SIEMENS

Data sheet

3RW5547-6HA04



SIRIUS soft starter 200-480 V 470 A, 24 V AC/DC Screw terminals

product brand name	SIRIUS		
product category	Hybrid switching devices		
product designation	Soft starter		
product type designation	3RW55		
manufacturer's article number			
 of high feature HMI module usable 	<u>3RW5980-0HF00</u>		
 of communication module PROFINET standard usable 	<u>3RW5980-0CS00</u>		
 of communication module PROFINET high-feature usable 	<u>3RW5950-0CH00</u>		
 of communication module PROFIBUS usable 	<u>3RW5980-0CP00</u>		
 of communication module Modbus TCP usable 	<u>3RW5980-0CT00</u>		
 of communication module Modbus RTU usable 	<u>3RW5980-0CR00</u>		
 of communication module Ethernet/IP 	<u>3RW5980-0CE00</u>		
 of circuit breaker usable at 400 V 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10		
 of circuit breaker usable at 500 V 	3VA2450-7MN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10		
 of circuit breaker usable at 400 V at inside-delta circuit 	3VA2510-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10		
 of circuit breaker usable at 500 V at inside-delta circuit 	3VA2510-6HN32-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10		
 of the gG fuse usable up to 690 V 	2x3NA3365-6; Type of coordination 1, Iq = 65 kA		
 of the gG fuse usable at inside-delta circuit up to 500 V 	2x3NA3365-6; Type of coordination 1, Iq = 65 kA		
 of full range R fuse link for semiconductor protection usable up to 690 V 	<u>3NE1436-2; Type of coordination 2, Iq = 65 kA</u>		
 of back-up R fuse link for semiconductor protection usable up to 690 V 	3NE3340-8; Type of coordination 2, Iq = 65 kA		
eneral 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-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		
 for main current circuit 	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	
	Lead monoxide (lead oxide) - 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one - 71868-10-5 1,6,7,8,9,14,15,16,17,17,18,18- Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) covering any of its individual anti- and syn-isomers or any combination thereof Dibutylbis(pentane-2,4-dionato-O,O')tin - 22673-19-4 Dicyclohexyl phthalate (DCHP) - 84-61-7 Lead titanium trioxide - 12060-00-3	
product function		
 ramp-up (soft starting) 	Yes	
 ramp-down (soft stop) 	Yes	
 breakaway pulse 	Yes	
 adjustable current limitation 	Yes	
 creep speed in both directions of rotation 	Yes	
 pump ramp down 	Yes	
DC braking	Yes	
motor heating	Yes	
 slave pointer function 	Yes	
trace function	Yes	
 intrinsic device protection 	Yes	
 motor overload protection 	Yes; Full motor protection (thermistor motor protection and electronic motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit.	
 evaluation of thermistor motor protection 	Yes; Type A PTC or Klixon / Thermoclick	
inside-delta circuit	Yes	
auto-RESET	Yes	
manual RESET	Yes	
remote reset	Yes	
 communication function 	Yes	
 operating measured value display 	Yes	
event list	Yes	
• error logbook	Yes	
 via software parameterizable 	Yes	
 via software configurable 	Yes	
 screw terminal 	Yes	
 spring-loaded terminal 	No	
PROFlenergy	Yes; in connection with the PROFINET Standard and PROFINET High-Feature	

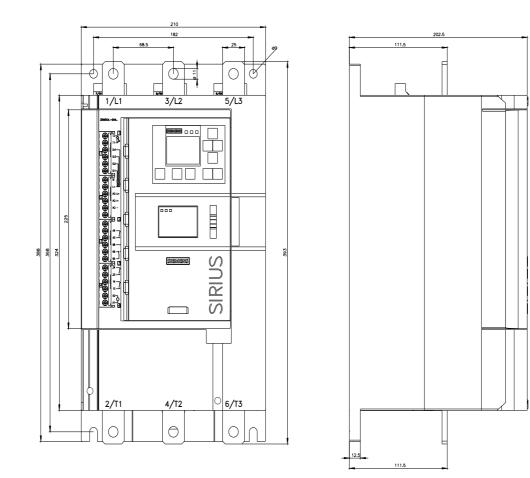
• removable tominal for control circuitYes• removable tominal for control circuitYes• concine-tominal control inputstructureYes• concine-tominal control inputstructureYes• concine-tominal control inputstructureYes• concine-tominationYes• concine-tominationYes		communication modules		
• National cancelYes• concluse brainingYes• concluse brainingYes• concluse monitoringYes• concluse monitoring woltage15 %• concluse monitoring woltage15	firmware update	Yes		
• torus Ves • conditional braking Ves • analog output Ves • programmable control inputs/outputs Yes • condition montroling Ves • analog output Yes • adubmatic parameterisation Yes • adubma	removable terminal for control circuit	Yes		
 ensure control construct biologing Yes analog output Yes Yes Analog output Yes <	voltage ramp	Yes		
 combined braking valid optid Ves conciden monitoring Ves concident monitoring Ves concident monitoring Ves concident monitoring Ves concident mode ves Power flectional current concident mode ves 		Yes		
