SIEMENS

Data sheet

3RA6250-1AB32



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 0.1 ... 0.4 A, IP20, MAIN CIRCUIT CONNECTION: SCREW TERMINAL, AUXILIARY CIRCUIT CONNECTION: SCREW TERMINAL

Figure similar	
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	0.1 0.4
Formula for making capacity limit current	-	120 x le
Formula for interruption capacity limit current		100 x le
Mechanical power output for 4-pole AC motor		
• at 400 V Rated value	kW	0.09
• at 500 V Rated value	kW	0.12
• at 690 V Rated value	kW	0.18
Operating voltage	_	
 at AC-3 Rated value maximum 	V	690
Operating current		
 with AC at 400 V Rated value 	А	0.4
• at AC-43		
— at 400 V Rated value	А	0.3
— at 500 V Rated value	А	0.32
— at 690 V Rated value	А	0.35
Operating power		
• at AC-3		
— at 400 V Rated value	W	90
• at AC-43		
— at 400 V Rated value	W	90
— at 500 V Rated value	W	120
— at 690 V Rated value	W	180
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 signaling contact 		1
Number of CO contacts	-	
 of the current-dependent overload release for signaling contact 		1
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	А	0.27
Protective and monitoring functions:		
Trip class		CLASS 10 and 20 adjustable

Trip class		CLASS 10 and 20 adjustable
OFF-delay time	ms	50
Operational short-circuit current breaking capacity (Ics)		
• at 400 V	kA	53
• at 500 V Rated value	kA	3
• at 690 V Rated value	kA	3

UL/CSA ratings:		
Full-load current (FLA) for three-phase AC motor		
• at 480 V Rated value	А	0.4
• at 600 V Rated value	А	0.4
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

Short-circuit:	
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 		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 170
Height Width	mm	90
	mm	
Depth	mm	165
Connections/ Terminals:	_	
Type of electrical connection		
 for main current circuit 		screw-type terminals
 for auxiliary and control current circuit 		screw-type terminals
Product function		
 removable terminal for main circuit 		Yes
 removable terminal for auxiliary and control circuit 		Yes
Type of connectable conductor cross-section	-	
for main contacts		
— solid		2x (1.5 6 mm²), 1x 10 mm²
 — finely stranded with core end processing 		2x (1.5 6 mm ²)
 for AWG conductors for main contacts 		2x (16 10), 1x 8
for auxiliary contacts		2x (10 10), 1x 0
-		0.5 4 mm², 2x (0.5 2.5 mm²)
— solid		
— finely stranded with core end processing		0.5 2.5 mm ² , 2x (0.5 1.5 mm ²)
 for AWG conductors for auxiliary contacts 		2x (20 14)
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 maximum	m	2 000		
Ambient temperature				
 during operation 	°C	-20 +60		
 during storage 	°C	-55 +80		
during transport	°C	-55 +80		
Relative humidity during operation	%	10 90		
Electromagnetic 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	t Approval			EMC	Functional Safety/Safety of Machinery
	CSA		EHC	C-TICK	VDE
Test Certificates	Shipping Approv	/al			
<u>Type Test</u> Certificates/Test <u>Report</u>	BUREAU VERITAS	DNV DNV	Lloyd's Register LRS	PRS	RINA
Shipping Approval	other				
RMRS	Declaration of Conformity	Environmental Confirmations	other		

Further information

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

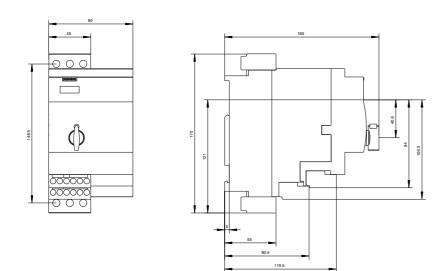
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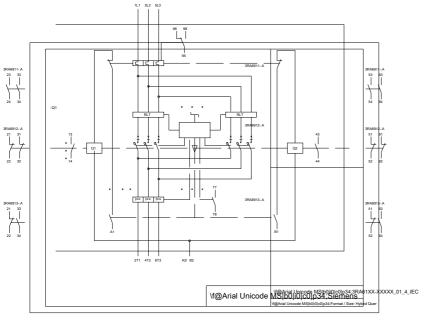
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA62501AB32/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA62501AB32&lang=en





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