## **SIEMENS**

product brand name

product category

Data sheet 3RW5546-6HA04

SIRIUS

Hybrid switching devices



SIRIUS soft starter 200-480 V 370 A, 24 V AC/DC Screw terminals





product designation	Soft starter
product type designation	3RW55
manufacturer's article number	
<ul> <li>of high feature HMI module usable</li> </ul>	3RW5980-0HF00
<ul> <li>of communication module PROFINET standard usable</li> </ul>	3RW5980-0CS00
<ul> <li>of communication module PROFINET high-feature usable</li> </ul>	3RW5950-0CH00
<ul> <li>of communication module PROFIBUS usable</li> </ul>	3RW5980-0CP00
<ul> <li>of communication module Modbus TCP usable</li> </ul>	3RW5980-0CT00
<ul> <li>of communication module Modbus RTU usable</li> </ul>	3RW5980-0CR00
<ul> <li>of communication module Ethernet/IP</li> </ul>	3RW5980-0CE00
<ul> <li>of circuit breaker usable at 400 V</li> </ul>	3VA2440-7MN32-0AA0; Type of coordination 1, lq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3VA2580-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3VA2580-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	2x3NA3365-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of the gG fuse usable at inside-delta circuit up to 500 V</li> </ul>	2x3NA3365-6; 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>	3NE1334-2; Type of coordination 2, Iq = 65 kA
<ul> <li>of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul>	3NE3340-8; Type of coordination 2, Iq = 65 kA
General technical data	
starting voltage [%]	20 100 %
stopping voltage [%]	50 %; non-adjustable
start-up ramp time of soft starter	0 360 s
ramp-down time of soft starter	0 360 s
start torque [%]	10 100 %
stopping torque [%]	10 100 %
torque limitation [%]	20 200 %
current limiting value [%] adjustable	125 800 %
breakaway voltage [%] adjustable	40 100 %
breakaway time adjustable	0 2 s
number of parameter sets	3
accuracy class	5 (based on IEC 61557-12)
certificate of suitability	
CE marking	Yes
UL approval	Yes

CSA approval	Yes
product component	
HMI-High Feature	Yes
is supported HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
current unbalance limiting value [%]	10 60 %
ground-fault monitoring limiting value [%]	10 95 %
buffering time in the event of power failure	
<ul> <li>for main current circuit</li> </ul>	100 ms
for control circuit	100 ms
idle time adjustable	0 255 s
insulation voltage rated value	480 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	6 kV
blocking voltage of the thyristor maximum	1 400 V
service factor	1.15
surge voltage resistance rated value	6 kV
maximum permissible voltage for protective separation	
between main and auxiliary circuit	480 V; does not apply for thermistor connection
shock resistance	15 g / 11 ms, from 6 g / 11 ms with potential contact lifting
recovery time after overload trip adjustable	60 1 800 s
utilization category according to IEC 60947-4-2	AC 53a
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	02/15/2018
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4 Lead titanium trioxide - 12060-00-3
product function	
<ul><li>ramp-up (soft starting)</li></ul>	Yes
<ul><li>ramp-down (soft stop)</li></ul>	Yes
breakaway pulse	Yes
adjustable current limitation	Yes
<ul> <li>creep speed in both directions of rotation</li> </ul>	Yes
pump ramp down	Yes
DC braking	Yes
motor heating	Yes
min/max pointer	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
<ul> <li>communication function</li> </ul>	Yes
<ul> <li>operating measured value display</li> </ul>	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
• firmware update	Yes
<ul> <li>removable terminal for control circuit</li> </ul>	Yes
<ul> <li>voltage ramp</li> </ul>	Yes

