## **SIEMENS**

Data sheet 3RW5517-1HA14



SIRIUS soft starter 200-480 V 38 A, 110-250 V AC Screw terminals

product brand name	SIRIUS
product category	Hybrid switching devices
product designation	Soft starter
product type designation	3RW55
manufacturer's article number	
<ul> <li>of high feature HMI module usable</li> </ul>	3RW5980-0HF00
<ul> <li>of communication module PROFINET standard usable</li> </ul>	3RW5980-0CS00
<ul> <li>of communication module PROFINET high-feature usable</li> </ul>	3RW5950-0CH00
<ul> <li>of communication module PROFIBUS usable</li> </ul>	3RW5980-0CP00
<ul> <li>of communication module Modbus TCP usable</li> </ul>	3RW5980-0CT00
<ul> <li>of communication module Modbus RTU usable</li> </ul>	3RW5980-0CR00
<ul> <li>of communication module Ethernet/IP</li> </ul>	3RW5980-0CE00
<ul> <li>of circuit breaker usable at 400 V</li> </ul>	3RV2032-4WA10; Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3RV2032-4WA10; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3RV2032-4RA10: Type of coordination 1, Iq = 65 kA, CLASS 10
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3RV2032-4RA10; Type of coordination 1, Iq = 10 kA, CLASS 10
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	3NA3824-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of the gG fuse usable at inside-delta circuit up to 500 V</li> </ul>	3NA3824-6; Type of coordination 1, Iq = 65 kA
<ul> <li>of full range R fuse link for semiconductor protection usable up to 690 V</li> </ul>	3NE1820-0; Type of coordination 2, Iq = 65 kA
<ul> <li>of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul>	3NE8024-1; Type of coordination 2, Iq = 65 kA

General technical data	
starting voltage [%]	20 100 %
stopping voltage [%]	50 %; non-adjustable
start-up ramp time of soft starter	0 360 s
ramp-down time of soft starter	0 360 s
start torque [%]	10 100 %
stopping torque [%]	10 100 %
torque limitation [%]	20 200 %
current limiting value [%] adjustable	125 800 %
breakaway voltage [%] adjustable	40 100 %
breakaway time adjustable	0 2 s
number of parameter sets	3
accuracy class according to IEC 61557-12	5 %
certificate of suitability	

