## SIEMENS

## Data sheet

## 3RA6500-2EB42



SIRIUS compact starter reversing starter for IO-Link 400 V 24 V DC 8...32 A IP20 connection main circuit: spring-loaded terminal connection control circuit: spring-loaded terminal "phase-out type" alternative 3RK1308 or 3RA8

product brand name	SIRIUS		
product designation	Compact starter for IO-Link		
design of the product	reversing starter		
product type designation	3RA65		
General technical data			
product function control circuit interface to parallel wiring	No		
product extension auxiliary switch	Yes		
power loss [W] for rated value of the current			
<ul> <li>at AC in hot operating state</li> </ul>	5.4 W		
<ul> <li>at AC in hot operating state per pole</li> </ul>	1.8 W		
<ul> <li>without load current share typical</li> </ul>	3.4 W		
insulation voltage rated value	690 V		
degree of pollution	3		
surge voltage resistance rated value	6 000 V		
degree of protection NEMA rating	other		
shock resistance	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes		
vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles		
mechanical service life (operating cycles)			
<ul> <li>of the main contacts typical</li> </ul>	10 000 000		
<ul> <li>of auxiliary contacts typical</li> </ul>	10 000 000		
<ul> <li>of the signaling contacts typical</li> </ul>	10 000 000		
electrical endurance (operating cycles) of auxiliary contacts			
<ul> <li>at DC-13 at 6 A at 24 V typical</li> </ul>	30 000		
<ul> <li>at AC-15 at 6 A at 230 V typical</li> </ul>	200 000		
type of assignment	continous operation according to IEC 60947-6-2		
reference code according to IEC 81346-2	Q		
Substance Prohibitance (Date)	05/01/2012		
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8 Lead titanium zirconium oxide - 12626-81-2		
Weight	2.605 kg		
Ambient conditions			
installation altitude at height above sea level maximum	2 000 m		
ambient temperature			
during operation	-20 +60 °C		
during storage	-55 +80 °C		
during transport	-55 +80 °C		
relative humidity during operation	10 90 %		
Main circuit			
number of poles for main current circuit	3		
adjustable current response value current of the current-	8 32 A		

