# **SIEMENS**

Data sheet 3RW5245-2AC14



SIRIUS soft starter 200-480 V 315 A, 110-250 V AC spring-type terminals Analog output

product brand name product category product designation product type designation manufacturer's article number

- of standard HMI module usable
- of high feature HMI module usable
- of communication module PROFINET standard usable
- of communication module PROFIBUS usable
- of communication module Modbus TCP usable
- of communication module Modbus RTU usable
- of communication module Ethernet/IP
- of circuit breaker usable at 400 V
- of circuit breaker usable at 500 V
- of circuit breaker usable at 400 V at inside-delta circuit
- of circuit breaker usable at 500 V at inside-delta circuit
- of the gG fuse usable up to 690 V
- of the gG fuse usable at inside-delta circuit up to 500 V
- $\bullet$  of full range R fuse link for semiconductor protection usable up to 690 V
- of back-up R fuse link for semiconductor protection usable up to 690 V

SIRIUS

Hybrid switching devices

Soft starter

3RW52

3RW5980-0HS00

3RW5980-0HF00

3RW5980-0CS00

3RW5980-0CP00

3RW5980-0CT00

3RW5980-0CR00

3RW5980-0CE00

3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10

3VA2440-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10

3VA2580-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10

3VA2580-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10

2x3NA3365-6; Type of coordination 1, Iq = 65 kA

2x3NA3365-6; Type of coordination 1, Iq = 65 kA

3NE1334-2; Type of coordination 2, Iq = 65 kA

3NE3336; Type of coordination 2, Iq = 65 kA

## General technical data

starting voltage [%] stopping voltage [%] start-up ramp time of soft starter current limiting value [%] adjustable certificate of suitability

