



SIRIUS, COMPACT STARTER,
DIRECT STARTER . 690 V, 24 V DC,
0.1 ... 0.4 A, IP20,
CONN. MAIN CIRCUIT: PLUG-IN,
W/O TERMINALS,
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		continuous 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	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 • at 400 V / rated value • at 500 V / rated value • at 690 V / rated value	kW kW kW	0.09 0.12 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
- of the auxiliary contacts / typical
- of the signal contacts / typical

10,000,000
10,000,000
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
- of the non-delayed short-circuit release / for alarm contact

0

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
- at DC-13 / at 6 A / at 24 V / typical

500,000

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

• 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		screw-type terminals
Type of the connectable conductor cross-section		
• for main contacts		
• solid		2x (1.5 ... 6 mm ²), 1x 10 mm ²
• finely stranded		
• with conductor end processing		2x (1.5 ... 6 mm ²)
• for auxiliary contacts		
• solid		0.5 ... 4 mm ² , 2x (0.5 ... 2.5 mm ²)
• finely stranded		
• with conductor end processing		0.5 ... 2.5 mm ² , 2x (0.5 ... 1.5 mm ²)
• for AWG conductors		
• for main contacts		2x (16 ... 10), 1x 8
• for auxiliary contacts		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](#)



LRS



PRS



RINA



RMRS

other

[Declaration of
Conformity](#)

[other](#)

[Environmental
Confirmations](#)

UL/CSA ratings:

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

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

A

0.4

A

0.4

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/3RA6400-1AB43/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3RA6400-1AB43