 condition monitor (publiculpuls) condition monitor (parameterisation) valuation (paramiton) (paramiton (parameterisation)	-	Yes		
 e. condition monitoring Yes e. application witards experience parameterisation experience parameterisation experience parameterisation experience parameterisation Yes expersion parameterisation Yes expersional current et al 0 10 rated value at 0 00 rated value<th>analog output</th><th colspan="2"></th>	analog output			
• automatic parameterisation Yes • application visuals Yes • antemative nun down Yes • emergency operation mode Yes • emergency operation access Yes • of 40 °C rated value 94 A • af 40 °C rated value 340 A • af 40 °C rated value 344 A • af 50 °C rated value 658 A • operating outlage 721 A • af 40 °C rated value 658 A • operating outlage 10 % • rated value 20 480 V • at at 50 °C rated value 658 A • operating outlage 10 % • rated value 20 480 V • at made-deta circuit rated value 20 480 V • at made-deta circuit rated value 10 % • rated value 50 Hz • at 30 V at inside odeta circuit at 40 °C rated value 20 HW • at 30 V at inside odeta circuit at 40 °C rated value 20 HW • at 30 V at in		Yes		
extornatic parameterisation Yes explication witards Yes emergency operation mode Yes emergency operation mode Yes estimations and mode Yes estimations and mode Yes estimations and mode Yes exercing operation Yes estimations and the set of	condition monitoring	Yes		
- diferentise pur-down Yes ·emergency operation mode Yes Yos Yes	-			
emergency operation mode ves evensing operation ends starting conditions Yes Power Electronics Power Electronics Power and value starting conditions Yes Power and value current end value value ves ves Power and value value ves	application wizards			
reversing operation Yes soft starting at heavy starting conditions Yes Yon Yes Ye	alternative run-down			
exits saring at heavy starting conditions Yes Power Electronics Power Electronics • at 40 °C rated value infinuum 470 A • at 40 °C rated value infinuum 94 A • at 40 °C rated value 380 A • at 40 °C rated value 380 A • at 40 °C rated value 380 A • at 60 °C rated value 814 A • at 60 °C rated value 658 A • at 60 °C rated value 658 A • at 60 °C rated value 658 A • at 60 °C rated value 200 480 V • at 60 °C rated value 200 480 V • at 60 °C rated value 200 480 V • rated value 200 480 V • rated value 200 480 V • rated value 200 480 V relative negative tolerance of the operating voltage 10 % relative positive tolerance of the operating voltage at inside-detta circuit 10 % relative positive tolerance of the operating voltage at inside-detta circuit at 40 °C rated value 20 kW • at 200 V at 140 °C rated value 20 kW 40 °C rated value • at 200 V at 10 °C rated value	 emergency operation mode 	Yes		
power Electronics 470 A et al 07 C rated value minimum 470 A et al 07 C rated value minimum 48 A et al 07 C rated value 380 A operational current at inside-detta circuit 380 A of e07 C rated value 380 A operational current at inside-detta circuit 380 A et al odd-detta circuit 380 A of e07 C rated value 384 A et al odd-detta circuit 380 A operating voltage 71 A et al odd-detta circuit 380 A operating voltage 16 A et at odd-detta circuit rated value 200 480 V et at odd value 10 % relative positive tolerance of the operating voltage at 10 % relative positive tolerance of the operating voltage at relative positive tolerance of the operating voltage at 10 % 10	reversing operation	Yes		
operational current 470 A • at 40 °C rade value minimum 94 A • at 50 °C rade value minimum 94 A • at 50 °C rade value 416 A • at 60 °C rade value 880 A operational current at inside-deta circuit 814 A • at 60 °C rade value 721 A • at 60 °C rade value 658 A operating voltage 658 A • at ado 'C rade value 658 A operating voltage 10 % • raded value 200 480 V • at inside-deta circuit rade value 200 480 V • raditive negative tolerance of the operating voltage 10 % relative negative tolerance of the operating voltage at 10 % relative negative tolerance of the operating voltage at 10 % relative negative tolerance of the operating voltage at 10 % relative negative tolerance of the operating voltage at 10 % relative negative tolerance of the operating voltage at 132 kW • at 230 V at inside-deta circuit at 40 °C rated value 250 kW • at 400 V at inside-deta circuit at 40 °C rated value 50 Hz Operating frequency 7 rated value 50 Hz Operating frequency 7 rated value 60 Hz relative negative tolerance of the operating frequency 10 % rela	 soft starting at heavy starting conditions 	Yes		
