SIEMENS

Product data sheet

3RA6250-2BB33



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: SPRING-LOADED TERMINAL

General technical data:				
Product brand name		SIRIUS		
product designation		compact starter		
Design of the product		reversing feeder		
Trip class		CLASS 10 and 20 adjustable		
Product function				
control circuit interface to parallel wiring		Yes		
bus-communication		No		
short circuit protection		Yes		
control circuit interface with IO link		No		
Type of assignement		continous operation according to IEC 60947-6-2		
Protection class IP		IP20		
Degree of pollution		3		
Built in orientation / recommended		vertical, on horizontal standard mounting rail		
Installation altitude / at a height over sea level				
• maximum	m	2,000		
Ambient temperature				
during storage	°C	-55 80		
during operating	°C	-20 60		
during transport	°C	-55 80		

Relative humidity	<i>c :</i>	
during operating phase	%	10 90
Resistance against shock	_	a=60 m/s2 (6g) with 10 ms per 3 shocks in all axes
Resistance against vibration		f= 4 5.8 Hz, d= 15 mm; f= 5.8 500 Hz, a= 20 m/s²; 10 cycles
Impulse voltage resistance / rated value	V	6,000
Field-bound parasitic coupling		
according to IEC 61000-4-3		10 V/m
Insulation voltage / rated value	V	690
Conductor-bound parasitic coupling conductor-earth SURGE		
according to IEC 61000-4-5		4 kV main contacts, 2 kV auxiliary contacts
Conductor-bound parasitic coupling conductor-conductor SURGE		
according to IEC 61000-4-5		2 kV main contacts, 1 kV auxiliary contacts
Conductor-bound parasitic coupling BURST		
according to IEC 61000-4-4		4 kV main contacts, 2 kV auxiliary contacts
Maximum permissible voltage for safe disconnection		
 between main circuit and auxiliary circuit 	V	400
 between control and auxiliary circuit 	V	300
 between auxiliary circuit and auxiliary circuit 	V	250
Item designation		
 according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		Q
according to DIN EN 61346-2		Q
Main circuit:		
Operating voltage / at AC-3 / rated value		
• maximum	V	690
Number of poles / for main current circuit		3
Adjustable response current		
• of the current-dependent overload release	А	0.32 1.25
Formula for making capacity limit current		38.4 x le
Formula for interruption capacity limit current		32 x le
Emitted mechanical power / for 4-pole three-phase 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
Service power / at AC-3 / at 400 V / rated value	W	370
Frequency of operation / at AC-41 / according to IEC 60947-6-2 / maximum	1/h	750
Frequency of operation / at AC-43 / according to IEC 60947-6-2 / maximum	1/h	250

Off-load operating frequency		3,600
Mechanical operating cycles as operating time		
of the main contacts / typical		10,000,000
 of the auxiliary contacts / typical 		10,000,000
 of the signal contacts / typical 		10,000,000

Control circuit:

	AC
V	24
V	24
V	24
W	2.8
W	2.9
ms	50
ms	70
	V V W W ms

Auxiliary circuit:		
Product extension		
auxiliary switch		Yes
Number of NC contacts		
for auxiliary contacts		0
Number of NO contacts		
for auxiliary contacts		2
• of the non-delayed short-circuit release / for alarm contact		1
Number of changeover contacts / of the current-dependent overload release / for alarm contact		1
Operating current / of the auxiliary contacts / at AC-12		
• maximum	А	10
Electrical switching cycle as operating time / of the auxiliary contacts		
• at AC-15 / at 6 A / at 230 V / typical		500,000
• at DC-13 / at 6 A / at 24 V / typical		100,000
Electrical switching cycle as operating time / of the signal contacts		
• at AC-15 / at 6 A / at 230 V / typical		500,000
• at DC-13 / at 6 A / at 24 V / typical		100,000

Short-circuit:	_		
Design of the fuse link / for short-circuit protection of the auxiliary switch			
• required		fuse gL/gG: 10 A	
Installation/mounting/dimensions:			
Type of mounting		screw and snap-on mounting	
Width	mm	90	
Height	mm	191	
Depth	mm	165	
Built in orientation		any	
Connections:			
Product function			
 removable terminal for main circuit 		Yes	
 removable terminal for auxiliary and control circuit 		Yes	
Design of the electrical connection			
for main current circuit		plug-in without terminals	
 for auxiliary and control current circuit 		spring-loaded terminals	
Type of the connectable conductor cross-section			
for main contacts			
• solid		2x (1.5 6 mm²), 1x 10 mm²	
finely stranded			
 with conductor end processing 		2x (1.5 6 mm²)	
 without conductor final cutting 		2x (1.5 6 mm²)	
for auxiliary contacts			
• solid		2x (0.25 1.5 mm²)	
finely stranded			
 with conductor end processing 		2x (0.25 1.5 mm²)	
without conductor final cutting		2x (0.25 1.5 mm²)	
for AWG conductors			
for main contacts		2x (16 10), 1x 8	
for auxiliary contacts		2x (24 16)	
Certificates/approvals:			
Verification of suitability		IEC / EN 60947-6-2	

General Product	Approval			Functional Safety / Safety of Machinery	Test Certificates
cqc	SP CSA	ROSTEST		other	Manufacturer
Shipping Approv	al			other	
B U RE A U VERITAS		PRS	RINA	Manufacturer	other

UL/CSA ratings:		
yielded mechanical performance (hp) / for three-phase squirrel cage motors		
• at 460/480 V / rated value	hp	0.5
• at 575/600 V / rated value	hp	0.5
Operating current (FLA) / for three-phase squirrel cage motors		
• at 480 V / rated value	А	1.25
• at 600 V / rated value	А	1.25
Contact rating designation / for 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
Reliability figures:		

Tenability lighteen				
B10 value		3,000,000		
Proportion of dangerous failures	%	50		
Proportion of dangerous failures / with low demand rate / according to SN 31920	%	40		
Protection against electrical shock		finger-safe		
Failure rate (FIT value) / with low demand rate / according to SN 31920	FIT	100		

Further information:

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrial-controls/mall

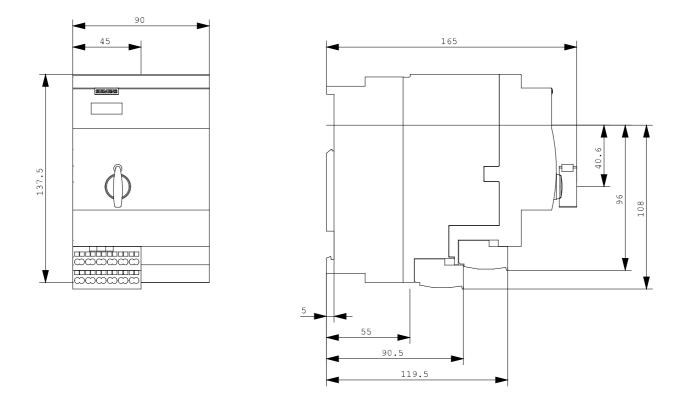
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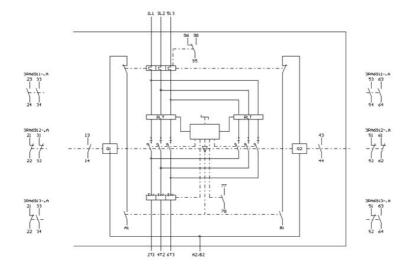
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Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA6250-2BB33/all

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

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