SIEMENS

Data sheet 3RA6250-1EP33



SIRIUS Compact load feeder Reversing starter 400 V 110...240 V AC/DC 50...60 Hz 8...32 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: screw terminal

product brand name	SIRIUS		
product designation	compact starter		
design of the product	reversing starter		
product type designation	3RA62		
General technical data			
product function control circuit interface to parallel wiring	Yes		
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 	5.8 W		
insulation voltage rated value	690 V		
degree of pollution	3		
surge voltage resistance rated value	6 000 V		
maximum permissible voltage for protective separation			
 between main and auxiliary circuit 	400 V		
 between auxiliary and auxiliary circuit 	250 V		
 between control and auxiliary circuit 	300 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/s ² ; 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		
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	8 32 A		
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	10 x 10		
• at 400 V rated value	15 kW		
operating voltage at AC-3 rated value maximum	400 V		
operating voltage acrite o rated value maximum	400 V		
at AC at 400 V rated value	32 A		
at AC-3 at 400 V rated value	32 A		
• at AC-43	0271		
— at 400 V rated value	29 A		
operating power			
at AC-3 at 400 V rated value	15 kW		
• at AC-43			
— at 400 V rated value	15 000 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	AC/DC		
control supply voltage 1 at AC			
at 50 Hz rated value	240 V		
• at 50 Hz	110 240 V		
• at 60 Hz	110 240 V		
control supply voltage frequency			
• 1 rated value	50 Hz		
• 2 rated value	60 Hz		
control supply voltage 1			
at DC rated value	240 V		
• at DC	110 240 V		
holding power			
 at AC maximum 	5.2 W		
at DC maximum	5.8 W		
Auxiliary circuit			
number of NC contacts for auxiliary contacts	0		
number of NO contacts for auxiliary contacts	2		
number of NO contacts of instantaneous short-circuit trip unit for signaling contact	1		
number of CO contacts of the current-dependent overload release for signaling contact	1		
operational current of auxiliary contacts at AC-12 maximum	10 A		
operational current of auxiliary contacts at AC-12 maximum operational current of auxiliary contacts at DC-13 at 250 V	0.27 A		
Protective and monitoring functions	V.E. 7.		
trip class	CLASS 10 and 20 adjustable		
operating short-circuit current breaking capacity (Ics)	OE 10 and 20 adjustable		
• at 400 V	53 kA		
UL/CSA ratings			
full-load current (FLA) for 3-phase AC motor			
• at 480 V rated value	32 A		
yielded mechanical performance [hp] for 3-phase AC motor			
• at 200/208 V rated value	7.5 hp		
• at 220/230 V rated value	10 hp		
• at 460/480 V rated value	20 hp		
contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300		
Short-circuit protection			
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	fuse gL/gG: 10 A		

for short-circuit protection of the signaling switch of the	6A gL/gG/400V			
short-circuit release required				
 for short-circuit protection of the signaling switch of the overload release required 	4A gL/gG/400V			
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			
Connections/ Terminals				
product component removable terminal for main circuit	Yes			
product component removable terminal for auxiliary and	Yes			
type of electrical connection				
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	301cw-type terriinai3			
solid	2x (2.5 6 mm²), 1x 10 mm²			
finely stranded with core end processing	2x (2.5 6 mm²)			
type of connectable conductor cross-sections				
for auxiliary contacts				
— solid	0.5 4 mm², 2x (0.5 2.5 mn	n²)		
 finely stranded with core end processing 	0.5 2.5 mm², 2x (0.5 1.5 mm²)			
for AWG cables for auxiliary contacts	2x (20 14)			
Safety related data				
B10 value with high demand rate according to SN 31920	2 000 000			
proportion of dangerous failures				
 with low demand rate according to SN 31920 	40 %			
 with high demand rate according to SN 31920 	50 %			
failure rate [FIT] with low demand rate according to SN 31920	100 FIT			
T1 value for proof test interval or service life according to IEC 61508	20 a			
protection class IP on the front according to IEC 60529	IP20			
touch protection on the front according to IEC 60529	finger-safe			
Communication/ Protocol				
product function bus communication	No			
protocol is supported				
AS-Interface protocol	No			
IO-Link protocol	No			
product function control circuit interface with IO link	No			
Electromagnetic compatibility				
conducted interference				
 due to burst according to IEC 61000-4-4 	4 kV main contacts, 2 kV auxiliary contacts			
due to conductor-earth surge according to IEC 61000-4-5	4 kV main contacts, 2 kV auxiliary contacts			
 due to conductor-conductor surge according to IEC 61000-4-5 	2 kV main contacts, 1 kV auxiliary contacts			
 due to high-frequency radiation according to IEC 61000- 4-6 	0.15-80Mhz at 10V			
field-based interference according to IEC 61000-4-3	10 V/m	10 V/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			
Supply voltage				
Supply voltage required Auxiliary voltage	No			
Display				
number of LEDs	3			
Certificates/ approvals				
General Product Approval		EMC	Functional Safety/Safety of Ma- chinery	