• at 40 °C rated value 470 A • at 40 °C rated value 94 A • at 60 °C rated value 380 A operational current at inside-delta circuit	Power Electronics			
• at 40 °C rated value minimum 94 Å • at 60 °C rated value 380 Å operational current at inside-deta circuit 814 Å • at 40 °C rated value 814 Å • at 60 °C rated value 721 Å • at 60 °C rated value 688 Å operating voltage 688 Å • at 60 °C rated value 688 Å operating voltage 10 % • rated value 200 480 V • rated value 10 % • rated value 10 % • rated value 10 % • rated value 200 480 V • at 200 V at 40 °C rated value 200 kW • at 400 V at 40 °C rated value 50 Hz • Deparating frequency 1 rated value 50 Hz • parating frequency 1 rated value 60 Hz • rated value of the operating requency <	operational current			
• at 50 °C rated value 416 A • at 60 °C rated value 380 A operational current at inside-delta circuit 814 A • at 40 °C rated value 688 A • at 60 °C rated value 688 A operating voltage 721 A • at 60 °C rated value 688 A operating voltage 200 480 V • at 60 °C rated value 200 480 V • at inside-delta circuit rated value 200 480 V • raticat value 200 480 V • raticat value 200 480 V • raticative positive tolerance of the operating voltage 10 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % operating frequency is rated value 200 kW • at 230 V at 40 °C rated value 200 kW • at 400 V at inside-delta circuit at 40 °C rated value 200 kW • at 400 V at inside-delta circuit at 40 °C rated value 400 kW Operating frequency is rated value 60 Hz relative positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative n	• at 40 °C rated value	470 A		
• at 80 °C rated value 380 A operating of Crated value 814 A • at 80 °C rated value 721 A • at 80 °C rated value 658 A operating voltage 721 A • at inside-delta circuit rated value 200480 V • at inside-delta circuit rated value 200480 V • at inside-delta circuit rated value 200480 V • relative positive tolerance of the operating voltage 10 % relative positive tolerance of the operating voltage at 10 % relative positive tolerance of the operating voltage at 10 % relative delta circuit 10 % operating over for 3-phase motors 12 kW • at 200 V at 10 °C rated value 250 kW • at 200 V at 10 °C rated value 250 kW • at 200 V at 10 °C rated value 250 kW • at 400 V at 40 °C rated value 250 kW • at 400 V at 10 °C rated value 50 Hz Operating frequency 1 rated value 50 Hz Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating requency 10 % relative negative tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 %	• at 40 °C rated value minimum	94 A		
operational current at inside-delta circuit 814 A • at 40 °C rated value 814 A • at 60 °C rated value 658 A operating voltage 658 A • at inside-delta circuit rated value 200 480 V • at inside-delta circuit rated value 200 480 V • relative negative tolerance of the operating voltage -15 % relative negative tolerance of the operating voltage at inside-delta circuit 10 % relative negative tolerance of the operating voltage at inside-delta circuit 10 % relative negative tolerance of the operating voltage at inside-delta circuit 10 % relative negative tolerance of the operating voltage at inside-delta circuit 10 % relative negative tolerance of the operating voltage at inside-delta circuit at 40 °C rated value 10 % • at 230 V at 40 °C rated value 250 kW • at 400 V 41 visite-delta circuit at 40 °C rated value 50 Hz Operating frequency 1 rated value 50 Hz Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 % minimum load [%] 10 % power loss [W] for rated value 10 % • at 40 °C after stat	● at 50 °C rated value	416 A		