UL approval CSA a	05 11	V.
Product component  * HMM-High Feature  * is supported HMM-High Feature  * is supported HMM-High Feature  * is supported HMM-High Feature  * product feature integrated bypass contact system number of controlled phases  * CLASS 10A/10E (default) / 20E / 30E; acc. to IEC 60947.4-2  current unbalance limiting value [Yk]  * pround-fault monitoring limiting value [Yk]  * of control circuit  * of control circu	CE marking	Yes
product component  • HMI-High Feature • Is supported HMI-High Feature product treature integrated bypass contact system Tyes unmbor of controlled phases trip class CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2 Current unbalance limiting value [½] 10 60 % ground-fault monitoring limiting value [½] 10 95 % bufforing time in the event of power failure • for main current circuit • for control cir	• •	
HMI-High Feature   Yes		Yes
vis supported HMM-High Feature   Yes	product component	
product feature integrated bypass contact system number of controlled phases  Current unbalance limiting value [%] 1060 %  current unbalance limiting value [%] 1060 %  pround-fault monitoring limiting value [%] 1095 %  buffering time in the event of power failure  • for main current circuit 100 ms  • for control circuit 100 ms  lidle time adjustable 20255 s  insulation voltage rated value 480 V  degree of pollution 3, acc. to IEC 60947-4-2  limpulse voltage rated value 6 kV  blocking voltage of the thyristor maximum 1500 V  service factor 1.15  surge voltage reside value 8 kV  maximum permissible voltage for safe isolation • between main and auxiliary circuit 480 V; does not apply for thermistor connection 480 V; does not apply for thermistor connection 515 g/ 11 ms, from 6 g/ 11 ms with potential contact lifting vibration resistance 15 g/ 11 ms, from 6 g/ 11 ms with potential contact lifting vibration resistance 15 mm up to 6 Hz; 2 g up to 500 Hz  reference code according to IEC 60947-4-2 AC 53a  generated code accord	<ul> <li>HMI-High Feature</li> </ul>	Yes
trip class  trip class  CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2  current unbalance limiting value [%] ground-fault monitoring limiting value [%]  of or main current circuit  of or main current circuit  of or ontrio circuit  of or control circuit  of or ontrio circuit  of or control circuit  of or control circuit  of or ontrio circuit  of ontrio c	<ul> <li>is supported HMI-High Feature</li> </ul>	Yes
trip class  current unbalance limiting value [%] 1060 %  ground-fault monitoring limiting value [%] 1095 %  buffering time in the event of power failure  • for main current circuit 100 ms  • for control circuit 111 for control 111 for con	product feature integrated bypass contact system	Yes
current unbalance limiting value [%] ground-fault monitoring limiting value [%] buffering time in the event of power failure  • for main current circuit  • for control circuit  iold time adjustable  • for control circuit  insulation voltage rated value  • degree of pollution  impulse voltage rated value  • for voltage resistance rated value  • for voltage resistance rated value  • for voltage rated value  • for voltage resistance rated value  • for voltage rated value  • for voltage resistance rated value  • for voltage rated value  • for voltage resistance rated value  • for voltage resistance voltage for safe isolation  • between main and auxiliary circuit  • lot voltage resistance  • for your voltage rated value  • for your voltage resistance  • for your voltage resistance rated value  • for your voltage resistance voltage for safe isolation  • for your voltage resistance voltage for safe isolation  • for your voltage resistance  • for your voltage resistance voltage for safe isolation  • ramp-up (soft starting)  • ramp-up (soft starting)  • ramp-down (soft stop)  • research your your voltage resistance  • or pump ramp down  • Cot be raking  • slave pointer function  • ramp-up (soft starting)  • slave pointer function  • ramp-up (soft starting)  • ramp-down (soft stop)  • research your your voltage resistance voltage resistance voltage representation of rotation  • yes  • pump ramp down  • rotage function  • rotage speed in both directions of rotation  • pump ramp down  • rotage speed in both direction of rotation  • rotage function  • rotage function  • rotage function  • rotage fun	number of controlled phases	3
ground-fault monitoring limiting value [%]  buffering time in the event of power failure  • for main current circuit  • for control circuit  • for mu up to 6 Hz; 2 g up to 500 Hz  • for mu up to 6 Hz; 2 g up to 500 Hz  • for mu up to 6 Hz; 2 g up to 500 Hz  • for mu up to 8 Hz; 2 g up to 500 Hz  • for mu up to 8 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9 Hz; 2 g up to 500 Hz  • for mu up to 9	trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2
buffering time in the event of power failure  • for main current circuit  • for control circuit  tide time adjustable  0255 s  insulation voltage rated value  degree of pollution  impulse voltage rated value  blocking voltage of the thyristor maximum  service factor  surge voltage resistance rated value  • between main and auxiliary circuit  • both resistance  • cree opseed in both directions of rotation  • pump ramp-down • both resistance  • crees pseed in both directions of rotation  • pump ramp down • both resistance  • r	current unbalance limiting value [%]	10 60 %
• for main current circuit     idle time adjustable     insulation voltage rated value     degree of pollution     impulse voltage rated value     degree of pollution     impulse voltage rated value     degree of pollution     impulse voltage rated value     blocking voltage of the thyristor maximum     service factor     surge voltage resistance rated value     service rated value     service factor     surge voltage resistance rated value     service rated value     service factor     surge voltage resistance rated value     service rated value     service factor     surge voltage resistance rated value     service rated value     service factor     surge voltage resistance rated value     service rated value     service rated value     service rated value     service factor     surge voltage resistance rated value     service rated value	ground-fault monitoring limiting value [%]	10 95 %
Idle time adjustable	buffering time in the event of power failure	
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   1 600 V     service factor   1.15     surge voltage resistance rated value   6 kV     maximum permissible voltage for safe isolation     between main and auxillary circuit   480 V; does not apply for thermistor connection     shock resistance   15 g/11 ms, from 6 g/11 ms with potential contact lifting     vibration resistance   15 mm up to 6 Hz; 2 g up to 500 Hz     recovery time after overload trip adjustable   60 1 800 s     utilization category according to IEC 60947-4-2   AC 53a     reference code according to IEC 60947-4-2   Q     Substance Prohibitance (Date)   02/15/2018     product function   02/15/2018     ramp-down (soft stop)   Yes     orange-down (	for main current circuit	100 ms
insulation voltage rated value  degree of pollution  3, acc. to IEC 60947-4-2  impulse voltage rated value  blocking voltage of the thyristor maximum  1 600 V  service factor  1.15  surge voltage resistance rated value  maximum permissible voltage for safe isolation  • between main and auxiliary circuit  480 V; does not apply for thermistor connection  • between main and auxiliary circuit  480 V; does not apply for thermistor connection  • between main and auxiliary circuit  480 V; does not apply for thermistor connection  • between main and auxiliary circuit  480 V; does not apply for thermistor connection  • book resistance  15 g / 11 ms, from 6 g / 11 ms with potential contact lifting  vibration resistance  15 mm up to 6 Hz; 2 g up to 500 Hz  recovery time after overload trip adjustable  vibilization category according to IEC 60947-4-2  AC 53a  reference code according to IEC 81346-2  Q  Substance Prohibitance (Date)  • ramp-up (soft starting)  • ramp-up (soft starting)  • ramp-down (soft stop)  • ramp down  • DC braking  • motor heading  • ramp down  • race function  • intrace function  • intrace function  • motor overload protection  • race function  • motor overload protection  • reside-defta circuit  • evaluation of thermistor motor protection  • inside-defta circuit  • ves  • auto-RESET  • manual RESET  • remote reset  • communication function  • operating measured value display  • event list  • evaluation  • raisofware parameterizable  • via software parameterizable  • via software configurable	for control circuit	100 ms
degree of poliution   3, acc. to IEC 60947-4-2	idle time adjustable	0 255 s
Impulse voltage rated value   6 kV	insulation voltage rated value	480 V
Impulse voltage rated value   6 kV   blocking voltage of the thyristor maximum   1600 V   service factor   1.15   surge voltage resistance rated value   6 kV   maximum permissible voltage for safe isolation   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   vibration resistance   15 mm up to 6 Hz; 2 g up to 500 Hz   recovery time after overload trip adjustable   60 1 80 s   cm and to 10 s   cm and 10 s   cm and to 10 s		3, acc. to IEC 60947-4-2
blocking voltage of the thyristor maximum   1 600 V		