dependent overload release           formula for mike geabelly limit current         12 x le           formula for mike geabelly limit current         12 x le           ei al 40 to rated value         15 kW           operating voltage al-A2 strated value maximum         400 V rated value           operating voltage AL-A2 strated value maximum         400 V rated value           operating voltage AL-A2 strated value         20 A           operating release value         15 kW           - at 400 V rated value         16 000 W           - at 400 V rated value         16 000 W           - at 400 V rated value         20 A           - at 400 V rated value         20 N           - at 400 V rated value         20 N           - at 400 V rated value         20 N           - at 400 V rated value         24 V           - at 400 V rated value         24 V           - at 400 V rated value         24 V           - control supply voltage 1 at DC rated value         24 V           - control supply voltage 1 at DC rated value         24 V           - at 80 C maximum	dependent overload release	
formule for limit current breaking capacity         10 kie           yielded machamica for 4-pole AC motor         4 400 V tand value           e at AO V tand value         15 kW           opprational current         30 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         32 A           e it AO C3 at AO V trade value         15 kW           e it AO C3 at AO V trade value         15 kW           e it AO C3 at AO V trade value         15 kW           e it AO C3 at AO V trade value         15 kW           e it AO C3 at AO V trade value         20 A           control supply voltage it at DC rated value         24 V           control supply voltage it at DC rated value         24 V           control supply voltage it at DC rated value         24 V           control supply voltage it at DC rated value         24 V           control supply voltage it at DC rated value         24 V           control supply voltage it at DC rated value         0	-	12 x le
yvielder mechanical porformance for 4-pole AC motor i at 400 V rated value operations current i AC 3 at 400 V rated value i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum i AC 4 at according to EC 60047-8.2 maximum		
• #4.00 V ried value15 kWoperation current400 V• # AC at 400 V ried value32 A• # AC at 400 V ried value36 00 t/h• # AC at 400 V ried value15 kW• # AC at 400 V ried value36 00 t/h• # AC at 500 V ried value36 00 t/h• # AC at 500 V ried value20 t/h• # AC at 500 V ried value24 V• # AC at 500 V ried value24 V• # AC at 500 V ried value0• # AC AT 500 V ried value0 <t< td=""><td></td><td></td></t<>		
operational current         400 V           operational current         32 A           = 4.7 2.3 at 400 V rated value         32 A           = 4.7 2.3 at 400 V rated value         32 A           = - at 400 V rated value         32 A           at 400 V rated value         32 A           at 400 V rated value         32 A           at 400 V rated value         15 k0W           at 400 V rated value         15 000 W           at 400 V rated value         15 000 W           at 400 V rated value         20 0 1/h           at 400 V rated value         20 0 1/h           at 400 V rated value         20 1/h           at 400 V rated value         20 1/h           at 400 V rated value         20 1/h           at 40 V rated value         20 1/h		15 kW
operational current		
• #1A/C all 400 V rated value32 A• #1A/C all 400 V rated value32 A• #1A/C all 400 V rated value32 A• #1A/C all 400 V rated value34 A• #1A/C all 400 V rated value15 k/W• #1A/C all 400 V rated value15 k/W• #1A/C all 400 V rated value3600 l/h• #1A/C all according to IEC 6047-6.2 maximum3000 l/h• #1A/C all according to IEC 6047-6.2 maximum250 l/h• #1D/C maximum34 W• #1D/C maximum34 W• #1D/C maximum34 W• #1D/C maximum0• #1D/C		
• al AC-3 at 400 Y rated value32 Å• al AC-3 at 400 V rated value29 Å• al AC-3 at 400 V rated value29 Å• al AC-3 at 400 V rated value15 k/W• al AC-3 at 400 V rated value15 k/W• al AC-3 at 400 V rated value3 600 r/h• al AC-4 at coording to EC 60947-6-2 maximum29 k/h• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum29 th• al AC-4 at according to EC 60947-6-2 maximum20 th• actor as any by voltage 1 at DC rated value24 V• actor actor according to EC 60947-6-2 maximum34 WAnatiang contact0• anumber of NC contacts for auxiliang contacts0• anumber of NC contacts for auxiliang contacts0• argunding contact0• argunding contact at AC-12 maximum10 A• operating advert of auxiliang contacts at AC-12 maximum10 A• operating advert of auxiliang contacts at AC-12 maximum10 A• operating advert of auxiliang contacts at AC-12 maximum10 A• operating advert of auxiliang contacts at AC-12 maximum10 A• at 400 V rated value20 A• at 400		32 A
• al AC-32 B A al 400 V rated value2 B A• al AC-3 at 400 V rated value15 000 W• al AC-3 at 400 V rated value15 000 W- al 400 V rated value3500 Th• al AC-41 according to EC 50947-8-2 maximum2500 Th• al AC-43 according to EC 50947-8-2 maximum250 Th• al C ruasimum34 W• al C maximum34 W• al C maximum34 W• al C maximum34 W• al C maximum34 W• al C maximum0•		
operating power         -           • IA AC-3 it 400 V rated value         15 kW           • IA AC-3 it 400 V rated value         15 000 W           • - at 400 V rated value         15 000 W           • - at 400 V rated value         15 000 W           • - at AC-3 according to IEC 60947-6-2 maximum         280 1/h           • or AC-43 according to IEC 60947-6-2 maximum         280 1/h           Control circuit Control         -           Vype of Vorlage         DC           control supply vorlage 1 at DC rated value         24 V           control supply vorlage 1 at DC rated value         24 V           control supply vorlage 1 at DC rated value         24 V           control supply vorlage 1 at DC rated value         24 V           control supply vorlage 1 at DC rated value         0           number of NC contacts for auxillary contacts         0           number of NC contacts of rasinaneous short-Ercuit try unit for signaling contact         0           number of NC contacts of rasinaneous short-Ercuit try unit for signaling contact         0           operational current of auxillary contacts at AC-12 maximum         10 A           operational current of auxillary contacts at AC-12 maximum         10 A           operating short-Ercuit current-base AC motor         -           • if A00 V rated valu		29 A
