

**PRODUCT-DETAILS** 

## AF09ZB-22-00RT-21

# AF09ZB-22-00RT-21 24-60V50/60HZ 20-60VDC Contactor



#### **General Information**

Extended Product Type	AF09ZB-22-00RT-21
Product ID	1SBL136560R2100
EAN	3471523129719

Catalog Description

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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 rollling 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 handling large DC voltage fluctuation voltage, including several Uc DC control voltages used for battery supply

and accepting sinusoïdal AC 50/60 Hz control supplies included inside Ucmin.... Ucmax 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.

AF09ZB..RT 4-pole contactors comply with the latest railway rolling stock standards and allow installation in passengers or driver cabins for trains frequently operating

Long Description

#### 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
UNSPSC	39121529

Container Information	
Package Level 1 Units	box 1 piece
Package Level 1 Width	87 mm
Package Level 1 Depth / Length	79 mm
Package Level 1 Height	47 mm
Package Level 1 Gross Weight	0.32 kg
Package Level 1 EAN	3471523129719
Package Level 2 Units	box 27 piece
Package Level 2 Width	250 mm
Package Level 2 Depth / Length	300 mm
Package Level 2 Height	315 mm
Package Level 2 Gross Weight	17.28 kg
Package Level 3 Units	1296 piece

Certificates and Declarations (Document Number)	
CB Certificate	CB_SE-80869M1
CCC Certificate	CCC_2010010304445624
Declaration of Conformity - CE	1SBD250004U1000
EAC Certificate	EAC_RU C-FR ME77 B03597
Environmental Information	1SBD250165E1000
Instructions and Manuals	1SBC101035M6801
RoHS Information	1SBD250004U1000
UL Certificate	UL_20121126-E319322_4_1
UL Listing Card	UL_E319322

Technical UL/CSA	
General Use Rating	(600 V AC) 25 A
UL/CSA	

Environmental	
Ambient Air Temperature	Close to Contactor for Storage -60 +80 °C Near Contactor for Operation in Free Air -40 +70 °C
Climatic Withstand	Category B according to IEC 60947-1 Annex Q
Maximum Operating Altitude Permissible	3000 m
RoHS Status	Following EU Directive 2011/65/EU

Technical	
Number of Main Contacts NO	2
Number of Main Contacts NC	2

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Number of Auxiliary	0
Contacts NO Number of Auxiliary	0
Contacts NC Rated Operational	Main Circuit 690 V
Voltage	Main Circuit FO / CO Un
Rated Frequency (f)  Conventional Free-air	Main Circuit 50 / 60 Hz acc. to IEC 60947-4-1, Open Contactors $q = 40$ °C 35 A
Thermal Current (I <sub>th</sub> )	
Rated Operational Current AC-1 (I <sub>e</sub> )	(690 V) 40 °C 25 A (690 V) 60 °C 25 A (690 V) 70 °C 22 A
Rated Operational Current AC-3 (I <sub>e</sub> )	(220 / 230 / 240 V) 60 °C 9 A (380 / 400 V) 60 °C 9 A (415 V) 60 °C 9 A (440 V) 60 °C 9 A (500 V) 60 °C 9.5 A (690 V) 60 °C 7 A
Rated Operational Power AC-3 (P <sub>e</sub> )	(220 / 230 / 240 V) 2.2 kW (380 / 400 V) 4 kW (415 V) 4 kW (440 V) 4 kW (500 V) 5.5 kW (690 V) 5.5 kW (400 V) 4 kW
Rated Short-time Withstand Current (I <sub>cw</sub> )	at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 1 s -empty- A
Maximum Breaking Capacity	cos phi=0.45 (cos phi=0.35 for le > 100 A) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for le > 100 A) at 690 V 106 A
Maximum Electrical Switching Frequency	AC-1 600 cycles per hour
Rated Insulation Voltage $(U_i)$	acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 690 V
Rated Impulse Withstand Voltage (U <sub>imp</sub> )	6 kV
Maximum Mechanical Switching Frequency	3600 cycles per hour
Rated Control Circuit Voltage (U <sub>c</sub> )	50 Hz 24 60 V 60 Hz 24 60 V DC Operation 20 60 V
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
Terminal Type	Ring-Tongue Terminals
Dimensions	
Product Net Width	45 mm
Product Net Depth / Length	77 mm
Product Net Height	86 mm
Product Net Weight	0.32 kg
Popular Downloads	

#### **Popular Downloads**

Instructions and	1SBC101035M6801
Manuals	

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Ordering	
Minimum Order Quantity	1 piece
Customs Tariff Number	85364900

### Categories

 $\textbf{Low Voltage Products and Systems} \rightarrow \textbf{Control Products} \rightarrow \textbf{Contactors} \rightarrow \textbf{Block Contactors}$ 