service factor surge voltage resistance rated value maximum permissible voltage for safe isolation • between main and auxiliary circuit shock resistance  15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance  15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance  15 g / 11 ms, from 6 g / 11 ms with potential contact lifting vibration resistance  16 mm up 16 Hz; 2 g up to 500 Hz 60 1 800 s  utilization category according to IEC 60947-4-2 AC 53a reference code according to IEC 60947-4-2 AC 53a reference code according to IEC 81346-2 Q Substance Prohibitance (Date) product function • ramp-up (soft starting) • ramp-down (soft stop) • breakaway pulse • adjustable current limitation • creep speed in both directions of rotation • pump ramp down • DC braking • creep speed in both directions of rotation • pump ramp down • DC braking • slave pointer function • trace function • intrinsic device protection • motor overload protection • motor overload protection • motor overload protection • motor overload 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 • 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 • communication function • operating measured val		
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maximum permissible voltage for safe isolation		
between main and auxiliary circuit  shock resistance  15 g / 11 ms, from 6 g / 11 ms with potential contact lifting  vibration resistance  15 mm up to 6 Hz; 2 g up to 500 Hz  frecovery time after overload trip adjustable  60 1800 s  utilization category according to IEC 60947-4-2  reference code according to IEC 60947-4-2  reference code according to IEC 80346-2  Q  Substance Prohibitance (Date)  product function  • ramp-up (soft starting)  • ramp-down (soft stop)  • breakaway pulse  • adjustable current limitation  • creep speed in both directions of rotation  • pump ramp down  • DC braking  • motor heating  • slave pointer function  • intrinsic device protection  • motor overload protection  • motor overload protection  • inside-delta circuit  • evaluation of thermistor motor protection  • inside-delta circuit  • auto-RESET  • manual RESET  • remote reset  • communication function  • operating measured value display  • ves  • via software parameterizable  • via software configurable  • via software configurable  • via software parameterizable  • via software configurable  • Tamp to 6 Hz; 2 g up to 500 Hz  from 60 Hz; 2 g up to 500 Hz  from 60 Hz; 2 g up to 500 Hz  from 60 Hz; 2 g up to 500 Hz  from 60 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 6 Hz; 2 g up to 500 Hz  from 18 my to 500 Hz  fr		
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vibration resistance         15 mm up to 6 Hz; 2 g up to 500 Hz           recovery time after overload trip adjustable         60 1 800 s           utilization category according to IEC 60947-4-2         AC 53a           reference code according to IEC 81346-2         Q           Substance Prohibitance (Date)         02/15/2018           product function         **           • 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           • purp ramp down         Yes           • DC braking         Yes           • motor heating         Yes           • slave pointer function         Yes           • trace function         Yes           • trace function         Yes           • motor overload protection         Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)           • motor overload protection         Yes; Full motor protection (thermistor motor overload protection)           • evaluation of thermistor motor protection         Yes; Type A PTC or Klixon / Thermoclick           • auto-RESET         Yes           • remote reset	· · · · · · · · · · · · · · · · · · ·	
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Substance Prohibitance (Date)   02/15/2018		
product function  • ramp-up (soft starting) • ramp-down (soft stop) • breakaway pulse • adjustable current limitation • creep speed in both directions of rotation • pump ramp down • DC braking • motor heating • slave pointer function • trace function • motor overload protection • motor overload protection • motor overload protection • evaluation of thermistor motor protection • iniside-delta circuit • auto-RESET • manual RESET • remote reset • communication function • ves • communication function • yes • vent list • event list • event goods • via software parameterizable • via software configurable  Yes • via software parameterizable		
<ul> <li>ramp-up (soft starting)</li> <li>ramp-down (soft stop)</li> <li>Yes</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> <li>DC braking</li> <li>motor heating</li> <li>slave pointer function</li> <li>trace function</li> <li>trace function</li> <li>motor overload protection</li> <li>motor overload protection</li> <li>motor overload protection</li> <li>yes</li> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>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</li> <li>evaluation of thermistor motor protection</li> <li>yes; Type A PTC or Klixon / Thermoclick</li> <li>inside-delta circuit</li> <li>yes</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>yes</li> <li>communication function</li> <li>yes</li> <li>event list</li> <li>event list</li> <li>ves</li> <li>via software parameterizable</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul>		02/10/2010
<ul> <li>ramp-down (soft stop)</li> <li>breakaway pulse</li> <li>adjustable current limitation</li> <li>creep speed in both directions of rotation</li> <li>pump ramp down</li> <li>DC braking</li> <li>motor heating</li> <li>slave pointer function</li> <li>trace function</li> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>motor overload protection</li> <li>evaluation of thermistor motor protection</li> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>event list</li> <li>ves</li> <li>via software parameterizable</li> <li>vias of ware</li> <li>ves</li> <li>via software configurable</li> </ul>	•	Vac
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<ul> <li>slave pointer function</li> <li>trace function</li> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>evaluation of thermistor motor protection</li> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>yes</li> <li>event list</li> <li>yes</li> <li>ves</li> <li>via software parameterizable</li> <li>ves</li> <li>via software configurable</li> <li>ves</li> </ul>	G	
<ul> <li>trace function</li> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>evaluation of thermistor motor protection</li> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>event list</li> <li>event good</li> <li>yes</li> <li>ves</li> <li>operating measured value display</li> <li>event good</li> <li>ves</li> <li>via software parameterizable</li> <li>ves</li> </ul>	_	
<ul> <li>intrinsic device protection</li> <li>motor overload protection</li> <li>Yes</li> <li>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.</li> <li>evaluation of thermistor motor protection</li> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul>		
<ul> <li>motor overload protection</li> <li>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.</li> <li>evaluation of thermistor motor protection</li> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>vias oftware configurable</li> </ul>		
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  • inside-delta circuit  • auto-RESET  • manual RESET  • remote reset  • communication function  • operating measured value display  • event list  • error logbook  • via software parameterizable  • via software configurable  motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta circuit.  Yes; Type A PTC or Klixon / Thermoclick  Yes  Yes  Yes  Yes  Yes  Yes  Yes  Ye		
<ul> <li>inside-delta circuit</li> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul> Yes	motor overload protection	motor overload protection) / When using the motor overload protection according to ATEX, an upstream contactor is required in inside-delta
<ul> <li>auto-RESET</li> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul> Yes <ul> <li>Yes</li> <li>Yes</li> </ul> Yes <ul> <li>Yes</li> </ul>	<ul> <li>evaluation of thermistor motor protection</li> </ul>	Yes; Type A PTC or Klixon / Thermoclick
<ul> <li>manual RESET</li> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul> Yes	• inside-delta circuit	Yes
<ul> <li>remote reset</li> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> </ul> Yes <ul> <li>Yes</li> </ul> Yes <ul> <li>Yes <ul> <li>Yes</li> </ul> </li> </ul>	auto-RESET	Yes
<ul> <li>communication function</li> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> </ul>	• manual RESET	Yes
<ul> <li>operating measured value display</li> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> </ul>	• remote reset	Yes
<ul> <li>event list</li> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> </ul>	<ul> <li>communication function</li> </ul>	Yes
<ul> <li>error logbook</li> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> <li>Yes</li> </ul>	<ul> <li>operating measured value display</li> </ul>	Yes
<ul> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> </ul>		Yes
<ul> <li>via software parameterizable</li> <li>via software configurable</li> <li>Yes</li> </ul>	error logbook	Yes
• via software configurable Yes	_	
	•	
100	G	
spring-loaded terminal     No		
		Yes; in connection with the PROFINET Standard and PROFINET High-
• firmware update Yes	firmware update	Yes