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a national posture of the control injustsousputs condition monitoring condition condition monitoring condition conditio	• torque control	Yes
e condition monitoring controlling condition monitoring controlling controllin	<ul> <li>combined braking</li> </ul>	Yes
• oundition monitoring • authorities can parameterisation • application vizards • alternative run-down • emergency operation mode • reversing operation • of starting at heavy starting conditions  Power Electronics   • of 40°C rated value • at 40°C rated value • at 60°C rated value • of inside-debts circuit rated value • of inside-debts circuit rated value • of inside-debts circuit rated value • at 60°C rated value • of this debts circuit rated value • of this circuit • of this circuit rated value • of this	analog output	Yes; 4 20 mA (default) / 0 10 V
authoratic parameterisation parameterisation parameterisation parameterisation parameterisation parameterisation parameterisation parameterisation power Electronics power El	<ul> <li>programmable control inputs/outputs</li> </ul>	Yes
a application wizards a diternative run down terminative run te	<ul> <li>condition monitoring</li> </ul>	Yes
alternative run-down     emergency operation mode     enewering peration     ves     enewering peration     ves     enewering peration     ves     enewering peration     ves     enewer Electronal     entry     e	<ul> <li>automatic parameterisation</li> </ul>	Yes
• emergency operation mode • reversing operation • exit starting at heavy starting conditions  Power Electronics  poperational current • all 40 °C rated value • at 40 °C rated value • at 60 °C rated value • at 180 °C rated value • at 200 °C rated value • at 400 °C rated value • at 200 °C rated value • at 400 °C rated value • at 50 °C during startup •	application wizards	Yes
eversing operation soft starting at heavy starting conditions  Power Electronics  operational current at 44 °C rated value 370 A at 44 °C rated value 382 A at 46 °C rated value 390 A operating requency 1 rated value at 40 °C rated value 684 A at 60 °C rated value 685 A at 60 °C rated value 785 A at 60 °C rater startup 786 A at 60 °C rater startup 78	alternative run-down	Yes
South starting at heavy starting conditions  Power Electronics  at 40 °C rated value at 40 °C rated value at 60 °C rater startup by 60 °C rater startup at 6	emergency operation mode	Yes
operational current  * all 40 °C rated value minimum  * all 40 °C rated value  * all 400 °V all 40 °C rated value  * all 400 °V all 40 °C rated value  * all 400 °V all 40 °C rated value  * all 400 °V all 40 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 400 °V all 60 °C rated value  * all 40 °C during startup  * all 60 °C during startup	reversing operation	Yes
operational current  * if 4 °C rated value minimum  * at 50 °C rated value  * at 60 °C rated value  * at a for value  * at a f	<ul> <li>soft starting at heavy starting conditions</li> </ul>	Yes
at 40 °C rated value at 40 °C rated value minimum 74 A 3 sal 80 °C rated value 300 A 328 A 328 A 300 A	Power Electronics	
at 00 °C rated value minimum at 00 °C rated value 588 A at 00 °C rated value 588 A at 00 °C rated value 588 A at 00 °C rated value 599 A  operating voltage at rated value at 160 °C rated value at 160 °C rated value 200 480 °V  relative positive tolerance of the operating voltage relative positive tolerance of the operating voltage relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit at 10 %  at 230 °V at 40 °C rated value at 320 °V at misde-delta circuit at 40 °V at 40 °V at 40 °V a	operational current	
at 60 °C rated value bat 61 °C rated value at 60 °C rated value bat 62 °C rated value at 60 °C rated value bat 63 °C rated value bat 64 °C rated value bat 65 °C rated value cared value car	•	370 A
operational current at inside-delta circuit     otal 40°C rated value     ot 60°C rated value     ot 60°C rated value     ot 60°C rated value     oparating voltage     oparating voltage     oparating voltage     otal value     otal value     oparating voltage     otal value     oparating proquency i rated value     otal value     oparating proquency i rated value     oparating requency of value     oparating frequency of value     oparating frequency of value     oparating frequency of value     oparating volue     on value     oparating volue     on value     oparating volue     on value     oparating volue     on value     on		74 A
operational current at inside-delta circuit  • at 40 °C rated value • at 60 °C rated value • at 1 inside-delta circuit rated value • at 320 °C rated value • at 320 °C rated value • at 320 °C rated value • at 400 °C rated value • at 40 °C rater sartup • at 80 °C after sartup • at 80 °C during startup • at 80	at 50 °C rated value	328 A
operational current at inside-delta circuit  • at 40 °C rated value • at 60 °C rated value • at 1 inside-delta circuit rated value • at 320 °C rated value • at 320 °C rated value • at 320 °C rated value • at 400 °C rated value • at 40 °C rater sartup • at 80 °C after sartup • at 80 °C during startup • at 80		300 A
• at 40 °C rated value • at 60 °C rated value • at 230 °C rated value • at 230 °C rated value • at 230 °C rated value • at 400 °C rated value • at 60 °C rater startup • at 60 °C rater		
• at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at 60 °C rated value • at 10 °C value value • at 230 °C value value • at 230 °C value value • at 40 °C rated value • at 50 °C date value • at 50 °C during startup • at 50 °C during start	•	641 A
operating voltage		
operating voltage  • rated value  • at inside-delta circuit rated value  relative positive tolerance of the operating voltage relative positive tolerance of the operating voltage relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit  relative positive tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors  • at 200 v at 40 °C rated value • at 230 v at inside-delta circuit at 40 °C rated value • at 400 v at 40 °C rated value • at 400 v at 40 °C rated value • at 400 v at inside-delta circuit at 40 °C rated value • at 400 v at inside-delta circuit at 40 °C rated value • at 400 v at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  operating frequency 3 rated value  operating frequency 4 rated value  Operating frequency 6 rated value  operating frequency 6 rated value  operating frequency 7 rated value  operating frequency 8 rated value  operating frequency 9 rated value  Operating frequency 1 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  operating frequency 1 rated value  Operating frequency 2 rated value  10 %  relative positive tolerance of the operating frequency  10 %  relative positive tolerance of the current at AC  111 W  111 W  115 %  111 W  116 %  117 %  118 %  119 %  119 %  110 %  110 %  110 %  111 W  110 %  110 %  111 W  111		
