## SIEMENS

## Data sheet

## 3RW5554-6HA06



SIRIUS soft starter 200-690 V 840 A, 24 V AC/DC Screw terminals

Figure similar

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>	<u>3RW5980-0HF00</u>			
<ul> <li>of communication module PROFINET standard usable</li> </ul>	<u>3RW5980-0CS00</u>			
<ul> <li>of communication module PROFINET high-feature usable</li> </ul>	<u>3RW5950-0CH00</u>			
<ul> <li>of communication module PROFIBUS usable</li> </ul>	<u>3RW5980-0CP00</u>			
<ul> <li>of communication module Modbus TCP usable</li> </ul>	<u>3RW5980-0CT00</u>			
<ul> <li>of communication module Modbus RTU usable</li> </ul>	<u>3RW5980-0CR00</u>			
<ul> <li>of communication module Ethernet/IP</li> </ul>	<u>3RW5980-0CE00</u>			
<ul> <li>of circuit breaker usable at 400 V</li> </ul>	3VA2510-6HN32-0AA0: Type of coordination 1, Iq = 65 kA, CLASS 10			
<ul> <li>of circuit breaker usable at 500 V</li> </ul>	3VA2510-6HN32-0AA0: Type of coordination 1, Iq = 65 kA, CLASS 10			
<ul> <li>of circuit breaker usable at 400 V at inside-delta circuit</li> </ul>	3VA2716-7AB05-0AA0; Type of coordination 1, Iq = 65 kA, CLASS 10			
<ul> <li>of circuit breaker usable at 500 V at inside-delta circuit</li> </ul>	3VA2716-7AB05-0AA0; Type of coordination 1. Iq = 65 kA, CLASS 10			
<ul> <li>of the gG fuse usable up to 690 V</li> </ul>	2x3NA3365-6; Type of coordination 1, Iq = 65 kA			
<ul> <li>of full range R fuse link for semiconductor protection usable up to 690 V</li> </ul>	<u>3NB3351-1KK26; Type of coordination 2, Iq = 65 kA</u>			
<ul> <li>of back-up R fuse link for semiconductor protection usable up to 690 V</li> </ul>	<u>3NC3343-1U; Type of coordination 2, Iq = 65 kA</u>			
General technical data				
starting voltage [%]	20 100 %			
stopping voltage [%]	50 50 %			
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 acc. to IEC 61557-12	5 %			

• CE making             Yes               • CSA approval             Yes               • SA approval             Yes               • MM-HapP Feature             Yes               • Product tomportent             Yes               • Statistic integrated Dypass contact system             Yes               • Product feature integrated Dypass contact system             Yes               rumber of controlled phases             3               Grand feature integrated Dypass contact system             Yes               ground-fault monotoring limiting value [%]             1060 %               ground-fault monotoring limiting value [%]             1060 %               ground-fault monotoring limiting value [%]             1060 %               ground-fault monotoring limiting value [%]             101800 %               limitidon voltage rated value             680 V               digree of pollution             3						
• L. approval             Yes               • IGM-High Feature             Yes               • IGM-High Feature             Yes               • IGM-High Feature             Yes               product tombure integrated typass contact system             Yes               product tombure integrated typass contact system             Yes               unther of controlled phases             3               (In possible feature)             0.6               ground-fault monitoring limiting value [%]             1096 %.               recovery time after overload ling value [%]             1096 %.               en crant carrent dicutal             100 ms               • or crant of court of pover failure             0256 %.               Instation voltage rated value             60 V               degree of pollution             3.acc. to IEC 60947-4-2               Impulse voltage rated value             61 V/               evelves finctor             115               surge voltage resistance             15 / 11 ms. from 6 g/ 11 ms. with potential contact lifting               vibration resistance             15 / 11 ms. from 6 g/ 11 ms. vith potential contact lifting               vibration resistance	certificate of suitability					
• CSA approval         Yes           product component         *           • # NUFHyb Feature         Yes           • * Bupported HMI-High Feature         Yes           product facture integrated bypass contact system         Yes           number of controlled phases         3           arrant integrated bypass contact system         Yes           product facture integrated bypass contact system         Yes           grand-fault integrated bypass contact system         Yes           or antio indired limiting value (%)         1065 %           recovery time after overload trip adjustable         601800 s           buffering time in the event of power failure         100 ms           - for antio carent draute         600 V           degree of plottion         3, acc to IEC 6047-4-2           imputes voltage redstable value         680 V           eventor factor         115           sturg voltage redstable value         680 V           eventor factor         15 g / 11 ms. from 6 g / 11 ms. with polential contact lifting           vibrack resistance <td< th=""><th>0</th><td></td></td<>	0					
product component         Yes           • HMI-High Feature         Yes           product facture integrated bypass contact system         Yes           unumber of controlled phases         3           trip class         CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2           current unbalance limiting value [%]         1060 %           ground-fault monitoring limiting value [%]         1065 %           recevery time after overload trip adjustable         60180 a           buffering time in the event of power failure         0255 a           insulation voltage rated value         600 V           degree of pollution         3, acc. to IEC 60947-4-2           Impulse voltage rated value         600 V           everve factore         15           unger resistance rated value         8 kV           maximum permissible voltage for safe balation         -           vibraton resistance         15 mm up to 6 Hz; 2 up to 500 Hz           order cacc. to IEC 60947-4-2         C           Substance Prohibilance (Date)         8 kV           maximum permissible voltage for safe balation         -           • between main and availlery circuit         690 V; does not apply for thermistor connection           utilization category acc. to IEC 60947-4-2         C						
• Holl High Feature         Yes           • is supported Holl-High Feature         Yes           product feature integrated bypass contect system         Yes           number of controlled phases         3           fig class         CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947.4-2           current unbalance limiting value [%]         1065 %           recovery time after overload trip adjustable         601 800 a           buffentg time in the event of power failure         •           • for main current circuit         100 ms           • for control circuit         00 ms           • for control circuit         600 V           • for control	CSA approval	Yes				