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• at 50 °C rated value 721 A • at 60 °C rated value 658 A operating voltage 200 480 V • rated value 200 480 V • at inside-defa circuit rated value 200 480 V relative negative tolerance of the operating voltage -15 % relative negative tolerance of the operating voltage at inside-defa circuit 10 % relative negative tolerance of the operating voltage at inside-defa circuit 10 % relative negative tolerance of the operating voltage at inside-defa circuit at 40 °C rated value 10 % operating power for 3-phase motors 132 kW • at 230 V at 40 °C rated value 250 kW • at 400 V at inside-defa circuit at 40 °C rated value 250 kW • at 400 V at inside-defa circuit at 40 °C rated value 400 kW Operating frequency 2 rated value 60 Hz operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC • at 40 °C rated value for 0 % • at 40 °C during startup 141 W • at 40 °C during startup 761 W • at 40 °C during startup 50 W • at 40 °C during startup 6400 W • at 40 °C during startup <t< th=""><th>operational current at inside-delta circuit</th><th></th></t<>	operational current at inside-delta circuit			
• at 60 °C rated value 658 A operating voltage 200 480 V • rated value 200 480 V • rated value 200 480 V relative negative tolerance of the operating voltage 15 % relative positive tolerance of the operating voltage 10 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % operating power for 3-phase motors 12 20 V at 0° C rated value • at 230 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 20 kW • at 400 V at inside-delta circuit at 40 °C rated value 20 kW • at 400 V at inside-delta circuit at 40 °C rated value 20 kW • at 40 °C atter starup 10 % relative negative tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 % relative negative tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % rela	• at 40 °C rated value	814 A		
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rated value 200 480 V e at inside-deta circuit rated value 200 480 V relative negative tolerance of the operating voltage 15 % relative negative tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage at inside-deta circuit relative positive tolerance of the operating voltage i at 230 V at 40 °C rated value i at 400 V at 40 °C rated value 250 kW e at 400 V at 40 °C rated value 50 Hz Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value foldize positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % e at 60 °C after startup i at 60 °C after startup 250 KW e at 60 °C during startup for C during startup for the arout positive tolerance e at 60 °C after startup for the arout positive tolerance for C during startup for the arout positive tolerance for C during startup for the arout positive tolerance for the arout portication for the arout value for C during startup f	• at 60 °C rated value	658 A		
• at inside-delta circuit rated value 200 480 V relative positive tolarance of the operating voltage -15 % relative positive tolarance of the operating voltage at inside-delta circuit -15 % relative negative tolarance of the operating voltage at inside-delta circuit -15 % relative negative tolarance of the operating voltage at inside-delta circuit 10 % operating power for 3-phase motors -15 % • at 230 V at 40 °C rated value 122 kW • at 230 V at inside-delta circuit at 40 °C rated value 250 kW • at 230 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at 40 °C rated value 250 kW • at 400 V at 40 °C rated value 50 Hz Operating frequency 1 rated value 60 Hz relative positive tolarance of the operating frequency 10 % minimum load [%] 10 % power loss [W] for rated value of the current at AC 141 W • at 60 °C after startup 141 W • at 60 °C after startup 144 °C • at 60 °C during startup 640 W • at 60 °C during startup 6400 W • at	operating voltage			
relative negative tolerance of the operating voltage -15 % relative positive tolerance of the operating voltage at inside-detta circuit -15 % relative positive tolerance of the operating voltage at inside-detta circuit -15 % relative positive tolerance of the operating voltage at inside-detta circuit 10 % operating power for 3-phase motors -15 % • at 230 V at 0° C rated value 132 kW • at 230 V at 10% - detta circuit at 40 °C rated value 250 kW • at 400 V at inside-detta circuit at 40 °C rated value 250 kW • at 400 V at inside-detta circuit at 40 °C rated value 60 Hz Operating frequency 1 rated value 60 Hz relative positive tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency -10 % relative negative tolerance of the current at AC • • at 40 °C after startup 141 W • at 40 °C during startup 5 620 W • at 60 °C during startup 5 620 W type of the moto	rated value	200 480 V		