voltage ramp     vortage control     voltage ramp     voltage ramper     voltage ram	removable terminal for control circuit	Yes
orabined braking     orab		
combined braking analog output in condition monitoring in condition monitoring analog output in programmable control inputs/outputs in condition monitoring and analog output in condition monitoring analog output in condition wizards in condition wizar		
e analog output error programmable control inputs/outputs error condition monitoring extremely a condition with the condition of	•	
programmable control injuts/outputs     condition monitoring     automatic parameterisation     **psipication wizards     **person of the parameterisation     **psipication wizards     **person of the parameterisation     **pers	_	
condition monitoring automical parameterisation automical parameterisation application wizards alternative run-down alternative repairing operation alternative run-down alterna		
submorticip parameterisation     spipication wizards     soft starting an heavy slarting conditions     ves emergency operation mode     veroversing operation     ves soft starting at heavy slarting conditions     ves soft starting at heavy slarting conditions     ves  Power Electronics operational current     at 40 °C rated value     at 60 °C rated value     at 6		
application wizards     alternative run-down     emergency operation mode     reversing operation     soft starting at heavy starting conditions     yes     soft starting at heavy starting conditions     yes     reversing operation     soft starting at heavy starting conditions     yes     research of the starting of the starting operational current     at 40 °C rated value     at 40 °C rated value     at 60 °C rated value     relative positive tolerance of the operating voltage at inside-delta circuit     relative positive tolerance of the operating voltage at inside-delta circuit     relative positive tolerance of the operating voltage at inside-delta circuit     at 40 °C rated value     at 40 °C rated value     at 400 °C at at 60 °C at red value     at 400 °C at 100 °C rated value     at 400 °C at 100 °C rated value     at 400 °C at 100 °C rated value     at 400 °C at 60 °C at	G	
alternative run-down emergency operation mode emergency operation mode soft starting at heavy starting conditions  Power Electrocics operational current at 40 °C rated value at 40 °C rated value minimum at 50 °C rated value minimum at 50 °C rated value minimum at 60 °C rated value at 60	•	
emergency operation mode     everensing operation     est starting at heavy starting conditions     Yes  Power Electronics  operational current     el 40 °C rated value     el 40 °C rated value minimum     el 40 °C rated value minimum     el 40 °C rated value     el	• •	
reversing operation		
Power Electronics    Power Electronics   Power Electronics   Power Electronics		
power Electronics  operational current  at 40 °C rated value at 40 °C rated value minimum at 40 °C rated value minimum at 40 °C rated value at 40 °C rated value at 60 °C rated value at 60 °C rated value 58 A 58 A 58 A 58 A 59		
operational current  at 40 °C rated value at 40 °C rated value at 60 °C rated value be at 60 °C rated value at 60 °C rated value at 60 °C rated value be at 60 °C rated value corrected value at 60 °C rated value at 60 °C		165
at 40 °C rated value at 40 °C rated value at 40 °C rated value 34 A at 60 °C rated value 34 A at 60 °C rated value 34 A at 60 °C rated value 34 A 35 A 36 A 36 O °C rated value 65 8 A 36 A 37 C rated value 58 A 37 C rated value 20 C rated value 90 rated value 91 rated value 91 C rated value 920 480 V 91 rated value 920 480 V 920 480 V 93  rated value 94  rated value 95  rated value 96  rated value 97  rated value 98  rated value 99  rated value 90  rated value 910  rate		
at 40 °C rated value minimum at 50 °C rated value at 60 °C rated value  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 10 % relative positive tolerance of the operating voltage at 11 kW at 200 °C ated value at 200 °C ated value at 400 °C after startup at 60 °C	•	20. A
at 60 °C rated value at 60 °C rated value 31 A  at 60 °C rated value 31 A  at 60 °C rated value 31 A  at 60 °C rated value 65 8 A  at 60 °C rated value 55 A  at 60 °C rated value 55 A  52 8 A  soperating voltage erated value 200 480 V  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 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 at 300 v at 40 °C rated value 10 %  at 230 v at 40 °C rated value 11 kW 18 5 kW 19 6 b b b b b b b b b b b b b b b b b b		
e at 60 °C rated value operational current at inside-delta circuit e at 40 °C rated value e at 50 °C rated value 9 at 60 °C rated value 9 at inside-delta circuit rated value 9 at inside-delta circuit rated value 10		
operational current at inside-delta circuit  at 40 °C rated value 58 A		
at 40 °C rated value at 60 °C rated value 58 A		JIA
at 50 °C rated value at 60 °C rated value at 160 °C rated value a	•	65 8 A
e at 60 °C rated value operating voltage		
operating voltage		
e rated value  relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit  operating power for 3-phase motors  • at 230 V at 140 °C rated value • at 430 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value • at 440 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  11 kW  12 kW  Operating frequency 2 rated value  Operating freque		32.0 A
e 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 e at 230 V at 40 °C rated value e at 230 V at 40 °C rated value e at 400 V at 40 °C rated value e at 400 V at inside-delta circuit at 40 °C rated value e at 400 V at inside-delta circuit at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value Operating frequency 2 rated value Operating frequency 60 Hz Operating frequency 61 Hz Operating frequency 7 to % relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC e at 40 °C after startup e at 50 °C after startup e at 60 °C after startup e at 60 °C after startup e at 60 °C after startup  e at 60 °C during startup e at 60 °C during startup e at 50 °C during sta		000 400 1/
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 230 V at 40 °C rated value • at 430 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at value delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  10 % relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency  10 %; Relative to set le  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 60 °C after startup  • at 60 °C after startup  • at 60 °C during startup  • at 50 °C during startup  • at 60 °	10.000	
relative positive tolerance of the operating voltage at inside-delta circuit relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors  • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at dinside-delta circuit at 40 °C rated value • at 400 V at dinside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • both to compare the control supply voltage at 60 °C after startup • at 60 °C during start		
relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors  • at 230 V at the office-delta circuit at 40 °C rated value • at 400 V at do °C rated value • at 400 V at do °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency at 50 °C after startup  • at 60 °C after startup  • at 60 °C after startup  • at 50 °C during startup • at 50 °C during startup • at 50 °C during startup • at 50 °C during startup • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C othrol circuit/ Control type of voltage of the control supply voltage  control supply voltage at AC • at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  10 %  10 %  10 %  10 %  10 %  10 %  10 %  10 %  10 %  10 %  10 %  10 %		- 11
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 400 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  operating requency 1 rated value  Operating frequency 1 rated value  operating requency 2 rated value  relative negative tolerance of the operating frequency  relative positive tolerance of the operating frequency  minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup  • at 50 °C after startup  • at 60 °C after startup  • at 60 °C after startup  • at 40 °C during startup  • at 40 °C during startup  • at 60 °C during startup  type of voltage of the control supply voltage  control supply voltage at AC  • at 60 Hz  relative negative tolerance of the control supply  voltage at AC at 50 Hz  10 %  10 %  10 %  11 kW  11 kW  18.5 kW  10 kW  10 by  10 %  Relative negative tolerance of the ontrol supply  voltage at AC at 50 Hz  10 %  10 %  11 kW  11 kW  11 kW  12 k 40 °C during tartup  12 k 40 °C during tartup  13 k 66 k W  14 t 40 °C during tartup  14 t W  15 k 5 k W  10 k W  10 %		
inside-delta circuit  operating power for 3-phase motors  • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at 410 °C rated value • at 400 V at 410 °C rated value • at 400 V at 410 °C rated value • at 400 V at 410 °C rated value • 50 Hz  Operating frequency 1 rated value  Operating frequency 2 rated value • 60 Hz  relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC • at 40 °C after startup • at 50 °C after startup • at 60 °C after startup • at 60 °C after startup • at 60 °C during startup • at 50 °C during startup • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %	inside-delta circuit	-13 /0
at 230 V at 40 °C rated value at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value Operating frequency 1 rated value Operating frequency 2 rated value Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  at 40 °C after startup  to W  at 50 °C after startup  of 20 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 60 °C during startup  type of the motor protection  control circuit/ Control type of voltage of the control supply voltage at 60 °C after startup  at 50 °C during startup  type of voltage of the control supply voltage at 60 °C after startup  at 50 °C during startup  type of voltage of the control supply voltage at 50 Hz  at 50 Hz  at 50 Hz  at 50 Hz  at 60 °C control supply voltage at AC at 50 Hz  110 250 V  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz		10 %