• • is supported HM-High Feature         Yes           product feature integrated bypass contact system         Yes           number of controlled phases         3           trip class         CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2           current unbalance limiting value [%]         1060 %           ground-fault monitoring limiting value [%]         1065 %           recovery time after overload trip adjustable         60180 o           buffering time in the event of power failure         100 ms           • for main current circuit         100 ms           • for main current circuit         100 ms           • for main current circuit         600 V           degree of pollution         3, eac. to IEC 60947-4-2           impulse voltage rated value         8 kV           becken main an adualing vicuit         690 V; does not apply for thermistor connection           utilization category acc. to IEC 60947-4-2         60           vication resistance rated value         8 kV           auge voltage resistance rated value         690 V; does not apply for thermistor connection           utilization category acc. to IEC 60947-4-2         C           solutation category acc. to IEC 60947-4-2         Q           vibration ratesitance         110 (1100 (100 (100 (100 (100 (100 (100						
product faiture integrated bypass contact system         Yes           number of controlled phases         3           rup class         CLASS 10A./ 10E (default) / 20E / 30E; acc. to IEC 60047.4-2           current unbalance limiting value [%]         1065 %           ground-fault monitoring limiting value [%]         1065 %           recovery time after overload trip adjustable         60 1800 s           buffering time in the over of power failure         100 ms           • for ranin current clicuit         100 ms           • for control clicuit         100 ms           • for control clicuit         00 ms           • for control clicuit         00 ms           • for control clicuit         00 ms           • for control clicuit         600 V           degree of pollution         3, acc to IEC 6047-4           full time adjustable         0	HMI-High Feature	Yes				
number of controlled phases         3           trip class         CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947.4.2           current unbalance limiting value [½]         1060 %           ground-fault monitoring limiting value [½]         1060 %           recovery time after overload trip adjustable         601800 s           buffering time in the event of power failure         60 ms           i for main current circuit         100 ms           i for control circuit         000 ms           i for control circuit         000 ms           i for gain gar rade value         68 kV           blokfering voltage rated value         8 kV           bloket gar rade value         8 kV           bloket gar rade value         8 kV           bloket gar rade value         8 kV           issuitator voltage rated value         8 kV           issuitato voltage rate value         8 kV           issuitato voltage rate value         8 kV           issuitato voltage rate value         8 kV           vibration resistance         15 / 11 ms. from 6 / 12 ms. from 6 /	<ul> <li>is supported HMI-High Feature</li> </ul>	Yes				
rip class         CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2           current unbalance limiting value [%]         1066 %           ground-fault monitoring limiting value [%]         601 800 s           buffering time in the event of power failure         100 ms           • for control circuit         100 ms           • for control circuit         100 ms           • dide time adjustable         0 255 s           insulation valueg rated value         680 V           • degree of pollution         3, acc. to IEC 60947-4-2           Impulse voltage rated value         680 V           • degree of pollution         3, acc. to IEC 60947-4-2           Impulse voltage restance rated value         64 V           • becking voltage of the thyristor maximum         8 800 V           • aervice factor         115           surge voltage restance rated value         64 V           • between main and auxiliary circuit         690 V; does not apply for thermistor connection           • diltration category acc. to IEC 60947-4-2         AC C Sa3           shock resistance         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           • diltration category acc. to IEC 60947-4-2         QC           Substance Prohibilance (Date)         11, 02.2019 00.00:00           product func	product feature integrated bypass contact system	Yes				
current unbalance limiting value [%]         1060 %           ground-fault monitoring limiting value [%]         1095 %           recovery time adjustable         601800 s           buffering time in the event of power failure         100 ms           i for main current circuit         100 ms           i for control circuit         000 ms           idle time adjustable         60255 s           insulation voltage rated value         680 V           degree of pollution         3. acc. to IEC 60947-4-2           Impuise voltage rated value         8 kV           blocking voltage of the thyristor maximum         1800 V           service factor         1.16           surge voltage resistance rated value         8 kV           maximum permissible voltage for safe isolation         600 V: does not apply for thermistor connection           utilization category acc. to IEC 60947-4-2         AC 63a           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         15 g/ 11 ms. from 6 g / 11 ms. with potential contact lifting           vibration soft stop)	number of controlled phases	3				
ground-fault monitoring limiting value [%]         1095 %           recovery time after overload trip adjustable         601800 s           buffering time in the event of power failure         100 ms           i for critic oricuit         100 ms           i for critic factor         1.15           subscience         160 V; does not apply for thermistor connection           vibration resistance         15 (/ 11 ms, from 6 / / 11 ms with potential contact lifting           vibration resistance         16 (/ 11 ms, from 6 / / 11 ms with potentia	trip class	CLASS 10A / 10E (default) / 20E / 30E; acc. to IEC 60947-4-2				
resourcy time after overload trip adjustable         60 1800 s           buffering time in the event of power failure         100 ms           of or main current circuit         100 ms           idid time adjustable         0 255 s           insulation voltage rated value         690 V           degree of pollution         3. acc. to IEC 60947.4-2           Impulse voltage rated value         640 V           blocking voltage rated value         640 V           surge voltage rated value         640 V           blocking voltage rated value         640 V           surge voltage rated value         640 V           surge voltage rotistance rated value         680 V           surge voltage rotistance rated value         680 V           whet main and auxiling victuit         680 V: does not apply for thermistor connection           utilization category acc. to IEC 60947.4-2         AC 53a           shock resistance         15 nm up to 6 Hz; 2 g up to 600 Hz           voltation resistance         15 nm up to 6 Hz; 2 g up to 600 Hz           voltation category acc. to IEC 61346-2         0           voltation coltation         Yes           • ramp-down (soft stop)         Yes           • ramp-down (soft stop)         Yes           • ramp-down (soft stop)         <	current unbalance limiting value [%]	10 60 %				
