SIEMENS

Data sheet

3RA6250-0BB30



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 0.32 ... 1.25 A, IP20, MAIN CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS, AUXILIARY CIRCUIT CONNECTION: PLUG-IN, W/O TERMINALS

product brand name	SIRIUS
Product designation	compact starter
Design of the product	reversing feeder

General technical data:		
Product function		
 Control circuit interface to parallel wiring 		Yes
Insulation voltage	_	
Rated value	V	690
maximum permissible voltage for safe isolation	_	
 between auxiliary and auxiliary circuit 	V	250
 between control and auxiliary circuit 	V	300
 between main and auxiliary circuit 	V	400
Degree of pollution	_	3
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
Surge voltage resistance Rated value	V	6 000
Mechanical service life (switching cycles)	_	
 of the main contacts typical 		10 000 000
 of the auxiliary contacts typical 		10 000 000
 of the signaling contacts typical 		10 000 000
Electrical endurance (switching cycles) of the	_	
auxiliary contacts		
● at DC-13 at 6 A at 24 V typical		100 000
• at AC-15 at 6 A at 230 V typical		500 000

Electrical endurance (switching cycles) of the signaling contacts				
• at DC-13 at 6 A at 24 V typical		100 000		
• at AC-15 at 6 A at 230 V typical		500 000		
Type of assignment	_	continous operation according to IEC 60947-6-2		
Protection class IP	_	IP20		
Equipment marking	_			
• acc. to DIN EN 61346-2		Q		
Main circuit:	_			
Number of poles for main current circuit		3		
Adjustable response value current of the current- dependent overload release	A	0.32 1.25		
Formula for making capacity limit current	-	38.4 x le		
Formula for interruption capacity limit current		32 x le		
Mechanical power output for 4-pole AC motor	_			
• at 400 V Rated value	kW	0.37		
• at 500 V Rated value	kW	0.55		
• at 690 V Rated value	kW	0.75		
Operating voltage	_			
 at AC-3 Rated value maximum 	V	690		
Operating current				
 with AC at 400 V Rated value 	А	1.25		
• at AC-43				
— at 400 V Rated value	А	1.1		
— at 500 V Rated value	А	1.2		
— at 690 V Rated value	А	1.1		
Operating power				
• at AC-3				
— at 400 V Rated value	W	370		
• at AC-43				
— at 400 V Rated value	W	370		
— at 500 V Rated value	W	550		
— at 690 V Rated value	W	750		
Operating frequency				
● at AC-41 acc. to IEC 60947-6-2 maximum	1/h	750		
● at AC-43 acc. to IEC 60947-6-2 maximum	1/h	250		
No-load switching frequency	1/h	3 600		
Control circuit/ Control:				
Type of voltage		AC		
Control supply voltage 1 with AC				
• at 50 Hz Rated value	V	24		
• at 60 Hz Rated value	V	24		

Control supply voltage 1		
 for DC Rated value 	V	24
Rated value	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60
Holding power	-	
 with AC maximum 	W	2.8
• for DC maximum	W	2.9
Auxiliary circuit:		
Number of NC contacts		
 for auxiliary contacts 		0
Number of NO contacts	_	
 for auxiliary contacts 		2
 of the instantaneous short-circuit release for 		1
signaling contact		
Number of CO contacts		
 of the current-dependent overload release for 		1
signaling contact		
Product expansion Auxiliary switch		Yes
Operating current of the auxiliary contacts at AC-12 maximum	A	10
Operating current of the auxiliary contacts at DC-13	-	
• at 250 V	A	0.27
Protective and monitoring functions:		
Trip class		CLASS 10 and 20 adjustable
OFF-delay time	ms	50
Operational short-circuit current breaking capacity (Ics)		
• at 400 V	kA	53

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	1.25
• at 600 V Rated value	А	1.25
yielded mechanical performance [hp]	-	
 for three-phase AC motor at 460/480 V Rated value 	metric hp	0.5
 for three-phase AC motor at 575/600 V Rated value 	metric hp	0.5
Contact rating of the auxiliary contacts acc. to UL		contacts 21-22, 13-14, 43-44 Q600 / A600, contacts 77-78 R300 / B300, contacts 95-96-98 R300 / D300

kA

kΑ

Short-circuit:

• at 500 V Rated value

• at 690 V Rated value

3

3

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 		fuse gL/gG: 10 A		
required				
 for short-circuit protection of the signaling 		6A gL/gG/400V		
switch of the short-circuit release required				
 for short-circuit protection of the signaling 		4A gL/gG/400V		
switch of the overload release required				
Installation/ mounting/ dimensions:				
mounting position		any		
• recommended		vertical, on horizontal standard mounting rail		
Mounting type		screw and snap-on mounting		
Height	mm	170		
Width	mm	90		
Depth	mm	165		
Connections/ Terminals:				
Type of electrical connection				
 for main current circuit 		plug-in without terminals		
 for auxiliary and control current circuit 		plug-in without terminals		
Product function	_			
 removable terminal for main circuit 		Yes		
 removable terminal for auxiliary and control 		Yes		
circuit				
Safety related data:				
B10 value with high demand rate acc. to SN 31920		3 000 000		
Proportion of dangerous failures				
• with low demand rate acc. to SN 31920	%	40		
• with high demand rate acc. to SN 31920	%	50		
Failure rate [FIT] with low demand rate acc. to SN 31920	FIT	100		
T1 value for proof test interval or service life acc. to IEC 61508	У	20		
Protection against electrical shock		finger-safe		
Communication/ Protocol:				
Product function Bus communication		No		
Product function Control circuit interface with IO link		No		
Ambient conditions:				
Installation altitude at height above sea level	m	2 000		
maximum				
Ambient temperature				
 during operation 	°C	-20 +60		

Relative humidity during operation %	10 90
• during transport °C	-55 +80
• during storage °C	-55 +80

Lieuromagnetic compatibility.	
Conducted interference due to burst acc. to IEC 61000-4-4	4 kV main contacts, 2 kV auxiliary contacts
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5	4 kV main contacts, 2 kV auxiliary contacts
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5	2 kV main contacts, 1 kV auxiliary contacts
Conducted interference due to high-frequency radiation acc. to IEC 61000-4-6	0.15-80Mhz at 10V
Field-bound parasitic coupling acc. to IEC 61000-4-3	10 V/m
Electrostatic discharge acc. to IEC 61000-4-2	8 kV

Supply voltage:

Supply voltage required Auxiliary voltage

_

No

Certificates/ approvals:

General Produc	ct Approval			EMC	Functional Safety/Safety of Machinery
ccc	CSA		EHC	С-тіск	VDE
Test Certificates	Shipping App	roval			
<u>Type Test</u> Certificates/Test <u>Report</u>	B U R E A U VERITAS	DNV DNV	Lloyd's Register LRS	PRS	RINA

Further information

Information- and Downloadcenter (Catalogs, Brochures,...) http://www.siemens.com/industrial-controls/catalogs

Industry Mall (Online ordering system) http://www.siemens.com/industrymall

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3RA62500BB30

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA62500BB30/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA62500BB30&lang=en





