## SIEMENS

## **Product data sheet**

## 3RA6250-2AP32



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 110 ... 240 V AC/DC, 50 ... 60 HZ, 0.1 ... 0.4 A, IP20, MAIN CIRCUIT CONNECTION: SPRING-LOADED TERMINAL, 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				
<ul> <li>control circuit interface to parallel wiring</li> </ul>		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				
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		
<ul> <li>between auxiliary circuit and auxiliary circuit</li> </ul>	V	250		
Item designation				
<ul> <li>according to DIN 40719 extendable after IEC 204-2 / according to IEC 750</li> </ul>		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	0.1 0.4		
Formula for making capacity limit current		120 x le		
Formula for interruption capacity limit current		100 x le		
Emitted mechanical power / for 4-pole three-phase 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		
Service power / at AC-3 / at 400 V / rated value	W	90		
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	1/h	3,600		
Mechanical operating cycles as operating time				
of the main contacts / typical		10,000,000		
<ul> <li>of the auxiliary contacts / typical</li> </ul>		10,000,000		
of the signal contacts / typical		10,000,000		
Control circuit:				
type of voltage AC				
Control supply voltage / 1				
• for DC				
• initial rated value	V	110		
final rated value	V	240		
• at 50 Hz / for AC				
• initial rated value	V	110		
• final rated value	V	240		
• at 60 Hz / for AC				
• initial rated value	V	110		
• final rated value	V	240		
Holding power				
• for AC / maximum	W	6		
• for DC / maximum	W	5.1		
Switch-off delay time	ms	50		
Start-up delay time	ms	70		

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	

Verification of suitability		IEC / EN 60947-6-2		
Certificates/approvals:				
for auxiliary contacts		2x (24 16)		
for main contacts		2x (16 10), 1x 8		
for AWG conductors				
without conductor final cutting		2x (0.25 1.5 mm <sup>2</sup> )		
with conductor end processing		2x (0.25 1.5 mm²)		
finely stranded				
• solid		2x (0.25 1.5 mm²)		
for auxiliary contacts				
without conductor final cutting		2x (1.5 6 mm <sup>2</sup> )		
with conductor end processing		2x (1.5 6 mm²)		
finely stranded		2A (1.5 0 IIIIIP), 1A 10 IIIIP		
solid		2x (1.5 6 mm²), 1x 10 mm²		
for main contacts				
Type of the connectable conductor cross-section		spring-loaded terminals		
for auxiliary and control current circuit				
• for main current circuit		spring-loaded terminals		
		100		
removable terminal for main circuit     removable terminal for auxiliary and control circuit		Yes		
removable terminal for main circuit		Yes		
Connections: Product function				
Connections				
Built in orientation				
Depth	mm	165		
Height	mm	191		
Width	mm	90		
Type of mounting		screw and snap-on mounting		
Installation/mounting/dimensions:				
• required	fuse gL/gG: 10 A			
Design of the fuse link / for short-circuit protection of the auxiliary switch				
Short-circuit:				
• at DC-13 / at 6 A / at 24 V / typical		100,000		
• at AC-15 / at 6 A / at 230 V / typical		500,000		
		500.000		
contacts				

General Product A	Approval				Functional Safety / Safety of Machinery	Test Certificates
coc	(SA)	ROSTEST			other	Manufacturer
Shipping Approva	ıl				other	
B U REAU VERITAS	J & DNV DNV	PRS	RINA		Manufacturer	other
UL/CSA ratings:						
Operating current (FLA) / for three-phase squirrel cage motors						
• at 480 V / rated	value		А	0.4		
• at 600 V / rated	value		А	0.4		
Contact rating designation / for auxiliary contacts / according to			contacts 21-22, 13-14, 43-44 Q600 / A600, contacts			

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

## **Further information:**

UL

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

Industry Mall (Online ordering system) http://www.siemens.com/industrial-controls/mall

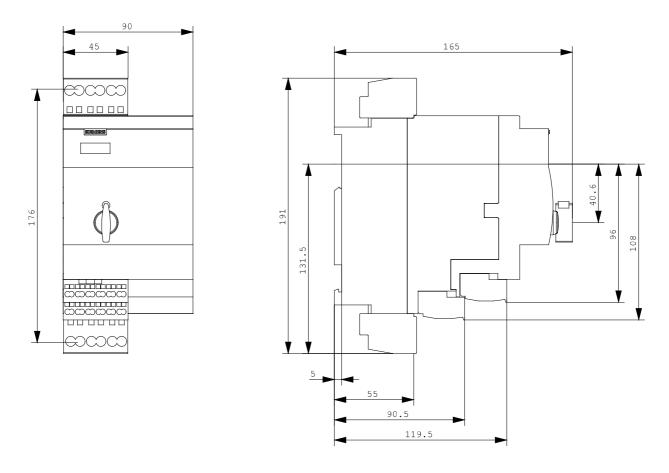
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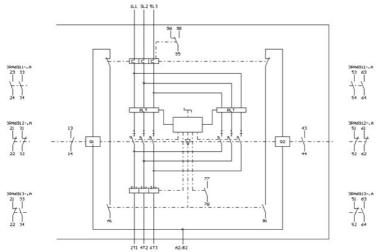
http://www.siemens.com/cax

Service&Support (Manuals, Certificates, Characteristics, FAQs,...) http://support.automation.siemens.com/WW/view/en/3RA6250-2AP32/all

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, ...) http://www.automation.siemens.com/bilddb/cax\_en.aspx?mlfb=3RA6250-2AP32

77-78 R300 / B300, contacts 95-96-98 R300 / D300





last change:

