## SIEMENS

## Data sheet

## 3RA6500-1AB43



SIRIUS Compact load feeder Reversing starter for IO-Link 690 V 24 V DC 0.1...0.4 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: screw terminal

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>	0.01 W			
<ul> <li>at AC in hot operating state per pole</li> </ul>	0.01 W			
<ul> <li>without load current share typical</li> </ul>	2.9 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			
Ambient conditions				
installation altitude at height above sea level maximum	2 000 m			
ambient temperature				
<ul> <li>during operation</li> </ul>	-20 +60 °C			
<ul> <li>during storage</li> </ul>	-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- dependent overload release	0.1 0.4 A			
formula for making capacity limit current	120 x le			
formula for limit current breaking capacity	100 x le			

yield mechanical performance for 4pole AC motor i e1 600 V rates value i 12 80V i e1 6100 V rates value i e1 600 V		
• • 160 V rated value0.12 kW• • • 160 V rated value0.84 KW• • 0 V rated value0.44 KW• • 1 A C at 00 V rated value0.44 KW• • 1 A C at 00 V rated value0.34 KW• • • 1 A C at 00 V rated value0.35 A• • - at 000 V rated value0.36 A• • - at 000 V rated value0.36 A• • - at 000 V rated value0.36 A• • - at 000 V rated value0.09 kW• • - at 000 V rated value0.00 W• • - at 000 V rated value0.00 W• • - at 000 V rated value0.00 W• •	yielded mechanical performance for 4-pole AC motor	
• # 180 V rised value maxmum980 Voperation current•• # AC at 400 V rised value0.4 A• # AC at 400 V rised value0.4 A• # AC at 400 V rised value0.3 A at 400 V rised value0.3 A at 500 V rised value0.3 A at 500 V rised value0.3 A at 400 V rised value0.0 N/V• # AC - 3 at 00 V rised value0.00 N/V• # AC - 3 at 00 V rised value0.00 N/V• # AC - 3 at 00 V rised value0.00 N/V• # AC - 3 at 00 V rised value1.30 N/V• # AC - 3 at 00 V rised value1.30 N/V• # AC - 3 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V• # AC - 4 according to IEC 00047-8.2 maximum2.00 N/V<	• at 400 V rated value	0.09 kW
operational current         600 V           operational current         0.4 A           • 17.62 vt 400 V rated value         0.4 A           • • 17.62 vt 400 V rated value         0.4 A           • • 17.62 vt 400 V rated value         0.3 A           - • • • 400 V rated value         0.3 A           - • • • • • • • • • • • • • • • • • • •	<ul> <li>at 500 V rated value</li> </ul>	0.12 kW
operational current         0.4 A           • et AC at 400 V rated value         0.4 A           • et AC-3 at 400 V rated value         0.3 A           • at 400 V rated value         0.3 A           • at 600 V rated value         0.09 kW           • at 600 V rated value         00 W           - at 600 V rated value         100 W           - at 600 V rated value         20 W           control supply voltage 1         1           • at IC-7 at 6 value         24 V           • at IC-7 rated value         0	at 690 V rated value	0.18 kW
n A A and A an	operating voltage at AC-3 rated value maximum	690 V
• at AC-3 at 400 V rated value0.4 A• at 400 V rated value0.34 A- at 600 V rated value0.35 A• at 600 V rated value0.35 A• at 600 V rated value0.35 A• at 600 V rated value0.00 kW• at 600 V rated value0.00 kW• at 600 V rated value100 W- at 600 V rated value20 W- at 600 V rated value20 W- at 10 C maximum20 W- at 10 C maximum0- at 10 C maximum0- at 10 C maximum20 W- at 10 C maximum0- at 10 C maximum<	operational current	
• alt AC-430.3 A- at 400 V rated value0.35 A0.95 A0.35 A0.95 A0.95 A0.97 ALTD (Stated Value)0.95 A0.98 WU0.99 WU• alt AC-3 at 400 V rated value0.99 WU• alt AC-3 at 400 V rated value100 WU- alt 90 V rated value120 W- alt 90 V rated value180 W• alt AC-43 according to IEC 60947-6-2 maximum3600 r/h• alt AC-41 according to IEC 60947-6-2 maximum250 V/h• alt AC-41 according to IEC 60947-6-2 maximum24 V• alt AC-41 according to according to IEC 60947-6-2 maximum24 V• alt OC0• alt AC-41 according to according to IEC 60947-6-2 maximum0• alt AC-41 according to AC-12 maximum3AA• alt AC-14 ac	<ul> <li>at AC at 400 V rated value</li> </ul>	0.4 A
	<ul> <li>at AC-3 at 400 V rated value</li> </ul>	0.4 A
- al 600 V rated value0.32 A 0.55 Aoperating power	• at AC-43	
− at 860 V rated value     0.35 Å       operating power     00 WW       • at AC-43	— at 400 V rated value	0.3 A
operating power         0.09 kW           • at AC-3 at 400 V rated value         0.09 kW           • at AC-3 at 400 V rated value         00 W           • - at 600 V rated value         120 W           at 600 V rated value         120 W           at 600 V rated value         120 W           at 600 V rated value         100 W           at 600 V rated value         100 W           at 600 V rated value         100 W           at 600 V rated value         20 W           at 600 V rated value         20 W           at 600 V rated value         20 W           at C rated value         24 V           at C C rated value         24 V	— at 500 V rated value	0.32 A
at AC3 at AO V rated value0.09 kW• at AC4390 W• at 600 V rated value100 W• at AC43 according to IEC 60947-6.2 maximum3600 1/h• at AC43 according to IEC 60947-6.2 maximum20 1/h• at AC43 according to IEC 60947-7.2 maximum20 1/h• at DC frated value24 V• at DC rated value24 W• at DC rated value24 W• at DC maximum2.9 WAutilizy cortacts0number of NC contacts for auxiliary contacts0number of NC contacts for auxiliary contacts0reless for signaling contact0operational current of auxiliary contacts at AC-12 maximum10 Aoperational current of auxiliary contacts at AC-12 maximum10 A <td></td> <td>0.35 A</td>		0.35 A
