



Descriptors

Alternate Catalog No. B7D-40-00-01 Catalog No. GJL1317201R0001

Description: B7D-40-00-01 Mini Contactor 24VDC with diode

UPC No 4013614262876

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The B7D-40-00 mini contactor is a compact 4 pole contactor with 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 buldings, commercial buildings and industrial applications for the control of single or three-phase loads up to $5.5 \, \mathrm{kW}$ (AC-3) and $20 \, \mathrm{A} / 690 \, \mathrm{V}$ (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.

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	24 V DC	
Number of Main Contacts NO	4	
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	0	
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	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	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	
Standards	IEC/EN 60947-1 IEC/EN 60947-4-1 IEC/EN 60947-5-1 UL 60947-1 UL 60947-4-1	

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Specifications	
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 le / 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 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 le / AC-3
Maximum Electrical Switching Frequency	AC-1 300 cycles per hour AC-15 360 cycles per hour AC-3 600 cycles per hour DC-1 600 cycles per hour DC-13 360 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 $\theta \le 55$ ° C)
Secondary Rated Impulse Withstand Voltage	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
Connecting Capacity Control Circuit	Flexible with Ferrule $1/2x\ 1\dots 2.5$ square mm Flexible with Insulated Ferrule $1/2x\ 1\dots 2.5$ square mm Flexible $1/2x\ 1\dots 2.5$ square mm Rigid $1/2x\ 1\dots 4$ 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
Screw Terminal Type	Screw Terminals

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

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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	4013614420146	
Package Level 1 Units	10 piece	
Package Level 1 Gross Weight	1.82 kg	

Ordering	
Minimum Order Quantity	1
Customs Tariff Number	85365080

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