at 230 V at inside-delta circuit at 40 °C rated value at 400 V at 40 °C rated value at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  10 %; Relative to set le  out 40 °C after startup at 50 °C after startup  out 60 °C after startup  power loss [W] for rated value of the current at AC  at 40 °C after startup  out 60 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 60 °C during startup  at 60 °C during startup  at 60 °C during startup  type of the motor protection  Electronic, tripping in the event of thermal overload of the motor  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz  at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %  10 %  18.5 kW  18.5 kW  18.5 kW  18.5 kW  10 %	operating power for 3-phase motors	
at 400 V at 40 °C rated value at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Operating frequency 2 rated value  Felative negative tolerance of the operating frequency relative positive tolerance of the operating frequency relative positive tolerance of the operating frequency  In %  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  out 60 °C after startup  at 60 °C during startup  at 60 °C during startup  at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz  at 50 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %  11 W  30 kW  50 Hz  10 %  86 Hz  11 W  41 W  42 W  43 W  447 W  448 C  449 of voltage of the control supply voltage  4C  4C  4 The control supply voltage at AC  at 50 Hz  110 250 V  125 W  10 %  10 %	<ul> <li>at 230 V at 40 °C rated value</li> </ul>	11 kW
• at 400 V at inside-delta circuit at 40 °C rated value  Operating frequency 1 rated value  Operating frequency 2 rated value  Felative negative tolerance of the operating frequency relative positive tolerance of the operating frequency nimimum load [%]  power loss [W] for rated value of the current at AC  at 40 °C after startup at 60 °C after startup  at 60 °C after startup  by W  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 60 °C during startup  at 60 °C during startup  by at 60 °C during startup  control circuit/ Control  type of the motor protection  Electronic, tripping in the event of thermal overload of the motor  Control supply voltage at AC  at 50 Hz  at 50 Hz  at 50 Hz  at 60 Hz  110 250 V  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %  10 %  W  By W  10 %  Relative to set le  10 %; Relative to set le  11 W  40 %; Relative to set le  11 W  41 W  42 W  43 W  447 W  448 C  449 C  440 °C at 50 Hz  440 °C at 50 Hz  110 250 V  110 250 V  125 %  126 V  127 **  128 **  129 V  120 **	<ul> <li>at 230 V at inside-delta circuit at 40 °C rated value</li> </ul>	18.5 kW
Operating frequency 1 rated value Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 60 °C after startup  • at 60 °C after startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during tartup  • at 60 °C during tartup  • at 60 °C during tartup  • at 60 °C during startup  • at 50 °C during startup	<ul> <li>at 400 V at 40 °C rated value</li> </ul>	18.5 kW
Operating frequency 2 rated value relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  at 50 °C during startup  • at 60 °C during startup  **The motor protection  **Control circuit/ Control**  **Type of the motor protection  **Control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	at 400 V at inside-delta circuit at 40 °C rated value	30 kW
relative negative tolerance of the operating frequency relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup  • at 60 °C after startup  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  **Electronic, tripping in the event of thermal overload of the motor  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	Operating frequency 1 rated value	50 Hz
relative positive tolerance of the operating frequency minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup • at 50 °C after startup  • at 60 °C after startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup • at 50 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  • at 50 Hz • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %  11 W  • at 60 °C during startup  447 W  Electronic, tripping in the event of thermal overload of the motor  AC  110 250 V  -15 %  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz		60 Hz
minimum load [%]  power loss [W] for rated value of the current at AC  • at 40 °C after startup  • at 50 °C after startup  • at 60 °C after startup  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  • at 50 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %; Relative to set le  11 W  10 W  10 W  10 W  11 W  10 W  616 W  616 W  616 W  617 W  618 W  618 W  619 W  619 W  610 W  610 W  610 W  611 W  612 W  613 W  614 W  615 W  616 W  616 W  616 W  617 W  618 W  618 W  619 W  610 W  610 W  611 W  611 W  612 W  613 W  614 W  615 W  616 W  617 W  618 W  618 W  619 W  619 W  610 W  610 W  610 W  610 W  610 W  611 W  611 W  612 W  613 W  614 W  615 W  616		
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  9 W  power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  • at 50 °C during startup  • at 60 °C during startup  • at 60 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  110 250 V  -15 %  10 %		10 %
<ul> <li>at 40 °C after startup</li> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>9 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>type of the motor protection</li> <li>type of voltage of the control supply voltage</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>110 250 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>10 %</li> </ul>		10 %; Relative to set le
<ul> <li>at 50 °C after startup</li> <li>at 60 °C after startup</li> <li>9 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>type of the motor protection</li> <li>type of voltage of the control supply voltage</li> <li>at 50 °L</li> <li>at 50 °C during startup</li> <li>AC</li> <li>control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>at 50 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 70 Ms</li> <li>at 70 Ms<!--</td--><td></td><td></td></li></ul>		
at 60 °C after startup  power loss [W] at AC at current limitation 350 %  at 40 °C during startup  at 60 °C during startup  at 60 °C during startup  at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz  at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  et at 60 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  et at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	·	
power loss [W] at AC at current limitation 350 %  • at 40 °C during startup  • at 50 °C during startup  • at 60 °C during startup  type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz	•	
<ul> <li>at 40 °C during startup</li> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>447 W</li> <li>type of the motor protection</li> <li>Electronic, tripping in the event of thermal overload of the motor</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>at 50 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>110 250 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>10 %</li> </ul>	-	9 W
<ul> <li>at 50 °C during startup</li> <li>at 60 °C during startup</li> <li>type of the motor protection</li> <li>Electronic, tripping in the event of thermal overload of the motor</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>aC</li> <li>control supply voltage at AC</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>110 250 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>10 %</li> </ul>		040.04
<ul> <li>at 60 °C during startup</li> <li>type of the motor protection</li> <li>Electronic, tripping in the event of thermal overload of the motor</li> <li>Control circuit/ Control</li> <li>type of voltage of the control supply voltage</li> <li>at 50 Hz</li> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>at 60 Hz</li> <li>110 250 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>10 %</li> </ul>		
type of the motor protection  Control circuit/ Control  type of voltage of the control supply voltage  control supply voltage at AC  at 50 Hz  at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  Control supply voltage at AC at 50 Hz  Electronic, tripping in the event of thermal overload of the motor  AC  110 250 V  110 250 V  -15 %  10 %	·	
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  control supply voltage at AC at 50 Hz  110 250 V  -15 %  10 %		
type of voltage of the control supply voltage  control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  AC  110 250 V  -15 %  10 %		Electronic, tripping in the event of thermal overload of the motor
control supply voltage at AC  • at 50 Hz  • at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz		10
<ul> <li>at 50 Hz</li> <li>at 60 Hz</li> <li>110 250 V</li> <li>relative negative tolerance of the control supply voltage at AC at 50 Hz</li> <li>relative positive tolerance of the control supply voltage at AC at 50 Hz</li> <li>10 %</li> </ul>		AC
◆ at 60 Hz  relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  110 250 V  -15 %  10 %		440 250 V
relative negative tolerance of the control supply voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %		
voltage at AC at 50 Hz  relative positive tolerance of the control supply voltage at AC at 50 Hz  10 %		
relative positive tolerance of the control supply voltage at AC at 50 Hz		-10 %
voltage at AC at 50 Hz		10 %
relative negative tolerance of the control supply -15 %	voltage at AC at 50 Hz	
	relative negative tolerance of the control supply	-15 %