• at AC-4390 W at 400 V trated value90 W at 690 V trated value120 W at 690 V trated value180 W	operating power	
	<ul> <li>at AC-3 at 400 V rated value</li> </ul>	0.09 kW
	• at AC-43	
	— at 400 V rated value	90 W
no-load switching frequency     3 600 1/h       operating frequency     i a K0-41 according to IEC 60947-6-2 maximum       i at AC-41 according to IEC 60947-6-2 maximum     260 1/h       Control circuit/ Control     type of voltage       i at DC rated value     24 V       i at DC rated value     20 W       Auxiliary circuit     0       number of NC contacts for auxiliary contacts     0       number of NC contacts for auxiliary contacts     0       number of NC contacts of the current-dependent overload     0       release for signaling 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-12 maximum     10 A       operational current of auxiliary contacts at AC-12 maximum     10 A       operational current of	— at 500 V rated value	120 W
operating frequency         750 1/h           • at AC-41 according to IEC 60947-8-2 maximum         250 1/h           • at AC-41 according to IEC 60947-8-2 maximum         250 1/h           Control supply voltage 1		
• at AC-41 according to IEC 60947-6-2 maximum     750 1/h       • at AC-43 according to IEC 60947-6-2 maximum     Z50 1/h       • at DC     Control supply voltage 1       • at DC Trade value     24 V       • at DC     24 24 V       • at DC maximum     2.9 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 AC-12 maximum     0.27 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     0       of at 500 V rated value     3 kA       ot 53 kA     3 kA       ot 400 V     53 kA       ot 400 V rated value     0.4 A       ot		3 600 1/h
• at AC-43 according to IEC 60947-6-2 maximum     250 1/h       Control circuit/ Control     DC       • at DC roted value     24 V       • at DC rated value     24 V       • at DC maximum     29 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 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 short-circuit current breaking capacity (Ics)     3 kA       • at 400 V vated value     3 kA       • at 400 V vated value     3 kA       • at 400 V vated		
Control circuit/ Control         type of voltage       DC         control supply voltage 1       -         • at DC Tated value       24 V         • at DC       2424 V         • at DC       28.W         Auxiliary circuit       0         number of NC contacts for auxiliary contacts       0         number of NC contacts of instananeous short-tircuit trip unit for signaling contact       0         signaling contact       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       25 k/A         et 300 V rated value       3 kA         • at 600 V rated value       3 kA         • at 600 V rated value       0.4 A         • at 600 V rated val	C C	
type of voltage         DC           control supply voltage 1         24 V           • at DC rated value         24 V           • at DC maximum         24 V           • at DC maximum         2.9 W           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           operational current of auxiliary contacts at AC-12 maximum         10 A           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 AC-13 at 250 V         53 kA           • at 400 V         53 kA           • at 400 V rated value         3 kA           • at 400 V rated value         3 kA           • at 600 V rated value         0.4 A           istor V rated value         0.4 A	-	250 1/h
A       Control supply voltage 1         • at DC rated value       24 W         • at DC       24 24 V         holding power       2.9 W         • at DC contacts for auxiliary contacts       0         number of NC contacts for auxiliary contacts       0         number of NO contacts of instantaneous short-circuit trip unit for signaing contact.       0         number of CO contacts of the current-dependent overload release for signaing contact.       0         operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at AC-13 at 250 V       0.27 A         Protective and monitoring functions       Trip class       CLASS 10 and 20 adjustable         operational current of auxiliary contacts at DC-13 at 250 V       0.37 A         Protective and monitoring functions       53 kA         trip class       CLASS 10 and 20 adjustable         operational current breaking capacity (Ics)       • at 600 V rated value         • at 600 V rated value       3 kA         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A         • at 800 V rated value       0.4 A         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A <td< td=""><td>Control circuit/ Control</td><td></td></td<>	Control circuit/ Control	
• at DC rated value     24 V       • at DC     24 24 V       holding power     2.9 W       • at DC maximum     2.9 W       Auxiliary circuit     0       number of NC contacts for auxiliary contacts     0       number of NO contacts for auxiliary contacts     0       number of NO contacts of instantaneous short-circuit frip unit for signaling contact     0       number of CO contacts of the current-dependent overload     0       release for signaling 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-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 full for advalue     3 kA <td></td> <td>DC</td>		DC