relative positive tolerance of the operating voltage 10 % relative negative tolerance of the operating voltage at inside-detic circuit -15 % relative positive tolerance of the operating voltage at inside-detic circuit 10 % operating power for 3-phase motors 10 % • at 230 V at 40 °C rated value 250 kW • at 230 V at 40 °C rated value 250 kW • at 400 V at inside-detia circuit at 40 °C rated value 260 kW • at 400 V at inside-detia circuit at 40 °C rated value 260 kW • at 400 V at inside-detia circuit at 40 °C rated value 260 kW • at 400 V at inside-detia circuit at 40 °C rated value 60 Hz operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 414 W • at 40 °C during startup 114 W • at 60 °C after startup 125 W • at 60 °C during startup 5620 W • at 60 °C during startup 6400 W • at 60 °C during startup 5820 W • at 60 °C during startup 5820 W • at 60 °C during startup 5400 W<	 at inside-delta circuit rated value 	200 480 V		
relative negative tolerance of the operating voltage at inside-delta circuit -15 % relative positive tolerance of the operating voltage at inside-delta circuit 10 % operating power for 3-phase motors 132 kW • at 230 V at 10 °C rated value 132 kW • at 230 V at 10 °C rated value 250 kW • at 400 V at 0 °C rated value 250 kW • at 400 V at 0 °C rated value 60 Hz Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency 10 % minimum load [%] 10 % power loss [W] for rated value of the current at AC 60 Hz • at 40 °C after startup 11 W • at 60 °C after startup 12 KW • at 40 °C during startup 56 W • at 40 °C during startup 141 W • at 40 °C during startup 141 W • at 40 °C during startup 141 W • at 40 °C during startup 6400 W • at 40 °C during startup 620 W type of the motor protection Electronic, tripping in the event of the motor Control circuit/ Control 12 V type of voltage of the control supply voltage AC/DC	relative negative tolerance of the operating voltage	-15 %		
Inside-detic circuit 10 % relative positive tolerance of the operating voltage at inside-detic circuit 10 % operating power for 3-phase motors 132 kW • at 230 V at 40 °C rated value 132 kW • at 240 V at inside-detic acrouit at 40 °C rated value 250 kW • at 400 V at inside-detia circuit at 40 °C rated value 250 kW • at 400 V at inside-detia circuit at 40 °C rated value 60 Hz Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency 10 % relative positive tolerance of the operating frequency 10 % minimum load [%] 10 % power loss [W] for rated value of the current at AC 60 Hz • at 40 °C after startup 141 W • at 40 °C difer startup 141 W • at 40 °C difer startup 144 W • at 40 °C during startup 6400 W • at 40 °C during startup 6620 W • at 40 °C during startup 620 W • at 50 °C during startup 620 W • at 50 °C during startup 620 W • at 60 °C during startup 620 W • at 60 °C during startup 620 W •	relative positive tolerance of the operating voltage	10 %		
inside-delta circuit inside-delta circuit operating power for 3-phase motors it 230 V at 40 °C rated value 132 kW e at 230 V at inside-delta circuit at 40 °C rated value 250 kW e at 400 V at inside-delta circuit at 40 °C rated value 400 kW Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 440 °C after startup e at 60 °C after startup 141 W e at 60 °C after startup 142 W e at 60 °C during startup 640 W e at 60 °C during startup 562 W e at 50 °C during startup 6400 W e at 50 °C during startup 5620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control supply voltage at AC 24 V e at 50 Hz rated value 24 V e at 60 Hz rated value 24 V e at 60 Hz rated value 24 V		-15 %		
• at 230 V at 40 °C rated value 132 kW • at 230 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at 0 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 400 kW Operating frequency 1 rated value 60 Hz relative negative tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency -10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC - • at 40 °C after startup 141 W • at 40 °C during startup 141 W • at 60 °C after startup 141 W • at 60 °C during startup 6400 W • at 60 °C during startup 6400 W • at 60 °C during startup 5620 W 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 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V		10 %		
