SIEMENS

Data sheet 3RA6500-2AB42



SIRIUS Compact load feeder Reversing starter for IO-Link 690 V 24 V DC 0.1...0.4 A IP20 Connection main circuit: Spring-type terminal Connection control circuit: Spring-type 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			
 at AC in hot operating state 	0.01 W		
 at AC in hot operating state per pole 	0.01 W		
without load current share typical	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		
mechanical service life (operating cycles)			
of the main contacts typical	10 000 000		
 of auxiliary contacts typical 	10 000 000		
of the signaling contacts typical	10 000 000		
electrical endurance (operating cycles) of auxiliary contacts			
• at DC-13 at 6 A at 24 V typical	30 000		
● at AC-15 at 6 A at 230 V typical	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	Blei - 7439-92-1 Bleimonoxid (Bleioxid) - 1317-36-8 Bleititanzirkonoxid - 12626-81-2 2,2',6,6'-Tetrabrom-4,4'-isopropylidendi - 79-94-7		
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- 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
yielded mechanical performance for 4-pole AC motor	100 X IC
at 400 V rated value	0.09 kW
at 500 V rated value	0.12 kW
at 690 V rated value	0.18 kW
operating voltage at AC-3 rated value maximum	690 V
operational current	090 V
at AC at 400 V rated value	0.4 A
at AC-3 at 400 V rated value at AC-3 at 400 V rated value	0.4 A
• at AC-3 at 400 V rated value • at AC-43	0.4 A
	0.2.4
— at 400 V rated value	0.3 A
— at 500 V rated value	0.32 A
— at 690 V rated value	0.35 A
operating power	0.00 114/
at AC-3 at 400 V rated value	0.09 kW
• at AC-43	2011
— at 400 V rated value	90 W
— at 500 V rated value	120 W
— at 690 V rated value	180 W
no-load switching frequency	3 600 1/h
operating frequency	
at AC-41 according to IEC 60947-6-2 maximum	750 1/h
at AC-43 according to IEC 60947-6-2 maximum	250 1/h
Control circuit/ Control	
type of voltage	DC
control supply voltage 1	
at DC rated value	24 V
• at DC	24 24 V
holding power	
at DC maximum	2.9 W
Auxiliary circuit	
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 NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact	0
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum	0 10 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	0
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum	0 10 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class	0 10 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions	0 10 A 0.27 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class	0 10 A 0.27 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics)	0 10 A 0.27 A CLASS 10 and 20 adjustable
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 7 kA 9.4 A 9.4 A 9.4 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 7 kA 9.4 A 9.4 A 9.4 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Ves electromagnetic
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Ves electromagnetic
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Yes electromagnetic fuse gL/gG: 10 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position • recommended	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Yes electromagnetic fuse gL/gG: 10 A any vertical, on horizontal standard DIN rail
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Yes electromagnetic fuse gL/gG: 10 A
number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload release for signaling contact operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V Protective and monitoring functions trip class operating short-circuit current breaking capacity (Ics) • at 400 V • at 500 V rated value • at 690 V rated value UL/CSA ratings full-load current (FLA) for 3-phase AC motor • at 480 V rated value • at 600 V rated value Short-circuit protection product function short circuit protection design of short-circuit protection design of the fuse link • for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions mounting position • recommended fastening method	0 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA 0.4 A 0.4 A Yes electromagnetic fuse gL/gG: 10 A any vertical, on horizontal standard DIN rail screw and snap-on mounting

