

## PRODUCT-DETAILS

# AF09B-22-00-14

## AF09B-22-00-14 250-500V50/60HZ-DC Contactor



### General Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extended Product Type | AF09B-22-00-14                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product ID            | 1SBL137561R1400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| EAN                   | 3471523123144                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Catalog Description   | AF09B-22-00-14 250-500V50/60HZ-DC Contactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Long Description      | The AF09B-22-00-14 is a 4 pole - 690 V IEC or 600 UL contactor with screw terminals, controlling motors up to 4 kW / 400 V AC (AC-3) and switching power circuits up to 25 A (AC-1) or 25 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (250-500 V 50/60 Hz and DC), managing large control voltage variations, reducing panel energy consumptions and ensuring distinct operations in unstable networks. Furthermore, surge protection is built-in, offering a compact solution. AF contactors have a block type design, can be easily extended with add-on auxiliary contact blocks and an additional wide range of accessories. |

### Ordering

|                        |          |
|------------------------|----------|
| Minimum Order Quantity | 1 piece  |
| Customs Tariff Number  | 85364900 |

### Popular Downloads

|                          |                 |
|--------------------------|-----------------|
| Instructions and Manuals | 1SBC101037M6801 |
|--------------------------|-----------------|

### Dimensions

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

## Technical

|                                                    |                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                         | 2                                                                                                                                                                                                                                                                                                                                          |
| Number of Main Contacts NC                         | 2                                                                                                                                                                                                                                                                                                                                          |
| Number of Auxiliary Contacts NO                    | 0                                                                                                                                                                                                                                                                                                                                          |
| Number of Auxiliary Contacts NC                    | 0                                                                                                                                                                                                                                                                                                                                          |
| Standards                                          | IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1, IEC 60077-1 (applicable parts), IEC 60077-2 (applicable parts), EN 50155 (applicable parts), TR CU 001/2011, IEC 61373, For compliance confirmation on applicable parts based on your application and combination, please consult your ABB sales representatives. |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-4-1, Open Contactors q = 40 °C 35 A                                                                                                                                                                                                                                                                                      |
| Rated Operational Current AC-1 ( $I_e$ )           | (690 V) 40 °C 25                                                                                                                                                                                                                                                                                                                           |
| Rated Operational Current AC-3 ( $I_e$ )           | (415 V) 60 °C 9 A<br>(440 V) 60 °C 9 A<br>(500 V) 60 °C 9.5 A<br>(690 V) 60 °C 7 A<br>(380 / 400 V) 60 °C 9 A<br>(220 / 230 / 240 V) 60 °C 9 A                                                                                                                                                                                             |
| Rated Operational Power AC-3 ( $P_e$ )             | (400 V) 4 kW<br>(415 V) 4 kW<br>(440 V) 4 kW<br>(500 V) 5.5 kW<br>(690 V) 5.5 kW<br>(380 / 400 V) 4 kW<br>(220 / 230 / 240 V) 2.2 kW                                                                                                                                                                                                       |
| Maximum Breaking Capacity                          | $\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 250 A<br>$\cos \phi = 0.45$ ( $\cos \phi = 0.35$ for $I_e > 100$ A) at 690 V 106 A                                                                                                                                                                                     |
| Rated Impulse Withstand Voltage ( $U_{imp}$ )      | 6 kV                                                                                                                                                                                                                                                                                                                                       |
| Rated Control Circuit Voltage ( $U_c$ )            | 50 Hz 250 ... 500 V<br>60 Hz 250 ... 500 V<br>DC Operation 250 ... 500 V                                                                                                                                                                                                                                                                   |
| Connecting Capacity Main Circuit                   | Flexible with Ferrule 1/2x 0.75 ... 6 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 4 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 6 mm <sup>2</sup>                                                                                                            |
| Connecting Capacity Control Circuit                | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm <sup>2</sup><br>Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm <sup>2</sup><br>Rigid 1/2x 1 ... 2.5 mm <sup>2</sup>                                                                                                      |
| Terminal Type                                      | Screw Terminals                                                                                                                                                                                                                                                                                                                            |

## Technical UL/CSA

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

## Environmental

|             |                                               |
|-------------|-----------------------------------------------|
| Ambient Air | Close to Contactor for Storage -60 ... +80 °C |
|-------------|-----------------------------------------------|

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| Temperature        | Near Contactor for Operation in Free Air -40 ... +70 °C |
| Climatic Withstand | Category B according to IEC 60947-1 Annex Q             |
| RoHS Status        | Following EU Directive 2011/65/EU                       |

## Certificates and Declarations (Document Number)

|                                    |                             |
|------------------------------------|-----------------------------|
| CB Certificate                     | CB_SE-96551                 |
| CCC Certificate                    | CCC_2010010304445624        |
| CQC Certificate                    | CQC2010010304445624         |
| Declaration of<br>Conformity - CCC | 2020980304001253            |
| Declaration of<br>Conformity - CE  | 1SBD250001U1000             |
| EAC Certificate                    | EAC_RU C-FR ME77 B03597     |
| Environmental<br>Information       | 1SBD250167E1000             |
| GOST Certificate                   | GOST_POCCFR.ME77.B07175.pdf |
| Instructions and<br>Manuals        | 1SBC101037M6801             |
| KC Certificate                     | KC_HW02016-15007C           |
| RoHS Information                   | 1SBD250001U1000             |
| UL Certificate                     | UL_20120918-E319322-3-1     |
| UL Listing Card                    | UL_E319322                  |

## Container Information

|                                   |               |
|-----------------------------------|---------------|
| Package Level 1 Units             | box 1 piece   |
| Package Level 1 Width             | 87 mm         |
| Package Level 1 Depth /<br>Length | 79 mm         |
| Package Level 1 Height            | 47 mm         |
| Package Level 1 Gross<br>Weight   | 0.31 kg       |
| Package Level 1 EAN               | 3471523123144 |
| Package Level 2 Units             | box 27 piece  |
| Package Level 2 Width             | 250 mm        |
| Package Level 2 Depth /<br>Length | 300 mm        |
| Package Level 2 Height            | 315 mm        |
| Package Level 2 Gross<br>Weight   | 16.74 kg      |
| Package Level 3 Units             | 1296 piece    |

## Classifications

|                               |                                           |
|-------------------------------|-------------------------------------------|
| Object Classification<br>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  |
| eClass                        | V11.0 : 27371003                          |
| UNSPSC                        | 39121529                                  |

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## Categories

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Low Voltage Products and Systems → Control Products → Contactors → Block Contactors