i Al AC 34 400 v rated value     15 kW       i Al AC 34 400 v rated value     15 000 W       i a 44 400 v rated value     35 00 1/h       operating frequency     750 1/h       i Al AC 41 according to IEC 60947-62 maximum     250 1/h       Control circuit/ Control     250 1/h       Control circuit/ Control     260 1/h       Control circuit/ Control     24 V       control supply voltago 1 at DC rated value     24 V       control supply voltago 1 at DC     0       mumber of NC contacts for auxillary contacts     0       number of NC contacts of natalaneous short-circuit rup utify of agring contact     0       upmber of NC contacts of natalaneous short-circuit rup utify of agring contact     0       operating contact of instalaneous short-circuit rup utify of agring contact at AC-12 maximum     10 A       operating contact of instalaneous short-circuit rup utify of agring contact at DC-13 at 250 V     027 A       Protoccircuit corrent of auxillary contacts at AC-12 maximum     10 A       operating abort-circuit corrent of auxillary contacts at AC-12 maximum     10 A       operating abort-circuit corrent of agring contacts at AC-12 maximum     10 A       operating abort-circuit cortact at AC-12 maximum     10 A		2011
		15 kW
no-load switching frequency     3 600 /h       operating frequency     750 f/h       et A C-41 according to IEC 60947-8-2 maximum     250 f/h       Control circuit/ Control     Yes       Vyse of voltage     DC       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC rated value     24 V       number of NC contacts for auxiliary contacts     0       number of NC contacts of instantineous short-circuit trip unit for     0       agranting contact     0       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at AC-13 maximum     10 A       operational current of auxiliary contacts		15 000 W
operating frequency              et A C-41 according to IEC 60947-8-2 maximum             250 1/h             250 1/h             Control second rote UE C0097-8-2 maximum             24 V             Control second rote UE C0097-8-2 maximum             34 W             Auxiliary contacts             0 Contracts for auxiliary contacts             0 Contracts of rote usiliary contacts             0 Contracts for auxiliary contacts             0 Contracts for auxiliary contacts             0 Contracts of rote usiliary contacts at DC-13 at 250 V             0 Z7 A             Protective and monitoring functions             fulfoad current of auxiliary contacts at DC-13 at 250 V             227 A             Protective and Honitoring functions             fulfoad current (FLA) for 3-phase AC motor             et at 400 V rated value             32 A             yielded mechanical performance (hp) for 3-phase AC motor             et at 200208 V rated value             32 A             yielded mechanical performance (hp) for 3-phase AC motor             et at 200208 V rated value             20 hp             Stort-cricut protection             et at 200209 V rated value             20 hp             Stort-cricut protection             funded formance             for shin-cricut protection             et at 20020 V rated value		
• st AC-41 according to IEC 60947-6-2 maximum     250 1/h       • at AC-43 according to IEC 60947-8-2 maximum     250 1/h       • at AC-43 according to IEC 60947-8-2 maximum     250 1/h       • control supply voltage 1 at DC     24 V       • control supply voltage 1 at DC     24 ··· 24 V       • at DC maximum     34 W       Auxiliary circuit     0       number of NC contacts for auxiliary contacts     0       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of auxiliary contacts at DC-13 at 250 V     0.27 A       Protective and monitoring functions     53 IA       tip class     CLASS 10 and 20 adjustable       operational current of auxiliary contacts at DC-13 at 250 V     0.27 A       Protective and monitoring functions     53 IA       tip class     CLASS 10 and 20 adjustable       operational current of auxiliary contacts at DC-13 at 250 V     0.27 A       Protective and monitoring functions     53 IA       tip class     CLASS 10 and 20 adjustable       operational current of auxiliary contacts at DC-13 at 250 V     0.27 A		5 000 mi
• at AC-43 according to IEC 60947-6-2 maximum         250 1/h           Control circuit/ Control         U           poor of voltage         DC           control supply voltage 1 at DC rated value         24 V           control supply voltage 1 at DC         24 V           holding power         -           • at DC maximum         34 W           Auxiliary carcuit         0           number of NC contacts for auxiliary contacts         0           number of NC contacts for auxiliary contacts         0           pagnaling contact         0           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts		750 1/b
Control circuit/ Control     DC       control supply voltage 1 at DC rated value     24 V       control supply voltage 1 at DC     24 24 V       holding power     -       - at DC maximum     3.4 W       Auxiliary victorial     0       number of NC contacts for auxiliary contacts     0       number of NC contacts for auxiliary contacts     0       number of NC contacts of instantaneous short-circuit trip unit for signaling contact     0       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-13 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-13 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-13 maximum     0.A       operational current of auxiliary contacts at AC-13 maximum     0.A       operational current of auxiliary contacts at AC-12 maximum     0.A       operational current of auxiliary contacts at AC-12 m	-	