	depth	165 mm			
product component removable terminal for auxiliary and control circuit Type of electrical connection For auxiliary and control circuit Fige of connectable conductor cross-sections for main contacts Finely stranded with core end processing Finely stranded with core end processing Finely stranded with core end processing For auxiliary contacts For auxiliary					
product component removable terminal for auxiliary and control circuit Type of electrical connection For auxiliary and control circuit Fige of connectable conductor cross-sections for main contacts Finely stranded with core end processing Finely stranded with core end processing Finely stranded with core end processing For auxiliary contacts For auxiliary	product component removable terminal for main circuit	Yes			
For main current circuit For an an current circuit For auxiliary contacts For auxil		Yes			
For auxiliary and control circuit spring-loaded ferminals	type of electrical connection				
type of connectable conductor cross-sections for main contacts solid inflexy stranded with core end processing inflexy stranded with core inflexy stranded with core inflexy stranded with core infl	for main current circuit	spring-loaded terminals			
* solid * finely stranded with core end processing * finely stranded without core end processing * finely stranded without core end processing * for availity contacts - solid - finely stranded with core end processing * for availity contacts - solid - finely stranded with core end processing * for availity contacts - solid - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core end processing * for availity contacts - finely stranded with core ends of the cutputs with cyclical transfer total - finely stranded strange according to IEC 61000-4-5 • due to industrial reference - finely stranded strange according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according to IEC 61000-4-5 • due to industrial reference according	for auxiliary and control circuit	spring-loaded terminals			
• finely stranded with core end processing Vye of connectable conductor ror ross-elections • for auxiliary contacts — solid — finely stranded without one end processing — solid — finely stranded with core end processing — finely stranded with core end processing — finely stranded without one end processing — finely stranded with one end processing — finely stranded with one end processing — finely stranded without one end processing — finely stranded with one end processing — finely stranded without one end processing — finely stranded with one end processing — finely stranded without one end processing — finely stranded with one end processing — finely stranded without one end processing — finely stranded with one end processing — finely stranded without one end procesi	type of connectable conductor cross-sections for main contacts				
Prince stranded without core end processing 2x (1.5 6 mm²)	• solid	2x (1.5 6 mm²), 1x 10 mm²			
type of connectable conductor cross-sections • for auxiliary contacts — select — select with core end processing — select with light demand rate according to ISN 31920 • for AWG cables for auxiliary contacts 2x (0.25 1.5 mm²) • for AWG cables for auxiliary contacts 2x (24 16) Safety related data proportion of dangerous failures • with high demand rate according to ISN 31920 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 protection is supported • ASInterface protocol • (O)-Link	 finely stranded with core end processing 	2x (1.5 6 mm²)			
• for auxillary contacts — solid — finely stranded with core end processing — finely stranded without core end processing — finely stranded without core end processing — for AVRC cables for auxillary contacts Safoty related data proportion of dangerous failures — with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit o value with high demand rate according to SN 31920 Bit ovalue with high demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light demand rate according to SN 31920 Bit ovalue with light d		2x (1.5 6 mm²)			
finely stranded with core end processing finely stranded without core end processing	•				
In the properties of the author of the auth					
Safety related data Proportion of dangerous failures • with high demand rate according to SN 31920 B10 value with high demand rate according to IEC 60529 protection class IP on the front according to IEC 60529 protection class IP on the front according to IEC 60529 product function bus communication Protocol Product function bus communication Protocol Product function bus communication Protocol Product function on the front according to IEC 60529 Product function on control circuit interface with IO link O-Link transfer rate O-Link protocol Product function control circuit interface with IO link O-Link transfer rate O-Link gespel with the protocol For voltage supply via input/output link master data volume of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference o- due to conductor-earth surge according to IEC 61000-4-5 due to conductor-earth surge according to IEC 61000-4-5 o- due to conductor-conductor surge according to IEC 61000-4-5 o- due to conductor-conductor surge according to IEC 61000-4-5 field-based interference according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-2 electrostatic discharge according to IEC 61000-4-3 Biolitical productor demand rate according to IEC					
Safoty related data proportion of dangerous failures • with high demand rate according to SN 31920 B10 value with high demand rate according to SN 31920 protection class IP on the front according to IEC 60529 IP20 communication/ Protocol product function bus communication protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Ves IO-Link transfer rate COMZ (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master total • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • due to burst according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conducto	•				
