SIEMENS

product brand name

product category

Data sheet 3RW5234-6TC04

SIRIUS

Hybrid switching devices



SIRIUS soft starter 200-480 V 113 A, 24 V AC/DC Screw terminals Thermistor input

product category	Trybrid Switching devices
product designation	Soft starter
product type designation	3RW52
manufacturer's article number	
 of standard HMI module usable 	3RW5980-0HS00
 of high feature HMI module usable 	3RW5980-0HF00
 of communication module PROFINET standard usable 	3RW5980-0CS00
 of communication module PROFIBUS usable 	3RW5980-0CP00
 of communication module Modbus TCP usable 	3RW5980-0CT00
 of communication module Modbus RTU usable 	3RW5980-0CR00
 of communication module Ethernet/IP 	3RW5980-0CE00
 of circuit breaker usable at 400 V 	3VA2216-7MN32-0AA0; Type of coordination 1, lq = 65 kA, CLASS 10
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2220-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10
 of the gG fuse usable up to 690 V 	3NA3244-6; Type of coordination 1, Iq = 65 kA
 of the gG fuse usable at inside-delta circuit up to 500 V 	3NA3244-6; Type of coordination 1, Iq = 65 kA
 of full range R fuse link for semiconductor protection usable up to 690 V 	3NE1225-0; Type of coordination 2, Iq = 65 kA
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3332-0B; Type of coordination 2, Iq = 65 kA
General technical data	
starting voltage [%]	30 100 %
stopping voltage [%]	50 50 %
start-up ramp time of soft starter	0 20 s
current limiting value [%] adjustable	130 700 %
certificate of suitability	
CE marking	Yes
UL approval	Yes
 CSA approval 	Yes
product component is supported	
HMI-Standard	Yes
HMI-High Feature	Yes
product feature integrated bypass contact system	Yes
number of controlled phases	3
trip class	CLASS 10A (default) / 10E / 20E; acc. to IEC 60947-4-2
buffering time in the event of power failure	