* rated value     * at inside-delta circuit rated value     * at inside-delta circuit rated value     * at inside-delta circuit rated value     * relative positive tolerance of the operating voltage     * relative negative tolerance of the operating voltage at inside-delta circuit     * relative positive tolerance of the operating voltage at inside-delta circuit     * relative positive tolerance of the operating voltage at inside-delta circuit     * operating power for 3-phase motors     * at 230 V at 40 °C rated value     * at 430 V at 40 °C rated value     * at 400 V at 10 °C rated value     * at 400 V at 10 rice rated value     * at 50 V at 10 rice rated value     * at 50 V at 10 rice rated value     * at 50 V at 10 rice rated value		Olo A
e at inside-delta circuit rated value  relative negative tolerance of the operating voltage  relative positive tolerance of the operating voltage  relative negative tolerance of the operating voltage at inside-delta circuit  relative positive tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors  • at 230 V at 10° C rated value • at 230 V at 10° C rated value • at 230 V at 10° C rated value • at 400 V at inside-delta circuit at 40° C rated value • at 400 V at inside-delta circuit at 40° C rated value • at 400 V at over 10° C rated value • at 400 V at inside-delta circuit at 40° C rated value • at 400 V at over 10° C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Felative positive tolerance of the operating frequency  relative positive tolerance of the operating frequency  relative positive tolerance of the operating frequency  minimum load [%]  power loss [W] for rated value of the current at AC • at 40° C after startup • at 50° C after startup • at 50° C after startup • at 60° C during start		200 480 V
relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage 10 % relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency  relative positive tolerance of the operating frequency • at 40 °C after startup • at 50 °C after startup • at 60 °C during startup • at 60 °C		
relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors  • at 230 V at 140 °C rated value • at 230 V at 140 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • Operating frequency 1 rated value Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 4 ro %  relative negative 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 during startup  • at 60 °C durin		
relative negative tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors  • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at 100 V at inside-delta circuit at 40 °C rated value • at 400 V at 100 V a		
Inside-delta circuit  relative positive tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors  • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at 10 °C rated value • at 400 V at 10 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 3 10 %  relative positive tolerance of the operating frequency  relative positive tolerance of the operating frequency  10 %  relative positive tolerance of the operating frequency  111 W  • at 50 °C after startup  • at 60 °C after startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  4 694 W  • at 60 °C during startup  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  • at 60 Hz rated value  relative positive tolerance of the control supply voltage at  AC at 50 Hz  relative positive tolerance of the control supply voltage at  AC at 50 Hz  relative positive tolerance of the control supply voltage at  AC at 60 Hz  relative positive tolerance of the control supply voltage at  AC at 60 Hz	· · · · · · · · · · · · · · · · · · ·	
inside-delta circuit operating power for 3-phase motors  • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 10 °C rated value • at 400 V at 10 °C rated value • at 400 V at 10 °C rated value • at 400 V at 10 °C rated value • at 400 V at 10 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 3 °C V V V V V V V V V V V V V V V V V V	inside-delta circuit	
at 230 V at 140 °C rated value at 230 V at inside-delta circuit at 40 °C rated value 200 kW at 400 V at 40 °C rated value 200 kW at 400 V at inside-delta circuit at 40 °C rated value 355 kW  Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 70 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % relative negative tolerance of the operating frequency 71 % 72 % 73 % 74 % 75 % 75 % 75 % 75 % 75 % 75 % 75 % 75	inside-delta circuit	10 %
at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 10 °C rated value at 400 V at inside-delta circuit at 40 °C rated value  9 at 400 V at inside-delta circuit at 40 °C rated value  9 50 Hz  Operating frequency 1 rated value  60 Hz  relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  10 %; Relative to set le  power loss [W] for rated value of the current at AC  at 40 °C after startup  at 50 °C after startup  90 W  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  4 694 W  at 50 °C during startup  5 563 W  at 40 °C during startup  4 694 W  at 50 °C during startup  5 566 W  at 40 °C during startup  4 694 W  at 50 °C during startup  5 560 W  Control circuit/ Control  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  at 60 Hz rated value  at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	operating power for 3-phase motors	
at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value 355 kW  Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%] 10 %; Relative to set le  power loss [W] for rated value of the current at AC  at 40 °C after startup 36 W at 60 °C after startup 99 W at 60 °C during startup 46 46 W at 60 °C during startup 46 46 W at 60 °C during startup 46 46 W at 60 °C during startup 5 563 W at 60 °C during startup 4 694 W at 60 °C during startup 4 145 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 at 60 °C trated value 24 V at 60 °C trated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz	<ul> <li>at 230 V at 40 °C rated value</li> </ul>	110 kW
• at 400 V at inside-delta circuit at 40 °C rated value Operating frequency 2 rated value Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%] relative positive tolerance of the operating frequency minimum load [%] 10 %; Relative to set le  power loss [W] for rated value of the current at AC     • at 40 °C after startup     • at 50 °C after startup 98 W     • at 40 °C after startup 99 W  power loss [W] at AC at current limitation 350 %     • at 40 °C during startup • at 50 °C during startup • at 50 °C during startup • at 60 °C during startup  **Yepe of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage control supply voltage at AC • at 50 Hz rated value • at 60 Hz rated value • at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	<ul> <li>at 230 V at inside-delta circuit at 40 °C rated value</li> </ul>	200 kW