buffering time in the event of power failure         100 ms           • for control circuit         100 ms           ife time adjustable         0255 s           insulation voltage rated value         600 V           degree of pollution         3, acc. to IEC 60947-4-2           impulse voltage rated value         8 kV           blocking voltage of the thyristor maximum         1800 V           service factor         1.15           surge voltage of the thyristor maximum         8 kV           maximum permissible voltage for safe isolation         8 kV           • between main and auxiliary circuit         650 V; does not apply for thermistor connection           • thization calstance         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           • thetween main and auxiliary circuit         650 V; does not apply for thermistor connection           • traing-tagory acc. to IEC 60947-4-2         Q           stock resistance         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           • traing-down (soft stop)         Yes           • traing-down (soft stop)         Yes           • traing-down (soft stop)         Yes           • transp.down (soft stop)         Yes           • transp.down (soft stop)         Yes           • thermal sevice protection         Yes	ground-fault monitoring limiting value [%]	10 95 %				
• for main ournet circuit         100 ms           • for control circuit         100 ms           Ide time adjustable         0 255 s           Insulation voltage rated value         650 V           degree of pollution         3, acc to IEC 60947.4-2           Impulse voltage rated value         8 kV           blocking voltage rot the thyristor maximum         1800 V           service factor         1.15           surge voltage resistance rated value         8 kV           maximum permissible voltage for safe isolation         690 V; does not apply for themistor connection           • between main and auxiliary circuit         690 V; does not apply for themistor connection           vitation resistance         15 rm up to 6 Hz; 2 g up to 500 Hz           reference code acc. to IEC 81346-2         Q           Substance Prohibitance (Lole)         11.02 2019 00:00.00           product function         Yes           • ramp-down (soft stop)         Yes           • creep speed in both directions of rotation         Yes           • adjustable current limitation         Yes           • law provericad protection         Yes           • notor heating         Yes           • indiversiter function         Yes           • sisave pointer function         Yes </th <th>recovery time after overload trip adjustable</th> <td>60 1 800 s</td>	recovery time after overload trip adjustable	60 1 800 s				
• for control circuit         100 ms           Idle time adjustable         0 285 s           Insulation voltage rated value         680 V           degree of pollution         3. acc. to IEC 60947-4-2           Impulse voltage rated value         8 kV           blocking voltage of the thyristor maximum         1800 V           service factor         1.15           surge voltage of the thyristor maximum         8 kV           maximum permissible voltage for safe isolation         600 V; does not apply for thermistor connection           • between main and auxiliary circuit         AC 55a           shock resistance         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           vibration resistance Class         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         110.22019 00:00:00           product function         Yes           • ramp-low (soft stop)         Yes           • adjustable current limitation         Yes           • creep speed in both directions of rotation         Yes           • motor heating         Yes           • motor heating         Yes           • motor overload protection         Yes <tr< th=""><th>buffering time in the event of power failure</th><td></td></tr<>	buffering time in the event of power failure					
Idle time adjustable       0 255 s         Insulation voltage rated value       690 V         degree of pollution       3, acc, to IEC 60947-4-2         Impulse voltage rated value       8 kV         blocking voltage resistance rated value       8 kV         maximum permissible voltage for safe isolation       690 V; does not apply for thermistor connection         witziation category acc. to IEC 60947-4-2       AC 55a         shock resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       15 g / 11 ms with potential contact lifting         vibration resistance       11 (a2 2019 0:0:0:00         product function       Yes         • ramp-up (soft starting)       Yes         • adjustable current limitation       Yes         • adjustable current limitation       Yes         • adjustable current limitation       Yes         • ramp-up (soft starting)       Yes </th <th><ul> <li>for main current circuit</li> </ul></th> <td>100 ms</td>	<ul> <li>for main current circuit</li> </ul>	100 ms				
Insulation voltage rated value     690 V       degree of pollution     3, acc. to IEC 60947.4-2       Impuise voltage rated value     8 kV       blocking voltage of the thyristor maximum     1 800 V       service factor     1.15       surge voltage presistance rated value     8 kV       maximum permissible voltage for safe isolation     690 V; does not apply for thermistor connection       • between main and auxiliary circuit     690 V; does not apply for thermistor connection       utilization category acc. to IEC 60947.4-2     AC 53a       shock resistance     15 g / 11 ms, from 6 g / 11 ms with potential contact lifting       vibration resistance (Date)     11.02.2019 00:00:00       product function     Yes       • ramp-up (soft starting)     Yes       • angl-ubbic current limitation     Yes       • adjustable current limitation     Yes       • creep speed in both directions of rotation     Yes       • undor heating     Yes       • limitinis device protection     Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)       • evaluation of thermistor motor protection     Yes; Toye A PTC or Klixon / Thermoclick       • uside-deta circuit     Yes       • uside-deta circuit     Yes       • waluation of thermistor motor protection     Yes; Toyly up to 600 V operating voltage       • us	<ul> <li>for control circuit</li> </ul>	100 ms				
degree of pollution       3, acc. to IEC 60947-4-2         Impulse voltage rated value       8 kV         blocking voltage of the thyristor maximum       1800 V         service factor       1.15         surge voltage resistance rated value       8 kV         maximum permissible voltage for safe isolation       690 V; does not apply for thermistor connection         • between main and auxiliary circuit       690 V; does not apply for thermistor connection         utilization category acc. to IEC 60947-4.2       AC 53a         shock resistance       15 mm up to 6 Hz; 2 g up to 500 Hz         reference code acc. to IEC 81346-2       Q         Quistance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • andpustor       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • DCb Traking       Yes         • Intrinsic device protection       Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)         • evaluation of thermistor motor protection       Yes; Yope A PTC or Klixon / Thermoclick         •	idle time adjustable	0 255 s				