* for control circuit insulation votinge rated value degree of politution 3. a.c. to IEC 60947.4-2 imputes vottage rated value 6.6 kV blocking vottage rated value 6.6 kV blocking vottage resistance rated value 7. a.c. to IEC 60947.4-2 8. c. vote resistance rated value 8. a.c. vote resistance rated value 8. a.c. vote resistance rated value 8. between main and auxiliary circuit 8. between parameters or production in the second or product function which special accessories 9. communication function 9. correct replace configurable 9. correct replace value 9. correct replace configurable 9. correct replace configurable 9. cor	for main current circuit	100 ms
Insulation voltage rated value degree of pollution Jacob to IEC 60947-4-2 blocking voltage of the thyristor maximum service factor 1 surge voltage rated value 2 surge voltage rated value 3, acc. to IEC 60947-4-2 1 surge voltage resistance rated value 2 surge voltage resistance rated value 2 blocking voltage for safe isolation 2 between main and auxiliary circuit 4 blocking voltage resistance rated value 2 block resistance 3 block resistance 4 block resistance 4 block resistance 5 block resistance 4 block resistance 5 block resistance 7 blo		
Indeption of pollution 3, acc. to IEC 60947-4-2		
Impulse voltage rated value sorvice factor surge voltage restance rated value service factor • between main and auxiliary circuit vibration resistance **The vibration vibration **The vibration vibration vibration **The vibration vibration vibration **The vibration vibration **The vibration vibration vibration **The vibration **The vibration vibra		
Social State 1 1 1 1 1 1 1 1 1		
service factor surge voltage resistance rated value		
surge voltage resistance rated value • between main and auxiliary of cruit • control of the main and auxiliary of cruit • control of a care. to IEC 80947-4-2 • AC 58a AC 58a AC 58a AC 58a • Control of the main and auxiliary of the control auxiliary of		1 100 1
maximum permissible voltage for safe isolation		
between main and auxiliary circuit utilization category acc. to IEC 60947-4-2 shock resistance vibration resistance vibration resistance reference code acc. to IEC 81346-2 product function **ramp-up (soft starting) **ramp-down (soft stop) **Soft Torque **pain-down (soft stop) **pain-down (soft stor) **pa		ONV
utilization category acc. to IEC 69947-4-2 shock resistance 15 g / 11 ms, from 12 g / 11 ms with potential contact lifting vibration resistance 15 mm to 6 Hz, 2g to 500 Hz reference code acc. LEC 81346-2 product function ramp-up (soft starting) ramp-down (soft stop) - Soft Torque - adjustable current limitation - Per and dijustable current limitation - Pupmy ramp down - Intrinsic device protection - Intrinsic device prote		600 V
shock resistance vibration resistance reference code acc. to IEC 81346-2 product function **ram-up (soft starting) **ramp-down (soft stop) **Soft Torque **soft Torque **peak (soft starting) **peak (soft st		
vibration resistance reference code acc. to IEC 81346-2 Q product function • ramp-up (soft starting) • ramp-down (soft stop) • Soft Torque • adjustable current limitation • pump ramp down • intrinsic device protection • revaluation of thermistor motor protection • revealuation of thermistor revealuation • revealuation of th		
reference code acc. to IEC 81346-2 product function * ramp-up (soft starting) * ramp-down (soft stop) * Soft Torque * adjustable current limitation * pump ramp down * motor overload protection * evaluation of thermistor motor protection and electronic motor overload protection * initiation device protection * motor overload protection * evaluation of thermistor motor protection * evaluation of thermistor motor protection * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * evaluation of thermistor motor protection * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Full motor protection (thermistor motor protection and electronic motor overload protection) * pes; Type A PTC or Klixon / Thermoclick * pes; B turning of the control supply voltage * error (sphericurs) * pes; By turning off the control supply voltage * pes; By turning off the control supply voltage * pes; By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * pes By turning off the control supply voltage * p		
product function armp-up (soft starting)		-
• ramp-up (soft starting) • ramp-down (soft stop) • ramp-down (soft stop) • soft Troque • adjustable current limitation • pump ramp down • motor overload protection • motor overload protection • evaluation of themistor motor protection • inistinasid eductation • evaluation of themistor motor protection • evaluation of themistor motor protection • inside-delta circuit • auto-RESET • manual RESET • remoter esset • communication function • operating measured value display • corrollogbook • via software parameterizable • via software parameterizable • via software configurable • FROFlenergy • FROFlenergy • FROFlenergy • removable terminal for control circuit • analog output • firmware update • removable terminal for control circuit • analog output • operational current • at 40 °C rated value • at 60 °C rated value • at		~
• ramp-down (soft stop) • Soft Torque • Soft Torque • Soft Torque • Adjustable current limitation • pump ramp down • intrinsic device protection • motor overload protection • motor overload protection • evaluation of thermistor motor protection • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • inside-delta circuit • evaluation of thermistor motor protection • evaluation of thermistor motor protection (thermistor motor protection and electronic motor overload protection) • ves: Full motor protection (thermistor motor protection and electronic motor overload protection) • ves: Type A PTC or Klixon / Thermoclick • ves • remote reset • ves • Permote reset • ves • Protection function • ves: By turning off the control supply voltage • ves: Only in conjunction with special accessories • ves: Only in conjunction	•	Yes
Soft Torque adjustable current limitation pump ramp down intrinsic device protection motor overload protection evaluation of thermistor motor protection inside-deta circuit auto-RESET evaluation of thermistor motor protection and electronic motor overload protection) Yes; Type A PTC or Kilxon / Thermoclick Yes evaluation of thermistor motor protection and electronic motor overload protection) Yes; Type A PTC or Kilxon / Thermoclick Yes evaluation of thermistor motor protection and electronic motor overload protection) Yes; Type A PTC or Kilxon / Thermoclick Yes evaluation / Thermoclick Yes evaluation of thermistor motor protection and electronic motor overload protection) Yes; Type A PTC or Kilxon / Thermoclick Yes evaluation / Thermoclick Yes evaluation of thermistor motor protection and electronic motor overload protection) Yes everified electroal outcommication with special accessories Yes; By turning off the control supply voltage Yes; Dyly in conjunction with special accessories Yes; Only		
adjustable current limitation pump ramp down pimp ramp ramp ramp down pimp ramp ramp ramp ramp down pimp ramp ramp ramp ramp ramp ramp ramp ra		
pump ramp down intrinsic device protection motor overload protection motor overload protection evaluation of thermistor motor protection inside-deflat circuit auto-RESET	·	
intrinsic device protection motor overload protection motor overload protection evaluation of thermistor motor protection inside-delta circuit 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 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 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 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 relative positive tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at	-	
motor overload protection evaluation of thermistor motor protection evaluation of thermistor motor protection inside-delta circuit auto-RESET emanual RESET remote reset communication function eoperating measured value display error logbook via software parameterizable via software parameterizable via software configurable PROFlenergy Forest endured to remove the operating voltage removable terminal for control circuit tal 40 °C rated value at 50 °C rated value eat 60 °C rated value		
inside-delta circuit auto-RESET auto-RESET auto-RESET aremote reset communication function operating measured value display error logbook via software parameterizable via software configurable firmware update removable terminal for control circuit at 40 °C rated value at 160 °C rated value at 60 °C ra		Yes; Full motor protection (thermistor motor protection and electronic
auto-RESET manual RESET remote reset remote reset communication function ves operating measured value display reiative negative tolerance of the operating voltage ves; By turning off the control supply voltage yes; Only in conjunction with special accessories ves; Only in conjunction with special accessories ves; Only in conjunction with special accessories via software parameterizable via software configurable ves PROFlenergy Yes; In connection with the PROFINET Standard communication module firmware update ves removable terminal for control circuit ves torque control value	 evaluation of thermistor motor protection 	Yes; Type A PTC or Klixon / Thermoclick
manual RESET remote reset communication function operating measured value display remote reset ves; By turning off the control supply voltage veror logbook veror logbook via software parameterizable via software parameterizable via software configurable ves removable terminal for control circuit ves removable terminal for control circuit ves vorque control value value value veror rated value va	• inside-delta circuit	Yes
remote reset communication function operating measured value display error logbook via software parameterizable via software configurable via software configurable via software update removable terminal for control circuit torque control analog output via to "C rated value at 60 "C rated valu	auto-RESET	Yes
communication function operating measured value display error logbook via software parameterizable via software configurable via software update ves; in connection with the PROFINET Standard communication module firmware update ves removable terminal for control circuit ves verenovable terminal for control circuit ves ves; in connection with the PROFINET Standard communication module ves ves; in connection with the PROFINET Standard communication module ves ves; in connection with the PROFINET Standard communication module ves ves; in connection with the PROFINET Standard communication module ves ves; in connection with the PROFINET Standard communication module ves ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module ves; in connection with the PROFINET Standard communication module	manual RESET	Yes
operating measured value display error logbook via software parameterizable via software configurable via	• remote reset	Yes; By turning off the control supply voltage
error logbook via software parameterizable via software configurable ves via software configurable PROFlenergy Yes; in connection with the PROFINET Standard communication module firmware update removable terminal for control circuit ves removable terminal for control circuit ves	 communication function 	Yes
via software parameterizable via software configurable PROFlenergy Pres; in connection with the PROFINET Standard communication module removable terminal for control circuit torque control no analog output No Power Electronics operational current at 40 °C rated value at 60 °C rated value at 60 °C rated value at 60 °C rated value at 40 °C rated value at 40 °C rated value at 60 °C rated val	 operating measured value display 	Yes; Only in conjunction with special accessories
via software configurable PROFlenergy Yes; in connection with the PROFINET Standard communication module firmware update Yes removable terminal for control circuit Yes torque control No analog output No Power Electronics operational current 1 44 0 °C rated value at 50 °C rated value at 60 °C rated value at 60 °C rated value	error logbook	Yes; Only in conjunction with special accessories
PROFlenergy Yes; in connection with the PROFINET Standard communication module Yes removable terminal for control circuit Yes torque control analog output No Power Electronics operational current at 40 °C rated value at 60 °C rated value at 40 °C rated value at 40 °C rated value at 40 °C rated value 101 A poperational current at inside-delta circuit at 40 °C rated value 196 A at 50 °C rated value 175 A at 60 °C rated value 154 A operational current at inside-delta circuit at 40 °C rated value 155 °C rated value 164 °C rated value 175 A at 60 °C rated value 175 A at 60 °C rated value 154 A operating voltage rated value 154 A 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	 via software parameterizable 	No
• firmware update • removable terminal for control circuit • torque control • torque control • analog output No Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at 40 °C rated value • at 60 °C rated value • at 50 °C rated value • at 50 °C rated value • at 60 °C rated value • at 50 °C rated value • at 80 °C rated value • at 50 °C rated value • at 60	 via software configurable 	Yes
removable terminal for control circuit torque control analog output No Power Electronics operational current at 40 °C rated value at 60 °C rated value at 60 °C rated value at 40 °C rated value at 40 °C rated value at 50 °C rated value at 60 °C rated value at 40 °C rated value at 50 °C rated value at 60 °C rated value at inside-delta circuit rated value at inside-delta circuit rated value 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		module
• torque control • analog output No Power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 60 °C rated value • at 40 °C rated value • at 60 °C rated value • at 50 °C rated value • at 60 °C rated value • at 50 °C rated value • at 60 °C rated value • rated value • rated value • rated value • at inside-delta circuit rated value 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	•	
analog output No Power Electronics operational current at 40 °C rated value at 50 °C rated value at 60 °C rated value at inside-delta circuit rated value at inside-delta circuit rated value 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 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 relative positive tolerance of the operating voltage at inside-delta circuit		
power Electronics operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value • at 40 °C rated value • at 60 °C rated value • at 40 °C rated value • 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 • rated value • rated value • at inside-delta circuit rated value • at inside-delta circuit rated value • at inside-delta circuit rated value • at inside-delta circuit rated value • rated value • at inside-delta circuit rated value 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 relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors	•	
operational current • at 40 °C rated value • at 50 °C rated value • at 60 °C rated value 89 A operational current at inside-delta circuit • at 40 °C rated value • at 50 °C rated value 196 A • at 50 °C rated value 175 A • at 60 °C rated value 154 A operating voltage • rated value • at inside-delta circuit rated value 200 480 V 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 relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors		No
at 40 °C rated value at 50 °C rated value at 60 °C rated value out 60 °C rated value say A operational current at inside-delta circuit at 40 °C rated value at 50 °C rated value out 60 °C rated value at 60 °C rated value operating voltage at inside-delta circuit rated value 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 relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors		
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 to 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 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 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 60 °C rated value perational current at inside-delta circuit at 40 °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 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		
operational current at inside-delta circuit • at 40 °C rated value • at 50 °C rated value 175 A • at 60 °C rated value 154 A operating voltage • rated value 200 480 V • 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 at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors		
 at 40 °C rated value at 50 °C rated value at 60 °C rated value 154 A Operating voltage 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 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 % 10 %<		89 A
 at 50 °C rated value at 60 °C rated value 154 A Operating voltage 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 10 % 10 % 10 % 10 % 10 % 10 % 10 % 		400 A
 at 60 °C rated value operating voltage 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 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 		
operating voltage • 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		
 rated value at inside-delta circuit rated value 200 480 V 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 relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors 		104 A
● 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 200 480 V -15 % -15 % 10 %		200 480 \
relative negative tolerance of the operating voltage relative positive tolerance of the operating voltage 10 % 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		
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		
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 -15 % 10 %		
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors		
inside-delta circuit operating power for 3-phase motors	inside-delta circuit	
	inside-delta circuit	IU /0
• at 230 v at 40 °C rated value 30 kW		00 144
	• at 230 V at 40 °C rated value	3U KVV

