



PRODUCT-DETAILS

AF16-30-10-14

**AF16-30-10-14 250-500V50/60HZ-DC
Contactor**



Información General

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| Tipo de producto extendido | AF16-30-10-14 |
| Código de producto | 1SBL177001R1410 |
| EAN | 3471523110649 |
| Descripción corta | AF16-30-10-14 250-500V50/60HZ-DC Contactor |
| Descripción larga | <p>ABB dispone de una amplia familia de contactores: contactores tripolares y relés de sobrecarga para arranque de motores y conmutación de alimentación (AF, minicontactores, AS), tetrapolares para conmutar la alimentación (AF y minicontactores), auxiliares para la conmutación de circuitos auxiliares (AS y minicontactores), para la conmutación de condensadores (UA, RA), para la conmutación de CC (GA y GAF), para aplicaciones ferroviarias, para aplicaciones de seguridad (AFS) y contactores de instalación (ESB...N).</p> <p>La referencia 1SBL177001R1410 concretamente, se trata de un/a contactor de potencia para conmutar la alimentación de CA.</p> <p>Sus características son: Tensión de alimentación de control nominal Us a CA 50HZ: 250V, Tensión de alimentación de control nominal Us a CA 60HZ: 250V, Tensión de alimentación de control nominal Us en CC: 250V, Tipo de tensión de accionamiento: CA/CC, Corriente de funcionamiento nominal Ie en CA-1, 400 V: 30A, Corriente de funcionamiento nominal Ie en CA-3, 400 V: 18A, Potencia de funcionamiento nominal en CA-3, 400 V: 7,5kW, Número de contactos auxiliares normalmente abiertos: 1, Tipo de conexión del circuito de corriente principal: Conexión roscada, Número de contactos normalmente abiertos como contactos principales: 3.</p> |

Clasificación

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| Cantidad mínima de pedido | 1 pieza |
| Código arancelario | 85364900 |

Descargas Populares

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| Instrucciones y manuales | 1SBC101027M6801 |
| Dibujo dimensional CAD | 2CDC001079B0201 |

Dimensiones

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| Ancho del product | 45 mm |
| Largo del product | 77 mm |
| Alto del product | 86 mm |
| Peso del product | 0.31 kg |

Technical

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| Número de contactos principales NO | 3 |
| Número de contactos principales NC | 0 |
| Número de contactos auxiliares NO | 1 |
| Número de contactos auxiliares NC | 0 |
| Normas | IEC/EN 60947-1, IEC/EN 60947-4-1, UL 60947-4-1, CSA C22.2 No. 60947-4-1 |
| Tensión nominal de operación | Auxiliary Circuit 690 V Main Circuit 690 V |
| Frecuencia nominal (f) | Auxiliary Circuit 50 / 60 Hz |