type of voltage         DC           control supply voltage 1 at DC rated value         24 V           control supply voltage 1 at DC         24 24 V           holding power         3.4 W           a valual or decimation         3.4 W           Availary decimation         3.4 W           Availary decimation         0           number of NC contacts for auxiliary contacts         0           number of NO contacts of instantaneous short-circuit trip unit for         0           signaling contact         0           operational current of auxiliary contacts at AC-12 maximum         0           operational current of auxiliary contacts at AC-13 at 250 V         0.27 A           Protective and monitoring functions         0           trip class         CLASS 10 and 20 adjustable           operational current of auxiliary contacts at CC-13 at 250 V         0.27 A           Protective and monitoring functions         53 kA           tu/CGSA ratings         10 A           operating short-circuit current breaking capacity (cs)         53 kA           vield mechanical performance [thp] for 3-phase AC motor         4 400 V rated value           at 4200/203 V rated value         22 A           yield mechanical performance [thp] for 3-phase AC motor         4 at 202/203 V rated value		
Control supply voltage 1 at DC rated value     24 V       Control supply voltage 1 at DC     24		DC
control supply voltage 1 at DC     24 24 V       holding power		
holding power       3.4 W         Auxiliary circuit       3.4 W         Auxiliary circuit       0         number of NO contacts for auxiliary contacts       0         number of NO contacts of instantaneous short-circuit trip unit for signaling contact.       0         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operational current of auxiliary contacts at AC-12 maximum       0 A         operating short-circuit current breaking capacity (les)                Six A         U/CSA ratings       CLASS 10 and 20 adjustable              Six A         U/CSA ratings              Six A              Six A         yielded mechanical performance [hp] for 3-phase AC motor              sta 480 Vrated value              Six A         i 4 200/230 V rated value              20 hp              Six A              Six A         sta 460/480 V rated value              20 hp		
• at DC maximum       3.4 W         Auxiliary circuit		
Auxiliary circuit         0           number of NC contacts for auxiliary contacts         0           number of NC contacts of instantaneous short-circuit trip unit for signaling contact         0           number of NC contacts of instantaneous short-circuit trip unit for signaling contact         0           operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V         0.27 A           Protective and monitoring functions         0           trip class         CLASS 10 and 20 adjustable           opporating short-circuit current breaking capacity (Ics)         53 kA           • at 400 V rated value         32 A           Vielded mechanical performance (Ip) for 3-phase AC motor         • at 480 V rated value           • at 200/28 V rated value         20 hp           • at 400/40 V rated value         10 hp           • at 400/40 V rated value         20 hp           • at 400/40 V rated value <td></td> <td>3.4 W</td>		3.4 W
number of NC contacts for auxiliary contacts         0           number of NC contacts for auxiliary contacts         0           number of NC contacts of instantaneous short-circuit trip unit for signaling contact         0           number of CO contacts of the current-dependent overload release for signaling contact         0           operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-12 maximum         10 A           operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-12 maximum         0 A           operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-12 maximum         10 A           operating short-circuit current breaking capacity (Ics) • at 400 V rated value         53 kA           ULCSA ratings         CLASS 10 and 20 adjustable           full-load current (FLA) for 3-phase AC motor • at 480 V rated value         32 A           vielded mechanical performance (Ivp] for 3-phase AC motor • at 480 V rated value         20 hp           Short-circuit protection         Yes           etal 480 V rated value         20 hp           Short-circuit protection         Yes           design of the five link         fuse gL/gG: 10 A           Installator/ mounting/ dimensions         any           mounting position         any           wortick <td></td> <td>5.4 VV</td>		5.4 VV
number of NO contacts for auxiliary contacts         0           number of NO contacts of instantaneous short-circuit trip unit for signaling contact         0           number of NO contacts of instantaneous short-circuit trip unit for signaling contact         0           operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-12 maximum operational short-circuit current breaking capacity (tcs)         0.27 A           Protective and monitoring functions         CLASS 10 and 20 adjustable         0           operating short-circuit current breaking capacity (tcs)         53 kA         0           • at 400 V rated value         52 A         0.27 A           Vielded mechanical performance (hp) for 3-phase AC motor • at 400 V rated value         32 A         0           • at 200/208 V rated value         7.5 hp         0           • at 200/208 V rated value         10 hp         0           • at 200/208 V rated value         20 hp         0           Short-circuit protection         Yes         0           product function short-circuit protection         4 lectromagnetic           design of short-circuit protection         4 lectromagnetic           design of short-circuit protection         electromagnetic           design of the fuse link         fuse gL/gG: 10 A <t< td=""><td></td><td>0</td></t<>		0