Operating frequency 1 rated value Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup • at 60 °C after startup  • at 50 °C after startup  • at 40 °C during startup  • at 50 °C during startup • at 50 °C during startup  • at 50 °C during startup  • at 60 °C during startup  • at 50 °C during startup  • at 60 °C during star	<ul> <li>at 400 V at 40 °C rated value</li> </ul>	200 kW
Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%] 10 %; Relative to set le  power loss [W] for rated value of the current at AC  at 40 °C after startup 111 W at 50 °C after startup 98 W at 60 °C after startup 99 W  power loss [W] at AC at current limitation 350 % at 40 °C during startup 4 694 W at 50 °C during startup 4 694 W at 60 °C during startup 4 145 W  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage at 50 Hz rated value at 60 Hz rated value at 60 Hz rated value at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	at 400 V at inside-delta circuit at 40 °C rated value	355 kW
relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup • at 60 °C after startup  • at 60 °C after startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup • at 50 °C during startup • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  4 145 W  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	Operating frequency 1 rated value	
relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup • at 60 °C after startup  • at 40 °C during startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup • at 50 °C during startup • at 60 °C during startup  • at 60 °C during startup • at 60 °C during startup • at 60 °C during startup  • at 60 °C during s	Operating frequency 2 rated value	60 Hz
minimum load [%]  power loss [W] for rated value of the current at AC  at 40 °C after startup  at 50 °C after startup  at 60 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 50 °C during startup  at 50 °C during startup  at 60 °C during startup  at 60 °C during startup  at 60 °C during startup  at 50 °C during startup  bype 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  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  celative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	relative negative tolerance of the operating frequency	-10 %
power loss [W] for rated value of the current at AC  • at 40 °C after startup  • at 50 °C after startup  • at 60 °C after startup  90 W  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  • at 50 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at 60 Hz rated value  • at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	relative positive tolerance of the operating frequency	10 %
at 40 °C after startup at 50 °C after startup 98 W at 60 °C after startup 90 W  power loss [W] at AC at current limitation 350 % at 40 °C during startup at 60 °C during startup 4 694 W at 60 °C during startup 4 145 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 at 60 °C during startup  4 7 AC/DC  Control supply voltage at AC at 50 Hz rated value 24 V  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	minimum load [%]	10 %; Relative to set le
at 50 °C after startup at 60 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup at 50 °C during startup at 60 °C during startup at 60 °C during startup be at 60 °C during startup at 60 °C during startup be at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage control supply voltage at AC at 50 Hz rated value at 60 Hz rated value control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at AC at 50 Hz relative negative tolerance of the control supply voltage at AC at 50 Hz relative negative tolerance of the control supply voltage at AC at 60 Hz relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	power loss [W] for rated value of the current at AC	
at 60 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 60 °C during startup  at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  at 50 Hz rated value  at 60 Hz rated value  at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	•	111 W
power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  • at 50 °C during startup  • at 60 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	• at 50 °C after startup	98 W
at 40 °C during startup at 50 °C during startup  at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	at 60 °C after startup	90 W
at 50 °C during startup  at 60 °C during startup  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  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	power loss [W] at AC at current limitation 350 %	
• at 60 °C during startup  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  control supply voltage at AC      • at 50 Hz rated value      • at 60 Hz rated value      24 V  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz	<ul> <li>at 40 °C during startup</li> </ul>	5 563 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/DC  control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %	<ul> <li>at 50 °C during startup</li> </ul>	4 694 W
type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %	at 60 °C during startup	4 145 W
type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz rated value  at 60 Hz rated value  control supply voltage at AC  telative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %	type of the motor protection	Electronic, tripping in the event of thermal overload of the motor
control supply voltage at AC  • at 50 Hz rated value  • at 60 Hz rated value  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %	Control circuit/ Control	
<ul> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> <li>24 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative negative tolerance of the control supply voltage at AC at 60 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 60 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 60 Hz</li> <li>relative positive tolerance of the control supply voltage at 20 %</li> </ul>	type of voltage of the control supply voltage	AC/DC
<ul> <li>at 50 Hz rated value</li> <li>at 60 Hz rated value</li> <li>24 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative negative tolerance of the control supply voltage at AC at 60 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 60 Hz</li> <li>20 %</li> <li>-20 %</li> <li>-</li></ul>	control supply voltage at AC	
relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %	at 50 Hz rated value	24 V
AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %  20 %	at 60 Hz rated value	24 V
relative positive tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 60 Hz  relative positive tolerance of the control supply voltage at 20 %  20 %		-20 %
AC at 60 Hz relative positive tolerance of the control supply voltage at 20 %	relative positive tolerance of the control supply voltage at	20 %
		-20 %
TO UL VV III	AC at 60 Hz	