| | Control Circuit 50 / 60 Hz Main Circuit 50 / 60 Hz |
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| Corriente térmica convencional de aire libre (I_{th}) | acc. to IEC 60947-4-1, Open Contactors $\Theta = 40\text{ }^{\circ}\text{C}$ 35 A acc. to IEC 60947-5-1, $\Theta = 40\text{ }^{\circ}\text{C}$ 16 A |
| Corriente nominal de funcionamiento AC-1 (I_e) | (690 V) 40 $^{\circ}\text{C}$ 30 A (690 V) 60 $^{\circ}\text{C}$ 30 A (690 V) 70 $^{\circ}\text{C}$ 26 A |
| Corriente nominal de funcionamiento AC-3 (I_e) | (415 V) 60 $^{\circ}\text{C}$ 18 A (440 V) 60 $^{\circ}\text{C}$ 18 A (500 V) 60 $^{\circ}\text{C}$ 15 A (690 V) 60 $^{\circ}\text{C}$ 10.5 A (380 / 400 V) 60 $^{\circ}\text{C}$ 18 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 18 A |
| Corriente nominal de funcionamiento AC-3e (I_e) | (415 V) 60 $^{\circ}\text{C}$ 18 A (440 V) 60 $^{\circ}\text{C}$ 18 A (500 V) 60 $^{\circ}\text{C}$ 15 A (690 V) 60 $^{\circ}\text{C}$ 10.5 A (380 / 400 V) 60 $^{\circ}\text{C}$ 18 A (220 / 230 / 240 V) 60 $^{\circ}\text{C}$ 18 A |
| Potencia operativa nominal AC-3 (P_e) | (400 V) 7.5 kW (415 V) 9 kW (440 V) 9 kW (500 V) 9 kW (690 V) 9 kW (380 / 400 V) 7.5 kW (220 / 230 / 240 V) 4 kW |
| Potencia operativa nominal AC-3e (P_e) | (415 V) 9 kW (440 V) 9 kW (500 V) 9 kW (690 V) 9 kW (380 / 400 V) 7.5 kW (220 / 230 / 240 V) 4 kW |
| Corriente nominal de funcionamiento AC-15 (I_e) | (500 V) 2 A (690 V) 2 A (24 / 127 V) 6 A (220 / 240 V) 4 A (400 / 440 V) 3 A |
| Corriente nominal de corta duración Tensión baja (I_{cw}) | at 40 $^{\circ}\text{C}$ Ambient Temp, in Free Air, from a Cold State 10 s 150 A at 40 $^{\circ}\text{C}$ Ambient Temp, in Free Air, from a Cold State 15 min 35 A at 40 $^{\circ}\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 min 60 A at 40 $^{\circ}\text{C}$ Ambient Temp, in Free Air, from a Cold State 1 s 300 A at 40 $^{\circ}\text{C}$ Ambient Temp, in Free Air, from a Cold State 30 s 80 A for 0.1 s 140 A for 1 s 100 A |
| Capacidad de rotura máxima | cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$) at 440 V 250 A cos phi=0.45 (cos phi=0.35 for $I_e > 100\text{ A}$) at 690 V 106 A |
| Frecuencia máxima de conmutación eléctrica | (AC-1) 600 cycles per hour (AC-15) 1200 cycles per hour (AC-2 / AC-4) 300 cycles per hour (AC-3) 1200 cycles per hour (DC-13) 900 cycles per hour |
| Corriente nominal de funcionamiento DC-1 (I_e) | (110 V) 1-Pole, 40 $^{\circ}\text{C}$ 20 A (110 V) 1-Pole, 60 $^{\circ}\text{C}$ 20 A (110 V) 1-Pole, 70 $^{\circ}\text{C}$ 20 A (110 V) 2 Poles in Series, 40 $^{\circ}\text{C}$ 30 A (110 V) 2 Poles in Series, 60 $^{\circ}\text{C}$ 30 A (110 V) 2 Poles in Series, 70 $^{\circ}\text{C}$ 26 A (110 V) 3 Poles in Series, 40 $^{\circ}\text{C}$ 30 A (110 V) 3 Poles in Series, 60 $^{\circ}\text{C}$ 30 A (110 V) 3 Poles in Series, 70 $^{\circ}\text{C}$ 26 A (220 V) 2 Poles in Series, 40 $^{\circ}\text{C}$ 20 A (220 V) 2 Poles in Series, 60 $^{\circ}\text{C}$ 20 A (220 V) 2 Poles in Series, 70 $^{\circ}\text{C}$ 20 A (220 V) 3 Poles in Series, 40 $^{\circ}\text{C}$ 30 A (220 V) 3 Poles in Series, 60 $^{\circ}\text{C}$ 30 A (220 V) 3 Poles in Series, 70 $^{\circ}\text{C}$ 26 A (72 V) 1-Pole, 40 $^{\circ}\text{C}$ 30 A |

