



SIRIUS, COMPACT STARTER,
DIRECT STARTER . 690 V, 24 V DC,
3 ... 12 A, IP20,
CONN. MAIN CIRCUIT: SCREW TERMINAL,
CONN. CONTROL CIRCUIT: SCREW TERMINAL

General technical data:

product brand name		SIRIUS
Product designation		compact starter
Design of the product		direct starter
Trip class		CLASS 10 and 20 adjustable
Product function		
• control circuit interface to parallel wiring		No
• bus-communication		Yes
• short circuit protection		Yes
• control circuit interface with IO link		Yes
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		80 ... 3000 MHz at 10V/m
Insulation voltage / rated value	V	690
Conductor-bound parasitic coupling conductor-earth SURGE • according to IEC 61000-4-5		4 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection
Conductor-bound parasitic coupling conductor-conductor SURGE • according to IEC 61000-4-5		2 kV main circuits, 0.5 kV auxiliary voltage with upstream overvoltage protection
Conductor-bound parasitic coupling BURST • according to IEC 61000-4-4		4 kV main circuits, 2 kV auxiliary circuits, 2 kV IO-Link, 2 kV limit switches, 2 kV line hand-held device
Reference code • according to DIN 40719 extended according to IEC 204-2 / according to IEC 750 • according to DIN EN 61346-2		Q 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	A	3 ... 12
Formula for making capacity limit current		12 x I _e
Formula for interruption capacity limit current		10 x I _e
Emitted mechanical power / for 4-pole three-phase motor • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value	kW kW kW	5.5 5.5 7.5
Service power / at AC-3 / at 400 V / rated value	kW	5.5
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
• of the auxiliary contacts / typical		10,000,000
• of the signal contacts / typical		10,000,000

Control circuit:

Type of voltage		AC
Holding power		
• for DC / maximum	W	2.9
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		0
• of the non-delayed short-circuit release / for alarm contact		0
Number of changeover contacts / of the current-dependent overload release / for alarm contact		0
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

Short-circuit:

Design of the fuse link / for short-circuit protection of the auxiliary switch		
• required		fuse gL/gG: 10 A

Installation/mounting/dimensions:

Mounting type		screw and snap-on mounting
Width	mm	45
Height	mm	170
Depth	mm	165
mounting position		any

Connections:

Product function		
• removable terminal for main circuit		Yes

<ul style="list-style-type: none"> removable terminal for auxiliary and control circuit 		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



Test Certificates

Shipping Approval

[Type Test Certificates/Test Report](#)



other

[Declaration of Conformity](#)

[other](#)

[Environmental Confirmations](#)

UL/CSA ratings:

yielded mechanical performance (hp) / for three-phase squirrel cage motors

at 200/208 V / rated value	hp	3
at 220/230 V / rated value	hp	3
at 460/480 V / rated value	hp	7.5
at 575/600 V / rated value	hp	10

Full-load current (FLA) / for 3-phase motor

- at 480 V / rated value
- at 600 V / rated value

A	12
A	12

Reliability figures:

B10 value		3,000,000
Proportion of dangerous failures	%	50
Protection against electrical shock		finger-safe

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:

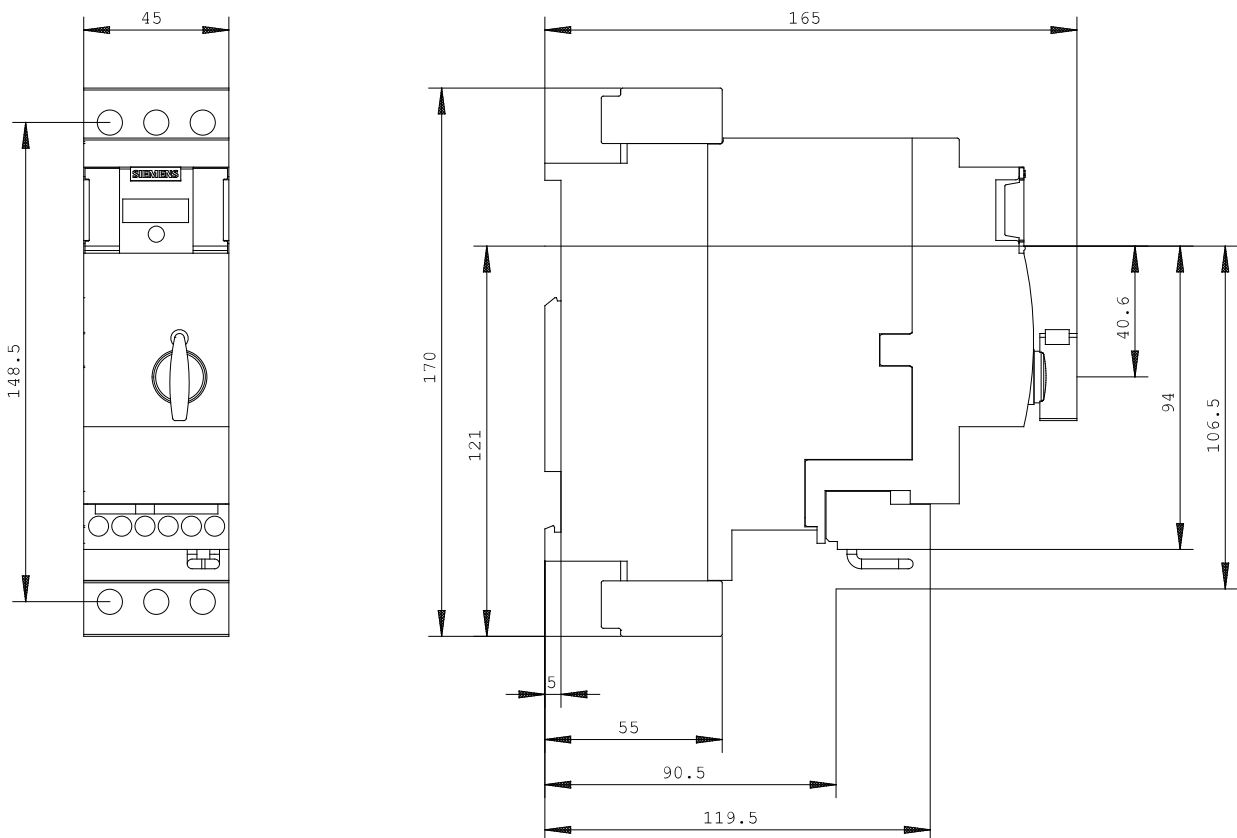
<http://www.siemens.com/cax>

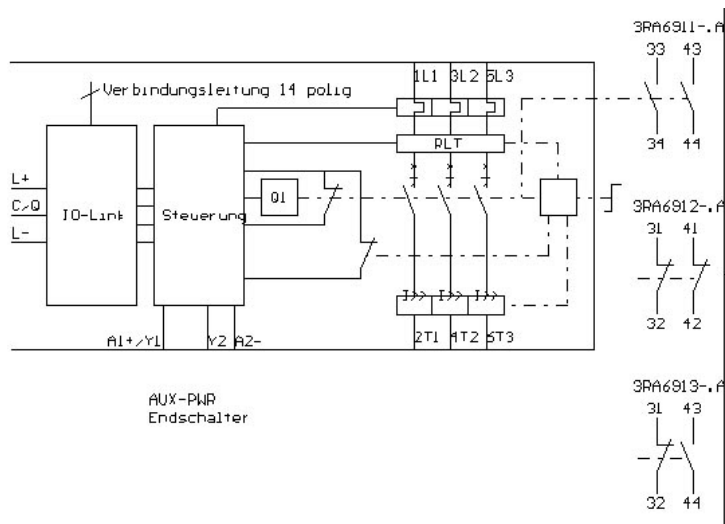
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3RA6400-1DB42/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA6400-1DB42





last change:

Jun 16, 2014