• at DC       24 24 V         holding power       2.9 W         Auxiliary circuit       0         number of NC contacts for auxiliary contacts       0         number of NC contacts for auxiliary contacts       0         number of NC contacts of nauxiliary contacts       0         number of NC contacts of nauxiliary contacts       0         number of NC contacts of the current-dependent overload       0         release for signaling contact       0.27 A         Protective and monitoring functions       0.27 A         Protective and monitoring functions       0.27 A         Protective and monitoring functions       0.27 A         VicSA ratings       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         • at 500 V rated value       3 kA         U/CSA ratings       U/CSA ratings         full-load current (FLA) for 3-phase AC motor       0.4 A         • at 600 V rated value	control supply voltage 1	
holding power       2.9 W         Auxiliary circuit       0         number of NC 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         number of CO contacts of the current-dependent overload       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 sourcent of auxiliary contacts at AC-12 maximum       0         operational current of auxiliary contacts at AC-12 maximum       10 A         operating short-circuit current breaking capacity (Ics)       63 kA         • at 400 V       53 kA         • at 400 V       54 kA         • at 600 V rated value       3 kA         UL/CSA ratings       0.4 A         full-load current (FLA) for 3-phase AC motor       • at 480 V rated value         • at 680 V rated value       0.4 A         Short-circuit protection       feast endogenetic         design of short-circuit protection       feast endogenetic         design of short-circuit protection       fuse gL/GS	<ul> <li>at DC rated value</li> </ul>	24 V
• at DC maximum       2.9 W         Auxiliary critorit       0         number of NC contacts for auxiliary contacts       0         number of NO contacts for instantaneous short-circuit trip unit for signaling contact.       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       10 A         operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       10 A         operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       10 A         operating short-circuit current breaking capacity (Ics)       6 A A         • at 600 V       53 kA         • at 600 V rated value       3 kA         • at 600 V rated value       0.4 A         Short-circuit protection       Yes         product function short circuit protection       Yes         e at 600 V rated value       0.4 A         Short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installator/ mounting dimensions       any         mounting position       electromagnetic         design of the fuse link	• at DC	24 24 V
Auxiliary circuit         Image of NC contacts for auxiliary contacts         0           number of NC contacts for auxiliary contacts         0         0           number of NC contacts for auxiliary contacts         0         0           signaling contact         0         0           rumber of NC contacts of the current-dependent overload         0         0           release for signaling contact         0         0           operational current of auxiliary contacts at AC-12 maximum         10 A         0           operational current of auxiliary contacts at DC-13 at 250 V         0.27 A         Protective and monitoring functions           trip class         CLASS 10 and 20 adjustable         0         0           operating short-circuit current breaking capacity (Ics)         53 kA         4           • at 600 V rated value         3 kA         10/LCSA ratings           full-load current (FLA) for 3-phase AC motor         0.4 A         0.4 A           • at 600 V rated value         0.4 A         0.4 A           • at 600 V rated value         0.4 A         0.4 A           • at 600 V rated value         0.4 A         0.4 A           • at 600 V rated value         0.4 A         0.4 A           • at 600 V rated value         0.4 A         0.4 A	holding power	
number of NC contacts for auxiliary contacts         0           number of NO contacts for auxiliary contacts         0           number of NO 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         10 A           operational current of auxiliary contacts at DC-13 at 250 V         0.27 A           Protective and monitoring functions         10 A           operational current of auxiliary contacts at DC-13 at 250 V         0.27 A           Protective and monitoring functions         53 kA           operating short-circuit current breaking capacity (Ics)         63 kA           • at 400 V         53 kA           • at 500 V rated value         3 kA           UL/CSA ratings         0.4 A           ot 400 V rated value         0.4 A           • at 480 V rated value         0.4 A           ot 50 V rated value         0.4 A           short-circuit protection         Yes           design of short-circuit protection         Yes           design of the fuse link         electromagnetic           dising of the fuse link         fuse gL/gG: 10 A           Installation/ mounting dimensions         any		2.9 W
