SIEMENS

Data sheet 3RA6500-1EB43



SIRIUS Compact load feeder Reversing starter for IO-Link 400 V 24 V DC 8...32 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	
 at AC in hot operating state 	5.4 W
 at AC in hot operating state per pole 	1.8 W
without load current share typical	3.4 W
insulation voltage rated value	690 V
degree of pollution	3
surge voltage resistance rated value	6 000 V
degree of protection NEMA rating	other
shock resistance	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes
vibration resistance	f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles
mechanical service life (operating cycles)	
 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-	8 32 A

dependent overload release	
formula for making capacity limit current	12 x le
formula for limit current breaking capacity	10 x le
yielded mechanical performance for 4-pole AC motor	TO X IC
at 400 V rated value	15 kW
operating voltage at AC-3 rated value maximum	400 V
operational current	400 V
at AC at 400 V rated value	32 A
at AC-3 at 400 V rated value at AC-3 at 400 V rated value	32 A
• at AC-43	32 A
— at 400 V rated value	29 A
operating power	23 A
at AC-3 at 400 V rated value	15 kW
• at AC-43	19 KW
— at 400 V rated value	45 000 W
	15 000 W 3 600 1/h
no-load switching frequency	3 600 1/11
operating frequency	750 1/h
at AC-41 according to IEC 60947-6-2 maximum at AC-43 according to IEC 60047-6-2 maximum	750 1/h
at AC-43 according to IEC 60947-6-2 maximum Control circuit/ Control	250 1/h
Control circuit/ Control	DC.
type of voltage	DC
control supply voltage 1	24.1/
at DC rated value	24 V
• at DC	24 24 V
holding power	2.43M
• at DC maximum	3.4 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 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	CLASS 40 and 20 adjustable
trip class	CLASS 10 and 20 adjustable
operating short-circuit current breaking capacity (lcs)	52 kA
• at 400 V	53 kA
UL/CSA ratings	
full-load current (FLA) for 3-phase AC motor	22.4
at 480 V rated value violed mechanical performance that for 3 phase AC motors	32 A
yielded mechanical performance [hp] for 3-phase AC motor	7.5 hp
at 200/208 V rated value at 220/220 V rated value	7.5 hp
at 220/230 V rated value at 460/490 V rated value	10 hp
• at 460/480 V rated value	20 hp
Short-circuit protection	V
product function short circuit protection	Yes
design of short-circuit protection	electromagnetic
design of the fuse link	fund at /aC: 10 A
for short-circuit protection of the auxiliary switch required Installation/ mounting/ dimensions	fuse gL/gG: 10 A
Installation/ mounting/ dimensions	CON.
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
Connections/ Terminals	Van
product component removable terminal for main circuit	Yes
product component removable terminal for auxiliary and	Yes

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















Type Test Certificates/Test Report







Marine / Shipping

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=3RA6500-1EB43

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA6500-1EB43

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-1EB43

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

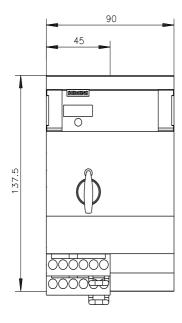
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6500-1EB43&lang=en

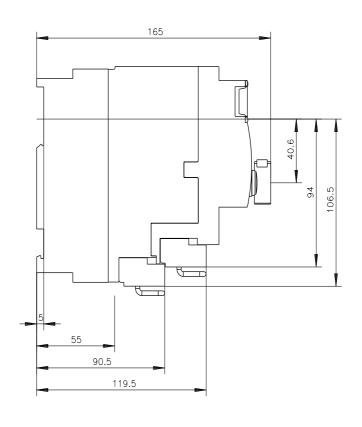
Characteristic: Tripping characteristics, I2t, Let-through current

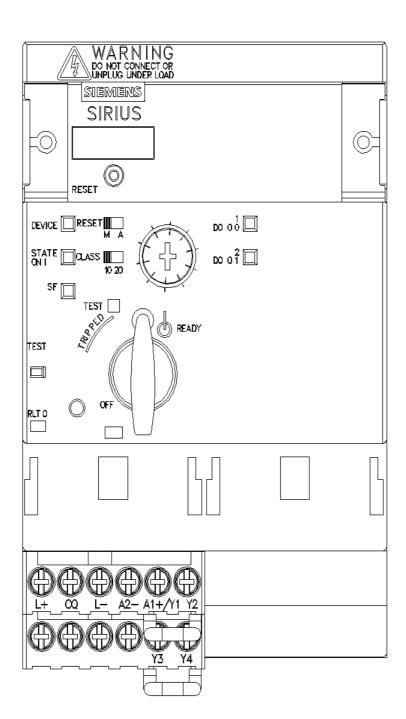
https://support.industry.siemens.com/cs/ww/en/ps/3RA6500-1EB43/char

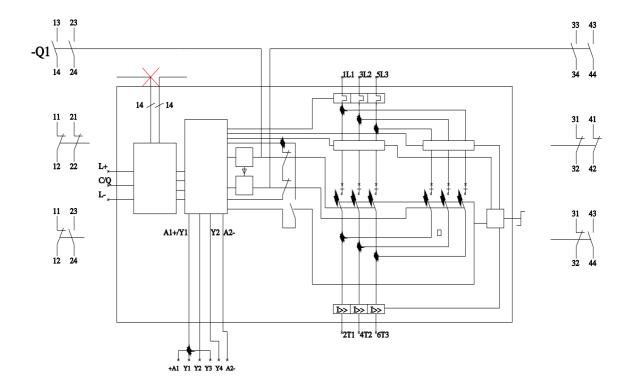
Further characteristics (e.g. electrical endurance, switching frequency)

http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6500-1EB43&objecttype=14&gridview=view1









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