• at 230 V at inside-delta circuit at 40 °C rated value	55 kW
at 400 V at 40 °C rated value	55 kW
at 400 V at inside-delta circuit at 40 °C rated value	110 kW
Operating frequency 1 rated value	50 Hz
Operating frequency 2 rated value	60 Hz
relative negative tolerance of the operating frequency	-10 %
relative positive tolerance of the operating frequency	10 %
adjustable motor current	
at rotary coding switch on switch position 1	53 A
at rotary coding switch on switch position 2	57 A
 at rotary coding switch on switch position 3 	61 A
 at rotary coding switch on switch position 4 	65 A
at rotary coding switch on switch position 5	69 A
at rotary coding switch on switch position 6	73 A
 at rotary coding switch on switch position 7 	77 A
 at rotary coding switch on switch position 8 	81 A
 at rotary coding switch on switch position 9 	85 A
 at rotary coding switch on switch position 10 	89 A
 at rotary coding switch on switch position 11 	93 A
 at rotary coding switch on switch position 12 	97 A
 at rotary coding switch on switch position 13 	101 A
 at rotary coding switch on switch position 14 	105 A
 at rotary coding switch on switch position 15 	109 A
 at rotary coding switch on switch position 16 	113 A
• minimum	53 A
adjustable motor current	
 for inside-delta circuit at rotary coding switch on switch position 1 	91.8 A
 for inside-delta circuit at rotary coding switch on switch position 2 	98.7 A
 for inside-delta circuit at rotary coding switch on switch position 3 	106 A
 for inside-delta circuit at rotary coding switch on switch position 4 	113 A
 for inside-delta circuit at rotary coding switch on switch position 5 	120 A
 for inside-delta circuit at rotary coding switch on switch position 6 	126 A
 for inside-delta circuit at rotary coding switch on switch position 7 	133 A
 for inside-delta circuit at rotary coding switch on switch position 8 	140 A
for inside-delta circuit at rotary coding switch on switch position 9	147 A
for inside-delta circuit at rotary coding switch on switch position 10	154 A
for inside-delta circuit at rotary coding switch on switch position 11	161 A
for inside-delta circuit at rotary coding switch on switch position 12	168 A
for inside-delta circuit at rotary coding switch on switch position 13	175 A
for inside-delta circuit at rotary coding switch on switch position 14 for inside delta circuit at retery coding switch on	182 A
for inside-delta circuit at rotary coding switch on switch position 15 for inside delta circuit at rotary coding switch on the circuit at rotary coding switch at rotary coding swi	189 A
for inside-delta circuit at rotary coding switch on switch position 16 at inside delta circuit minimum	196 A
at inside-delta circuit minimum	91.8 A
minimum load [%]	15 %; Relative to smallest settable le
power loss [W] for rated value of the current at ACat 40 °C after startup	46 W