degree of pollution         3, acc. to IEC 60947-4-2           Impulse voltage rated value         8 kV           blocking voltage of the thyristor maximum         1800 V           service factor         1.15           surge voltage resistance rated value         8 kV           maximum permissible voltage for safe isolation         680 V; does not apply for thermistor connection           • between main and auxiliary circuit         690 V; does not apply for thermistor connection           utilization category acc. to IEC 60947-42         AC 53a           shock resistance         15 mm up to 6 Hz; 2 g up to 500 Hz           reference code acc. to IEC 81346-2         Q           Substance Prohibitance (Date)         11.02.2019 00:00:00           product function         Yes           • tranp-up (soft starting)         Yes           • tranp-up down (soft stop)         Yes           • DC braking         Yes           • DC braking         Yes           • lintrinsic device protection         Yes           • lintrinsic device protection         Yes           • lintrinsic device protection         Yes           • ramp-up (soft starting)         Yes           • ramp-up down         Yes           • DC braking         Yes           • notor hea	insulation voltage rated value	690 V				
Impulse voltage rated value         8 kV           blocking voltage of the thyristor maximum         1800 V           service factor         1.15           surge voltage resistance rated value         8 kV           maximum permissible voltage for safe isolation         690 V; does not apply for thermistor connection           utilization category acc. to IEC 60947-4-2         AC 53a           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           reference code acc. to IEC 81346-2         Q           Substance Prohibitance (Date)         11.02 2019 00:00:00           product function         Yes           • ramp-down (soft starting)         Yes           • creep speed in both directions of rotation         Yes           • pump ramp down         Yes           • DC braking         Yes           • notor heating         Yes           • notor verolad protection         Yes           • motor rotection         Yes           • indic-deta circuit         Yes           • motor overload protection         Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)           • indic-deta circuit         Yes           • motor ve		3, acc. to IEC 60947-4-2				
blocking voltage of the thyristor maximum         1 800 V           service factor         1.15           surge voltage for safe isolation         680 V; does not apply for thermistor connection           • between main and auxiliary circuit         690 V; does not apply for thermistor connection           • utilization category acc. to IEC 60947.4-2         AC 53a           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         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           • reference code acc. to IEC 81346-2         Q           Q         Substance Prohibitance (Date)         11.02.2019 00:00:00           product function         Yes           • ramp-up (soft starting)         Yes           • ramp-down (soft stop)         Yes           • creep speed in both directions of rotation         Yes           • pump ramp down         Yes           • Locaking         Yes           • notor neeting         Yes           • indrisis device protection         Yes           • inotrisis device protection         Yes; Full motor protec		8 kV				
service factor         1.15           surge voltage resistance rated value         8 kV           maximum permissible voltage for safe isolation         690 V; does not apply for themistor connection           • between main and auxiliary circuit         690 V; does not apply for themistor connection           ditilization category acc. to IEC 69947.4-2         AC 53a           shock resistance         15 g / 11 ms, from 6 g / 11 ms with potential contact lifting           vibration resistance         16 mm up to 6 Hz; 2 g up to 500 Hz           efference code acc. to IEC 81346-2         Q           Substance (Date)         11.02 2019 00:00:00           product function         Yes           • ramp-up (soft starting)         Yes           • adjustable current limitation         Yes           • adjustable current limitation         Yes           • creep speed in both directions of rotation         Yes           • breakaway pulse         Yes           • adjustable current limitation         Yes           • breakaway pulse         Yes           • adjustable current limitation         Yes           • breakaway pulse         Yes           • adjustable current limitation         Yes           • breakaway pulse         Yes           • adjustable current limitation		1 800 V				
maximum permissible voltage for safe isolation       690 V; does not apply for thermistor connection         utilization category acc. to IEC 60947.4-2       AC 53a         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         reference code acc. to IEC 81346-2       Q         Substance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • ramp-dup (soft starting)       Yes         • adjustable current limitation       Yes         • creep speed in both directions of rotation       Yes         • breakaway pulse       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • breakaway pulse       Yes         • adjustable durent limitation       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • breakaway pulse       Yes         • breakaway       Yes         • breakaway       Yes <t< th=""><th></th><td>1.15</td></t<>		1.15				
maximum permissible voltage for safe isolation       690 V; does not apply for thermistor connection         utilization category acc. to IEC 60947.4-2       AC 53a         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         reference code acc. to IEC 81346-2       Q         Substance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • ramp-dup (soft starting)       Yes         • adjustable current limitation       Yes         • creep speed in both directions of rotation       Yes         • breakaway pulse       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • breakaway pulse       Yes         • adjustable durent limitation       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • breakaway pulse       Yes         • breakaway       Yes         • breakaway       Yes <t< th=""><th>surge voltage resistance rated value</th><td>8 kV</td></t<>	surge voltage resistance rated value	8 kV				
