SIEMENS

Data sheet 3RA6250-0CP30



SIRIUS, COMPACT STARTER, REVERSING STARTER 690 V, 110 ... 240 V AC/DC, 50 ... 60 HZ, 1 ... 4 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/s ² ; 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 00	0
• at AC-15 at 6 A at 230 V typical	500 00	0
Type of assignment	contino	ous 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-	Α	1 4
dependent overload release		40.
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 	Α	4
• at AC-43		
— at 400 V Rated value	Α	3.6
— at 500 V Rated value	Α	3.9
— at 690 V Rated value	Α	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	V	110 240
● at 60 Hz	V	110 240

Control supply voltage 1		
• for DC	V	110 240
Rated value	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60
Holding power		
 with AC maximum 	W	6
● for DC maximum	W	5.1
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	Α	10
Operating current of the auxiliary contacts at DC-13		
● at 250 V	Α	0.27
Protective and monitoring functions:		
Trip class		CLASS 10 and 20 adjustable
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	Α	4
at 600 V Rated value	Α	4
yielded mechanical performance [hp]		
• for three-phase AC motor at 200/208 V Rated	metric	0.75
value	hp	
 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		
. 7 po or orodinal commodion		
• for main current circuit		plug-in without terminals
for main current circuitfor auxiliary and control current circuit		plug-in without terminals plug-in without terminals
• for main current circuit		
for main current circuitfor auxiliary and control current circuit		
for main current circuit for auxiliary and control current circuit Product function		plug-in without terminals
for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control		plug-in without terminals Yes
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit 		plug-in without terminals Yes
for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data:		plug-in without terminals Yes Yes
for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920	%	plug-in without terminals Yes Yes
for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures	% %	plug-in without terminals Yes Yes 3 000 000
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures with low demand rate acc. to SN 31920 		Plug-in without terminals Yes Yes 3 000 000
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 Failure rate [FIT] with low demand rate acc. to SN 	%	Plug-in without terminals Yes Yes 3 000 000 40 50
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 Failure rate [FIT] with low demand rate acc. to SN 31920 Talue for proof test interval or service life acc. to 	% FIT	Plug-in without terminals Yes Yes 3 000 000 40 50 100
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 Failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 	% FIT	Plug-in without terminals Yes Yes 3 000 000 40 50 100 20
 for main current circuit for auxiliary and control current circuit Product function removable terminal for main circuit removable terminal for auxiliary and control circuit Safety related data: B10 value with high demand rate acc. to SN 31920 Proportion of dangerous failures with low demand rate acc. to SN 31920 with high demand rate acc. to SN 31920 Failure rate [FIT] with low demand rate acc. to SN 31920 T1 value for proof test interval or service life acc. to IEC 61508 Protection against electrical shock 	% FIT	Plug-in without terminals Yes Yes 3 000 000 40 50 100 20

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 Product Approval

EMC

Functional Safety/Safety of Machinery













rest	
Certificates	

Shipping Approval

Type Test
Certificates/Test
Report











Shipping Approval other

ppiovai



Declaration of Conformity

Environmental Confirmations

other

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

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

Industry Mall (Online ordering system)

http://www.siemens.com/industrymall

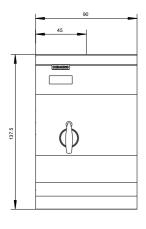
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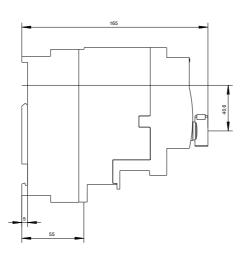
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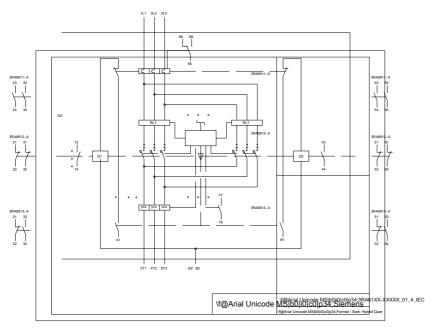
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

http://support.automation.siemens.com/WW/view/en/3RA62500CP30/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=3RA62500CP30&lang=en







last modified: 11.03.2015