number of NO contacts of instantaneous short-circuit trip unit for       0         signaling contact       0         operational current of auxiliary contacts at AC-12 maximu       0         operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       0         trip class       CLASS 10 and 20 adjustable         operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       0         trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         ul/CSA ratings       53 kA         full-load current (FLA) for 3-phase AC motor       32 A         vjelded mechanical performance [hp] for 3-phase AC motor       32 A         vielded value       10 hp         • at 200/208 V rated value       20 hp         Short-circuit protection       Yes         product function short circuit protection       Yes         design of short-circuit protection delectromagnetic       design of short-circuit protection delectromagnetic         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting dimensions       any         mountting position recommended       vert	· · · · · · · · · · · · · · · · · · ·	
signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operating sont-circuit current breaking capacity (Ics)		
number of CO contacts of the current-dependent overload release for signaling contact     0       operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V     0.27 A       Protective and monitoring functions     0       trip class     CLASS 10 and 20 adjustable       operating short-circuit current breaking capacity (Ics)     53 kA       • at 400 V rated value     53 kA       UL/CSA ratings     10 hp       full-load current (FLA) for 3-phase AC motor     32 A       • at 400 V rated value     7.5 hp       • at 200/208 V rated value     10 hp       • at 200/208 V rated value     20 hp       Short-circuit protection     Yes       design of short-circuit protection     Yes       mounting position recommended     vertical, on horizontal standard DIN rail       fastening method     screw and snap-on mounting       height     191 mm       width     90 mm       depth     165 mm       Connections/Terminals     Yes	· · · · · · · · · · · · · · · · · · ·	0
operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       Itip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (lcs)       53 kA         ulL/CSA ratings       53 kA         full-load current (FLA) for 3-phase AC motor       53 kA         uit/CSA ratings       7.5 hp         full-load current value       10 hp         e at 480 V rated value       7.5 hp         e at 220/230 V rated value       10 hp         e at 220/230 V rated value       20 hp         Short-circuit protection       Yes         design of short-circuit protection       Yes         design of the fuse link       e for short-circuit protection of the auxiliary switch required         e for short-circuit protection of the auxiliary switch required       any         mounting position       any         mounting position recommended       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes	number of CO contacts of the current-dependent overload	0
Protective and monitoring functions         trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         ut/CSA ratings       53 kA         full-load current (FLA) for 3-phase AC motor       32 A         • at 480 V rated value       32 A         yielded mechanical performance [hp] for 3-phase AC motor       -         • at 200/208 V rated value       10 hp         • at 220/230 V rated value       20 hp         Short-circuit protection       Yes         product function short circuit protection       Yes         design of the fuse link       -         • of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       -         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes	operational current of auxiliary contacts at AC-12 maximum	10 A
trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         uL/CSA ratings       53 kA         full-load current (FLA) for 3-phase AC motor       32 A         • at 480 V rated value       32 A         yielded mechanical performance [hp] for 3-phase AC motor       7.5 hp         • at 220/230 V rated value       10 hp         • at 220/230 V rated value       20 hp         Short-circuit protection       Yes         design of short-circuit protection       Yes         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Fes	operational current of auxiliary contacts at DC-13 at 250 V	0.27 A
operating short-circuit current breaking capacity (Ics) <ul> <li>at 400 V rated value</li> <li>53 kA</li> </ul> <b>full-load current (FLA) for 3-phase AC motor</b> <ul> <li>at 480 V rated value</li> <li>32 A</li> <li>yielded mechanical performance [hp] for 3-phase AC motor</li> <li>at 200/208 V rated value</li> <li>7.5 hp</li> <li>at 220/230 V rated value</li> <li>10 hp</li> <li>at 480/480 V rated value</li> <li>20 hp</li> <li>Short-circuit protection</li> <li>product function short circuit protection</li> <li>design of short-circuit protection</li> <li>electromagnetic</li> <li>design of the fuse link         <ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>fuse gL/gG: 10 A</li> </ul> </li> <li>Installation/ mounting/ dimensions       <ul> <li>mounting position recommended</li> <li>vertical, on horizontal standard DIN rail</li> <li>fastening method</li> <li>screw and snap-on mounting</li> <li>height</li> <li>191 mm</li> <li>width</li> <li>90 mm</li> <li>depth</li> <li>165 mm</li> </ul> </li> <li>Connections/ Terminals         <ul> <li>product component removable terminal for main circuit</li> <li>Yes</li> </ul> </li> </ul>	Protective and monitoring functions	
• at 400 V rated value       53 kA         UL/CSA ratings	trip class	CLASS 10 and 20 adjustable
UL/CSA ratings         full-load current (FLA) for 3-phase AC motor         • at 480 V rated value       32 A         yielded mechanical performance [hp] for 3-phase AC motor         • at 200/208 V rated value       7.5 hp         • at 220/230 V rated value       10 hp         • at 480 V rated value       20 hp         Short-circuit protection       20 hp         Short-circuit protection       electromagnetic         design of short-circuit protection       electromagnetic         design of the fuse link       effort fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       900 mm         depth       165 mm         Connections/ Terminals       product component removable terminal for main circuit         Yes       Yes	operating short-circuit current breaking capacity (lcs)	