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 CO contacts at 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)         3 kA           • at 400 V         53 kA           • at 690 V rated value         3 kA           • at 690 V rated value         0.4 A           • at 480 V rated value         0.4 A           • at 690 V rated value         0.4 A           • at 600 V rated value         0.4 A           short-circuit protection         Yes           design of short-circuit protection         Vers           design of short-circuit protection         electromagnetic           design of short-circuit protection of the auxiliary switch required         tuse gL/gG: 10 A           Installation	Auxiliary circuit	
number of NO 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 DC-13 at 250 V       0.27 A         Protective and monitoring functions       trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         • at 600 V rated value       3 kA         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A         • at 400 V at a value       0.4 A         • at 600 V rated value       0.4 A         • for short-circuit protection       fuse gL/gG: 10		
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 DC-13 at 250 V     0.27 A       Protective and monitoring functions     0       trip class     CLASS 10 and 20 adjustable       operational value     53 kA       • at 400 V     53 kA       • at 690 V rated value     3 kA       • at 690 V rated value     0.4 A       • at 400 V rated value     0.4 A       • at 600 V rated value     0.4 A       • of on Short-circuit protection     Yes       design of short-circuit protection     Yes       design of short-circuit protection     Yes       design of short-circuit protection     Yes       mounting position     any       • recommended     vertical, on horizontal standard DIN rail       fastellation/mounting/ dimensions     any       • recommended     screw and snap-on mounting       height     90 mm	number of NO contacts for auxiliary contacts	0
release for signaling contact       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       0.27 A         trip class       CLASS 10 and 20 adjustable         operational current breaking capacity (Ics)       -         • at 400 V       53 kA         • at 500 V rated value       3 kA         • at 690 V rated value       3 kA         • at 690 V rated value       0.4 A         Short-circuit protection       -         • at 480 V rated value       0.4 A         Short-circuit protection       -         • at 800 V rated value       0.4 A         Short-circuit protection       -         • at 600 V rated value       0.4 A         Short-circuit protection       -         • at 800 V rated value       0.4 A         Short-circuit protection       -         • at 600 V rated value       0.4 A         Short-circuit protection       -         product function short circuit protection       -         • for short-circuit protection of the auxiliary switch required       -         • for short-circuit protection of the auxiliary switch required	signaling contact	
operational current of auxiliary contacts at DC-13 at 250 V       0.27 A         Protective and monitoring functions       E         trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       • at 400 V         • at 400 V       53 kA         • at 690 V rated value       3 kA         • at 690 V rated value       0.4 A         • at 600 V rated value       0.4 A         Short-circuit protection       electromagnetic         design of short-circuit protection       electromagnetic         design of short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         deepth       165 mm	release for signaling contact	
Protective and monitoring functions         trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       stat 400 V         • at 400 V       53 kA         • at 500 V rated value       3 kA         • at 690 V rated value       3 kA         • at 690 V rated value       3 kA         • at 600 V rated value       0.4 A         • at 480 V rated value       0.4 A         • at 600 V rated value       0.4 A         Short-circuit protection       Yes         design of short-circuit protection       Yes         • for short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		
trip class       CLASS 10 and 20 adjustable         operating short-circuit current breaking capacity (Ics)       53 kA         • at 400 V       53 kA         • at 500 V rated value       3 kA         • at 690 V rated value       3 kA         UL/CSA ratings       53 kA         full-load current (FLA) for 3-phase AC motor       0.4 A         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A         • at 600 V rated value       0.4 A         Short-circuit protection       Yes         design of short-circuit protection       electromagnetic         design of the fuse link       electromagnetic         if or short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         if ecommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		0.27 A
operating short-circuit current breaking capacity (Ics)53 kA• at 400 V53 kA• at 500 V rated value3 kA• at 690 V rated value3 kA• at 690 V rated value3 kAUL/CSA ratings0.4 Afull-load current (FLA) for 3-phase AC motor0.4 A• at 480 V rated value0.4 A• at 600 V rated value0.4 AShort-circuit protectionYesproduct function short circuit protectionYesdesign of short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsany• eccommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight170 mmwidth90 mmdespth165 mm		