proportion of dangerous failures • with high demand rate according to SN 31920 BT0 value with high demand rate according to SN 31920 protection class IP on the front according to IEC 60529 flouch protection on the front according to IEC 60529 flouch protection on the front according to IEC 60529 product function bus communication protocol is supported • AS-interface protocol • IO-Link protocol • IO-Link protocol • IO-Link protocol • OND (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master data volume • of the address range of the inputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-centrh surge according to IEC 61000-4-5 • due to conductor-centrh conductor surge according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radia		ZX (Z4 10)			
with high demand rate according to SN 31920 50 % B10 value with high demand rate according to IEC 60529 1 5000 000 protection class iP on the front according to IEC 60529 finger-safe Communication/Protocol product function bus communication Yes product function bus communication Yes in Collink transfor rate in Collink address range of the inputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs with cyclical transfor total of the address range of the outputs					
B10 value with high demand rate according to SN 31920 1 500 000 protection class IP on the front according to IEC 60529 IP20 flouch protection on the front according to IEC 60529 finger-safe Communication/ Protocol product function bus communication Yes protocol is supported AS-Interface protocol • IO-Link protocol 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 device minimum type of voltage supply via input/output link master Adata volume • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-2		50 %			
protection class IP on the front according to IEC 60529 totuch protection on the front according to IEC 60529 finger-safe communication Protecol product function bus communication Protecol is supported					
touch protection on the front according to IEC 60529 Communication/ Protocol product function bus communication Yes protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link Yes IO-Link transfer rate COMZ (38.4 kBaud) 2.5 ms device milimum • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-5 • due to conductor-carth surge according to IEC 61000-4-5 • due to bigh-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radiation according to IEC 61000-4-2 • Sied-based interference emissions according to IEC 61000-4-2 • Supply voltage required Auxiliary voltage Supply voltage required Auxiliary voltage Yes Incurrence of IED Siegolay number of LEDs display version as status display of the input/output link device Approvals Certificates Yes Incurrence Functional Safety/Safety of Ma Safety/Safe					
Product function bus communication	·				
product function bus communication protocol is supported AS-Interface protocol OAS-Interface protocol Product function control circuit interface with IO link Pes IO-Link protocol Product function control circuit interface with IO link Pes IO-Link transfer rate COM2 (38,4 kBaud) Point-to-point cycle time between master and IO-Link device minimum Pype of voltage supply via input/output link master No data volume of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-3 of due to high-frequency radiation according to IEC 61000-4-2 of due to high-frequency radiation according to IEC 61000-4-2 of due to high-frequency radiation according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 onducted HF interference emissions according to IEC 61000-4-2 onducted HF interference emissions according to IEC 61000-4-2 Supply voltage Supply voltage Supply voltage Supply voltage required Auxiliary voltage Yes Sipply Inumber of LEDs General Product Approval EMC Functional Safety/Safety of Ma					
protocol is supported • AS-Interface protocol • IO-Link protocol product function control circuit interface with IO link IO-Link transfer rate point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master data volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of use to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-3 field-based interference according to IEC 61000-4-3 selectrostatic discharge according to IEC 61000-4-3 sele		Yes			
No	<u> </u>				
Pick-Link protocol Product function control circuit interface with IO link Pes IO-Link transfer rate COM2 (38,4 kBaud) point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to burst according to IEC 61000-4-4 of due to conductor-centh surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-6 of due to high-frequency radiation according to IEC 61000-4-7 of due to high-frequency radiation according to IEC 61000-4-8 of due to high-frequency radiation according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 selectrostatic discharge according to IEC 61000-4-2 sonducted HF interference emissions according to CISPR11 Supply voltage Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs display version as status display of the input/output link device Approvals Certificates Functional Safety/Safety of Ma Saf		No			
product function control circuit interface with IO link IO-Link transfer rate point-to-point cycle time between master and IO-Link device minimum type of voltage supply via input/output link master of the address range of the inputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total e of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the address range of the outputs with cyclical transfer total io of the ad	·	Yes			
point-to-point cycle time between master and IO-Link device minimum 1 type of voltage supply via input/output link master 1 of the address range of the inputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 3 byte 4 kV main circuits, 2 kV auxiliary circuits, 2 kV lo-Link, 2 kV limit switches, 2 kV line hand-held device 4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage are upstream overvoltage protection 4 kV main circuits, 0.5 kV auxiliary voltage wi	·	Yes			
point-to-point cycle time between master and IO-Link device minimum 1 type of voltage supply via input/output link master 1 of the address range of the inputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 2 byte 1 of the address range of the outputs with cyclical transfer total 2 byte 3 byte 4 kV main circuits, 2 kV auxiliary circuits, 2 kV lo-Link, 2 kV limit switches, 2 kV line hand-held device 4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 3 byte main circuits, 0.5 kV auxiliary voltage with upstream overvoltage are upstream overvoltage protection 4 kV main circuits, 0.5 kV auxiliary voltage wi	IO-Link transfer rate	COM2 (38,4 kBaud)			
data volume • of the address range of the inputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total • of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to conductor-conductor-conductor-surge according to IEC 61000-4-3 • due to conductor-c					
of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer total of the address range of the outputs with cyclical transfer to the nand-held device of the and-held device of the volucitis, 0.5 kV auxiliary voltage with upstream overvoltage protection of the and-held device of kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage on the nor-voltage of the nor-	type of voltage supply via input/output link master	No			
total of the address range of the outputs with cyclical transfer total Electromagnetic compatibility conducted interference of due to burst according to IEC 61000-4-4 of due to conductor-earth surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to conductor-conductor surge according to IEC 61000-4-5 of due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to IEC 61000-4-2 conducted HF interference emission according to IEC 61000-4-2 supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs display version as status display of the input/output link device Approvals Certificates EMC Functional Safety/Safety of Ma Functional Safety/Safety of Ma	data volume				
Electromagnetic compatibility conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to IEC 61000-4-2 sk V conducted HF interference emissions according to IEC 61000-4-3 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 supply voltage Supply voltage Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs display version as status display of the input/output link device General Product Approval EMC Functional Safety/Safety of Ma		2 byte			
conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to IEC 61000-4-2 conducted HF interference emissions according to IEC 61000-4-2 supply voltage Supply volt	total	2 byte			
• due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-8 • field-based interference according to IEC 61000-4-3 • electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 field-bo	Electromagnetic compatibility				
iline hand-held device 4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection 6 due to conductor-conductor surge according to IEC 61000-4-5 6 due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11					
protection • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000- 4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage Supply voltage required Auxiliary voltage Pyes Display number of LEDs display version as status display of the input/output link device General Product Approval Approvals EMC Functional Safety/Safety of Ma	•	line hand-held device			
61000-4-5 • due to high-frequency radiation according to IEC 61000- 4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 supply voltage Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs display version as status display of the input/output link device Approvals Certificates Functional Safety/Safety of Ma		protection		-	
4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 s kV conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 supply voltage Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs display version as status display of the input/output link device Approvals Certificates Functional Safety/Safety of Ma	61000-4-5	protection	oltage with upstream	overvoltage	
electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 30 1000 MHz Class A Supply voltage Supply voltage required Auxiliary voltage Pisplay number of LEDs display version as status display of the input/output link device General Product Approval 8 kV 150 kHz 30 MHz Class A 9 class A 5 class A 5 class A Functional Safety/Safety of Ma	4-6				
conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 Supply voltage Supply voltage required Auxiliary voltage Display number of LEDs display version as status display of the input/output link device Approvals Certificates Functional Safety/Safety of Ma					
CISPR11 field-bound HF interference emission according to CISPR11 30 1000 MHz Class A Supply voltage Supply voltage required Auxiliary voltage Yes Display number of LEDs 5 display version as status display of the input/output link device green/red dual LED Approvals Certificates Functional Safety/Safety of Ma					
Supply voltage Supply voltage required Auxiliary voltage Pisplay number of LEDs display version as status display of the input/output link device Approvals Certificates General Product Approval Functional Safety/Safety of Ma	CISPR11				
Supply voltage required Auxiliary voltage Pisplay number of LEDs display version as status display of the input/output link device green/red dual LED Approvals Certificates General Product Approval Functional Safety/Safety of Ma		30 1000 MHz Class A			
number of LEDs display version as status display of the input/output link device green/red dual LED Approvals Certificates General Product Approval EMC Functional Safety/Safety of Ma		Voc			
number of LEDs display version as status display of the input/output link device green/red dual LED Approvals Certificates Functional Safety/Safety of Ma		res			
display version as status display of the input/output link device green/red dual LED Approvals Certificates Functional Safety/Safety of Ma		5			
Approvals Certificates Functional General Product Approval EMC Safety/Safety of Ma					
General Product Approval EMC Safety/Safety of Ma					
Cililery		ЕМС	c	Functional Safety/Safety of Ma- chinery	