voltage at AC at 60 H=	
voltage at AC at 60 Hz	40.0/
relative positive tolerance of the control supply voltage at AC at 60 Hz	10 %
control supply voltage frequency	50 60 Hz
relative negative tolerance of the control supply	-10 %
voltage frequency	
relative positive tolerance of the control supply voltage frequency	10 %
control supply current in standby mode rated value	100 mA
holding current in bypass operation rated value	165 mA
locked-rotor current at close of bypass contact maximum	0.2 A
inrush current peak at application of control supply voltage maximum	43 A
duration of inrush current peak at application of control supply voltage	1.6 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
<ul><li>at DC-13 at 24 V rated value</li></ul>	1 A
In a tallation / manuation / dimensions	
Installation/ mounting/ dimensions	
Installation/ mounting/ dimensions mounting position	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°)
-	Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing
mounting position	
mounting position fastening method	screw fixing
mounting position fastening method height	screw fixing 275 mm
mounting position fastening method height width	screw fixing 275 mm 170 mm
mounting position fastening method height width depth	screw fixing 275 mm 170 mm
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm
mounting position fastening method height width depth required spacing with side-by-side mounting • forwards	screw fixing 275 mm 170 mm 152 mm
mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards	screw fixing 275 mm 170 mm 152 mm 10 mm 0 mm
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm
mounting position fastening method height width depth required spacing with side-by-side mounting • forwards • backwards • upwards • downwards • at the side weight without packaging	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm
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	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm
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	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg
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 wire length for thermistor connection	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals  50 m 150 m 250 m
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing  275 mm  170 mm  152 mm  10 mm  0 mm  100 mm  75 mm  5 mm  2.6 kg  screw-type terminals screw-type terminals  50 m  150 m  250 m  2x (1.0 2.5 mm²), 2x (2.5 10 mm²)  2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing 275 mm 170 mm 152 mm  10 mm 0 mm 100 mm 75 mm 5 mm 2.6 kg  screw-type terminals screw-type terminals  50 m 150 m 250 m
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing  275 mm  170 mm  152 mm  10 mm  0 mm  100 mm  75 mm  5 mm  2.6 kg  screw-type terminals  screw-type terminals  50 m  150 m  250 m  2x (1.0 2.5 mm²), 2x (2.5 10 mm²)  2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)  2x (1.0 2.5 mm²), 2x (1.0 2.5 mm²)
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing  275 mm  170 mm  152 mm  10 mm  0 mm  100 mm  75 mm  5 mm  2.6 kg  screw-type terminals screw-type terminals  50 m  150 m  250 m  2x (1.0 2.5 mm²), 2x (2.5 10 mm²) 2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²) 2x (16 12), 2x (14 8)  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
mounting position fastening method height width depth required spacing with side-by-side mounting	screw fixing  275 mm  170 mm  152 mm  10 mm  0 mm  100 mm  75 mm  5 mm  2.6 kg  screw-type terminals  screw-type terminals  50 m  150 m  250 m  2x (1.0 2.5 mm²), 2x (2.5 10 mm²)  2x (1.0 2.5 mm²), 2x (2.5 6.0 mm²)  2x (1.0 2.5 mm²), 2x (1.0 8)