 at 50 °C after startup 	42 W
at 60 °C after startup	39 W
power loss [W] at AC at current limitation 350 %	
 at 40 °C during startup 	1 512 W
 at 50 °C during startup 	1 291 W
 at 60 °C during startup 	1 086 W
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
control supply voltage at AC at 50 Hz rated value	24 V
control supply voltage at AG at 60 Hz rated value control supply voltage at AG at 60 Hz rated value	24 V
relative negative tolerance of the control supply	-20 %
voltage at AC at 50 Hz	-20 /0
relative positive tolerance of the control supply voltage at AC at 50 Hz	20 %
relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply voltage frequency	-10 %
relative positive tolerance of the control supply voltage frequency	10 %
control supply voltage at DC rated value	24 V
relative negative tolerance of the control supply voltage at DC	-20 %
relative positive tolerance of the control supply voltage at DC	20 %
control supply current in standby mode rated value	160 mA
holding current in bypass operation rated value	380 mA
locked-rotor current at close of bypass contact	7.6 A
maximum inrush current peak at application of control supply voltage	3.3 A
maximum	12.1 ms
duration of inrush current peak at application of control supply voltage	12.11115
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 inputs for thermistor connection	1; Type A PTC or Klixon / Thermoclick
number of digital outputs	3
not parameterizable	2
digital output version	2 normally-open contacts (NO) / 1 changeover contact (CO)
number of analog outputs	0
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	with vertical mounting surface +/-90° rotatable, with vertical mounting surface +/- 22.5° tiltable to the front and back
fastening method	screw fixing
height	306 mm
width	185 mm
depth	203 mm
required spacing with side-by-side mounting	
• forwards	10 mm
• backwards	0 mm
• upwards	100 mm
•	