• at 400 V53 kA• at 500 V rated value3 kA• at 690 V rated value3 kA• at 690 V rated value3 kAUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value0.4 A• at 600 V rated value0.4 AShort-circuit protectionYesproduct function short circuit protectionYesdesign of short-circuit protectionelectromagneticdesign of the fuse linkfuse gL/gG: 10 A• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsany• recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight170 mmwidth90 mmdepth165 mm	-	CLASS 10 and 20 adjustable
• at 500 V rated value3 kA• at 690 V rated value3 kAUL/CSA ratingsfull-load current (FLA) for 3-phase AC motor• at 480 V rated value0.4 A• at 600 V rated value0.4 AShort-circuit protectionYesdesign of short-circuit protectionYesdesign of short-circuit protectionYesdesign of short-circuit protectionYesdesign of the fuse link• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsany• recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight170 mmwidth90 mmdespth165 mm		
• at 690 V rated value       3 kA         UL/CSA ratings         full-load current (FLA) for 3-phase AC motor       0.4 A         • at 480 V rated value       0.4 A         • at 600 V rated value       0.4 A         short-circuit protection       Yes         design of short-circuit protection       electromagnetic         design of the fuse link       electromagnetic         of or short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         orecommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		
UL/CSA ratings         full-load current (FLA) for 3-phase AC motor         • at 480 V rated value       0.4 A         • at 600 V rated value       0.4 A         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         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		
full-load current (FLA) for 3-phase AC motor       0.4 A         • at 480 V rated value       0.4 A         • at 600 V rated value       0.4 A         Short-circuit protection       ves         product function short circuit protection       Yes         design of short-circuit protection       electromagnetic         design of the fuse link       • for short-circuit protection of the auxiliary switch required         fustallation/ mounting/ dimensions       mounting position         notating position       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		3 KA
• at 480 V rated value0.4 A• at 600 V rated value0.4 AShort-circuit protectionYesproduct function short circuit protectionelectromagneticdesign of short-circuit protectionelectromagneticdesign of the fuse link • for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsanymounting position • recommendedanyvertical, on horizontal standard DIN railscrew and snap-on mountingheight170 mmwidth90 mmdepth165 mm		
• at 600 V rated value0.4 AShort-circuit protectionYesproduct function short circuit protectionelectromagneticdesign of short-circuit protectionelectromagneticdesign of the fuse linkuse gL/gG: 10 A• for short-circuit protection of the auxiliary switch requiredfuse gL/gG: 10 AInstallation/ mounting/ dimensionsanymounting positionany• recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight170 mmwidth90 mmdepth165 mm		
Short-circuit protection       Yes         design of short-circuit protection       electromagnetic         design of the fuse link       electromagnetic         • for short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		
product 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/ dimensionsany• recommendedvertical, on horizontal standard DIN railfastening methodscrew and snap-on mountingheight170 mmwidth90 mmdepth165 mm		0.4 A
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       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm		
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     any       • recommended     vertical, on horizontal standard DIN rail       fastening method     screw and snap-on mounting       height     170 mm       width     90 mm       depth     165 mm		
• for short-circuit protection of the auxiliary switch required       fuse gL/gG: 10 A         Installation/ mounting/ dimensions       any         • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm	· · ·	electromagnetic
Installation/ mounting/ dimensions         mounting position       any            • recommended       vertical, on horizontal standard DIN rail         fastening method       screw and snap-on mounting         height       170 mm         width       90 mm         depth       165 mm	-	
mounting position     any       • recommended     vertical, on horizontal standard DIN rail       fastening method     screw and snap-on mounting       height     170 mm       width     90 mm       depth     165 mm		tuse gL/gG: 10 A
• recommended     vertical, on horizontal standard DIN rail       fastening method     screw and snap-on mounting       height     170 mm       width     90 mm       depth     165 mm		
fastening method     screw and snap-on mounting       height     170 mm       width     90 mm       depth     165 mm		
height         170 mm           width         90 mm           depth         165 mm		
width         90 mm           depth         165 mm		
depth 165 mm	•	
Connections/ Terminals	•	165 mm
	Connections/ Terminals	