wire length	
wire length	
<ul> <li>between soft starter and motor maximum</li> </ul>	800 m
at the digital inputs at DC maximum	1 000 m
tightening torque	0. 0.5 N
for main contacts with screw-type terminals	2 2.5 N·m
for auxiliary and control contacts with screw-type terminals	0.8 1.2 N·m
tightening torque [lbf·in]	
<ul> <li>for main contacts with screw-type terminals</li> </ul>	18 22 lbf·in
<ul> <li>for auxiliary and control contacts with screw-type terminals</li> </ul>	7 10.3 lbf·in
Ambient conditions	
installation altitude at height above sea level maximum	5 000 m; Derating as of 1000 m, see catalog
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C; Please observe derating at temperatures of 40 °C or above
<ul> <li>during storage and transport</li> </ul>	-40 +80 °C
environmental category	
<ul> <li>during operation according to IEC 60721</li> </ul>	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
<ul> <li>during storage according to IEC 60721</li> </ul>	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4
<ul> <li>during transport according to IEC 60721</li> </ul>	2K2, 2C1, 2S1, 2M2 (max. fall height 0.3 m)
EMC emitted interference	acc. to IEC 60947-4-2: Class A, Class B on request
Communication/ Protocol	
communication module is supported	
<ul> <li>PROFINET standard</li> </ul>	Yes
<ul> <li>PROFINET high-feature</li> </ul>	Yes
EtherNet/IP	Yes
Modbus RTU	Yes
Modbus TCP	Yes
• PROFIBUS	Yes
UL/CSA ratings	
manufacturer's article number	
manufacturer's article number  • of circuit breaker	
	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA
<ul> <li>of circuit breaker</li> <li>usable for Standard Faults at 460/480 V</li> </ul>	Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA  Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA
<ul> <li>of circuit breaker</li> <li>usable for Standard Faults at 460/480 V according to UL</li> <li>usable for High Faults at 460/480 V according</li> </ul>	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65
<ul> <li>of circuit breaker</li> <li>usable for Standard Faults at 460/480 V according to UL</li> <li>usable for High Faults at 460/480 V according to UL</li> <li>usable for Standard Faults at 460/480 V at</li> </ul>	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA
<ul> <li>of circuit breaker         <ul> <li>usable for Standard Faults at 460/480 V according to UL</li> <li>usable for High Faults at 460/480 V according to UL</li> <li>usable for Standard Faults at 460/480 V at inside-delta circuit according to UL</li> <li>usable for High Faults at 460/480 V at insidedelta circuit according to UL</li> <li>usable for Standard Faults at 575/600 V</li> </ul> </li> </ul>	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         • of the fuse	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL          • of the fuse         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         • of the fuse         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Type: Class RK5 / K5, max. 150 A; lq = 5 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL         — usable for Standard Faults at inside-delta	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 100 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL         — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL         — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 100 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA
<ul> <li>of circuit breaker         <ul> <li>usable for Standard Faults at 460/480 V according to UL</li> <li>usable for High Faults at 460/480 V according to UL</li> <li>usable for Standard Faults at 460/480 V at inside-delta circuit according to UL</li> <li>usable for High Faults at 460/480 V at inside-delta circuit according to UL</li> <li>usable for Standard Faults at 575/600 V according to UL</li> <li>usable for High Faults at 575/600 V at inside-delta circuit according to UL</li> <li>usable for Standard Faults at 575/600 V at inside-delta circuit according to UL</li> </ul> </li> <li>of the fuse         <ul> <li>usable for Standard Faults up to 575/600 V according to UL</li> <li>usable for High Faults up to 575/600 V according to UL</li> <li>usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> <li>usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul> </li> </ul>	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Type: Class RK5 / K5, max. 150 A; lq = 5 kA Type: Class RK5 / K5, max. 150 A; lq = 100 kA Type: Class RK5 / K5, max. 150 A; lq = 5 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL         — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 100 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA Type: Class J / L, max. 150 A; Iq = 100 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL         — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL  operating power [hp] for 3-phase motors         • at 200/208 V at 50 °C rated value	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3VA51, max. 60 A; lq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; lq = 5 kA Type: Class RK5 / K5, max. 150 A; lq = 5 kA Type: Class RK5 / K5, max. 150 A; lq = 100 kA Type: Class J / L, max. 150 A; lq = 100 kA Type: Class J / L, max. 150 A; lq = 100 kA
of circuit breaker         — usable for Standard Faults at 460/480 V according to UL         — usable for High Faults at 460/480 V according to UL         — usable for Standard Faults at 460/480 V at inside-delta circuit according to UL         — usable for High Faults at 460/480 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V according to UL         — usable for High Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults at 575/600 V at inside-delta circuit according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for Standard Faults up to 575/600 V according to UL         — usable for High Faults up to 575/600 V according to UL         — usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL         — usable for High Faults at inside-delta circuit up to 575/600 V according to UL  operating power [hp] for 3-phase motors         • at 200/208 V at 50 °C rated value	Siemens type: 3RV2742, max.40 A or 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3VA51, max. 60 A; Iq max = 65 kA Siemens type: 3RV2742, max. 70 A or 3VA51, max. 125 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA Type: Class RK5 / K5, max. 150 A; Iq = 5 kA Type: Class J / L, max. 150 A; Iq = 100 kA Type: Class J / L, max. 150 A; Iq = 100 kA