• at 230 V at inside-delta circuit at 40 °C rated value 250 kW • at 400 V at 40 °C rated value 250 kW • at 400 V at inside-delta circuit at 40 °C rated value 400 kW Operating frequency 1 rated value 60 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency -10 % relative negative tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC - • at 40 °C after startup 141 W • at 60 °C after startup 125 W • at 60 °C dring startup 144 W • at 60 °C during startup 6400 W • at 60 °C during startup 5620 W • at 60 °C during startup 24 V	operating power for 3-phase motors			
• at 400 V at 40 °C rated value250 kW• at 400 V at inside-delta circuit at 40 °C rated value400 kWOperating frequency 1 rated value50 HzOperating frequency 2 rated value60 Hzrelative negative tolerance of the operating frequency-10 %relative positive tolerance of the operating frequency10 %minimum load [%]10 %; Relative to set lepower loss [W] for rated value of the current at AC-• at 40 °C after startup141 W• at 60 °C after startup125 W• at 60 °C after startup114 W• at 60 °C during startup6 400 W• at 60 °C during startup5 620 W• at 60 °C during startup5 620 W• at 60 °C during startup5 620 W• at 50 °C during startup5 620 W• at 60 °C during startup5 620 W• at 60 °C during startup24 V• at 60 Hz rated value24 V• at 50 Hz rated value20 %	 at 230 V at 40 °C rated value 	132 kW		
e at 400 V at inside-delta circuit at 40 °C rated value 400 kW Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency -10 % relative positive tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 414 W e at 40 °C after startup 141 W e at 60 °C after startup 125 W e at 60 °C after startup 114 W power loss [W] at AC at current limitation 350 % e at 40 °C during startup 6 400 W e at 60 °C during startup 5620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control 24 V e at 50 Hz rated value 24 V	 at 230 V at inside-delta circuit at 40 °C rated value 	250 kW		
Operating frequency 1 rated value 50 Hz Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency -10 % relative positive tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 41 W • at 40 °C after startup 141 W • at 50 °C after startup 141 W • at 60 °C during startup 144 W power loss [W] at AC at current limitation 350 % • • at 40 °C during startup 6 400 W • at 60 °C during startup 5 620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control type of the control supply voltage type of voltage of the control supply voltage AC/DC control supply voltage at AC 24 V • at 50 Hz rated value 24 V • at 50 Hz	• at 400 V at 40 °C rated value	250 kW		
Operating frequency 2 rated value 60 Hz relative negative tolerance of the operating frequency -10 % relative positive tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC • at 40 °C after startup 141 W • at 50 °C after startup 125 W • at 60 °C after startup 114 W power loss [W] at AC at current limitation 350 % • at 40 °C during startup 6400 W • at 60 °C during startup 6400 W • at 60 °C during startup 5620 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 type of voltage of the control supply voltage AC/DC control supply voltage at AC • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC -20 % relative positive toler	 at 400 V at inside-delta circuit at 40 °C rated value 	400 kW		
relative negative tolerance of the operating frequency -10 % relative positive tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 141 W • at 40 °C after startup 141 W • at 50 °C after startup 125 W • at 60 °C after startup 114 W power loss [W] at AC at current limitation 350 % 6400 W • at 60 °C during startup 6 400 W • at 60 °C during startup 5 620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V • at 50 Hz rated value 24 V • at 50 Hz rated value 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V • at 60 Hz rated value 24 V	Operating frequency 1 rated value	50 Hz		
relative positive tolerance of the operating frequency 10 % minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 141 W • at 40 °C after startup 141 W • at 50 °C after startup 125 W • at 60 °C after startup 114 W power loss [W] at AC at current limitation 350 % • • at 40 °C during startup 7 651 W • at 50 °C during startup 6 400 W • at 60 °C during startup 5 620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control V type of voltage of the control supply voltage AC/DC control supply voltage at AC 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC -20 % -20 % 20 % <th>Operating frequency 2 rated value</th> <th colspan="2">g frequency 2 rated value 60 Hz</th>	Operating frequency 2 rated value	g frequency 2 rated value 60 Hz		
