

# AF09ZB ... AF38ZB 3-pole contactors

## 4 to 18.5 kW

### DC operated - connection with standard ferrules



AF09ZB-30-10



AF26ZB-30-00

#### Description

AF09ZB ... AF38ZB 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. These contactors are of the block type design with 3 main poles.

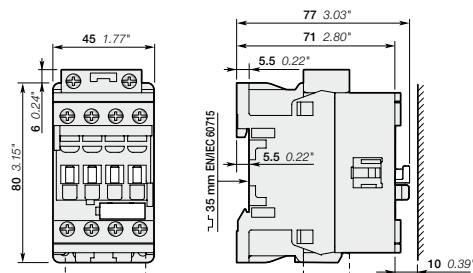
- designed in accordance to the applicable parts of IEC 60077 and EN 50155 standard
- shocks and vibration withstand conforming to IEC 61373 (category 1, class B)
- fire and smoke safety compliance to european standard EN 45545 (H2, HL3 hazard levels)
- electronic coil interface accepting a wide DC control voltage range (0.85  $U_c$  min. ... 1.1  $U_c$  max. according to IEC 60947-4-1) including several  $U_c$  control voltages (0.7 ... 1.25  $U_c$  according to IEC 60077) used for battery supply
- low coil consumption
- built-in surge suppression
- side by side mounting without restriction from -40 °C up to +70 °C
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories.

#### Ordering details

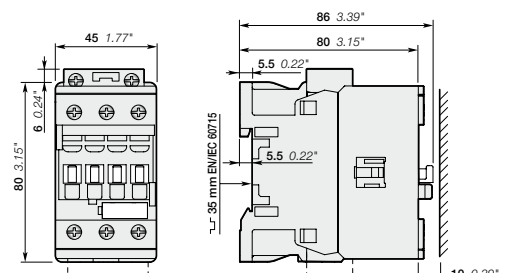
IEC		UL / CSA		Supply control voltage $U_c$ (IEC 60077) (1)	Rated control circuit voltage $U_c$ min. ... $U_c$ max. (IEC 60947-4-1)	Auxiliary contacts fitted	Type	Order code	Weight										
Rated power	operational current $\theta \leq 40$ °C	3-phase motor rating	General use rating	$U_c$	V DC				Pkg (1 pce)										
400 V AC-3	AC-1	480 V	600 V AC	V DC	V DC				kg										
kW	A	hp	A																
4	25	5	25	24, 33, 48	20...60	1 0	AF09ZB-30-10-21	1SBL136061R2110	0.31										
								0 1	AF09ZB-30-01-21	1SBL136061R2101	0.31								
								1 0	AF09ZB-30-10-22	1SBL136061R2210	0.31								
								0 1	AF09ZB-30-01-22	1SBL136061R2201	0.31								
								1 0	AF09ZB-30-10-23	1SBL136061R2310	0.31								
								0 1	AF09ZB-30-01-23	1SBL136061R2301	0.31								
								5.5	28	7.5	28	24, 33, 48	20...60	1 0	AF12ZB-30-10-21	1SBL156061R2110	0.31		
																0 1	AF12ZB-30-01-21	1SBL156061R2101	0.31
																1 0	AF12ZB-30-10-22	1SBL156061R2210	0.31
																0 1	AF12ZB-30-01-22	1SBL156061R2201	0.31
																1 0	AF12ZB-30-10-23	1SBL156061R2310	0.31
																0 1	AF12ZB-30-01-23	1SBL156061R2301	0.31
7.5	30	10	30	24, 33, 48	20...60	1 0	AF16ZB-30-10-21	1SBL176061R2110	0.31										
								0 1	AF16ZB-30-01-21	1SBL176061R2101	0.31								
								1 0	AF16ZB-30-10-22	1SBL176061R2210	0.31								
								0 1	AF16ZB-30-01-22	1SBL176061R2201	0.31								
								1 0	AF16ZB-30-10-23	1SBL176061R2310	0.31								
								0 1	AF16ZB-30-01-23	1SBL176061R2301	0.31								
11	45	15	45	24, 33, 48	20...60	0 0	AF26ZB-30-00-21	1SBL236061R2100	0.37										
				72, 96, 110	48...130	0 0	AF26ZB-30-00-22	1SBL236061R2200	0.37										
				220	100...250	0 0	AF26ZB-30-00-23	1SBL236061R2300	0.37										
15	50	20	50	24, 33, 48	20...60	0 0	AF30ZB-30-00-21	1SBL276061R2100	0.37										
				72, 96, 110	48...130	0 0	AF30ZB-30-00-22	1SBL276061R2200	0.37										
				220	100...250	0 0	AF30ZB-30-00-23	1SBL276061R2300	0.37										
18.5	50	25	50	24, 33, 48	20...60	0 0	AF38ZB-30-00-21	1SBL296061R2100	0.37										
				72, 96, 110	48...130	0 0	AF38ZB-30-00-22	1SBL296061R2200	0.37										
				220	100...250	0 0	AF38ZB-30-00-23	1SBL296061R2300	0.37										

(1) Other control voltages, see voltage code table.