control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage	-10 %
frequency	40.04
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage at DC	
• rated value	24 V
relative negative tolerance of the control supply voltage at	-20 %
DC	-20 /0
relative positive tolerance of the control supply voltage at	20 %
DC	
control supply current in standby mode rated value	440 mA
holding current in bypass operation rated value	720 mA
inrush current by closing the bypass contacts maximum	6.7 A
inrush current peak at application of control supply voltage	7.5 A
maximum	
duration of inrush current peak at application of control supply voltage	20 ms
design of the overvoltage protection	Varistor
design of the overvoltage protection  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
accept of chore-chouse protection for control 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
<ul> <li>number of digital outputs</li> </ul>	4
<ul> <li>number of digital outputs parameterizable</li> </ul>	3
<ul> <li>number of digital outputs not parameterizable</li> </ul>	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	1 A
Installation/ mounting/ dimensions	
mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
mounting position fastening method	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing
fastening method	screw fixing
fastening method height	screw fixing 393 mm
fastening method height width	screw fixing 393 mm 210 mm
fastening method height width depth	screw fixing 393 mm 210 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm
fastening method height width depth required spacing with side-by-side mounting • forwards	screw fixing 393 mm 210 mm 203 mm
fastening method height width depth required spacing with side-by-side mounting • forwards • backwards	screw fixing 393 mm 210 mm 203 mm 10 mm 0 mm
fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m  2x (50 240 mm²) 2x (70 240 mm²)
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m  2x (50 240 mm²) 2x (70 240 mm²) 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
fastening method height width depth required spacing with side-by-side mounting	screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 10.9 kg  busbar connection screw-type terminals 45 mm  50 m 150 m 250 m  2x (50 240 mm²) 2x (70 240 mm²)