Declaration of Conformity

Test Certificates

Marine / Shipping





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=3RA6250-1EP33

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6250-1EP33}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-1EP33

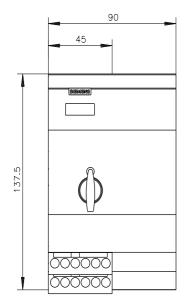
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

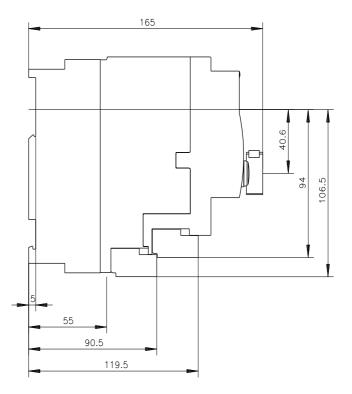
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-1EP33&lang=en

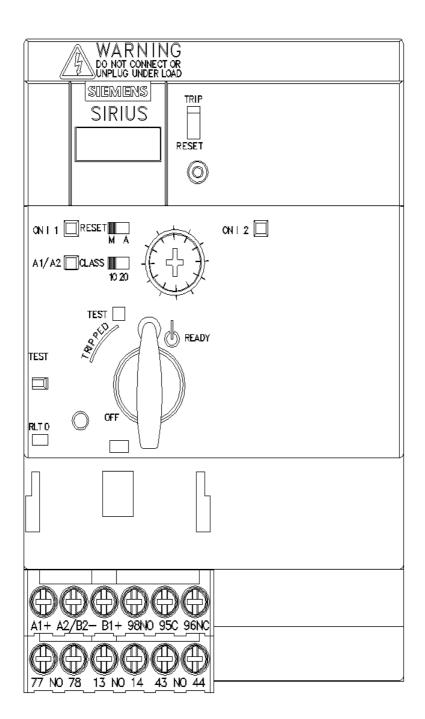
Characteristic: Tripping characteristics, I2t, Let-through current

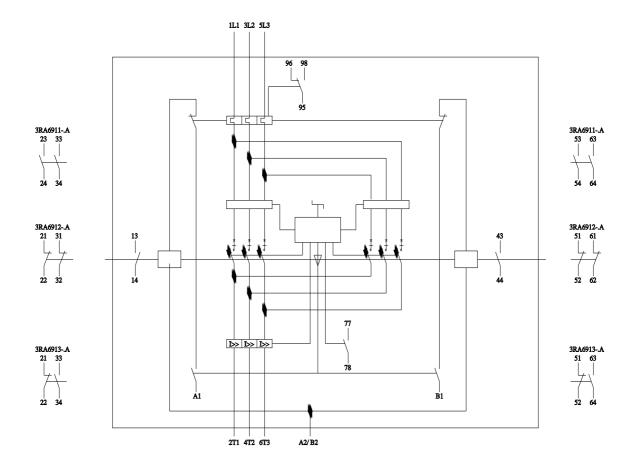
https://support.industry.siemens.com/cs/ww/en/ps/3RA6

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-1EP33&objecttype=14&gridview=view1









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