#### Main dimensions mm, inches



AF09ZB, AF12ZB, AF16ZB



AF26ZB, AF30ZB, AF38ZB

# AF09(Z)B ... AF38(Z)B 3-pole contactors

## 4 to 18.5 kW

### AC operated - connection with standard ferrules



AF09(Z)B-30-10

1SBC101091F0014



AF26(Z)B-30-00



1SBC101091F0014

#### Description

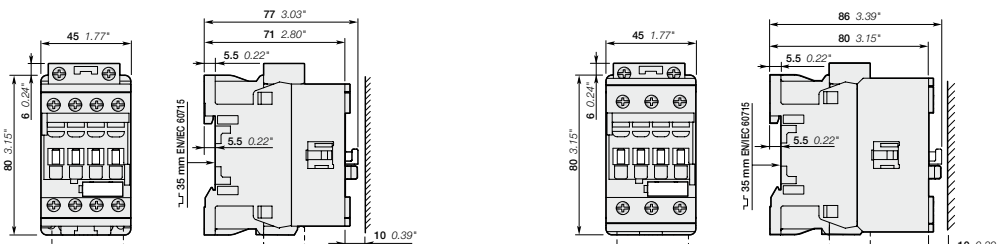
AF09(Z)B ... AF38(Z)B 3-pole contactors comply with the latest railway rolling stock standards and allow installation in passengers or driver cabins for trains frequently operating tunnels or undergrounds. They are mainly used for controlling 3-phase motors and power circuits up to 690 V AC and 220 V DC. These contactors are of the block type design with 3 main poles.

- designed in accordance to the applicable parts of IEC 60077 and EN 50155 standard
- shocks and vibration withstand conforming to IEC 61373 (category 1, class B)
- fire and smoke safety compliance to european standard EN 45545 (H2, HL3 hazard levels)
- electronic coil interface accepting sinusoidal AC 50/60 Hz control supplies included inside the wide control voltage range  $U_c \text{ min.} \dots U_c \text{ max.}$  of the contactor. Max. permitted control voltage must not be exceeded during voltage fluctuation defined according to IEC 60077 or EN 50155 (see technical data)
- built-in surge suppression and side by side mounting without restriction from  $-40 \text{ }^\circ\text{C}$  up to  $+70 \text{ }^\circ\text{C}$
- add-on auxiliary contact blocks for front or side mounting and a wide range of accessories

#### Ordering details

IEC		UL / CSA		Rated control circuit voltage $U_c \text{ min.} \dots U_c \text{ max.}$ (IEC 60947-4-1)	Auxiliary contacts fitted	Type	Order code	Weight				
Rated operational power	current $\theta \leq 40 \text{ }^\circ\text{C}$	3-phase motor rating 480 V	General use rating 600 V AC						Pkg (1 pce)			
400 V AC-3	AC-1	hp	A	V AC 50/60 Hz	 			kg				
4	25	5	25	24...60	1 0	AF09ZB-30-10-21	1SBL136061R2110	0.31				
					0 1	AF09ZB-30-01-21	1SBL136061R2101	0.31				
				48...130	1 0	AF09ZB-30-10-22	1SBL136061R2210	0.31				
					0 1	AF09ZB-30-01-22	1SBL136061R2201	0.31				
				100...250	1 0	AF09ZB-30-10-23	1SBL136061R2310	0.31				
					0 1	AF09ZB-30-01-23	1SBL136061R2301	0.31				
				250...500	1 0	AF09B-30-10-14	1SBL137061R1410	0.31				
					0 1	AF09B-30-01-14	1SBL137061R1401	0.31				
				5.5	28	7,5	28	24...60	1 0	AF12ZB-30-10-21	1SBL156061R2110	0.31
									0 1	AF12ZB-30-01-21	1SBL156061R2101	0.31
48...130	1 0	AF12ZB-30-10-22	1SBL156061R2210					0.31				
	0 1	AF12ZB-30-01-22	1SBL156061R2201					0.31				
100...250	1 0	AF12ZB-30-10-23	1SBL156061R2310					0.31				
	0 1	AF12ZB-30-01-23	1SBL156061R2301					0.31				
250...500	1 0	AF12B-30-10-14	1SBL157061R1410					0.31				
	0 1	AF12B-30-01-14	1SBL157061R1401					0.31				
7.5	30	10	30					24...60	1 0	AF16ZB-30-10-21	1SBL176061R2110	0.31
									0 1	AF16ZB-30-01-21	1SBL176061R2101	0.31
				48...130	1 0	AF16ZB-30-10-22	1SBL176061R2210	0.31				
					0 1	AF16ZB-30-01-22	1SBL176061R2201	0.31				
				100...250	1 0	AF16ZB-30-10-23	1SBL176061R2310	0.31				
					0 1	AF16ZB-30-01-23	1SBL176061R2301	0.31				
				250...500	1 0	AF16B-30-10-14	1SBL177061R1410	0.31				
					0 1	AF16B-30-01-14	1SBL177061R1401	0.31				
				11	45	15	45	24...60	0 0	AF26ZB-30-00-21	1SBL236061R2100	0.37
								48...130	0 0	AF26ZB-30-00-22	1SBL236061R2200	0.37
100...250	0 0	AF26ZB-30-00-23	1SBL236061R2300					0.37				
250...500	0 0	AF26B-30-00-14	1SBL237061R1400					0.37				
24...60	0 0	AF30ZB-30-00-21	1SBL276061R2100					0.37				
15	50	20	50	48...130	0 0	AF30ZB-30-00-22	1SBL276061R2200	0.37				
				100...250	0 0	AF30ZB-30-00-23	1SBL276061R2300	0.37				
				250...500	0 0	AF30B-30-00-14	1SBL277061R1400	0.37				
				24...60	0 0	AF38ZB-30-00-21	1SBL296061R2100	0.37				
				48...130	0 0	AF38ZB-30-00-22	1SBL296061R2200	0.37				
18.5	50	25	50	100...250	0 0	AF38ZB-30-00-23	1SBL296061R2300	0.37				
				250...500	0 0	AF38B-30-00-14	1SBL297061R1400	0.37				

#### Main dimensions mm, inches



AF09(Z)B, AF12(Z)B, AF16(Z)B

AF26(Z)B, AF30(Z)B, AF38(Z)B

1SBC100114S0201