- CE marking
- UL approval
- CSA approval

### product component

- HMI-High Feature
- is supported HMI-Standard
- is supported HMI-High Feature

product feature integrated bypass contact system number of controlled phases

trip class

buffering time in the event of power failure

30 ... 100 %

50 %; non-adjustable

0 ... 20 s

130 ... 700 %

Yes

Yes

Yes

No

Yes

Yes

Yes

3

CLASS 10A (default) / 10E / 20E; acc. to IEC 60947-4-2

for main current circuit	100 ms
for control circuit	100 ms
insulation voltage rated value	600 V
degree of pollution	3, acc. to IEC 60947-4-2
impulse voltage rated value	6 kV
blocking voltage of the thyristor maximum	1 600 V
service factor	1
surge voltage resistance rated value	6 kV
maximum permissible voltage for safe isolation	000.14
between main and auxiliary circuit	600 V
shock resistance vibration resistance	15 g / 11 ms, from 12 g / 11 ms with potential contact lifting
utilization category according to IEC 60947-4-2	15 mm to 6 Hz; 2g to 500 Hz AC 53a
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	02/15/2018
product function	02/10/2010
ramp-up (soft starting)	Yes
• ramp-down (soft stop)	Yes
• Soft Torque	Yes
adjustable current limitation	Yes
pump ramp down	Yes
<ul><li>intrinsic device protection</li></ul>	Yes
<ul> <li>motor overload protection</li> </ul>	Yes; Electronic motor overload protection
<ul> <li>evaluation of thermistor motor protection</li> </ul>	No
<ul> <li>inside-delta circuit</li> </ul>	Yes
• auto-RESET	Yes
manual RESET	Yes
remote reset	Yes; By turning off the control supply voltage
communication function	Yes
operating measured value display	Yes; Only in conjunction with special accessories
error logbook     via aeftuara parametarimable	Yes; Only in conjunction with special accessories  No
<ul><li>via software parameterizable</li><li>via software configurable</li></ul>	Yes
PROFlenergy	Yes: in connection with the PROFINET Standard communication
• Fixor lenergy	module
firmware update	Yes
<ul><li>firmware update</li><li>removable terminal for control circuit</li></ul>	Yes Yes
·	
• removable terminal for control circuit	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature
<ul> <li>removable terminal for control circuit</li> <li>torque control</li> <li>analog output</li> </ul>	Yes No
removable terminal for control circuit     torque control     analog output  Power Electronics	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature
removable terminal for control circuit     torque control     analog output  Power Electronics operational current	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)
<ul> <li>removable terminal for control circuit</li> <li>torque control</li> <li>analog output</li> </ul> Power Electronics <ul> <li>operational current</li> <li>at 40 °C rated value</li> </ul>	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value operational current at inside-delta circuit	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A 546 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     operating voltage	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at inside-delta circuit rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at inside-delta circuit rated value relative negative tolerance of the operating voltage at	Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     rated value     rated value     rated value     rated value     relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage at inside-delta circuit	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     rated value     rated value     rated value     relative negative tolerance of the operating voltage relative negative 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	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     at inside-delta circuit rated value  relative negative tolerance of the operating voltage relative negative 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	Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 % 10 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     at inside-delta circuit rated value relative negative tolerance of the operating voltage 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 operating power for 3-phase motors     at 230 V at 40 °C rated value	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 % 10 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     at inside-delta circuit rated value     relative negative tolerance of the operating voltage 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 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	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 % 10 %
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value  operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     at inside-delta circuit rated value     rated value     at inside-delta circuit rated value relative negative tolerance of the operating voltage relative negative tolerance of the operating voltage relative negative 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 operating power for 3-phase motors     at 230 V at 40 °C rated value     at 230 V at 40 °C rated value     at 400 V at 40 °C rated value	Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 % 10 %  90 kW 160 kW 160 kW
removable terminal for control circuit     torque control     analog output  Power Electronics  operational current     at 40 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     operational current at inside-delta circuit     at 40 °C rated value     at 50 °C rated value     at 50 °C rated value     at 60 °C rated value     at 60 °C rated value     at 60 °C rated value     at inside-delta circuit rated value     relative negative tolerance of the operating voltage 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 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	Yes No Yes; 4 20 mA (default) / 0 10 V (parameterizable with High Feature HMI)  315 A 279 A 255 A  546 A 483 A 442 A  200 480 V 200 480 V -15 % 10 % -15 % 10 %

