

SIEMENS

Product data sheet

3RA6120-1BP33


SIRIUS, COMPACT LOAD FEEDER,
DIRECT STARTER WITH PARALLEL INTERFACE,
690 V, 32 A, 110 ... 240 V AC/DC,
50 ... 60 HZ, 0.32 ... 1.25 A, IP20,
CONNECTION MAIN CIRCUIT: PLUGGABLE,
WITHOUT TERMINALS,
CONNECTION AUXILIARY CIRCUIT: SCREW
TERMINAL

General technical data:

Product brand name	SIRIUS
Product designation	compact load feeder
Design of the product	direct starter
Size of the load feeder	S0
Trip class	CLASS 10 and 20 adjustable
Product component /surge suppressorsnrlaycs	Yes
Product function	
• control circuit interface to parallel wiring	Yes
• Bus-communication	No
• Short circuit protection	Yes
Protection class IP	IP20
Degree of pollution	3
Built in orientation / recommended	horizontal
Altitude of installation site / at a height over sea level	
• maximum	2000 m
Ambient temperature	
• during storage	
• minimum	-55 °C
• maximum	80 °C

<ul style="list-style-type: none"> • during the operating phase <ul style="list-style-type: none"> • minimum • maximum • during transport <ul style="list-style-type: none"> • minimum • maximum 	-20 °C 60 °C -55 °C 80 °C
Relative humidity / during the operating phase <ul style="list-style-type: none"> • minimum • maximum 	10 % 90 %
Resistance against vibration	f=1 up to 6 Hz; d=15 mm, 10 cycles, f=150 Hz; a=2g
Impulse voltage resistance / rated value	6000 V
EMC immunity to interference <ul style="list-style-type: none"> • according to IEC 60947-1 	corresponds to ...f severity 3
Field-bound parasitic coupling <ul style="list-style-type: none"> • according to IEC 61000-4-3 	10 V/m
Insulation voltage / rated value	690 V
Conductor-bound parasitic coupling conductor-earth SURGE <ul style="list-style-type: none"> • according to IEC 61000-4-5 	4 kV
Conductor-bound parasitic coupling conductor-conductor SURGE <ul style="list-style-type: none"> • according to IEC 61000-4-5 	1 kV
Conductor-bound parasitic coupling BURST <ul style="list-style-type: none"> • according to IEC 61000-4-4 	4 kV
Maximum permissible voltage for safe disconnection <ul style="list-style-type: none"> • between main circuit and auxiliary circuit • between control and auxiliary circuit • between auxiliary circuit and auxiliary circuit 	400 V 250 V 250 V
Equipment identification <ul style="list-style-type: none"> • acc. to DIN 40719 extended acc. to IEC 204-2 / acc. to IEC 750 • acc. to DIN EN 61346-2 	Q Q
Main circuit:	
Operating voltage / at 3 AC / rated value <ul style="list-style-type: none"> • maximum 	690 V

Number of poles / for main circuit	3
Adjustable response current / of the current-dependent overload release	
• initial value	0.32 A
• final value	1.25 A
Formula for making capacity limit current	$12 \times I_n$
Formula for interruption capacity limit current	$10 \times I_n$
Service power / at AC-3	
• at 400 V / rated value	15 kW
• at 500 V / rated value	15 kW
• at 690 V / rated value	15 kW
Emitted mechanical power / for three-phase servomotors / at 400 V / at standard switching / at 40 °C	
• rated value	0.37 kW
Operating cycles	
• at AC-41 / according to IEC 60947-6-2 / maximum	750 1/h
• at AC-43 / according to IEC 60947-6-2 / maximum	250 1/h
Off-load operating frequency	3600 1/h
Mechanical switching cycle as operating period	
• of the main contacts / typical	10000000
• of the auxiliary contacts / typical	10000000
• of the signal contact / typical	10000000
Control circuit:	
Type of voltage	AC/DC
Supply voltage frequency / for auxiliary and control current circuit / rated value	
• minimum	50 Hz
• maximum	60 Hz
Control supply voltage / for DC / rated value	
• minimum	110 V
• maximum	240 V
Control supply voltage / at 50 Hz / for AC / rated value	
• minimum	110 V
• maximum	240 V

Control supply voltage / at 60 Hz / for AC / rated value	
• minimum	110 V
• maximum	240 V
Operating range factor control supply voltage rated value / of solenoid	
• initial value	0.7
• final value	1.25
Switch-off delay time	50 ms
Start-up delay time	70 ms
Auxiliary circuit:	
Number of NC contacts	
• for auxiliary contact	1
Number of NO contacts	
• for auxiliary contact	1
Number of change-over switches	
• for auxiliary contact	0
Product extension	
• auxiliary switch	Yes
Number of NO contacts / of non-delayed short circuit release	
• for alarm contact	1
Number of change-over switches / of current-dependent overload release	
• for alarm contact	1
Electrical switching cycle as operating time / of the auxiliary contacts	
• at AC-15 / at 3 A / at 230 V / typical	500000
• at DC-13 / at 3 A / at 24 V / typical	100000
Electrical switching cycle as operating time / of the signal contact	
• at AC-15 / at 3 A / at 230 V / typical	500000
• at DC-13 / at 3 A / at 24 V / typical	100000
Contact reliability	One incorrect s...(17 V, 5 mA)
Short-circuit:	
Switch-off capacity limit short-circuit current	
• at 400 V / rated value	53 kA

