

Representative Image

Alternate Catalog No. B7D-30-10-05
Catalog No. GJL1317001R0105

Description: B7D-30-10-05 Mini Contactor 220-240VDC with diode

UPC No 4013614262906

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The B7D-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. The mini contactor has a build-in surge suppressor diode. Further features are the noiseless and hum-free coil, the integrated overvoltage protection, a switch position indication and the integrated possibility for rail or wall mounting.

Descriptors

Category	AF Contactors

Specifications

Product Type	Mini Contactors (B6, B7)
General Use Rating UL/CSA	(600 V AC) 16 A
Object Classification Code	Q
Terminal Type	Screw Terminals
Rated Control Circuit Voltage	220 ... 240 V DC
Number of Main Contacts NO	3
Connecting Capacity Auxiliary Circuit UL/CSA	Stranded 1/2x 22-10 american wire gauge
Number of Main Contacts NC	0
Maximum Operating Voltage UL/CSA	Main Circuit 600 V AC
Connecting Capacity Main Circuit UL/CSA	Stranded 1/2x 22-10 american wire gauge
Resistance to Vibrations acc. to IEC 60068-2-6	5g / 5 ... 150 Hz
Number of Auxiliary Contacts NO	1
Connecting Capacity Main Circuit UL/CSA	Stranded 1/2x 22-10 american wire gauge
RoHS Status	Following EU Directive 2011/65/EU
Reference Ambient Air Temperature	Operation -20 ... +55 °C
Rated Operational Voltage	Auxiliary Circuit 12 ... 240 V DC Auxiliary Circuit 12 ... 500 V AC / DC Main Circuit 12 ... 690 V AC / DC Main Circuit 690 V AC
Resistance to Shock acc. to IEC 60068-2-27	11 ms Pulse 15g
Number of Auxiliary Contacts NC	0
Tightening Torque UL/CSA	Auxiliary Circuit 7 in-lb (pound inch) Control Circuit 7 in-lb (pound inch) Main Circuit 7 in-lb (pound inch)
Maximum Operating Altitude Permissible	2000 m
Rated Operational Current AC-1	(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

by ABB

Specifications

Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1
Rated Operational Power AC-3	(220 / 230 / 240 V) 3 kW (400 V) 5.5 kW (400 V) Three Phase 5.5 kW (440 V) 5.5 kW (500 V) 5.5 kW (690 V) 3 kW
Rated Breaking Capacity AC-3 acc. to IEC 60947-4-1	8 x Ie / AC-3
Horsepower Rating UL/CSA	(208 V AC) Three Phase 3 hp (220 ... 240 V AC) Single Phase 1.5 hp (220 ... 240 V AC) Three Phase 3 hp (440 ... 480 V AC) Three Phase 5 hp (550 ... 600 V AC) Three Phase 5 hp
Conventional Free-air Thermal Current	Main Circuit 20 A
Rated Operational Current AC-15	(120 V) 4 A (220 / 240 V) 4 A (24 V) 4 A (380 / 400 V) 3 A (500 V) 2 A
Rated Frequency	Control Circuit DC Main Circuit 60 Hz Main Circuit 50Hz Main Circuit DC
Rated Short-time Withstand Current	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 96 A
Rated Operational Current AC-3	(220 / 230 / 240 V) 55 °C 11.3 A (380 / 400 V) 55 °C 11.5 A (440 V) 55 °C 10.1 A (500 V) 55 °C 9.2 A (690 V) 55 °C 3.8 A
Rated Making Capacity AC-3 acc. to IEC 60947-4-1	10 x Ie / AC-3
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
Short-Circuit Protective Devices	gG Type Fuses Type 1&2 25 A
Rated Insulation Voltage	690 V acc. to UL/CSA 600 V
Mechanical Durability	10000000 cycle
Coil Operating Limits	(acc. to IEC 60947-4-1) for DC supply 0.85 ... 1.1 x Uc (at θ ≤ 55 ° C)
Secondary Rated Impulse Withstand Voltage	Auxiliary Circuit 6 kV Main Circuit 6 kV
Connecting Capacity Main Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 square mm Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square mm Flexible 1/2x 1 ... 2.5 square mm Rigid 1/2x 1 ... 4 square mm
Rated Operational Current DC-13	(110 V) 0.7 A (220 / 240 V) 0.4 A (24 V) 2.5 A
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 square mm Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square mm Flexible 1/2x 1 ... 2.5 square mm Rigid 1/2x 1 ... 4 square mm
Coil Consumption	Average Holding Value 50 Hz 3.5 V - A Average Pull-in Value 50 Hz 3.5 V - A
Degree of Protection	Auxiliary Circuit Terminals IP20 Control Circuit Terminals IP20 Main Circuit Terminals IP20
Connecting Capacity Auxiliary Circuit	Flexible with Ferrule 1/2x 1 ... 2.5 square millimetre Flexible with Insulated Ferrule 1/2x 1 ... 2.5 square millimetre Flexible 1/2x 1 ... 2.5 square millimetre Rigid 1/2x 1 ... 4 square millimetre
Mounting on DIN Rail	TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715

Specifications

Screw Terminal Type	Screw Terminals
Wire Stripping Length	Auxiliary Circuit 9 mm Main Circuit 9 mm

Classifications

ETIM 4	EC000066 - Magnet contactor, AC-switching
ETIM 6.0	EC000066 - Power contactor, AC switching
ETIM 7	EC000066 - Power contactor, AC switching
ETIM 5.0	EC000066 - Magnet contactor, AC-switching
eClass	7.0 27371003

Dimensions

Product Net Weight	0.175 kg
Product Net Depth / Length	46.5 mm
Product Net Width	52.5 mm
Product Net Height	57.5 mm

Package Information

Package Level 1 Width	115 mm
Package Level 1 Height	54 mm
Package Level 1 Depth / Length	280 mm
Package Level 1 EAN	4013614420139
Package Level 1 Units	10 piece
Package Level 1 Gross Weight	1.82 kg

Ordering

Minimum Order Quantity	1
Customs Tariff Number	85365080