product component removable terminal for main circuit	Yes			
product component removable terminal for auxiliary and	Yes			
control circuit				
type of electrical connection				
• for main current circuit	plug-in without terminals			
for auxiliary and control circuit	screw-type terminals			
type of connectable conductor cross-sections for main contacts				
• solid	2x (1.5 6 mm²), 1x 10 mm²			
<ul> <li>finely stranded with core end processing</li> </ul>	2x (1.5 6 mm²)			
type of connectable conductor cross-sections				
<ul> <li>for auxiliary contacts</li> </ul>				
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)			
<ul> <li>finely stranded with core end processing</li> </ul>	0.5 2.5 mm², 2x (0.5 1.5 mm²)			
<ul> <li>for AWG cables for auxiliary contacts</li> </ul>	2x (20 14)			
afety related data				
B10 value with high demand rate according to SN 31920	1 500 000			
proportion of dangerous failures				
<ul> <li>with high demand rate according to SN 31920</li> </ul>	50 %			
protection class IP on the front according to IEC 60529	IP20			
touch protection on the front according to IEC 60529	finger-safe			
ommunication/ Protocol				
product function bus communication	Yes			
protocol is supported				
AS-Interface protocol	No			
IO-Link protocol	Yes			
product function control circuit interface with IO link	Yes			
IO-Link transfer rate	COM2 (38,4 kBaud)			
point-to-point cycle time between master and IO-Link	2.5 ms			
device minimum	2.0 110			
type of voltage supply via input/output link master	No			
data volume				
<ul> <li>of the address range of the inputs with cyclical transfer total</li> </ul>	2 byte			
<ul> <li>of the address range of the outputs with cyclical transfer total</li> </ul>	2 byte			
lectromagnetic compatibility				
conducted interference				
• due to burst according to IEC 61000-4-4	4 kV main circuits, 2 kV auxiliary circuits, 2 kV IO-Link, 2 kV limit switches, 2 k line hand-held device			
• due to conductor-earth surge according to IEC 61000-4-5	4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection			
• due to conductor-conductor surge according to IEC 61000-4-5	2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection			
<ul> <li>due to high-frequency radiation according to IEC 61000- 4-6</li> </ul>	0.15-80Mhz at 10V			
field-based interference according to IEC 61000-4-3	80 3000 MHz at 10V/m			
electrostatic discharge according to IEC 61000-4-2	8 kV			
conducted HF interference emissions according to CISPR11	150 kHz 30 MHz Class A			
field-bound HF interference emission according to CISPR11	30 1000 MHz Class A			
upply voltage				
Supply voltage required Auxiliary voltage isplay	Yes			
number of LEDs	5			
display version as status display of the input/output link device ertificates/ approvals	green/red dual LED			
General Product Approval	EMC Functional Safety/Safety of M chinery			

