

## PRODUCT-DETAILS

# AF12B-30-01RT-14

## AF12B-30-01RT-14 250-500V50/60HZ-DC Contactor



### General Information

|                       |                                               |
|-----------------------|-----------------------------------------------|
| Extended Product Type | AF12B-30-01RT-14                              |
| Product ID            | 1SBL157060R1401                               |
| EAN                   | 3471523125643                                 |
| Catalog Description   | AF12B-30-01RT-14 250-500V50/60HZ-DC Contactor |

### Long Description

The AF12B-30-01RT-14 is a 3 pole - 690 V IEC or 600 UL contactor with 1 built-in auxiliary contact and Ring-Tongue Terminals, controlling motors up to 5.5 kW / 400 V AC (AC-3) or 7-1/2 hp / 480 V UL and switching power circuits up to 28 A (AC-1) or 28 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 | 1SBC101035M6801 |
|--------------------------|-----------------|

## Dimensions

|                            |         |
|----------------------------|---------|
| Product Net Width          | 45 mm   |
| Product Net Depth / Length | 77 mm   |
| Product Net Height         | 86 mm   |
| Product Net Weight         | 0.32 kg |

## Technical

|                                                    |                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Number of Main Contacts NO                         | 3                                                                                                                                                                                                                                                                                                                                          |
| Number of Main Contacts NC                         | 0                                                                                                                                                                                                                                                                                                                                          |
| Number of Auxiliary Contacts NO                    | 0                                                                                                                                                                                                                                                                                                                                          |
| Number of Auxiliary Contacts NC                    | 1                                                                                                                                                                                                                                                                                                                                          |
| 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. |
| Rated Operational Voltage                          | Auxiliary Circuit 690 V<br>Main Circuit 690 V                                                                                                                                                                                                                                                                                              |
| Rated Frequency (f)                                | Auxiliary Circuit 50 / 60 Hz<br>Main Circuit 50 / 60 Hz                                                                                                                                                                                                                                                                                    |
| Conventional Free-air Thermal Current ( $I_{th}$ ) | acc. to IEC 60947-5-1, q = 40 °C 16 A                                                                                                                                                                                                                                                                                                      |
| Rated Operational Current AC-1 ( $I_e$ )           | (690 V) 40 °C 28                                                                                                                                                                                                                                                                                                                           |
| Rated Operational Current AC-3 ( $I_e$ )           | (380 / 400 V) 60 °C 12 A                                                                                                                                                                                                                                                                                                                   |
| Rated Operational Power AC-3 ( $P_e$ )             | (380 / 400 V) 5.5 kW                                                                                                                                                                                                                                                                                                                       |
| Rated Operational Current AC-15 ( $I_e$ )          | (500 V) 2 A<br>(690 V) 2 A<br>(24 / 127 V) 6 A<br>(220 / 240 V) 4 A<br>(400 / 440 V) 3 A                                                                                                                                                                                                                                                   |
| Rated Short-time Withstand Current ( $I_{cw}$ )    | for 0.1 s 140 A<br>for 1 s 100 A                                                                                                                                                                                                                                                                                                           |
| Maximum Electrical Switching Frequency             | (AC-15) 1200 cycles per hour<br>(DC-13) 900 cycles per hour                                                                                                                                                                                                                                                                                |
| Rated Operational Current DC-13 ( $I_e$ )          | (24 V) 6 A / 144 W<br>(48 V) 2.8 A / 134 W<br>(72 V) 1 A / 72 W<br>(110 V) 0.55 A / 60 W<br>(125 V) 0.55 A / 69 W<br>(220 V) 0.27 A / 60 W<br>(250 V) 0.27 A / 68 W<br>(400 V) 0.15 A / 60 W<br>(500 V) 0.13 A / 65 W<br>(600 V) 0.1 A / 60 W                                                                                              |
| Rated Control Circuit Voltage ( $U_c$ )            | 50 Hz 250 ... 500 V<br>60 Hz 250 ... 500 V<br>DC Operation 250 ... 500 V                                                                                                                                                                                                                                                                   |
| Operate Time                                       | Between Coil De-energization and NC Contact Closing 13 ... 98 ms<br>Between Coil De-energization and NO Contact Opening 11 ... 95 ms<br>Between Coil Energization and NC Contact Opening 38 ... 90 ms<br>Between Coil Energization and NO Contact Closing 40 ... 95 ms                                                                     |
| Terminal Type                                      | Ring-Tongue Terminals                                                                                                                                                                                                                                                                                                                      |

## Technical UL/CSA

|                              |                                                                                                                                                                                                                               |
|------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Use Rating<br>UL/CSA | (600 V AC) 28 A                                                                                                                                                                                                               |
| Horsepower Rating<br>UL/CSA  | (120 V AC) Single Phase 1 hp<br>(200 ... 208 V AC) Three Phase 3 hp<br>(220 ... 240 V AC) Three Phase 3 hp<br>(240 V AC) Single Phase 2 hp<br>(440 ... 480 V AC) Three Phase 7-1/2 hp<br>(550 ... 600 V AC) Three Phase 10 hp |

## Environmental

|                    |                                             |
|--------------------|---------------------------------------------|
| 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  | 1SBD250004U1000         |
| EAC Certificate                    | EAC_RU C-FR ME77 B03597 |
| Environmental<br>Information       | 1SBD250165E1000         |
| Instructions and<br>Manuals        | 1SBC101035M6801         |
| RoHS Information                   | 1SBD250004U1000         |
| UL Certificate                     | UL_20121122-E312527_9_5 |
| UL Listing Card                    | UL_E312527              |

## 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   | 0.32 kg       |
| Package Level 1 EAN               | 3471523125643 |
| 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   | 17.28 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