relative negative tolerance of the operating frequency adjustable motor current  • at rolary coding switch on switch position 1 • at rolary coding switch on switch position 2 • at rolary coding switch on switch position 3 • at rolary coding switch on switch position 6 • at rolary coding switch on switch position 6 • at rolary coding switch on switch position 7 • at rolary coding switch on switch position 6 • at rolary coding switch on switch position 7 • at rolary coding switch on switch position 7 • at rolary coding switch on switch position 10 • at rolary coding switch on switch position 10 • at rolary coding switch on switch position 10 • at rolary coding switch on switch position 11 • at rolary coding switch on switch position 12 • at rolary coding switch on switch position 13 • at rolary coding switch on switch position 14 • at rolary coding switch on switch position 15 • a rolary coding switch on switch position 16 • a rolary coding switch on switch position 16 • a rolary coding switch on switch position 16 • a rolary coding switch on switch position 16 • a rolary coding switch on switch position 16 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 7 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 1 • rolar inside-delta circuit at rolary coding switch on switch position 14 • rolar inside-delta circuit at ro	Operating frequency 2 rated value	60 Hz
a ir rotary coding switch on switch position 1 a ir rotary coding switch on switch position 3 a ir rotary coding switch on switch position 3 a ir rotary coding switch on switch position 3 a ir rotary coding switch on switch position 6 a ir rotary coding switch on switch position 7 a ir rotary coding switch on switch position 7 a ir rotary coding switch on switch position 7 a ir rotary coding switch on switch position 7 a ir rotary coding switch on switch position 10 a ir rotary coding switch on switch position 10 a ir rotary coding switch on switch position 10 a ir rotary coding switch on switch position 11 a ir rotary coding switch on switch position 11 a ir rotary coding switch on switch position 12 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 13 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 15 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 15 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 14 a ir rotary coding switch on switch position 15 a ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rinside-delta circuit at rotary coding switch on switch position 14 b ir rin	relative negative tolerance of the operating frequency	-10 %
a trotary coding switch on switch position 2 a for tortary coding switch on switch position 3 a for tortary coding switch on switch position 4 a for tortary coding switch on switch position 6 at rotary coding switch on switch position 7 at rotary coding switch on switch position 7 a for tortary coding switch on switch position 7 a for tortary coding switch on switch position 7 a for tortary coding switch on switch position 9 a for tortary coding switch on switch position 9 a for tortary coding switch on switch position 9 a for tortary coding switch on switch position 11 a for tortary coding switch on switch position 12 a for tortary coding switch on switch position 12 a for tortary coding switch on switch position 13 a for tortary coding switch on switch position 13 a for tortary coding switch on switch position 14 a for tortary coding switch on switch position 15 a for tortary coding switch on switch position 15 a for tortary coding switch on switch position 16 a for tortary coding switch on switch position 16 a for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 6 b for inside-deltal circuit at rotary coding switch on switch position 6 b for inside-deltal circuit at rotary coding switch on switch position 6 b for inside-deltal circuit at rotary coding switch on switch position 7 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position 1 b for inside-deltal circuit at rotary coding switch on switch position	relative positive tolerance of the operating frequency	10 %
a ricrotary coding switch on switch position 3 britished to coding switch on switch position 3 crotary coding switch on switch position 5 crotary coding switch on switch position 7 crotary coding switch on switch position 9 crotary coding switch on switch position 10 crotary coding switch on switch position 11 crotary coding switch on switch position 12 crotary coding switch on switch position 13 crotary coding switch on switch position 13 crotary coding switch on switch position 14 crotary coding switch on switch position 15 crotary coding switch on switch position 16 crotary coding switch on switch position 17 crotary coding switch on switch position 17 crotary coding switch on switch position 18 crotary coding switch on switch position 18 crotary coding switch on switch position 19 crotary coding switch 19 crotary c	adjustable motor current	
a trotary coding switch on switch position 4 a trotary coding switch on switch position 5 at rotary coding switch on switch position 7 at rotary coding switch on switch position 7 at rotary coding switch on switch position 8 at rotary coding switch on switch position 7 at rotary coding switch on switch position 8 at rotary coding switch on switch position 12 at rotary coding switch on switch position 11 at rotary coding switch on switch position 12 at rotary coding switch on switch position 13 at rotary coding switch on switch position 15 at rotary coding switch on switch position 16 at rotary coding switch on switch position 16 at rotary coding switch on switch position 17 at rotary coding switch on switch position 17 at rotary coding switch on switch position 17 at rotary coding switch on switch position 18 at rotary coding switch on switch position 19 at rotary coding switch 19 at rotary coding swit	<ul> <li>at rotary coding switch on switch position 1</li> </ul>	135 A
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switch position 10  • for inside-delta circuit at rotary coding switch on switch position 11  • for inside-delta circuit at rotary coding switch on switch position 12  • for inside-delta circuit at rotary coding switch on switch position 13  • for inside-delta circuit at rotary coding switch on switch position 13  • for inside-delta circuit at rotary coding switch on switch position 14  • for inside-delta circuit at rotary coding switch on switch position 15  • for inside-delta circuit at rotary coding switch on switch position 16  • at inside-delta circuit minimum  234 A  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 60 °C during startup  • AC	switch position 9	
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switch position 12  • for inside-delta circuit at rotary coding switch on switch position 13  • for inside-delta circuit at rotary coding switch on switch position 14  • for inside-delta circuit at rotary coding switch on switch position 15  • for inside-delta circuit at rotary coding switch on switch position 15  • for inside-delta circuit at rotary coding switch on switch position 16  • at inside-delta circuit minimum  234 A  minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup  • at 50 °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	switch position 11	462 A
• for inside-delta circuit at rotary coding switch on switch position 14     • for inside-delta circuit at rotary coding switch on switch position 15     • for inside-delta circuit at rotary coding switch on switch position 16     • at inside-delta circuit minimum     inimum 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     • at 40 °C during startup     • at 50 °C during startup     • at 60 °C during startup	switch position 12	483 A
• for inside-delta circuit at rotary coding switch on switch position 15     • for inside-delta circuit at rotary coding switch on switch position 16     • at inside-delta circuit minimum     234 A  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     • at 60 °C during startup	<ul> <li>for inside-delta circuit at rotary coding switch on</li> </ul>	504 A
<ul> <li>for inside-delta circuit at rotary coding switch on switch position 16</li> <li>at inside-delta circuit minimum</li> <li>at inside-delta circuit minimum</li> <li>234 A</li> <li>minimum load [%]</li> <li>power loss [W] for rated value of the current at AC</li> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>at 60 °C after startup</li> <li>at 40 °C during startup</li> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li></ul>	for inside-delta circuit at rotary coding switch on	525 A
<ul> <li>at inside-delta circuit minimum</li> <li>minimum load [%]</li> <li>power loss [W] for rated value of the current at AC</li> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>at 60 °C after startup</li> <li>power loss [W] at AC at current limitation 350 %</li> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °</li></ul>	for inside-delta circuit at rotary coding switch on	546 A
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		234 A
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 60 °C during startup  • AC		
<ul> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>89 W</li> <li>power loss [W] at AC at current limitation 350 %</li> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>AC</li> </ul> Control circuit/ Control type of voltage of the control supply voltage AC		1.5 7.5, Teledition to chiminot outdolle to
<ul> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>89 W</li> <li>power loss [W] at AC at current limitation 350 %</li> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>at 60 °C during startup</li> <li>3 934 W</li> </ul> Control circuit/ Control type of voltage of the control supply voltage AC		107 W
<ul> <li>at 60 °C after startup</li> <li>power loss [W] at AC at current limitation 350 %</li> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>at 60 °C during startup</li> <li>3 934 W</li> </ul> Control circuit/ Control type of voltage of the control supply voltage AC	•	
power loss [W] at AC at current limitation 350 %  • at 40 °C during startup 5 350 W  • at 50 °C during startup 4 471 W  • at 60 °C during startup 3 934 W  Control circuit/ Control  type of voltage of the control supply voltage AC	•	89 W
at 50 °C during startup     at 60 °C during startup     3 934 W  Control circuit/ Control  type of voltage of the control supply voltage  AC	•	
at 60 °C during startup  Control circuit/ Control  type of voltage of the control supply voltage  AC	<ul> <li>at 40 °C during startup</li> </ul>	5 350 W
Control circuit/ Control  type of voltage of the control supply voltage AC	<ul> <li>at 50 °C during startup</li> </ul>	4 471 W
type of voltage of the control supply voltage AC	at 60 °C during startup	3 934 W
	Control circuit/ Control	
control supply voltage at AC		AC
	control supply voltage at AC	