• downwards	75 mm
at the side	5 mm
weight without packaging	6.6 kg
Connections/ Terminals	
type of electrical connection	
for main current circuit	busbar connection
for control circuit	screw-type terminals
width of connection bar maximum	25 mm
wire length for thermistor connection	
 with conductor cross-section = 0.5 mm² maximum 	50 m
 with conductor cross-section = 1.5 mm² maximum 	150 m
• with conductor cross-section = 2.5 mm² maximum	250 m
type of connectable conductor cross-sections	
for DIN cable lug for main contacts stranded	2x (16 95 mm²)
for DIN cable lug for main contacts finely stranded	2x (25 120 mm²)
type of connectable conductor cross-sections	
for control circuit solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
for control circuit finely stranded with core end processing.	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
processing ● at AWG cables for control circuit solid	1x (20 12), 2x (20 14)
wire length	1 (20 12), 2 (20 17)
between soft starter and motor maximum	800 m
at the digital inputs at AC maximum	100 m
at the digital inputs at DC maximum	1 000 m
tightening torque	1 000 111
for main contacts with screw-type terminals	10 14 N·m
for auxiliary and control contacts with screw-type	0.8 1.2 N·m
terminals	0.0 1.2 IV III
tightening torque [lbf·in]	
 for main contacts with screw-type terminals 	89 124 lbf·in
 for auxiliary and control contacts with screw-type 	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 during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
ambient temperature during storage and transport	-40 +80 °C
environmental category	
 during operation acc. to IEC 60721 	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
 during storage acc. to IEC 60721 	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
during transport acc. 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 according to UL 	Siemens type: 3VA52, max. 250 A; Iq = 10 kA
 usable for High Faults at 460/480 V according to UL 	Siemens type: 3VA52, max. 250 A; Iq max = 65 kA
 usable for Standard Faults at 460/480 V at inside-delta circuit according to UL 	Siemens type: 3VA52, max. 250 A; Iq = 10 kA

