main contacts for box terminal using the back clamping point</li> </ul>	1x (10 2/0)
<ul> <li>for main contacts for box terminal using both clamping points solid</li> </ul>	2x (2.5 16 mm²)
<ul> <li>for main contacts for box terminal using both clamping points finely stranded with core end processing</li> </ul>	2x (2.5 35 mm²)
<ul> <li>for main contacts for box terminal using both clamping points stranded</li> </ul>	2x (6 16 mm²), 2x (10 50 mm²)
<ul> <li>for main contacts for box terminal using the back clamping point finely stranded with core end processing</li> </ul>	1x (2.5 50 mm²)
<ul> <li>for main contacts for box terminal using the back clamping point stranded</li> </ul>	1x (10 70 mm²)
type of connectable conductor cross-sections	
<ul> <li>for control circuit solid</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>for control circuit finely stranded with core end processing</li> </ul>	2x (0.25 1.5 mm²)
<ul> <li>at AWG cables for control circuit solid</li> </ul>	2x (24 16)
<ul> <li>at AWG cables for control circuit finely stranded with core end processing</li> </ul>	2x (24 16)
wire length	
<ul> <li>between soft starter and motor maximum</li> </ul>	800 m
<ul> <li>at the digital inputs at DC maximum</li> </ul>	1 000 m
tightening torque	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	4.5 6 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]	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	40 53 lbf·in
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> </ul>	7 10.3 lbf·in
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m; Derating as of 1000 m, see catalog
<ul><li>ambient temperature</li><li>during operation</li></ul>	-25 +60 °C; Please observe derating at temperatures of 40 °C or
<ul> <li>during storage and transport</li> </ul>	above -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
Communication/ Protocol	
communication module is supported	
PROFINET standard	Yes
PROFINET high-feature	Yes
EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP     PROFIBUS	Yes
UL/CSA ratings	

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manufacturer's article number	Siemens type: 3VA
of circuit breaker	
<ul> <li>— usable for Standard Faults at 460/480 V according to UL</li> </ul>	l l l l l l l l l l l l l l l l l l l
<ul> <li>— usable for High Faults at 460/480 V according to UL</li> </ul>	Siemens type: 3VA51, max. 125 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: 3VA51, max. 125 A; Iq = 10 kA
<ul> <li>— usable for High Faults at 460/480 V at inside- delta circuit according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; lq max = 65 kA
<ul> <li>— usable for Standard Faults at 575/600 V according to UL</li> </ul>	Siemens type: 3VA51, max. 125 A; lq = 10 kA
<ul> <li>— usable for High Faults at 575/600 V at inside- delta circuit according to UL</li> </ul>	Siemens type: 3VA51, max. 125 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: 3VA51, max. 125 A; lq = 10 kA
of the fuse	
<ul> <li>— usable for Standard Faults up to 575/600 V according to UL</li> </ul>	Type: Class RK5 / K5, max. 300 A; lq = 10 kA
<ul> <li>— usable for High Faults up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 250 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. 300 A; lq = 10 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. 250 A; lq = 100 kA
operating power [hp] for 3-phase motors	
<ul> <li>at 200/208 V at 50 °C rated value</li> </ul>	25 hp
<ul> <li>at 220/230 V at 50 °C rated value</li> </ul>	30 hp
<ul> <li>at 460/480 V at 50 °C rated value</li> </ul>	60 hp
<ul> <li>at 575/600 V at 50 °C rated value</li> </ul>	75 hp
<ul> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> </ul>	40 hp
<ul> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>	50 hp
<ul> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> </ul>	100 hp
<ul> <li>at 575/600 V at inside-delta circuit at 50 °C rated value</li> </ul>	125 hp
contact rating of auxiliary contacts according to UL Safety related data	R300-B300
protection class IP on the front according to IEC 60529	IP00; IP20 with cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover
electromagnetic compatibility	acc. to IEC 60947-4-2
TEX	
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 s
Certificates/ approvals	

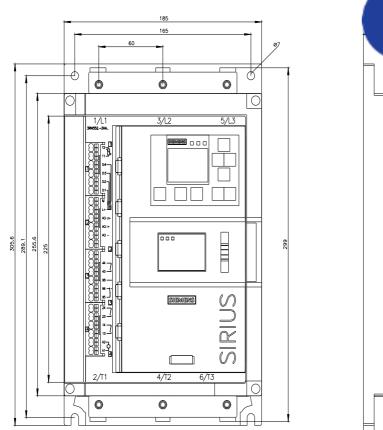


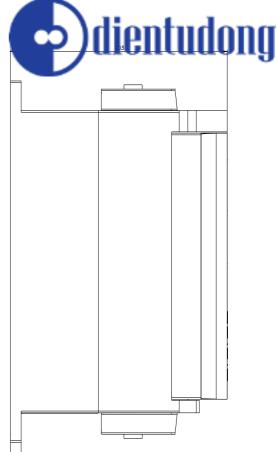
https://support.industry.siemens.com/cs/ww/en/ps/3RW5527-3HA06/char

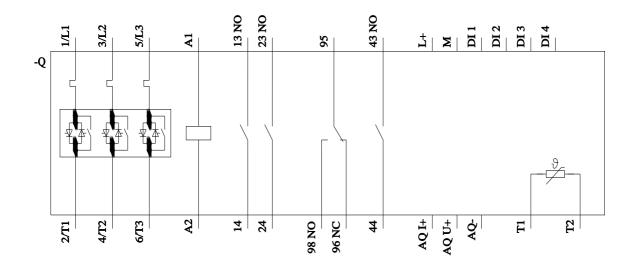
Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5527-3HA06&objecttype=14&gridview=view1 Simulation Tool for Soft Starters (STS)

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









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