Subject to change without notice © Copyright Siemens

Declaration of Confo	rmity	Test Certificates	Marine / Shipping		
CE EG-Konf.	UK CA	<u>Type Test Certific-</u> ates/Test Report	ABS	Lloyds Register us	PRS
Marine / Shipping	other	Dangerous Good			
<b>BINA</b>	<u>Confirmation</u>	Transport Information			

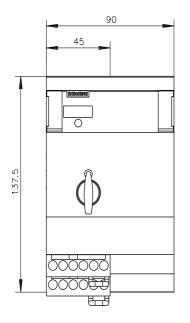
## Further information

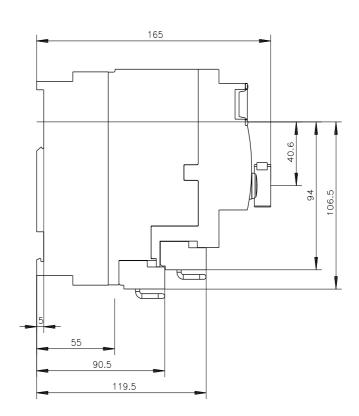
Siemens has decided to exit the Russian market (see here). https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business Siemens is working on the renewal of the current EAC certificates. Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus). 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=3RA6500-1AB43 Cax online generator http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6500-1AB43 Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-1AB4 Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3RA6500-1AB43&lang=en

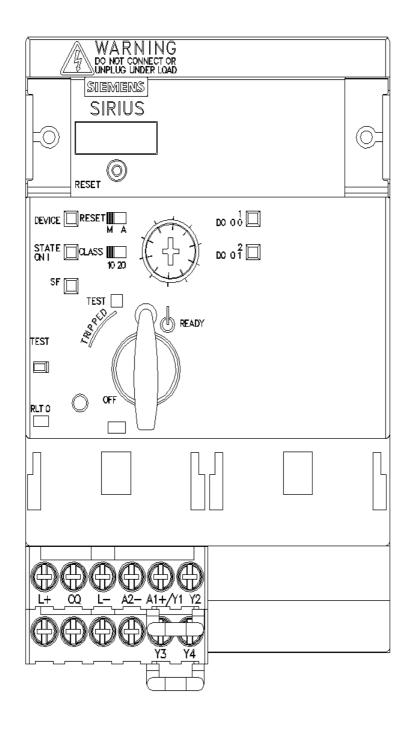
Characteristic: Tripping characteristics, I<sup>2</sup>t, Let-through current

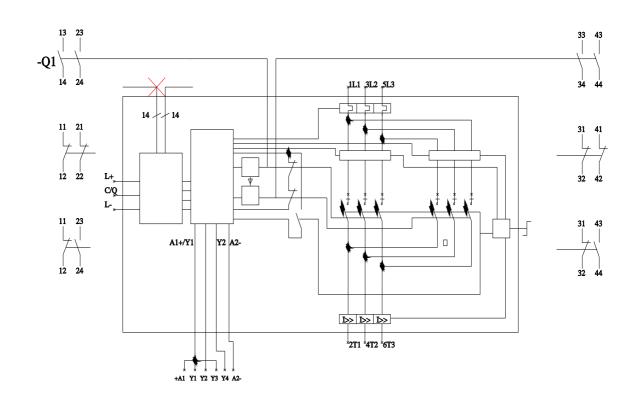
https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-1AB43/char

Further characteristics (e.g. electrical endurance, switching frequency) http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6500-1AB43&objecttype=14&gridview=view1









last modified:

11/21/2022 🖸