

## PRODUCT-DETAILS

# B7S-30-10-1.7-71

## B7S-30-10-1.7-71 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals



### General Information

Extended Product Type	B7S-30-10-1.7-71
Product ID	GJL1313001R7101
EAN	4013614189845
Catalog Description	B7S-30-10-1.7-71 Mini Contactor 24 V DC - 3 NO - 0 NC - Screw Terminals

#### Long Description

The B7S-30-10 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 / 690 V (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. Auxiliary contacts,

### Ordering

Minimum Order Quantity	1 piece
Customs Tariff Number	85365080

### Popular Downloads

Data Sheet, Technical	1SBC100214C0202
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## Information

Instructions and Manuals	2CDC102047M6801
CAD Dimensional Drawing	2CDC001079B0201
Dimension Diagram	GJL1200436F0001

## Dimensions

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

## Technical

Number of Poles	3
Mini Contactor Type	Interface Mini Contactor
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
Rated Impulse Withstand Voltage ( $U_{imp}$ )	Auxiliary Circuit 6 kV Main Circuit 6 kV
Rated Insulation Voltage ( $U_i$ )	690 V acc. to UL/CSA 600 V
Number of Main Contacts NC	0
Number of Main Contacts NO	3
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 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 Short-time Withstand Current Low Voltage ( $I_{cw}$ )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A
Number of Auxiliary Contacts NC	0
Number of Auxiliary Contacts NO	1
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 Current DC-13 ( $I_e$ )	(24 V) 2.5 A (110 V) 0.7 A (220 / 240 V) 0.4 A
Conventional Free-air Thermal Current ( $I_{th}$ )	Main Circuit 20 A

Rated Control Circuit Voltage ( $U_c$ )	24 V DC
Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x $U_c$ (at $\theta \leq 55^\circ\text{C}$ )
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Mechanical Durability	10000000 cycle
Minimum Switching Capacity	Auxiliary Circuit 17 V Auxiliary Circuit 5 mA
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
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
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
Recommended Screw Driver	M3 Pozidriv 1
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
Power Loss	at Rated Operating Conditions AC-1 per Pole 1.4 W
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Remarks	No CA6 or CAF6 mountable

## Technical UL/CSA

Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
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
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
General Use Rating UL/CSA	(600 V AC) 16 A
Contact Rating UL/CSA	A600
Connecting Capacity Main	Stranded 1/2x 22-10 AWG

## Circuit UL/CSA

Connecting Capacity	Stranded 1/2x 22-10 AWG
Auxiliary Circuit UL/CSA	
Tightening Torque	Auxiliary Circuit 7 in-lb
UL/CSA	Control Circuit 7 in-lb
	Main Circuit 7 in-lb

## 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 acc. to IEC 60068-2-6	5g / 5 ... 150 Hz
RoHS Status	Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019

## Certificates and Declarations

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	10 piece
Package Level 1 Width	115 mm
Package Level 1 Height	54 mm
Package Level 1 Depth / Length	280 mm
Package Level 1 Gross Weight	1.82 kg
Package Level 1 EAN	4013614418389

## Classifications

Object Classification Code	Q
ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 5	EC000066 - Magnet contactor, AC-switching

ETIM 6	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 8	EC000066 - Power contactor, AC switching
eClass	V11.0 : 27371003
UNSPSC	39121529
IDEA Granular Category Code (IGCC)	4763 >> Power contactor, DC switching

Categories

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