full-load current (FLA) for 3-phase AC motor       32 A         vielded mechanical performance [hp] for 3-phase AC motor       32 A         • at 200/208 V rated value       7.5 hp         • at 220/230 V rated value       10 hp         • at 4200/400 V rated value       20 hp         Short-circuit protection       20 hp         geroduct function short circuit protection       Yes         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	• at 400 V rated value	53 kA
• at 480 V rated value       32 A         yielded mechanical performance [hp] for 3-phase AC motor       7.5 hp         • at 200/208 V rated value       10 hp         • at 220/230 V rated value       20 hp         Short-circuit protection       20 hp         Short-circuit protection       Yes         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	UL/CSA ratings	
yielded mechanical performance [hp] for 3-phase AC motor       7.5 hp         • at 200/208 V rated value       10 hp         • at 220/230 V rated value       20 hp         Short-circuit protection       20 hp         Short-circuit protection       Yes         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes	full-load current (FLA) for 3-phase AC motor	
• at 200/208 V rated value7.5 hp• at 220/230 V rated value10 hp• at 460/480 V rated value20 hpShort-circuit protectionproduct function short circuit protectionYesdesign of short-circuit protectionelectromagneticdesign of the fuse link• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsanymounting position recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight191 mmwidth90 mmdepth165 mmConnections/ Terminalsproduct component removable terminal for main circuitYesproduct component removable terminal for auxiliary andYes	• at 480 V rated value	32 A
• at 200/208 V rated value7.5 hp• at 220/230 V rated value10 hp• at 460/480 V rated value20 hpShort-circuit protectionproduct function short circuit protectionYesdesign of short-circuit protectionelectromagneticdesign of the fuse link• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsanymounting position recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight191 mmwidth90 mmdepth165 mmConnections/ Terminalsproduct component removable terminal for main circuitYesproduct component removable terminal for auxiliary andYes	yielded mechanical performance [hp] for 3-phase AC motor	
• at 460/480 V rated value       20 hp         Short-circuit protection       product function short circuit protection         product function short circuit protection       electromagnetic         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes		7.5 hp
Short-circuit protection       Yes         product function short circuit protection       electromagnetic         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	• at 220/230 V rated value	10 hp
product function short circuit protection         Yes           design of short-circuit protection         electromagnetic           design of the fuse link         fuse gL/gG: 10 A           • for short-circuit protection of the auxiliary switch required         fuse gL/gG: 10 A           Installation/mounting/ dimensions         mounting position           mounting position recommended         vertical, on horizontal standard DIN rail           fastening method         screw and snap-on mounting           height         191 mm           width         90 mm           depth         165 mm           Connections/ Terminals         Yes	• at 460/480 V rated value	20 hp
design of short-circuit protection       electromagnetic         design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>fuse gL/gG: 10 A</li> </ul> Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	Short-circuit protection	
design of short-circuit protection       electromagnetic         design of the fuse link <ul> <li>for short-circuit protection of the auxiliary switch required</li> <li>fuse gL/gG: 10 A</li> </ul> Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	product function short circuit protection	Yes
design of the fuse link       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes		electromagnetic
Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes		
Installation/ mounting/ dimensions       any         mounting position       any         mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       Yes         product component removable terminal for main circuit       Yes	<ul> <li>for short-circuit protection of the auxiliary switch required</li> </ul>	fuse gL/gG: 10 A
mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       yes         product component removable terminal for main circuit       Yes         product component removable terminal for auxiliary and       Yes	Installation/ mounting/ dimensions	
mounting position recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       yes         product component removable terminal for main circuit       Yes         product component removable terminal for auxiliary and       Yes	mounting position	any
fastening method       screw and snap-on mounting         height       191 mm         width       90 mm         depth       165 mm         Connections/ Terminals       yes         product component removable terminal for main circuit       Yes         product component removable terminal for auxiliary and       Yes		vertical, on horizontal standard DIN rail
height     191 mm       width     90 mm       depth     165 mm       Connections/ Terminals     Product component removable terminal for main circuit       product component removable terminal for auxiliary and     Yes		screw and snap-on mounting
width     90 mm       depth     165 mm       Connections/Terminals     product component removable terminal for main circuit       yes     Yes		
Connections/ Terminals         product component removable terminal for main circuit       Yes         product component removable terminal for auxiliary and       Yes		90 mm
product component removable terminal for main circuit     Yes       product component removable terminal for auxiliary and     Yes	depth	165 mm
product component removable terminal for auxiliary and Yes		
product component removable terminal for auxiliary and Yes		Yes
		Yes

for auxiliary and control circuit     type of connectable conductor cross-sections for main contacts         isolid         ifinely stranded with core end processing         ifor auxiliary contacts             — solid             — solid             — finely stranded with core end processing             — finely stranded without core end processing             — with high demand rate according to SN 31920             — Solid             — with high demand rate according to SN 31920             — Solid             — solid stranded rate according to IEC 60529             — finely stranded rate according to IEC 60529             — finely stranded stranded to IEC 60529             — finely stranded stranded to IEC 60529             — finely stranded stranded to IEC 60529             — solid finely stranded to IEC 60529             — finely stranded stranded to IEC 60529             — solid stranded to IEC 60529	pring-loaded terminals pring-loaded terminals x (2.5 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> x (2.5 6 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
• for auxiliary and control circuit         space           type of connectable conductor cross-sections for main contacts         22           • solid         22           • finely stranded with core end processing         22           type of connectable conductor cross-sections         22           type of connectable conductor cross-sections         22           • for auxiliary contacts         22           - solid         22           - finely stranded with core end processing         22           - finely stranded with core end processing         22           - finely stranded without core end processing         25           of ro AWG cables for auxiliary contacts         25           Safety related data         25           proportion of dangerous failures         56           B10 value with high demand rate according to SN 31920         1           Electrical Safety         1           protection class IP on the front according to IEC 60529         IF           touch protection on the front according to IEC 60529         If           Communication/ Protocol         1	pring-loaded terminals x (2.5 6 mm <sup>2</sup> ), 1x 10 mm <sup>2</sup> x (2.5 6 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
type of connectable conductor cross-sections for main contacts       22         • solid       22         • finely stranded with core end processing       23         type of connectable conductor cross-sections       23         • for auxiliary contacts       23         - solid       23         - finely stranded with core end processing       23         - finely stranded with core end processing       23         - finely stranded without core end processing       23         - finely stranded without core end processing       24         off AWG cables for auxiliary contacts       25         Safety related data       25         proportion of dangerous failures       56         B10 value with high demand rate according to SN 31920       1         Electrical Safety       1         protection class IP on the front according to IEC 60529       IF         touch protection on the front according to IEC 60529       fir         Communication/ Protocol       1	x (2.5 6 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
finely stranded with core end processing     type of connectable conductor cross-sections         for auxiliary contacts             — solid             — solid             — finely stranded with core end processing             — finely stranded with core end processing             — finely stranded without core end processing             — with high demand rate according to SN 31920             — finely stranded without core end processing             — with high demand	x (2.5 6 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
type of connectable conductor cross-sections       i         • for auxiliary contacts       -         - solid       20         - finely stranded with core end processing       20         - finely stranded without core end processing       20         - finely stranded without core end processing       20         - finely stranded without core end processing       20         • for AWG cables for auxiliary contacts       20         safety related data	x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
for auxiliary contacts         — solid         22         — finely stranded with core end processing         — finely stranded without core end processing         — with high demand rate according to SN 31920         50         B10 value with high demand rate according to IEC 60529         IF         touch protection on the front according to IEC 60529         fir         Communication/ Protocol	x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
solid     22       finely stranded with core end processing     22       finely stranded without core end processing     22       finely stranded without core end processing     22       for AWG cables for auxiliary contacts     22       Safety related data     22       proportion of dangerous failures     23       with high demand rate according to SN 31920     50       B10 value with high demand rate according to SN 31920     1       Electrical Safety     1       protection class IP on the front according to IEC 60529     IF       touch protection on the front according to IEC 60529     fir       Communication/ Protocol     1	x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
<ul> <li>finely stranded with core end processing</li> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> <li>for auxiliary</li></ul>	x (0.25 1.5 mm <sup>2</sup> ) x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
<ul> <li>finely stranded without core end processing</li> <li>for AWG cables for auxiliary contacts</li> <li>for auxiliary con</li></ul>	x (0.25 1.5 mm <sup>2</sup> ) x (24 16) 0 % 500 000			
for AWG cables for auxiliary contacts     afety related data  proportion of dangerous failures     with high demand rate according to SN 31920     56 B10 value with high demand rate according to SN 31920     1 Electrical Safety protection class IP on the front according to IEC 60529     IF touch protection on the front according to IEC 60529     fir communication/ Protocol	x (24 16) 0 % 500 000			
bafety related data       proportion of dangerous failures       50         • with high demand rate according to SN 31920       50         B10 value with high demand rate according to SN 31920       1         Electrical Safety       1         protection class IP on the front according to IEC 60529       IF         touch protection on the front according to IEC 60529       fin         Communication/ Protocol       1	0 % 500 000			
proportion of dangerous failures       50         • with high demand rate according to SN 31920       50         B10 value with high demand rate according to SN 31920       1         Electrical Safety       1         protection class IP on the front according to IEC 60529       IF         touch protection on the front according to IEC 60529       fir         communication/ Protocol       1	500 000			
with high demand rate according to SN 31920     50     B10 value with high demand rate according to SN 31920     1     Electrical Safety     protection class IP on the front according to IEC 60529     IF     touch protection on the front according to IEC 60529     fir Communication/ Protocol	500 000			
B10 value with high demand rate according to SN 31920       1         Electrical Safety       1         protection class IP on the front according to IEC 60529       IF         touch protection on the front according to IEC 60529       fir         Communication/ Protocol       1	500 000			
Electrical Safety protection class IP on the front according to IEC 60529 IF touch protection on the front according to IEC 60529 fir Communication/ Protocol				
protection class IP on the front according to IEC 60529 IF touch protection on the front according to IEC 60529 fir Communication/ Protocol	P20			
touch protection on the front according to IEC 60529 fir Communication/ Protocol	220			
Communication/ Protocol				
	nger-safe			
product function buc communication				
product function bus communication Y	/es			
protocol is supported				
AS-Interface protocol     N	lo			
	Yes			
	Yes			
	COM2 (38,4 kBaud)			
	2.5 ms			
type of voltage supply via input/output link master N	lo			
data volume				
• of the address range of the inputs with cyclical transfer 2 total	2 byte			
• of the address range of the outputs with cyclical transfer 2 total	byte			
Electromagnetic compatibility				
conducted interference				
lir	4 kV main circuits, 2 kV auxiliary circuits, 2 kV IO-Link, 2 kV limit switches, 2 kV line hand-held device			
р	kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage rotection			
61000-4-5 pr	kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage rotection			
4-6	.15-80Mhz at 10V			
5	0 3000 MHz at 10V/m			
conducted HF interference emissions according to 19	kV 50 kHz 30 MHz Class A			
CISPR11 field-bound HF interference emission according to CISPR11 30	0 1000 MHz Class A			
Supply voltage				
	/es			
Display				
number of LEDs 5				
display version as status display of the input/output link device gr	reen/red dual LED			
Approvals Certificates				
General Product Approval				

EMV	Functional Saftey	Test Certificates	other	Dangerous goods	Environment





Type Test Certificates/Test Report

**Confirmation** 

Transport Information

Environmental Con**firmations** 

## Further information

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RA6500-2EB42

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6500-2EB42

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA65

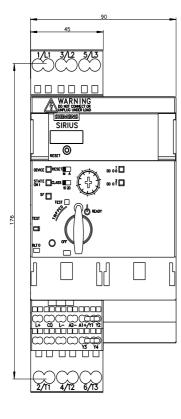
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6500-2EB42&lang=en

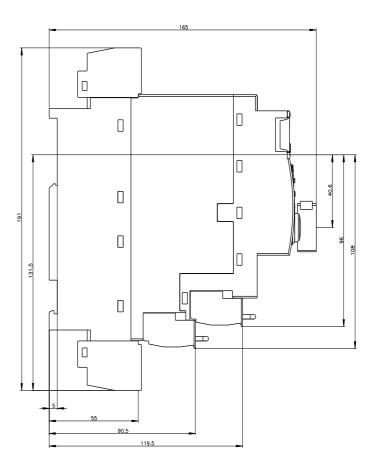
Characteristic: Tripping characteristics, I2t, Let-through current

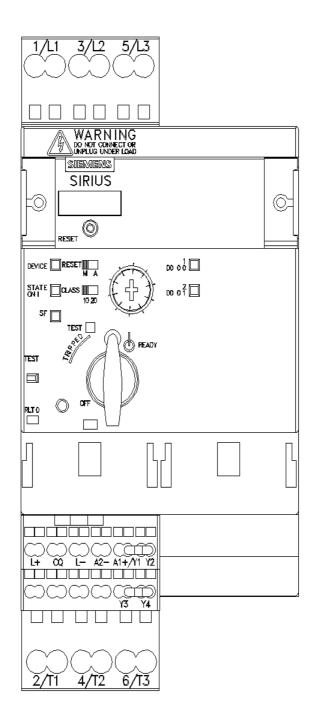
https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-2EB42/char

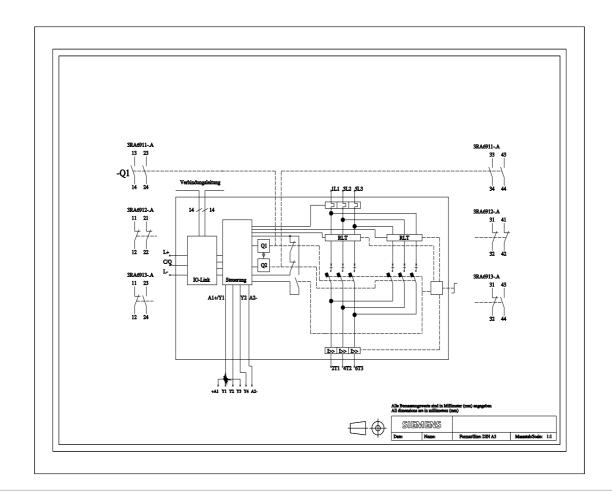
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6500-2EB42&objecttype=14&gridview=view1









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3/11/2024 🖸