

SIRIUS, COMPACT STARTER,
 REVERSING STARTER 690 V,
 110 ... 240 V AC/DC, 50 ... 60 HZ,
 0.1 ... 0.4 A, IP20,
 MAIN CIRCUIT CONNECTION: SCREW TERMINAL,
 AUXILIARY CIRCUIT CONNECTION: SCREW 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 assignment		continous operation according to IEC 60947-6-2
Protection class IP		IP20
Degree of pollution		3
mounting position / 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/s ² (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/s ² ; 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		

<ul style="list-style-type: none"> • according to IEC 61000-4-5 		4 kV main contacts, 2 kV auxiliary contacts
Conductor-bound parasitic coupling conductor-conductor SURGE		
<ul style="list-style-type: none"> • according to IEC 61000-4-5 		2 kV main contacts, 1 kV auxiliary contacts
Conductor-bound parasitic coupling BURST		
<ul style="list-style-type: none"> • according to IEC 61000-4-4 		4 kV main contacts, 2 kV auxiliary contacts
Maximum permissible voltage for safe disconnection		
<ul style="list-style-type: none"> • between main circuit and auxiliary circuit 	V	400
<ul style="list-style-type: none"> • between control and auxiliary circuit 	V	300
<ul style="list-style-type: none"> • between auxiliary circuit and auxiliary circuit 	V	250
Item designation		
<ul style="list-style-type: none"> • according to DIN 40719 extendable after IEC 204-2 / according to IEC 750 		Q
<ul style="list-style-type: none"> • according to DIN EN 61346-2 		Q

Main circuit:

Operating voltage / at AC-3 / rated value		
<ul style="list-style-type: none"> • maximum 	V	690
Number of poles / for main current circuit		3
Adjustable response current		
<ul style="list-style-type: none"> • of the current-dependent overload release 	A	0.1 ... 0.4
Formula for making capacity limit current		120 x I _e
Formula for interruption capacity limit current		100 x I _e
Emitted mechanical power / for 4-pole three-phase motor		
<ul style="list-style-type: none"> • at 400 V / rated value 	kW	0.09
<ul style="list-style-type: none"> • at 500 V / rated value 	kW	0.12
<ul style="list-style-type: none"> • 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		
<ul style="list-style-type: none"> • of the main contacts / typical 		10,000,000
<ul style="list-style-type: none"> • of the auxiliary contacts / typical 		10,000,000
<ul style="list-style-type: none"> • of the signal contacts / typical 		10,000,000

Control circuit:

type of voltage		AC
Control supply voltage / 1		
<ul style="list-style-type: none"> • 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	A	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
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Width	mm	90
Height	mm	170
Depth	mm	165
mounting position		any

Connections:

Product function		
<ul style="list-style-type: none"> removable terminal for main circuit removable terminal for auxiliary and control circuit 		Yes Yes
Design of the electrical connection		
<ul style="list-style-type: none"> for main current circuit for auxiliary and control current circuit 		screw-type terminals screw-type terminals
Type of the connectable conductor cross-section		
<ul style="list-style-type: none"> for main contacts <ul style="list-style-type: none"> solid finely stranded <ul style="list-style-type: none"> with conductor end processing for auxiliary contacts <ul style="list-style-type: none"> solid finely stranded <ul style="list-style-type: none"> with conductor end processing for AWG conductors <ul style="list-style-type: none"> for main contacts for auxiliary contacts 		2x (1.5 ... 6 mm ²), 1x 10 mm ² 2x (1.5 ... 6 mm ²) 0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²) 0.5 ... 2.5 mm ² , 2x (0.5 ... 1.5 mm ²) 2x (16 ... 10), 1x 8 2x (20 ... 14)

Certificates/approvals:

Verification of suitability	IEC / EN 60947-6-2		
General Product Approval	EMC	Functional Safety / Safety of Machinery	
 CCC  CSA  GOST  UL  C-TICK  VDE			

Test Certificates

[Type Test Certificates/Test Report](#)

Shipping Approval



other

[Declaration of Conformity](#) [other](#) [Environmental Confirmations](#)