wire length	
<ul> <li>between soft starter and motor maximum</li> </ul>	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>	14 24 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>	124 210 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	5 000 m; Derating as of 1000 m, see catalog
ambient temperature	05
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
during storage and transport	-40 +80 °C
environmental category	01/0 ( i fti
<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
during transport according to IEC 60721	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
Environmental footprint	
Siemens Eco Profile (SEP)	Siemens EcoTech
EMC emitted interference	acc. to IEC 60947-4-2: Class A
Communication/ Protocol	
communication module is supported	
PROFINET standard	Yes
PROFINET high-feature	Yes
EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
• PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
of the fuse	
<ul> <li>usable for Standard Faults up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 1200 A; Iq = 18 kA
<ul> <li>— usable for High Faults up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 1200 A; Iq = 100 kA
<ul> <li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 1200 A; Iq = 18 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. 1200 A; Iq = 100 kA
operating power [hp] for 3-phase motors	
operating power [hp] for 3-phase motors  • at 200/208 V at 50 °C rated value	100 hp
	100 hp 125 hp
• at 200/208 V at 50 °C rated value	· · · ·
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> </ul>	125 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> </ul>	125 hp 250 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> </ul>	125 hp 250 hp 200 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>	125 hp 250 hp 200 hp 200 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> </ul>	125 hp 250 hp 200 hp 200 hp 450 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>contact rating of auxiliary contacts according to UL</li> </ul>	125 hp 250 hp 200 hp 200 hp 450 hp
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>contact rating of auxiliary contacts according to UL</li> <li>Electrical Safety</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> </ul>	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>contact rating of auxiliary contacts according to UL</li> <li>Electrical Safety</li> <li>protection class IP on the front according to IEC 60529</li> </ul>	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300
<ul> <li>at 200/208 V at 50 °C rated value</li> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> <li>at 200/208 V at inside-delta circuit at 50 °C rated value</li> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> <li>contact rating of auxiliary contacts according to UL</li> <li>Electrical Safety</li> <li>protection class IP on the front according to IEC 60529</li> <li>touch protection on the front according to IEC 60529</li> </ul>	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300
at 200/208 V at 50 °C rated value at 220/230 V at 50 °C rated value at 460/480 V at 50 °C rated value at 200/208 V at inside-delta circuit at 50 °C rated value at 220/230 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value contact rating of auxiliary contacts according to UL Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529  ATEX  Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX  PFHD with high demand rate according to IEC 61508	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300  IP00; IP20 with cover finger-safe, for vertical contact from the front with cover
at 200/208 V at 50 °C rated value at 220/230 V at 50 °C rated value at 460/480 V at 50 °C rated value at 200/208 V at inside-delta circuit at 50 °C rated value at 220/230 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value contact rating of auxiliary contacts according to UL Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529  ATEX  Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX  PFHD with high demand rate according to IEC 61508 relating to ATEX  PFDavg with low demand rate according to IEC 61508	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300  IP00; IP20 with cover finger-safe, for vertical contact from the front with cover
at 200/208 V at 50 °C rated value at 220/230 V at 50 °C rated value at 460/480 V at 50 °C rated value at 200/208 V at inside-delta circuit at 50 °C rated value at 220/230 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value at 460/480 V at inside-delta circuit at 50 °C rated value contact rating of auxiliary contacts according to UL Electrical Safety protection class IP on the front according to IEC 60529 touch protection on the front according to IEC 60529  ATEX  Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX  PFHD with high demand rate according to IEC 61508 relating to ATEX	125 hp 250 hp 200 hp 200 hp 450 hp R300-B300  IP00; IP20 with cover finger-safe, for vertical contact from the front with cover  SIL1  5E-7 1/h