• at 50 Hz	110 250 V
• at 60 Hz	110 250 V
relative negative tolerance of the control supply voltage at AC at 50 Hz	-15 %
relative positive tolerance of the control supply	10 %
voltage at AC at 50 Hz	10 /0
relative negative tolerance of the control supply	-15 %
voltage at AC at 60 Hz	
relative positive tolerance of the control supply	10 %
voltage at AC at 60 Hz	
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply	-10 %
voltage frequency relative positive tolerance of the control supply	10 %
voltage frequency	10 76
control supply current in standby mode rated value	30 mA
holding current in bypass operation rated value	100 mA
inrush current peak at application of control supply voltage	12.2 A
maximum	
duration of inrush current peak at application of control	2.2 ms
supply voltage	W. C.
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	1
number of digital outputs	3
<ul> <li>not parameterizable</li> </ul>	2
digital output version	2 normally-open contacts (NO) / 1 changeover contact (CO)
number of analog outputs	1
switching capacity current of the relay outputs	
<ul><li>at AC-15 at 250 V rated value</li></ul>	3 A
<ul> <li>at DC-13 at 24 V rated value</li> </ul>	1 A
Installation/ mounting/ dimensions	
	with vertical mounting surface +/-90° rotatable, with vertical mounting
Installation/ mounting/ dimensions mounting position	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
Installation/ mounting/ dimensions mounting position fastening method	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing
Installation/ mounting/ dimensions mounting position fastening method height	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm
Installation/ mounting/ dimensions mounting position fastening method height width	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm
Installation/ mounting/ dimensions mounting position fastening method height width depth	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting • forwards	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting • forwards • backwards	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting  • forwards • backwards • upwards	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting  • forwards • backwards • upwards • downwards • at the side	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • backwards • upwards • downwards • at the side weight without packaging  Connections/ Terminals type of electrical connection	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • backwards • upwards • downwards • at the side weight without packaging  Connections/ Terminals  type of electrical connection • for main current circuit	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting  • forwards  • backwards  • upwards  • downwards  • at the side weight without packaging  Connections/ Terminals  type of electrical connection  • for main current circuit  • for control circuit width of connection bar maximum type of connectable conductor cross-sections  • for DIN cable lug for main contacts stranded  • for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections  • for control circuit solid • for control circuit finely stranded with core end processing	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting  • forwards • backwards • upwards • downwards • at the side weight without packaging  Connections/ Terminals  type of electrical connection • for main current circuit • for control circuit width of connection bar maximum type of connectable conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections • for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit solid	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting  • forwards • backwards • upwards • downwards • at the side weight without packaging  Connections/ Terminals  type of electrical connection • for main current circuit • for control circuit width of connection bar maximum type of connectable conductor cross-sections • for DIN cable lug for main contacts stranded • for DIN cable lug for main contacts finely stranded type of connectable conductor cross-sections • for control circuit solid • for control circuit finely stranded with core end processing • at AWG cables for control circuit finely stranded with	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16) 2x (24 16)
Installation/ mounting/ dimensions  mounting position  fastening method height width depth required spacing with side-by-side mounting	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back screw fixing 393 mm 210 mm 203 mm  10 mm 0 mm 100 mm 75 mm 5 mm 9.9 kg  busbar connection spring-loaded terminals 45 mm  2x (50 240 mm²) 2x (70 240 mm²) 2x (0.25 1.5 mm²) 2x (0.25 1.5 mm²) 2x (24 16)

