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 PRODUCT-DETAILS

## B7S-30-01-1.7-71

### B7S-30-01-1.7-71 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals




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#### General Information

Extended Product Type	B7S-30-01-1.7-71
Product ID	GJL1313001R7011
EAN	4013614187889

Catalog Description	B7S-30-01-1.7-71 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals
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Long Description	<p>The B7S-30-01 mini contactor is a compact 3 pole contactor with 1 auxiliary contact and screw terminals. They are ideally suited for applications where reliability is a must and space is at a premium. Mini contactors are used in residential buildings, commercial buildings and industrial applications for the control of single or three-phase loads up to 5.5 kW (AC-3) and 20 A (AC-1) or switching of control signals. Due to the low coil consumption, this device can be directly controlled by a PLC. Further features are the noiseless and hum-free coil, the integrated protective circuit with diodes and additional overvoltage protection, a switch position indication and the integrated possibility for rail or wall mounting. The integrated surge suppressor saves time and costs by avoiding the need to install an external suppressor circuit.</p>
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#### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

## Popular Downloads

Data Sheet, Technical Information	1SBC100214C0202
Instructions and Manuals	2CDC102047M6801
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	GJL1200436F0001

## Dimensions

Product Net Width	52.5 mm
Product Net Depth / Length	46.7 mm
Product Net Height	57.5 mm
Product Net Weight	0.175 kg

## Technical

Number of Main Contacts NO	3
Number of Main Contacts NC	0
Number of Auxiliary Contacts NO	0
Number of Auxiliary Contacts NC	1
Number of Poles	3P
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1 IEC 60335-2-40 A2L
Rated Operational Voltage	Auxiliary Circuit 690 V AC Auxiliary Circuit 250 V DC Main Circuit 690 V AC Main Circuit 220 V DC
Rated Frequency (f)	Control Circuit DC Main Circuit 60 Hz Main Circuit 50 Hz Main Circuit DC
Conventional Free-air Thermal Current ( $I_{th}$ )	Main Circuit 20 A
Rated Operational Current AC-1 ( $I_e$ )	(220 / 240 V) 40 °C 20 A (220 / 240 V) 55 °C 16 A (380 / 440 V) 40 °C 20 A (380 / 440 V) 55 °C 16 A (690 V) 40 °C 6 A (690 V) 55 °C 6 A
Rated Operational Current AC-3 ( $I_e$ )	(230 V) 55 °C 12 A (400 V) 55 °C 12 A (500 V) 55 °C 9 A (690 V) NO 55 °C 3.5 A
Rated Operational Current AC-15 ( $I_e$ )	(24 V) 4 A (120 V) 4 A (500 V) 2 A (220 / 240 V) 4 A (380 / 400 V) 3 A
Rated Operational	(24 V) 2.5 A

Current DC-13 ( $I_e$ )	(110 V) 0.7 A (220 / 240 V) 0.4 A
Rated Operational Power AC-3 ( $P_e$ )	(230 V) Three Phase 3 kW (400 V) Three Phase 5.5 kW (500 V) Three Phase 5.5 kW (690 V) Three Phase, NO 3 kW
Rated Breaking Capacity AC-3	8 x $I_e$ / AC-3
Rated Making Capacity AC-3	10 x $I_e$ / AC-3
Rated Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A
Rated Insulation Voltage ( $U_i$ )	690 V acc. to UL/CSA 600 V
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Maximum Electrical Switching Frequency	(AC-1) 300 cycles per hour (AC-15) 600 cycles per hour (AC-3) 600 cycles per hour (DC-1) 600 cycles per hour (DC-13) 600 cycles per hour (DC-3) 600 cycles per hour
Mechanical Durability	10000000 cycle
Minimum Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55$ °C)
Rated Control Circuit Voltage ( $U_c$ )	24 V DC
Coil Consumption	Average Holding Value 50 Hz 1.7 V·A Average Pull-in Value 50 Hz 1.7 V·A
Power Loss	at Rated Operating Conditions AC-1 per Pole 1.4 W
Mounting on DIN Rail	TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible with Insulated Ferrule 1/2x 1 ... 2.5 mm <sup>2</sup> Flexible 1/2x 1 ... 2.5 mm <sup>2</sup> Rigid 1/2x 1 ... 4 mm <sup>2</sup>
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 9 mm
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Recommended Screw Driver	M3 Pozidriv 1
Tightening Torque	Auxiliary Circuit 0.8 ... 1.1 N·m Control Circuit 0.8 ... 1.1 N·m Main Circuit 0.8 ... 1.1 N·m
Terminal Type	Screw Terminals
Mini Contactor Type	Interface Mini Contactor
Product Name	Mini Contactor
Remarks	No CA6 or CAF6 mountable

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
General Use Rating UL/CSA	(600 V AC) 16 A
Horsepower Rating UL/CSA	(115 V AC) Single Phase 0.75 Hp (200 V AC) Three Phase 2 Hp (220 ... 240 V AC) Three Phase 3 Hp (230 V AC) Single Phase 1.5 Hp (440 ... 480 V AC) Three Phase 5 Hp (550 ... 600 V AC) Three Phase 5 Hp
Connecting Capacity Main Circuit UL/CSA	Stranded 1/2x 22-10 AWG
Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 22-10 AWG
Contact Rating UL/CSA	A600
Tightening Torque UL/CSA	Auxiliary Circuit 7 in-lb Control Circuit 7 in-lb Main Circuit 7 in-lb
Full Load Amps Motor Use	(115 V AC) Single Phase 13.8 A (200 V AC) Three Phase 7.8 A (220 ... 240 V AC) Three Phase 9.6 A (230 V AC) Single Phase 10 A (440 ... 480 V AC) Three Phase 7.6 A (550 ... 600 V AC) Three Phase 6.1 A

## Environmental

Ambient Air Temperature	Operation -20 ... +55 °C Storage -40 ... +80 °C
Maximum Operating Altitude Permissible	2000 m
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 15g
Resistance to Vibrations	5g 5 ... 150 Hz

## Material Compliance

Conflict Minerals Reporting Template (CMRT)	9AKK108467A5658
REACH Declaration	2CMT2021-006202
RoHS Information	2CMT2021-006277
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019
Toxic Substances Control Act - TSCA	2CMT2023-006525
WEEE B2C / B2B	Business To Business
WEEE Category	5. Small Equipment (No External Dimension More Than 50 cm)

## ABB EcoSolutions

Environmental Product Declaration - EPD	1SAC200409H0001
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## Certificates and Declarations

A2L Certificate – IEC	1SAA938000-4601
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BV Certificate	1SAA920000-0204
CB Certificate	1SAA938000-2002
CQC Certificate	CQC2003010304064033
Declaration of Conformity - CCC	2020980304001854
Declaration of Conformity - CE	1SAD101100-3101
Declaration of Conformity - UKCA	1SAD201100-3101
DNV GL Certificate	1SAA938000-0306
EAC Certificate	1SAA920000-2702
KC Certificate	1SAA938000-1501
LR Certificate	1SAA938000-0504
RMRS Certificate	1SAA938000-0704
UL Certificate	E191658-19881208

## Container Information

Package Level 1 Units	box 10 piece
Package Level 1 Width	115 mm
Package Level 1 Depth / Length	280 mm
Package Level 1 Height	54 mm
Package Level 1 Gross Weight	1.82 kg
Package Level 1 EAN	4013614418365

## Classifications

Object Classification Code	Q
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
ETIM 9	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching
E-Number (Norway)	4183993

## Categories

Low Voltage Products and Systems → Control Products → Contactors → Mini Contactors