T1 value for proof test interval or service life according to IEC 61508 relating to ATEX

certificate of suitability

• ATEX

• IECEx

• according to ATEX directive 2014/34/EU

type of protection according to ATEX directive 2014/34/EU

[Ex db Mb]

3 a

Yes

Yes

Yes

1 (2)G [Ex eb Gb] [Ex pxb Gb], II (2)D [Ex tb Db] [Ex pxb Db], I (M2)

[Ex db Mb]

## **Approvals Certificates**

## **General Product Approval**



Confirmation









**EMV** 

For use in hazardous locations

**Test Certificates** 

Marine / Shipping



<u>KC</u>



• /



Type Test Certificates/Test Report



Marine / Shipping

other

Environment



Lloyd's Register



Confirmation



Siemens EcoTech



Environment

Environmental Confirmations

## Further information

Information on the packaging

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

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industrv.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5546-6HA04

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5546-6HA04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5546-6HA04

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

 $\underline{\text{http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW5546-6HA04\&lang=en}}$ 

Characteristic: Tripping characteristics, I²t, Let-through current

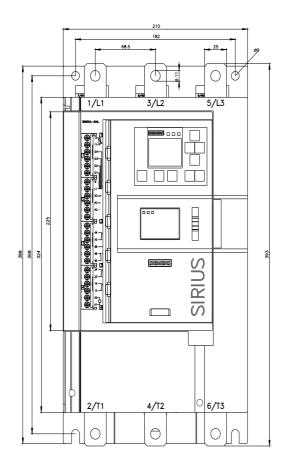
https://support.industry.siemens.com/cs/ww/en/ps/3RW5546-6HA04/char

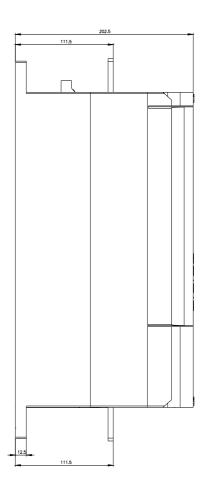
Characteristic: Installation altitude

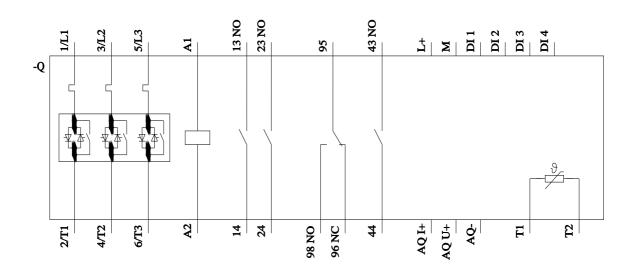
 $\underline{\text{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5546-6HA04\&objecttype=14\&gridview=view1}$ 

Simulation Tool for Soft Starters (STS)

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







last modified: 6/6/2024 🖸