• between main and auxiliary circuit690 V; does not apply for thermistor connectionutilization category acc. to IEC 60947-42AC 53ashock resistance15 g / 11 ms, trom 6 g / 11 ms with potential contact liftingvibration resistance15 mm up to 6 Hz; 2 g up to 500 Hzreference code acc. to IEC 81346-2QSubstance Prohibitance (Date)11.02.2019 00:00:00product functionYes• ramp-up (soft starting)Yes• tramp-down (soft stop)Yes• adjustable current limitationYes• creep speed in both directions of rotationYes• pump ramp downYes• DC brakingYes• notor heatingYes• intrinsic device protectionYes• intrinsic device protectionYes• notor overload protectionYes• notor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes• uato-RESETYes• manual RESETYes• event listYes• event listYes• via software configurableYes• via software configurableYes• via software configurableYes• via software configurableYes• screw terminalYes• ported to filtermistationYes• screw terminalYes• software configurableYes• sin dortware						
utilization category acc. to IEC 60947-4-2       AC 53a         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         reference code acc. to IEC 81346-2       Q         Substance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • ramp-up (soft starting)       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • pump ramp down       Yes         • DC braking       Yes         • notor heating       Yes         • lintinsic device protection       Yes         • lintinsic device protection       Yes         • motor overload protection       Yes         • motor overload protection       Yes         • inside-delta circuit       Yes         • auto-RESET       Yes         • manual RESET       Yes         • compresender bunction       Yes         • event list       Yes         • operating measured value display       Yes         • inside-delta circuit       Yes         • operating measured value display       Yes         • operating measured value display       Yes </th <th></th> <td colspan="4">690 V: does not apply for thermistor connection</td>		690 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         reference code acc. to IEC 81346-2       Q         Q       9         Substance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • ramp-up (soft starting)       Yes         • andp-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         • notor heating       Yes         • latace function       Yes         • trace function       Yes         • intrinsic device protection       Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)         • evaluation of thermistor motor protection       Yes; Type A PTC or Klixon / Thermoclick         • inside-delta circuit       Yes         • emote reset       Yes         • emote reset       Yes         • communication function       Yes         • eparting measured value display       Yes         • event list       Yes </th <th></th> <th colspan="5"></th>						
vibration resistance         15 mm up to 6 Hz; 2 g up to 500 Hz           reference code acc. to IEC 81346-2         Q           Substance Prohibitance (Date)         11.02.2019 00:00:00           product function         Yes           • ramp-up (soft starting)         Yes           • breakaway pulse         Yes           • adjustable current limitation         Yes           • creep speed in both directions of rotation         Yes           • DC braking         Yes           • break way pulse         Yes           • break function         Yes           • adjustable current limitation         Yes           • pump ramp down         Yes           • DC braking         Yes           • brace function         Yes           • lace function         Yes           • intrinsic device protection         Yes           • indic-delta circuit         Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)           • inside-delta circuit         Yes           • auto-RESET         Yes           • amanual RESET         Yes           • communication function         Yes           • operating measured value display         Yes           • event list         Yes						
reference code acc. to IEC 81346-2       Q         Substance Prohibitance (Date)       11.02.2019 00:00:00         product function       Yes         • ramp-up (soft starting)       Yes         • breakaway pulse       Yes         • adjustable current limitation       Yes         • creep speed in both directions of rotation       Yes         • pump ramp down       Yes         • DC braking       Yes         • notor heating       Yes         • arace function       Yes         • intrinsic device protection       Yes         • intrinsic device protection       Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)         • evaluation of thermistor motor protection       Yes; Type A PTC or Klixon / Thermoclick         • inside-delta circuit       Yes         • auto-RESET       Yes         • manual RESET       Yes         • eronde reset       Yes         • communication function       Yes         • operating measured value display       Yes         • via software parameterizable       Yes         • via software parameterizable       Yes         • via software parameterizable       Yes         • via software configurable       Yes	vibration resistance					
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         • slave pointer function       Yes         • trace function       Yes         • intrinsic device protection       Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)         • evaluation of thermistor motor protection       Yes; Type A PTC or Klixon / Thermoclick         • inside-delta circuit       Yes; Only up to 600 V operating voltage         • auto-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         • via software configurable       Yes         • via software confi	reference code acc. to IEC 81346-2					
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         • slave pointer function       Yes         • trace function       Yes         • intrinsic device protection       Yes; Full motor protection (thermistor motor protection and electronic motor overload protection)         • evaluation of thermistor motor protection       Yes; Type A PTC or Klixon / Thermoclick         • inside-delta circuit       Yes; Only up to 600 V operating voltage         • auto-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         • via software configurable       Yes         • via software confi	Substance Prohibitance (Date)	11.02.2019 00:00:00				
• ramp-up (soft starting)Yes• ramp-down (soft stop)Yes• breakaway pulseYes• adjustable current limitationYes• adjustable current limitationYes• creep speed in both directions of rotationYes• pump ramp downYes• DC brakingYes• DC brakingYes• motor heatingYes• intrinsic device protectionYes• intrinsic device protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes• auto-RESETYes• manual RESETYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• spring-type terminalYes; in						
• breakaway pulseYes• adjustable current limitationYes• creep speed in both directions of rotationYes• pump ramp downYes• DC brakingYes• motor heatingYes• motor heatingYes• slave pointer functionYes• trace functionYes• intrinsic device protectionYes• motor overload protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• communication functionYes• operating measured value displayYes• event listYes• via software parameterizableYes• via software configurableYes• via software configurableYes• via software configurableYes• perterminalYes• pRoFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	-	Yes				