• at 690 V / rated value	3 kA
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 notify switch / required	fuse gL/gG: 10 A
Installation/mounting/dimensions:	
Type of fixing/fixation	screw and snap-on mounting
Width	45 mm
Height	170 mm
Depth	165 mm
Connections:	
Product function	
• removable terminal for main circuit	Yes
Design of the electrical connection	
• for main current circuit	plug-in without terminals
Type of connectable conductor cross section	
• for main contacts	
• solid	2 x (1.5 ... 2.5 mm ²), 2 x (2.5 ... 6 mm ²), 1 x 10 mm ²
• finely stranded	
• with wire end processing	2 x (1.5 ... 2.5 mm ²), 2 x (2.5 ... 6 mm ²)
• for AWG conductors / for main contacts	2 x (16 ... 14), 2 x (14 ... 10), 1 x 8
Product function	
• removable terminal for auxiliary and control circuit	Yes
Design of the electrical connection	
• for auxiliary and control current circuit	screw-type terminals
Type of connectable conductor cross section	
• for auxiliary contacts	
• solid	1 x (0.5 ... 4 mm ²), 2 x (0.5 ... 2.5 mm ²)
• finely stranded	
• with wire end processing	1 x (0,5 ... 2,5 mm ²), 2 x (0,5 ... 1,5 mm ²)
• for AWG conductors / for auxiliary contacts	2 x (20 ... 14)
Certificates/approvals:	
varification of suitability	IEC / EN 60947-6-2
Shipbuilding-Approbation	available soon

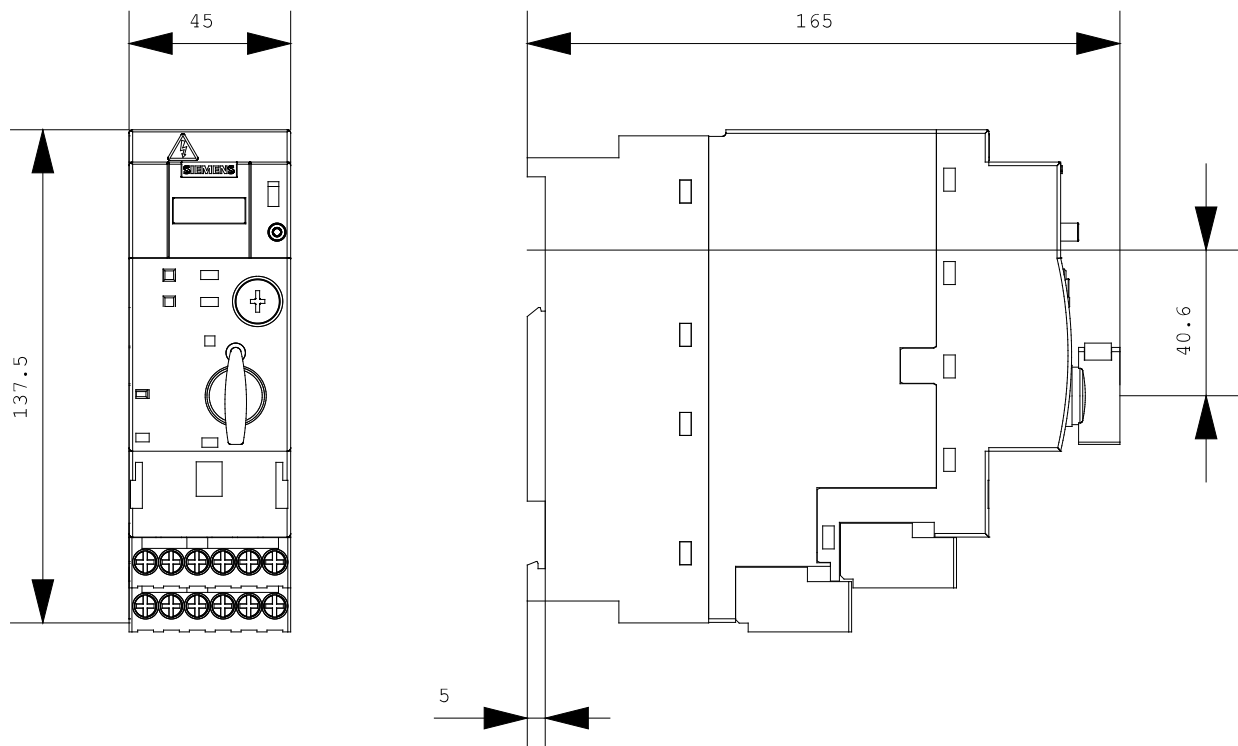
Safety:

Protection against electrical shock

finger-safe

Electrostatic discharge

8 kV

**last change:**

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Technical Assistance:

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