SIEMENS

Data sheet 3RA6250-0AB30



SIRIUS Compact load feeder Reversing starter 690 V 24 V AC/DC 50...60 Hz 0.1...0.4 A IP20 Connection main circuit: plug-in, without terminals Connection control circuit: plug-in, without terminals

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 	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		
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-	0.1 0.4 A
dependent overload release	
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	
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	
 at AC at 400 V rated value 	0.4 A
 at AC-3 at 400 V rated value 	0.4 A
• at AC-43	
— 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	
 at AC-3 at 400 V rated value 	0.09 kW
• at AC-43	
— 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	AC/DC
control supply voltage 1 at AC	
at 50 Hz rated value	24 V
● at 50 Hz	24 24 V
at 60 Hz rated value	24 V
● at 60 Hz	24 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
control supply voltage 1	
at DC rated value	24 V
• at DC	
- 3. 50	24 24 V
holding power	24 24 V
	24 24 V 2.8 W
holding power	
holding power • at AC maximum • at DC maximum	2.8 W
holding power • at AC maximum • at DC maximum Auxiliary circuit	2.8 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts number of NO contacts of instantaneous short-circuit trip unit for signaling contact number of CO contacts of the current-dependent overload	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W
• at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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 (lcs)	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA
holding power • at AC maximum • at DC maximum Auxiliary circuit number of NC contacts for auxiliary contacts number of NO contacts for auxiliary contacts 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	2.8 W 2.9 W 0 2 1 1 1 10 A 0.27 A CLASS 10 and 20 adjustable 53 kA 3 kA 3 kA

contact rating of auxiliary contacts according to UL	contacts 21-22, 13-14, 43-44 C	0600 / A600. contacts 77-	78 R300 / B300.		
		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 short-circuit release required 	6A gL/gG/400V				
 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 control circuit	Yes				
type of electrical connection					
for main current circuit	plug-in without terminals				
for auxiliary and control circuit	plug-in without terminals				
Safety related data					
B10 value with high demand rate according to SN 31920	3 000 000				
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	20 a				
61508 protection class IP on the front according to IEC 60529	IP20				
touch protection on the front according to IEC 60529					
Communication/ Protocol	finger-safe	_	_		
	No				
product function bus communication	No				
protocol is supported	No				
AS-Interface protocol	No No				
IO-Link protocol	No 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	0.15-80Mhz at 10V			
field-based interference according to IEC 61000-4-3	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=3RA6250-0AB30

Cax online generator

 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RA6250-0AB30}$

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

https://support.industry.siemens.com/cs/ww/en/ps/3RA6250-0AB30

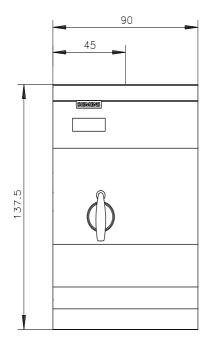
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

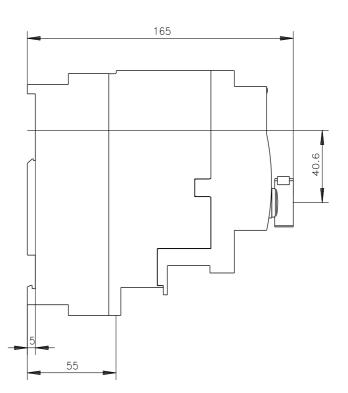
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA6250-0AB30&lang=en

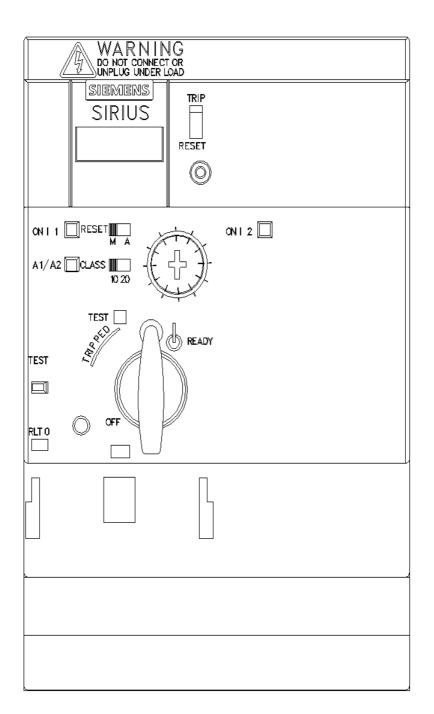
Characteristic: Tripping characteristics, I2t, Let-through current

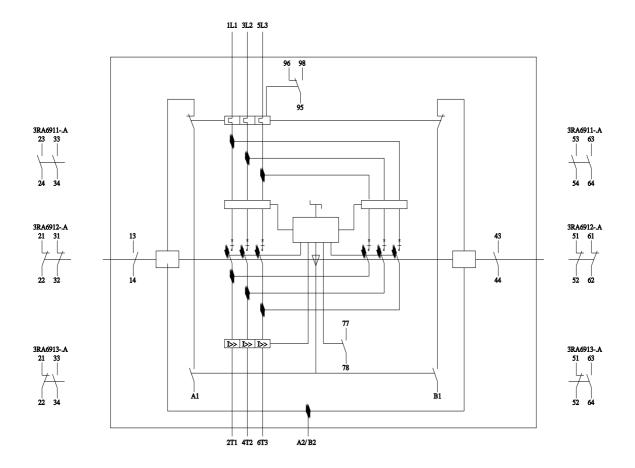
https://support.industry.siemens.com/cs/ww/en/ps/3RA6

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RA6250-0AB30&objecttype=14&gridview=view1









last modified: 11/21/2022 🖸