SIEMENS

Data sheet

3RA6250-1CB32



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 24 V AC/DC, 50 ... 60 HZ, 1 ... 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	_	
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-	A	1 4
dependent overload release	_	
Formula for making capacity limit current	_	12 x le
Formula for interruption capacity limit current		10 x le
Mechanical power output for 4-pole AC motor		
• at 400 V Rated value	kW	1.5
• at 500 V Rated value	kW	2.2
• at 690 V Rated value	kW	3
Operating voltage		
 at AC-3 Rated value maximum 	V	690
Operating current		
 with AC at 400 V Rated value 	А	4
• at AC-43		
— at 400 V Rated value	А	3.6
— at 500 V Rated value	А	3.9
— at 690 V Rated value	А	3.8
Operating power	_	
• at AC-3		
— at 400 V Rated value	W	1 500
• at AC-43		
— at 400 V Rated value	W	1 500
— at 500 V Rated value	W	2 200
— at 690 V Rated value	W	3 000
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

V	24
-	
Hz	50
Hz	60
W	2.8
W	2.9
	0
	2
	1
	1
	Yes
А	10
A	0.27
	CLASS 10 and 20 adjustable
ms	50
	W W W

OFF-delay time	ms	50
Operational short-circuit current breaking capacity		
(lcs)		
• 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	4
• at 600 V Rated value	А	4
yielded mechanical performance [hp]		
 for three-phase AC motor at 200/208 V Rated value 	metric hp	0.75
 for three-phase AC motor at 220/230 V Rated value 	metric hp	0.75
 for three-phase AC motor at 460/480 V Rated value 	metric hp	2

 for three-phase AC motor at 575/600 V Rated value 	metric hp	3
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 switch of the overload release required 	4A gL/gG/400V			

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 	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 mm²)
 for AWG conductors for main contacts 	2x (16 10), 1x 8
 for auxiliary contacts 	
— solid	0.5 4 mm², 2x (0.5 2.5 mm²)
— finely stranded with core end processing	0.5 2.5 mm², 2x (0.5 1.5 mm²)
 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	m	2 000
maximum		
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 CSA		EHC	C-TICK	VDE
Test Certificates	Shipping Approv	val			
<u>Type Test</u> Certificates/Test <u>Report</u>	BUREAU VERITAS	ŮŇV 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

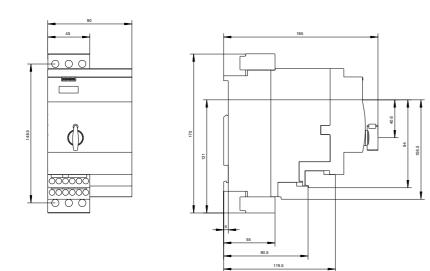
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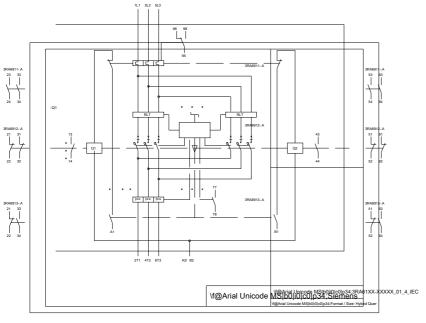
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA62501CB32/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3RA62501CB32&lang=en





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