minimum load [%] 10 %; Relative to set le power loss [W] for rated value of the current at AC 141 W • at 40 °C after startup 141 W • at 50 °C after startup 125 W • at 60 °C after startup 114 W power loss [W] at AC at current limitation 350 % 7 651 W • at 40 °C during startup 6 400 W • at 60 °C during startup 5 620 W • at 60 °C during startup 5 620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control C/DC control supply voltage at AC 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 20 %	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 at 60 °C after startup 141 W e at 60 °C after startup 114 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 6 400 W at 60 °C during startup 6 400 W at 60 °C during startup 5 620 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 50 Hz rated value at 50 Hz rated value e at 60 Hz rated value e at 60 Hz rated value relative negative tolerance of the control supply voltage at <ld>-20 %</ld>	relative positive tolerance of the operating frequency	10 %		
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• at 50 °C during startup 6 400 W • at 60 °C during startup 5 620 W type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control Korter of the control supply voltage type of voltage of the control supply voltage AC/DC control supply voltage at AC 24 V • at 50 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz 20 %		7 054 114		
• at 60 °C during startup 5 620 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 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz 20 %				
type of the motor protection Electronic, tripping in the event of thermal overload of the motor Control circuit/ Control AC/DC type of voltage of the control supply voltage AC/DC control supply voltage at AC 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz -20 %				
Control circuit/ Control type of voltage of the control supply voltage AC/DC control supply voltage at AC - • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz 20 %	· · ·			
control supply voltage at AC 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz 20 %		Electronic, tripping in the event of thermal overload of the motor		
control supply voltage at AC 24 V • at 50 Hz rated value 24 V • at 60 Hz rated value 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz -20 % relative positive tolerance of the control supply voltage at AC at 50 Hz 20 %	type of voltage of the control supply voltage	AC/DC		
 at 50 Hz rated value at 60 Hz rated value 24 V 24 V relative negative tolerance of the control supply voltage at AC at 50 Hz relative positive tolerance of the control supply voltage at 20 % 				
relative negative tolerance of the control supply voltage at -20 % AC at 50 Hz 20 %		24 V		
AC at 50 Hz relative positive tolerance of the control supply voltage at 20 %	• at 60 Hz rated value	24 V		
		-20 %		
		20 %		

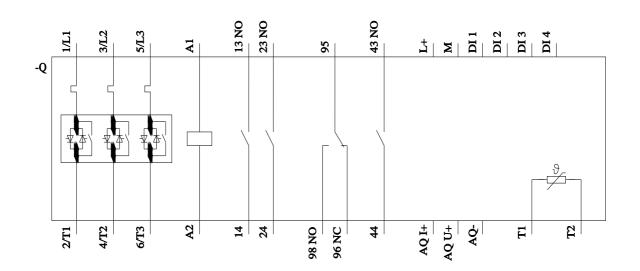
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relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %	
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %	
control supply voltage frequency	50 60 Hz	
relative negative tolerance of the control supply voltage frequency	re tolerance of the control supply voltage -10 %	
relative positive tolerance of the control supply voltage frequency	ance of the control supply voltage 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	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 maximum	7.5 A	
duration of inrush current peak at application of control supply voltage	20 ms	
design of the overvoltage protection	Varistor	
design of short-circuit protection for control circuit	4 A gG fuse (Icu=1 kA), 6 A quick-acting fuse (Icu=1 kA), C1 miniature circuit breaker (Icu= 600 A), C6 miniature circuit breaker (Icu= 300 A); Is not part of scope of supply	
Inputs/ Outputs		
number of digital inputs	4	
parameterizable	4	
'		
 number of digital outputs 	4	
number of digital outputs parameterizable	3	
 number of digital outputs not parameterizable 	1	
digital output version	3 normally-open contacts (NO) / 1 changeover contact (CO)	
number of analog outputs	1	
switching capacity current of the relay outputs		
• at AC-15 at 250 V rated value	3 A	
at DC-13 at 24 V rated value	1A	
Installation/ mounting/ dimensions		
mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)	
fastening method	screw fixing	
height	393 mm	
width	210 mm	
depth	203 mm	
required spacing with side-by-side mounting	200 (1011	
forwards	10 mm	
lorwards backwards	0 mm	
	0 mm 100 mm	
 upwards downwards 	75 mm	
• at the side	5 mm	
weight without packaging	10.9 kg	
Connections/ Terminals		
type of electrical connection	husher connection	
for main current circuit	busbar connection	
• for control circuit	screw-type terminals	
width of connection bar maximum	45 mm	
wire length for thermistor connection	50	
• with conductor cross-section = 0.5 mm ² maximum	50 m	
• with conductor cross-section = 1.5 mm ² maximum	150 m	
• with conductor cross-section = 2.5 mm ² maximum	250 m	
type of connectable conductor cross-sections		
 for DIN cable lug for main contacts stranded 	2x (50 240 mm²)	
 for DIN cable lug for main contacts finely stranded 	2x (70 240 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)	
 for AWG cables for control circuit solid 	1x (20 12), 2x (20 14)	
wire length		
 between soft starter and motor maximum 	800 m	
 at the digital inputs at DC maximum 	e digital inputs at DC maximum 1 000 m	
tightening torque		
 for main contacts with screw-type terminals 	14 24 N·m	
 for auxiliary and control contacts with screw-type terminals 	0.8 1.2 N·m	
tightening torque [lbf·in]		
 for main contacts with screw-type terminals 	124 210 lbf in	
 for auxiliary and control contacts with screw-type terminals 	7 10.3 lbf·in	
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)	
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		
 or the fuse — usable for Standard Faults up to 575/600 V according to UL 	Type: Class J / L, max. 1600 A; Iq = 30 kA	
— usable for High Faults up to 575/600 V according to UL	Type: Class J / L, max. 1200 A; Iq = 100 kA	
 usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL 	Type: Class J / L, max. 1600 A; lq = 30 kA	
— usable for High Faults at inside-delta circuit up to 575/600 V according to UL	Type: Class J / L, max. 1200 A; Iq = 100 kA	
operating power [hp] for 3-phase motors		
• at 200/208 V at 50 °C rated value	150 hp	
• at 220/230 V at 50 °C rated value	150 hp	
• at 460/480 V at 50 °C rated value	350 hp	
• at 200/208 V at inside-delta circuit at 50 °C rated value	250 hp	
• at 220/230 V at inside-delta circuit at 50 °C rated value	250 hp	
• at 460/480 V at inside-delta circuit at 50 °C rated value	600 hp	
contact rating of auxiliary contacts according to UL	R300-B300	
Electrical Safety		
protection class IP on the front according to IEC 60529	IP00; IP20 with cover	
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with cover	
ATEX		
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1	
	demand rate according to IEC 61508 5E-7 1/h	
relating to ATEX	5E-7 1/h	

PFDavg with low dema relating to ATEX	and rate according to IE	C 61508	0.008			
hardware fault toleran ATEX	ce according to IEC 615	08 relating to	0			
T1 value for proof test IEC 61508 relating to A	interval or service life a	ccording to	3 a			
certificate of suitability	у					
• ATEX			Yes			
• IECEx			Yes			
 according to ATE 	X directive 2014/34/EU		BVS 1	8 ATEX F 003 X		
type of protection acc	ording to ATEX directive	e 2014/34/EU	II (2)G [Ex db		[Ex pxb Gb], II (2)D [Ex tl	b Db] [Ex pxb Db], I (M2)
Approvals Certificates						
General Product Appr	oval					
	CCC	<u>Confirmatio</u>	n	UK CA	CE EG-Konf.	
General Product Ap- proval	EMV			For use in hazardou	s locations	Test Certificates
EHC	RCM	KC		KEx ATEX	IECEx	Type Test Certific- ates/Test Report
Marine / Shipping					other	Environment
ABS	B U REAU VERITAS	Lloyds Kegister us		PRS	<u>Confirmation</u>	Siemens EcoTech
Environment						
EPD	Environmental Con- firmations					

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nage database (product images, 2D dimension of the second se	drawings, 3D models, device circuit diagrams, EPLAN macros,) sec.englister.com , and a sec.englister.com
haracteristic: Tripping characteristics, I ² t, Let-th	nrough current
tps://support.industry.siemens.com/cs/ww/en/ps/3F	<u>RW5547-6HA04/char</u>
haracteristic: Installation altitude	
tp://www.automation.siemens.com/bilddb/index.asp	px?view=Search&mlfb=3RW5547-6HA04&objecttype=14&gridview=view1
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