Declaration of Conformity

Test Certificates

Marine / Shipping





Type Test Certificates/Test Report







other **Dangerous Good**

Confirmation **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=3RA6500-2AB42

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6500-2AB42

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-2AB4

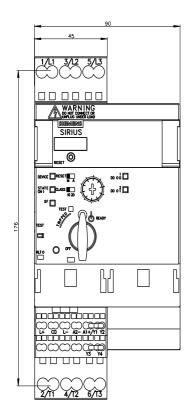
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

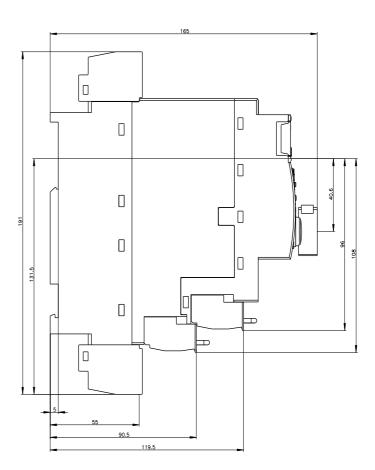
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6500-2AB42&lang=en

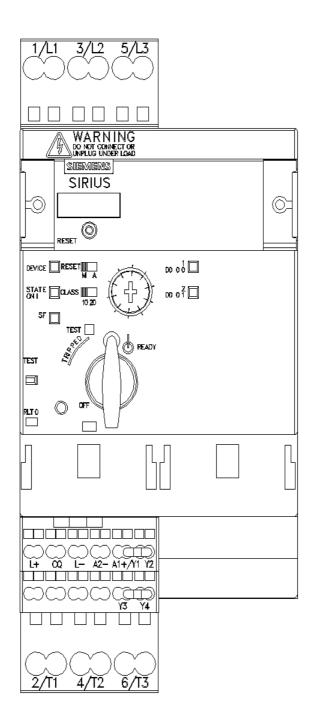
Characteristic: Tripping characteristics, I2t, Let-through current

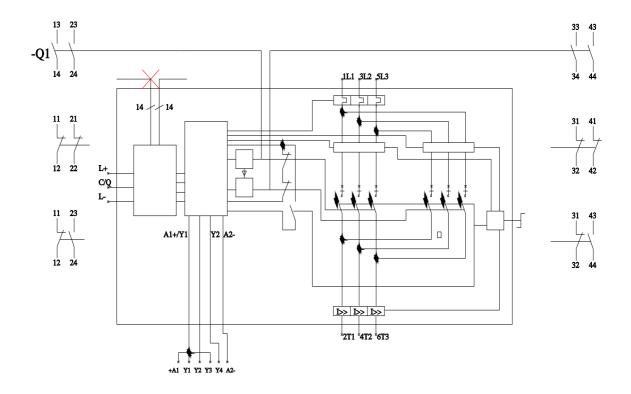
https://support.industry.siemens.com/cs/ww/en/ps/3RA6

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6500-2AB42&objecttype=14&gridview=view1









last modified: 8/7/2023 🖸