<ul> <li>at 220/230 V at inside-delta circuit at 50 °C rated value</li> </ul>	20 hp
<ul> <li>at 460/480 V at inside-delta circuit at 50 °C rated value</li> </ul>	40 hp
contact rating of auxiliary contacts according to UL	R300-B300
Safety related data	
protection class IP on the front according to IEC 60529	IP20
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front
electromagnetic compatibility	acc. to IEC 60947-4-2
ATEX	
certificate of suitability	
• ATEX	Yes
• IECEx	Yes
<ul> <li>according to ATEX directive 2014/34/EU</li> </ul>	BVS 18 ATEX F 003 X
type of protection according to ATEX directive 2014/34/EU	II (2)G [Ex eb Gb] [Ex db Gb] [Ex pxb Gb], II (2)D [Ex tb Db] [Ex pxb Db], I (M2) [Ex db Mb]
hardware fault tolerance according to IEC 61508 relating to ATEX	0
PFDavg with low demand rate according to IEC 61508 relating to ATEX	0.008
PFHD with high demand rate according to EN 62061 relating to ATEX	5E-7 1/h
Safety Integrity Level (SIL) according to IEC 61508 relating to ATEX	SIL1
T1 value for proof test interval or service life according to IEC 61508 relating to ATEX	3 s
Certificates/ approvals	



**General Product Approval** 



Confirmation







**EMC** 

For use in hazardous locations

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=3RW5517-1HA14

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RW5517-1HA14

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

https://support.industry.siemens.com/cs/ww/en/ps/3RW5517-1HA14

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax">http://www.automation.siemens.com/bilddb/cax</a> de.aspx?mlfb=3RW5517-1HA14&lang=en

Characteristic: Tripping characteristics, I²t, Let-through current <a href="https://support.industry.siemens.com/cs/ww/en/ps/3RW5517-1HA14/char">https://support.industry.siemens.com/cs/ww/en/ps/3RW5517-1HA14/char</a>

Characteristic: Installation altitude
<a href="http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5517-1HA14&objecttype=14&gridview=view1">http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5517-1HA14&objecttype=14&gridview=view1</a>

Simulation Tool for Soft Starters (STS)

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

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