• breakaway pulseYes• adjustable current limitationYes• creep speed in both directions of rotationYes• pump ramp downYes• DC brakingYes• motor heatingYes• motor heatingYes• slave pointer functionYes• trace functionYes• intrinsic device protectionYes• motor overload protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• communication functionYes• operating measured value displayYes• event listYes• via software parameterizableYes• via software configurableYes• via software configurableYes• via software configurableYes• perterminalYes• pRoFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	<ul> <li>ramp-down (soft stop)</li> </ul>	Yes				
eadjustable current limitationYescreep speed in both directions of rotationYespump ramp downYesDC brakingYesmotor heatingYesslave pointer functionYesintrinsic device protectionYesintrinsic device protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protectionevaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclickinside-delta circuitYesauto-RESETYeserrende resetYescommunication functionYesevent listYesevent listYesevent listYeserror logbookYesvia software parameterizableYesvia software configurableYesvia software configurableYesspring-type terminalNoePROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	<ul> <li>breakaway pulse</li> </ul>	Yes				
• creep speed in both directions of rotationYes• pump ramp downYes• DC brakingYes• motor heatingYes• motor heatingYes• slave pointer functionYes• trace functionYes• intrinsic device protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• via software parameterizableYes• via software parameterizableYes• perforlenergyYes in connection with the PROFINET Standard and PROFINET High-		Yes				
• pump ramp downYes• DC brakingYes• motor heatingYes• motor heatingYes• slave pointer functionYes• trace functionYes• intrinsic device protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• event listYes• event listYes• event listYes• via software parameterizableYes• via software configurableYes• via software configurableYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	-	Yes				
DC brakingYesmotor heatingYesslave pointer functionYesstave pointer functionYestrace functionYesintrinsic device protectionYesmotor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)evaluation of thermistor motor protectionYes; Full motor overload protection)evaluation of thermistor motor protectionYes; Solly up to 600 V operating voltageauto-RESETYesmanual RESETYesremote resetYescommunication functionYesoperating measured value displayYesevent listYesvia software parameterizableYesvia software configurableYesscrew terminalYesspring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-						
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slave pointer functionYestrace functionYesintrinsic device protectionYesmotor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclickinside-delta circuitYes; Only up to 600 V operating voltageauto-RESETYesmanual RESETYesremote resetYescommunication functionYesevent listYeserror logbookYesvia software parameterizableYesvia software configurableYesspring-type terminalNoeROFLenergyYes; in connection with the PROFINET Standard and PROFINET High-		Yes				
• trace functionYes• intrinsic device protectionYes• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• event listYes• via software parameterizableYes• via software configurableYes• via software configurableYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	-					
intrinsic device protectionYesmotor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclickinside-delta circuitYes; Only up to 600 V operating voltageauto-RESETYesmanual RESETYeseremote resetYescommunication functionYesoperating measured value displayYesevent listYeserror logbookYesvia software parameterizableYesvia software configurableYesscrew terminalYesepring-type terminalNoPROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-						
• motor overload protectionYes; Full motor protection (thermistor motor protection and electronic motor overload protection)• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-						
• evaluation of thermistor motor protectionYes; Type A PTC or Klixon / Thermoclick• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-		Yes; Full motor protection (thermistor motor protection and electronic				
• inside-delta circuitYes; Only up to 600 V operating voltage• auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	<ul> <li>evaluation of thermistor motor protection</li> </ul>					
e auto-RESETYes• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-						
• manual RESETYes• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	auto-RESET					
• remote resetYes• communication functionYes• operating measured value displayYes• event listYes• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-						
<ul> <li>operating measured value display</li> <li>operating measured value display</li> <li>operating measured value display</li> <li>operating measured value display</li> <li>Yes</li> <li>ves</li> <li>ves</li> <li>ves</li> <li>via software parameterizable</li> <li>via software configurable</li> <li>Ves</li> <li>via software configurable</li> <li>Yes</li> <li>ves</li> <li>ves</li></ul>		Yes				
• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	<ul> <li>communication function</li> </ul>	Yes				
• event listYes• error logbookYes• via software parameterizableYes• via software configurableYes• screw terminalYes• spring-type terminalNo• PROFlenergyYes; in connection with the PROFINET Standard and PROFINET High-	<ul> <li>operating measured value display</li> </ul>	Yes				
• error logbook       Yes         • via software parameterizable       Yes         • via software configurable       Yes         • screw terminal       Yes         • spring-type terminal       No         • PROFlenergy       Yes; in connection with the PROFINET Standard and PROFINET High-						
<ul> <li>via software parameterizable</li> <li>via software configurable</li> <li>screw terminal</li> <li>spring-type terminal</li> <li>PROFIenergy</li> <li>Yes; in connection with the PROFINET Standard and PROFINET High-</li> </ul>						
<ul> <li>via software configurable</li> <li>screw terminal</li> <li>spring-type terminal</li> <li>PROFIenergy</li> <li>Yes; in connection with the PROFINET Standard and PROFINET High-</li> </ul>	5					
<ul> <li>screw terminal</li> <li>spring-type terminal</li> <li>PROFIenergy</li> <li>Yes; in connection with the PROFINET Standard and PROFINET High-</li> </ul>						
spring-type terminal No     PROFIenergy Yes; in connection with the PROFINET Standard and PROFINET High-	-					
• <b>PROFIEnergy</b> Yes; in connection with the PROFINET Standard and PROFINET High-						
		Feature communication modules				

£	Ver				
firmware update	Yes				
<ul> <li>removable terminal for control circuit</li> </ul>	Yes				
voltage ramp	Yes				
torque control	Yes				
<ul> <li>combined braking</li> </ul>	Yes				
<ul> <li>analog output</li> </ul>	Yes; 4 20 mA (default) / 0 10 V				
<ul> <li>programmable control inputs/outputs</li> </ul>	Yes				
<ul> <li>condition monitoring</li> </ul>	Yes				
<ul> <li>automatic parameterisation</li> </ul>	Yes				