#### tightening torque 14 ... 24 N·m • for main contacts with screw-type terminals · for auxiliary and control contacts with screw-type 0.8 ... 1.2 N·m terminals tightening torque [lbf·in] 124 ... 210 lbf·in • for main contacts with screw-type terminals 7 ... 10.3 lbf·in for auxiliary and control contacts with screw-type terminals Ambient conditions installation altitude at height above sea level maximum 5 000 m; Derating as of 1000 m, see catalog ambient temperature during operation -25 ... +60 °C; Please observe derating at temperatures of 40 °C or above · during storage and transport -40 ... +80 °C environmental category • during operation according to IEC 60721 3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 during storage according to IEC 60721 1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4 during transport according to IEC 60721 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 EtherNet/IP Yes Modbus RTU Yes Modbus TCP Yes PROFIBUS Yes **UL/CSA** ratings manufacturer's article number of circuit breaker usable for Standard Faults at 460/480 V Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 18 kA according to UL - usable for High Faults at 460/480 V according Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq max = 65 to UL - usable for Standard Faults at 460/480 V at Siemens type: 3VA54, max. 600 A; Iq = 18 kA inside-delta circuit according to UL - usable for High Faults at 460/480 V at inside-Siemens type: 3VA54, max. 600 A; Iq max = 65 kA delta circuit according to UL usable for Standard Faults at 575/600 V Siemens type: 3VA53, max. 400 A or 3VA54, max. 600 A; Iq = 18 kA according to UL usable for Standard Faults at 575/600 V at Siemens type: 3VA54, max. 600 A; Iq = 18 kA inside-delta circuit according to UL • of the fuse usable for Standard Faults up to 575/600 V Type: Class J / L, max. 1000 A; Iq = 18 kA according to UL usable for High Faults up to 575/600 V Type: Class J / L, max. 1000 A; Iq = 100 kA according to UL usable for Standard Faults at inside-delta Type: Class J / L, max. 1000 A; Iq = 18 kA circuit up to 575/600 V according to UL - usable for High Faults at inside-delta circuit up Type: Class J / L, max. 1000 A; Iq = 100 kA to 575/600 V according to UL operating power [hp] for 3-phase motors • at 200/208 V at 50 °C rated value 75 hp at 220/230 V at 50 °C rated value 100 hp • at 460/480 V at 50 °C rated value 200 hp • at 200/208 V at inside-delta circuit at 50 °C rated 150 hp value • at 220/230 V at inside-delta circuit at 50 °C rated 200 hp

# contact rating of auxiliary contacts according to UL

Safety related data
protection class IP on the front according to IEC

• at 460/480 V at inside-delta circuit at 50 °C rated

IP00; IP20 with cover

60529

value

400 hp

R300-B300

touch protection on the front according to IEC 60529 electromagnetic compatibility

finger-safe, for vertical contact from the front with cover in accordance with IEC 60947-4-2

Certificates/ approvals

**General Product Approval** 

**EMC** 



Confirmation









**Declaration of Conformity** 

**Test Certificates** 

Marine / Shipping





Type Test Certificates/Test Report







Marine / Shipping

other



Confirmation

#### Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5245-2AC14

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RW5245-2AC14}$ 

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5245-2AC14

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

http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RW5245-2AC14&lang=en

Characteristic: Tripping characteristics, I2t, Let-through current

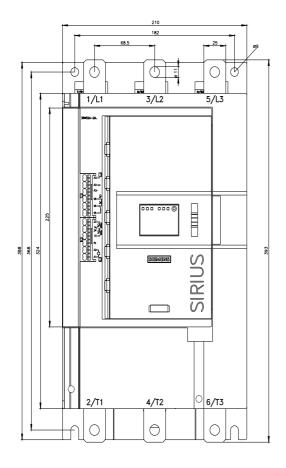
https://support.industry.siemens.com/cs/ww/en/ps/3RW5245-2AC14/char

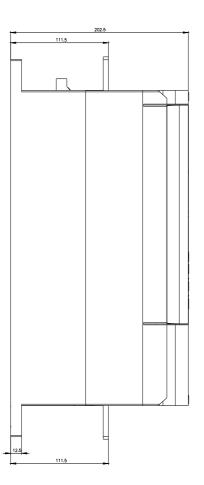
Characteristic: Installation altitude

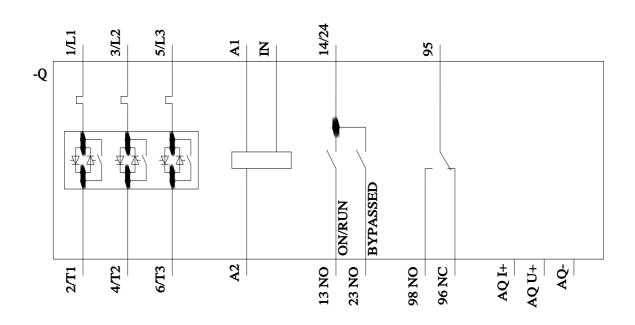
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5245-2AC14&objecttype=14&gridview=view1

Simulation Tool for Soft Starters (STS)

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







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