



Representative Image

Alternate Catalog No. AF12B-30-01-14 Catalog No. 1SBL157061R1401

Description: AF12B-30-01-14 250-500V50/60HZ-DC Contactor

UPC No 3471523122147

Home > Contactors & Starters > UL Listed IEC Contactors > AF Contactors

AF12B 3-pole contactors comply with the latest railway rolling stock standards and allow installation in passengers or driver cabins for trains frequently operating tunnels or undergrounds. They are mainly used for controlling 3-phase motors and power circuits up to 690 V AC and 220 V DC. Improve the compactness of the installations thanks to reduced dimension and side-by-side mounting requiring less 15% width (without spacing) from -40 °C up to +70 °C. Meet all main rolling stocks standards: IEC 60947-4-1, IEC 60947-5-1, IEC 60077-1/-2 and applicable parts of EN 50155 standards, shocks and vibration withstand conforming to IEC 61373 cat. 1, class B. Reach the highest levels in fire and smoke behaviour with compliance to European standard EN 45545-2 (HL2, HL3 hazard levels) in group mounting. Reduce train energy with lighter devices and requiring 68% less coil energy consumption in operation. Electronic coil interface accepting sinusoidal AC 50/60 Hz control supplies included inside U_{cmin}.... U_{cmax} voltage range. Max permitted AC 50/60 Hz control voltage must not be exceeded (see technical data). Wide range of auxiliary contact blocks for front and side mounting.

Descriptors

Category	AF Contactors
Block Contactor Type	3-Pole Contactor

Specifications

Product Type	AF
General Use Rating UL/CSA	(600 V AC) 28 A
Object Classification Code	Q
Terminal Type	Screw Terminals
Rated Control Circuit Voltage	50 Hz /60 Hz DC Operation 250 ... 500 V
Number of Main Contacts NO	3
Number of Main Contacts NC	0
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Number of Auxiliary Contacts NO	0
RoHS Status	Following EU Directive 2011/65/EU
Rated Operational Voltage	Auxiliary Circuit 690 V Main Circuit 690 V
Number of Auxiliary Contacts NC	1
Rated Operational Current AC-1	(690 V) 40 °C 28 A
Horsepower Rating UL/CSA	(220 ... 240 V AC) Three Phase 3 hp (440 ... 480 V AC) Three Phase 7-1/2 hp (550 ... 600 V AC) Three Phase 10 hp (120 V AC) Single Phase 1 hp (200 ... 208 V AC) Three Phase 3 hp (240 V AC) Single Phase 2 hp
Conventional Free-air Thermal Current	acc. to IEC 60947-5-1, q = 40 °C 16 A
Rated Operational Current AC-15	(220 / 240 V) 4 A (24 / 127 V) 6 A (500 V) 2 A (690 V) 2 A (400 / 440 V) 3 A
Rated Frequency	Auxiliary Circuit 50 Hz Auxiliary Circuit 60 Hz Main Circuit 50Hz Main Circuit 60 Hz

by ABB

Specifications

Rated Short-time Withstand Current	for 0.1 s 140 A for 1 s 100 A
Rated Operational Current AC-3	(380 / 400 V) 60 °C 12 A
Maximum Electrical Switching Frequency	AC-15 1200 cycles per hour DC-13 900 cycles per hour
Operate Time	Between Coil De-energization and NC Contact Closing 13 ... 98 ms Between Coil De-energization and NO Contact Opening 11 ... 95 ms Between Coil Energization and NC Contact Opening 38 ... 90 ms Between Coil Energization and NO Contact Closing 40 ... 95 ms
Connecting Capacity Main Circuit	Rigid 1/2x 1 ... 6 m ² Flexible with Ferrule 1/2x 0.75 ... 6 m ² Flexible with Insulated Ferrule 1x 0.75 ... 4 m ² /2x 0.75 ... 2.5 m ²
Rated Operational Current DC-13	(125 V) 0.55 A / 69 W (24 V) 6 A / 144 W (250 V) 0.27 A / 68 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (220 V) 0.27 A / 60 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W
Degree of Protection	acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20
Screw Terminal Type	Screw Terminals
Wire Stripping Length	Main Circuit 10 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

Dimensions

Product Net Weight	0.31kg
Product Net Depth / Length	77 mm
Product Net Width	45 mm
Product Net Height	86 mm

Package Information

Package Level 1 Width	87 mm
Package Level 1 Height	47 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 EAN	3471523122147
Package Level 1 Units	box 1 piece
Package Level 2 Width	250 mm
Package Level 2 Height	315 mm
Package Level 1 Gross Weight	0.31 kg
Package Level 2 Units	27 piece
Package Level 3 Units	1296 piece
Package Level 2 Depth / Length	300 mm
Package Level 2 Gross Weight	16.74 kg

Ordering

Minimum Order Quantity	1
Customs Tariff Number	85364900