UL/CSA ratings:

Operating current (FLA) / for three-phase squirrel cage motors	• at 480 V / rated value	A	0.4
	• at 600 V / rated value	A	0.4
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:		
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>

Cax online generator:

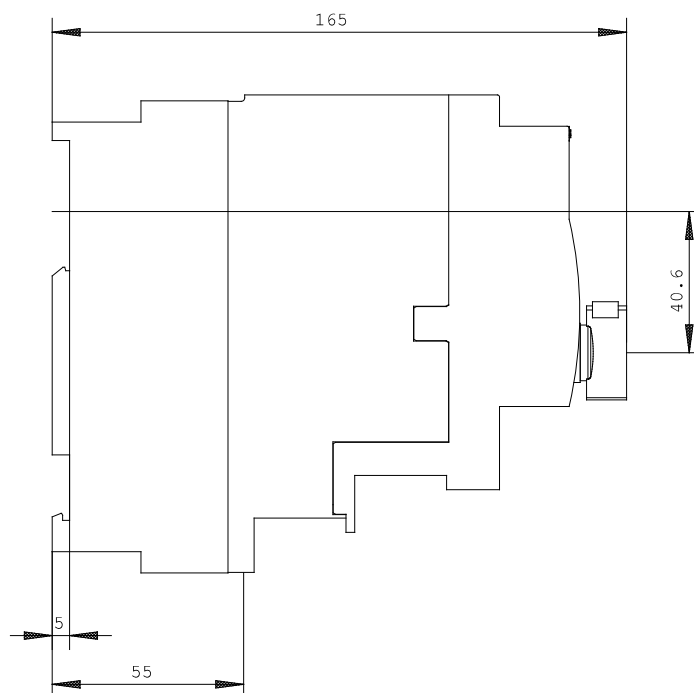
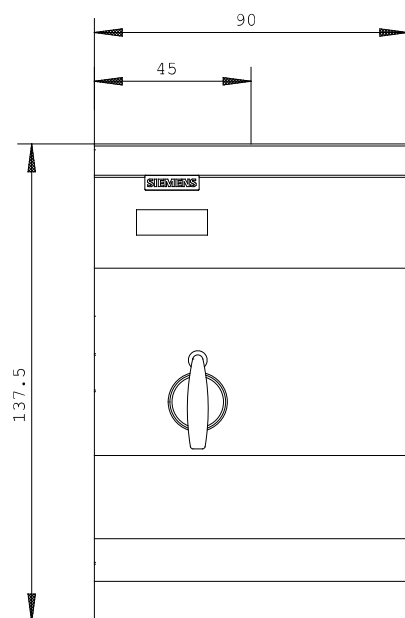
<http://www.siemens.com/cax>

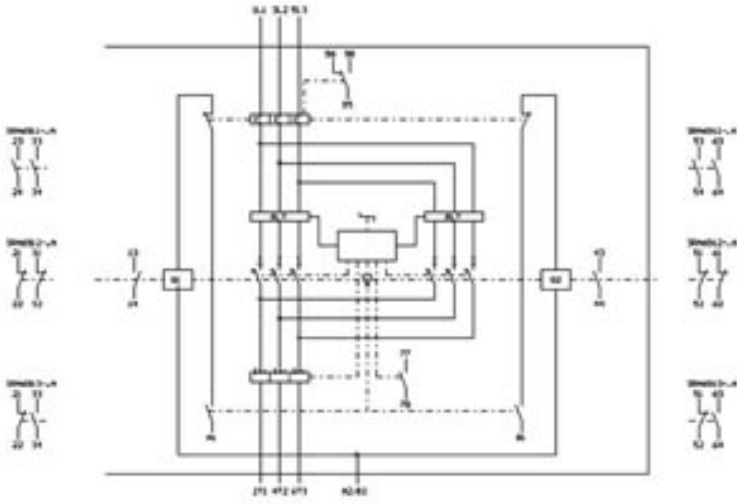
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA6250-1AP32/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA6250-1AP32





last change:

Dec 17, 2012