- usable for High Faults at 460/480 V at inside-Siemens type: 3VA52, max. 250 A; Iq max = 65 kA delta circuit according to UL - usable for Standard Faults at 575/600 V Siemens type: 3VA52, max. 250 A; Iq = 10 kA according to UL - usable for Standard Faults at 575/600 V at Siemens type: 3VA52, max. 250 A; Iq = 10 kA inside-delta circuit according to UL • of the fuse - usable for Standard Faults up to 575/600 V Type: Class RK5 / K5, max. 350 A; Iq = 10 kA according to UL - usable for High Faults up to 575/600 V Type: Class J / L, max. 350 A; Iq = 100 kA according to UL — usable for Standard Faults at inside-delta Type: Class RK5 / K5, max. 350 A; Iq = 10 kA circuit up to 575/600 V according to UL — usable for High Faults at inside-delta circuit up Type: Class J / L, max. 350 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 30 hp • at 220/230 V at 50 °C rated value 30 hp 75 hp • at 460/480 V at 50 °C rated value at 200/208 V at inside-delta circuit at 50 °C rated 50 hp value • at 220/230 V at inside-delta circuit at 50 °C rated 60 hp value • at 460/480 V at inside-delta circuit at 50 °C rated 125 hp contact rating of auxiliary contacts according to UL R300-B300 Safety related data protection class IP on the front acc. to IEC 60529 IP00; IP20 with cover touch protection on the front acc. to IEC 60529 finger-safe, for vertical contact from the front with cover in accordance with IEC 60947-4-2 electromagnetic compatibility



Certificates/ approvals

General Product Approval











EMC

Declaration of Conformity

Test Certificates

Marine / Shipping



Miscellaneous

Type Test Certificates/Test Report







Marine / Shipping

other



Confirmation

Confirmation

Further information

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

 $\underline{https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RW5234-6TC04}$

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5234-6TC04

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5234-6TC04

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax de.aspx?mlfb=3RW5234-6TC04&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current

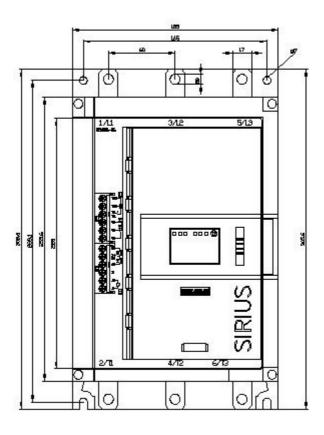
https://support.industry.siemens.com/cs/ww/en/ps/3RW5234-6TC04/char

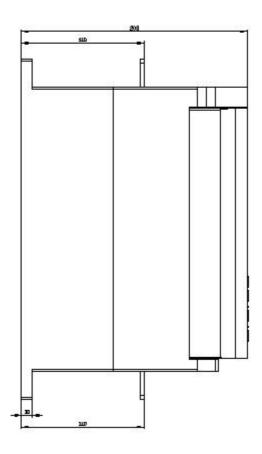
Characteristic: Installation altitude

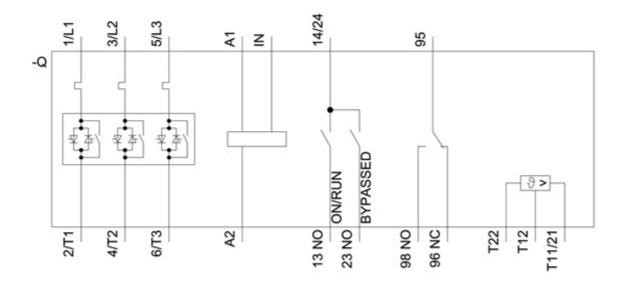
 $\underline{http://www.automation.siemens.com/bilddb/index.aspx?view=Search\&mlfb=3RW5234-6TC04\&objecttype=14\&gridview=view1}$

Simulation Tool for Soft Starters (STS)

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







last modified: 12/15/2020 🖸