<ul> <li>application wizards</li> </ul>	Yes				
<ul> <li>alternative run-down</li> </ul>	Yes				
<ul> <li>emergency operation mode</li> </ul>	Yes				
<ul> <li>reversing operation</li> </ul>	Yes				
<ul> <li>soft starting at heavy starting conditions</li> </ul>	Yes				
Power Electronics					
operational current					
<ul> <li>at 40 °C rated value</li> </ul>	840 A				
<ul> <li>at 40 °C rated value minimum</li> </ul>	168 A				
<ul> <li>at 50 °C rated value</li> </ul>	748 A				
● at 60 °C rated value	670 A				
operational current at inside-delta circuit					
• at 40 °C rated value	1 454 A				
• at 50 °C rated value	1 295 A				
• at 60 °C rated value	1 160 A				
operating voltage					
<ul> <li>rated value</li> </ul>	200 690 V				
at inside-delta circuit rated value	200 600 V				
relative negative tolerance of the operating voltage	-15 %				
relative positive tolerance of the operating voltage	10 %				
relative negative tolerance of the operating voltage at inside-delta circuit	-15 %				
relative negative tolerance of the operating voltage at inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit	-15 % 10 %				
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					
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors	10 %				
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	10 % 250 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value	10 % 250 kW 450 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value	10 % 250 kW 450 kW 450 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • 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 500 V at 40 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW 560 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at inside-delta circuit at 40 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 40 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • 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 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 60 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 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 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 60 °C rated value • at 690 °C rated value	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 %				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 60 °C rated value • at 690 V at	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 %				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 90 °C rated value • at 690 V at	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % Relative to set le				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V 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 minimum load [%] power loss [W] for rated value of the current at AC • at 40 °C after startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V 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 minimum load [%] power loss [W] for rated value of the current at AC • at 40 °C after startup • at 50 °C after startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 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 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V 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 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 %	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 %; Relative to set le 252 W 205 W 164 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 %; Relative to set le 252 W 205 W 164 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V 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 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 50 °C during startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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 during startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W 10 405 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at a inside-delta circuit at 40 °C rated value • at 690 V at 40 °C rated value • at 690 V 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 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 differ startup • at 60 °C during startup • at 50 °C during startup • at 60 °C during startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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 during startup • at 50 °C during startup • at 60 °C during startup	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W 10 405 W Electronic, tripping in the event of thermal overload of the motor				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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 during startup • at 6	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W 10 405 W				
inside-delta circuit relative positive tolerance of the operating voltage at inside-delta circuit operating power for 3-phase motors • at 230 V at 40 °C rated value • at 230 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 400 V at inside-delta circuit at 40 °C rated value • at 500 V at 40 °C rated value • at 500 V at 40 °C rated value • at 690 V 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 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 during startup • at 6	10 % 250 kW 450 kW 450 kW 800 kW 560 kW 900 kW 800 kW 50 Hz 60 Hz -10 % 10 % 10 % 10 %; Relative to set le 252 W 205 W 164 W 14 441 W 12 187 W 10 405 W Electronic, tripping in the event of thermal overload of the motor				

	• · · · ·			
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 %			
relative negative tolerance of the control supply voltage at AC at 60 Hz	-20 %			
relative positive tolerance of the control supply voltage at AC at 60 Hz	20 %			
control supply voltage frequency	50 60 Hz			
relative negative tolerance of the control supply voltage frequency	-10 %			
relative positive tolerance of the control supply voltage frequency	10 %			
control supply voltage				
<ul> <li>at DC rated value</li> </ul>	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	1 100 mA			
locked-rotor current at close of bypass contact 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				
Inputs/ Outputs number of digital inputs	4			
	4 4			
number of digital inputs				
number of digital inputs <ul> <li>parameterizable</li> </ul>	4			
number of digital inputs <ul> <li>parameterizable</li> </ul> number of inputs for thermistor connection	4 1; Type A PTC or Klixon / Thermoclick			
number of digital inputs <ul> <li>parameterizable</li> </ul> <li>number of inputs for thermistor connection <ul> <li>number of digital outputs</li> </ul> </li>	4 1; Type A PTC or Klixon / Thermoclick 4			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs	4 1; Type A PTC or Klixon / Thermoclick 4 3			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable	4 1; Type A PTC or Klixon / Thermoclick 4 3 1			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO)			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • upwards	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards         • upwards         • downwards	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 75 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards         • upwards         • at the side	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 5 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards         • upwards         • at the side	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 75 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards         • upwards         • at the side         weight without packaging         Connections/ Terminals	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 5 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • at the side         weight without packaging         Connections/ Terminals         type of electrical connection	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 5 mm 5 mm 5 mm			
