



Representative Image

## Alternate Catalog No. AF16B-22-00-14 Catalog No. 1SBL177561R1400

**Description:** AF16B-22-00-14 250-500V50/60HZ-DC Contactor

**UPC No** 3471523123243

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

AF16B 4-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 non-inductive or slightly inductive loads and generally for controlling power circuits up to 690 V AC and 440 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<sub>min</sub>... U<sub>max</sub> 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	4-Pole Contactor

### Specifications

Product Type	AF
General Use Rating UL/CSA	(600 V AC) 30 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	2
Number of Main Contacts NC	2
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
Reference Ambient Air Temperature	Close to Contactor for Storage -60 ... +80 °C Near Contactor for Operation in Free Air -40 ... +70 °C
Number of Auxiliary Contacts NC	0
Rated Operational Current AC-1	(690 V) 40 °C 30 A
Rated Operational Power AC-3	(220 / 230 / 240 V) 4 KWT (380 / 400 V) 7.5 KWT (415 V) 9 KWT (440 V) 9 KWT (500 V) 9 KWT (690 V) 9 KWT (400 V) 7.5 KWT
Conventional Free-air Thermal Current	acc. to IEC 60947-4-1, Open Contactors q = 40 °C 35 A (220 / 230 / 240 V) 60 °C 18 A (380 / 400 V) 60 °C 18 A (415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A
Rated Operational Current AC-3	(220 / 230 / 240 V) 60 °C 18 A (380 / 400 V) 60 °C 18 A (415 V) 60 °C 18 A (440 V) 60 °C 18 A (500 V) 60 °C 15 A (690 V) 60 °C 10.5 A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for I <sub>e</sub> > 100 A) at 690 V 106 A

**by ABB**

## Specifications

Secondary Rated Impulse Withstand Voltage	6 kV
Connecting Capacity Main Circuit	Rigid 1/2x 1 ... 6 m <sup>2</sup> Flexible with Ferrule 1/2x 0.75 ... 6 m <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 4 m <sup>2</sup> /2x 0.75 ... 2.5 m <sup>2</sup>
Connecting Capacity Control Circuit	Flexible with Ferrule 1/2x 0.75 ... 2.5 m <sup>2</sup> Flexible with Insulated Ferrule 1x 0.75 ... 2.5 m <sup>2</sup> /2x 0.75 ... 1.5 m <sup>2</sup> Rigid 1/2x 1 ... 2.5 m <sup>2</sup>

## 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	3471523123243
Package Level 1 Units	box 1 piece
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