number of digital inputs         • parameterizable         number of inputs for thermistor connection         • number of digital outputs         • number of digital outputs parameterizable         • number of digital outputs not parameterizable         digital output version         number of analog outputs         switching capacity current of the relay outputs         • at AC-15 at 250 V rated value         • at DC-13 at 24 V rated value         Installation/ mounting/ dimensions         mounting position         fastening method         height         width         depth         required spacing with side-by-side mounting         • forwards         • backwards         • upwards         • at the side         weight without packaging         Connections/ Terminals	4 1; Type A PTC or Klixon / Thermoclick 4 3 1 3 normally-open contacts (NO) / 1 changeover contact (CO) 1 3 A 1 A Vertical (can be rotated +/- 90° and tilted forward or backward +/- 22.5°) screw fixing 764 mm 478 mm 241 mm 10 mm 0 mm 100 mm 5 mm			

width of connection bar maximum	55 mm				
wire length for thermistor connection					
<ul> <li>with conductor cross-section = 0.5 mm<sup>2</sup> maximum</li> </ul>	50 m				
<ul> <li>with conductor cross-section = 1.5 mm<sup>2</sup> maximum</li> </ul>	150 m				
<ul> <li>with conductor cross-section = 2.5 mm<sup>2</sup> maximum</li> </ul>	250 m				
type of connectable conductor cross-sections					
<ul> <li>for DIN cable lug for main contacts stranded</li> </ul>	2x (50 240 mm²)				
<ul> <li>for DIN cable lug for main contacts finely stranded</li> </ul>	2x (70 240 mm <sup>2</sup> )				
type of connectable conductor cross-sections					
<ul> <li>for control circuit solid</li> </ul>	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)				
<ul> <li>for control circuit finely stranded with core end</li> </ul>	1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )				
processing					
<ul> <li>at AWG cables for control circuit solid</li> </ul>	1x (20 12), 2x (20 14)				
wire length					
<ul> <li>between soft starter and motor maximum</li> </ul>	800 m				
<ul> <li>at the digital inputs at DC maximum</li> </ul>	1 000 m				
tightening torque					
<ul> <li>for main contacts with screw-type terminals</li> </ul>	20 35 N·m				
<ul> <li>for auxiliary and control contacts with screw-type</li> </ul>	0.8 1.2 N·m				
terminals					
tightening torque [lbf·in]					
for main contacts with screw-type terminals	177 310 lbf·in				
<ul> <li>for auxiliary and control contacts with screw-type</li> </ul>	7 10.3 lbf·in				
terminals					
Ambient conditions					
installation altitude at height above sea level maximum	2 000 m; Derating as of 1000 m, see catalog				
ambient temperature					
during operation	-25 +60 °C; Please observe derating at temperatures of 40 °C or				
0.1	above				
<ul> <li>during storage and transport</li> </ul>	-40 +80 °C				
environmental category					
• during operation acc. to IEC 60721	3K6 (no ice formation, only occasional condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• during storage acc. to IEC 60721	1K6 (only occasional condensation), 1C2 (no salt mist), 1S2 (sand must not get inside the devices), 1M4				
<ul> <li>during transport acc. 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				
Communication/ Protocol					
communication module is supported	Ver				
PROFINET standard	Yes				
PROFINET high-feature	Yes				
• EtherNet/IP	Yes				
• Modbus RTU	Yes				
Modbus TCP	Yes				
PROFIBUS	Yes				
UL/CSA ratings					
manufacturer's article number					
of the fuse					
<ul> <li>— usable for Standard Faults up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 2500 A; Iq = 42 kA				
<ul> <li>— usable for High Faults up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 2500 A; Iq = 100 kA				
<ul> <li>— usable for Standard Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 2500 A; Iq = 42 kA				
<ul> <li>usable for High Faults at inside-delta circuit up to 575/600 V according to UL</li> </ul>	Type: Class J / L, max. 2500 A; lq = 100 kA				
operating power [hp] for 3-phase motors					
• at 200/208 V at 50 °C rated value	250 hp				
<ul> <li>at 220/230 V at 50 °C rated value</li> </ul>	300 hp				
<ul> <li>at 220/230 V at 50 °C rated value</li> <li>at 460/480 V at 50 °C rated value</li> </ul>	300 hp 600 hp				

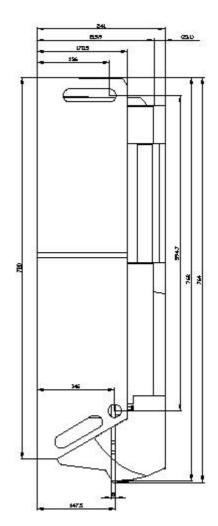
	50 °C rated value		800 ł	r.				
<ul> <li>at 200/208 V at value</li> </ul>	inside-delta circuit at 5	50 °C rated		450 hp				
<ul> <li>at 220/230 V at value</li> </ul>	inside-delta circuit at 5	50 °C rated	550 ł	р				
	• at 460/480 V at inside-delta circuit at 50 °C rated			) hp				
	• at 575/600 V at inside-delta circuit at 50 °C rated			) hp				
contact rating of au	ciliary contacts accor	ding to UL	R300	)-B300				
Safety related data								
protection class IP of	on the front acc. to IE	C 60529	IP00					
electromagnetic cor	npatibility		acc.	to IEC 60947-4-2				
ATEX								
certificate of suitabi	lity							
<ul> <li>ATEX</li> </ul>			Yes					
• IECEx			Yes					
<ul> <li>according to AT</li> </ul>	EX directive 2014/34/E	EU	BVS	18 ATEX F 003 X				
	cording to ATEX dire	ective	II (2)	G [Ex eb Gb] [Ex d	b Gb] [Ex pxb Gb], II (	(2)D [Ex tb Db] [Ex pxb Db],		
2014/34/EU		• • • • •	I (M2	) [Ex db Mb]				
ATEX	ance acc. to IEC 6150		0					
relating to ATEX	mand rate acc. to IEC		0.008					
PFHD with high demand rate acc. to EN 62061 relating to ATEX			0.000	00005 1/h				
Safety Integrity Leve to ATEX	el (SIL) acc. to IEC 61	508 relating	SIL1					
T1 value for proof te IEC 61508 relating to	st interval or service ATEX	life acc. to	3 у					
Certificates/ approval	S							
General Product Ap	proval				EMC	For use in hazard- ous locations		
		~			•			
		(UL)		EHC	RCM	K ATEX		
For use in hazard- ous locations	Declaration of Conformity	Test Certifica	ates	Marine / Shippi	ng	other		
IECEx	CE	<u>Type Test Ce</u> ates/Test Re			Lloyds Register	<u>Confirmation</u>		
IECEx	EG-Konf.			ABS	LRS			
Further information	unloadcanter (0-t.)	no Dreek						
https://www.siemens.	wnloadcenter (Catalo com/ic10	gs, Brochures,	)					
Industry Mall (Online		/Catalog/produc	:t?mlfb=	3RW5554-6HA06				
Cax online generato								
Service&Support (M	anuals, Certificates, 0	Characteristics,	, FAQs,	)				
Image database (pro	y.siemens.com/cs/ww/ oduct images, 2D dime	ension drawing	ıs, 3D m	nodels, device cir		N macros,)		
http://www.automation			a					

Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current https://support.industry.siemens.com/cs/ww/en/ps/3RW5554-6HA06/char

Characteristic: Installation altitude

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RW5554-6HA06&objecttype=14&gridview=view1 Simulation Tool for Soft Starters (STS) https://support.industry.siemens.com/cs/ww/en/view/101494917

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