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| Corriente nominal de funcionamiento DC-3 (I _e) | (72 V) 1-Pole, 60 °C 30 A (72 V) 1-Pole, 70 °C 26 A (72 V) 2 Poles in Series, 40 °C 30 A (72 V) 2 Poles in Series, 60 °C 30 A (72 V) 2 Poles in Series, 70 °C 26 A (72 V) 3 Poles in Series, 40 °C 30 A (72 V) 3 Poles in Series, 60 °C 30 A (72 V) 3 Poles in Series, 70 °C 26 A (110 V) 1-Pole, 40 °C 8 A (110 V) 1-Pole, 60 °C 8 A (110 V) 1-Pole, 70 °C 8 A (110 V) 2 Poles in Series, 40 °C 30 A (110 V) 2 Poles in Series, 60 °C 30 A (110 V) 2 Poles in Series, 70 °C 26 A (110 V) 3 Poles in Series, 40 °C 30 A (110 V) 3 Poles in Series, 60 °C 30 A (110 V) 3 Poles in Series, 70 °C 26 A (220 V) 2 Poles in Series, 40 °C 8 A (220 V) 2 Poles in Series, 60 °C 8 A (220 V) 2 Poles in Series, 70 °C 8 A (220 V) 3 Poles in Series, 40 °C 30 A (220 V) 3 Poles in Series, 60 °C 30 A (220 V) 3 Poles in Series, 70 °C 26 A (72 V) 1-Pole, 40 °C 30 A (72 V) 1-Pole, 60 °C 30 A (72 V) 1-Pole, 70 °C 26 A (72 V) 2 Poles in Series, 40 °C 30 A (72 V) 2 Poles in Series, 60 °C 30 A (72 V) 2 Poles in Series, 70 °C 26 A (72 V) 3 Poles in Series, 40 °C 30 A (72 V) 3 Poles in Series, 60 °C 30 A (72 V) 3 Poles in Series, 70 °C 26 A |
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| Corriente nominal de funcionamiento DC-5 (I _e) | (110 V) 1-Pole, 40 °C 4 A (110 V) 1-Pole, 60 °C 4 A (110 V) 1-Pole, 70 °C 4 A (110 V) 2 Poles in Series, 40 °C 20 A (110 V) 2 Poles in Series, 60 °C 20 A (110 V) 2 Poles in Series, 70 °C 20 A (110 V) 3 Poles in Series, 40 °C 30 A (110 V) 3 Poles in Series, 60 °C 30 A (110 V) 3 Poles in Series, 70 °C 26 A (220 V) 2 Poles in Series, 40 °C 4 A (220 V) 2 Poles in Series, 60 °C 4 A (220 V) 2 Poles in Series, 70 °C 4 A (220 V) 3 Poles in Series, 40 °C 16 A (220 V) 3 Poles in Series, 60 °C 16 A (220 V) 3 Poles in Series, 70 °C 16 A (72 V) 1-Pole, 40 °C 16 A (72 V) 1-Pole, 60 °C 16 A (72 V) 1-Pole, 70 °C 16 A (72 V) 2 Poles in Series, 40 °C 30 A (72 V) 2 Poles in Series, 60 °C 30 A (72 V) 2 Poles in Series, 70 °C 26 A (72 V) 3 Poles in Series, 40 °C 30 A (72 V) 3 Poles in Series, 60 °C 30 A (72 V) 3 Poles in Series, 70 °C 26 A |
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| Corriente nominal de funcionamiento DC-13 (I _e) | (24 V) 6 A / 144 W (48 V) 2.8 A / 134 W (72 V) 1 A / 72 W (110 V) 0.55 A / 60 W (125 V) 0.55 A / 69 W (220 V) 0.27 A / 60 W (250 V) 0.27 A / 68 W (400 V) 0.15 A / 60 W (500 V) 0.13 A / 65 W (600 V) 0.1 A / 60 W |
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| Tensión nominal de aislamiento (U _i) | acc. to IEC 60947-4-1 690 V acc. to IEC 60947-5-1 690 V acc. to UL/CSA 600 V |
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| Tensión nominal | 6 kV |
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| soportada por impulsos (U_{imp}) | |
| Frecuencia máxima de conmutación mecánica | 3600 cycles per hour |
| Tensión nominal del circuito de control (U_c) | 50 Hz 250 ... 500 V 60 Hz 250 ... 500 V DC Operation 250 ... 500 V |
| Tiempo de funcionamiento | 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 |
| Montaje en contactores | TH35-15 (35 x 15 mm Mounting Rail) acc. to IEC 60715 TH35-7.5 (35 x 7.5 mm Mounting Rail) acc. to IEC 60715 |
| Montaje mediante tornillos (no suministrados) | 2 x M4 screws placed diagonally |
| Capacidad de conexión del circuito principal | Flexible with Ferrule 1/2x 0.75 ... 6 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 4 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 2.5 mm ² Rigid Solid 1/2x 1 ... 4 mm ² Rigid Stranded 1/2x 1 ... 6 mm ² |
| Capacidad de conexión del circuito auxiliar | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ² |
| Conexión del circuito de control de capacidad | Flexible with Ferrule 1/2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 2x 0.75 ... 1.5 mm ² Rigid Solid 1/2x 1 ... 2.5 mm ² Rigid Stranded 1/2x 1 ... 2.5 mm ² |
| Longitud de pelado del cable | Auxiliary Circuit 10 mm Control Circuit 10 mm Main Circuit 10 mm |
| Grado de protección | acc. to IEC 60529, IEC 60947-1, EN 60529 Auxiliary Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP20 |
| Tipo de terminal | Screw Terminals |

Technical UL/CSA

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| Tensión máxima de funcionamiento UL/CSA | Main Circuit 600 V |
| Clasificación de uso general UL/CSA | (600 V AC) 30 A |
| Potencia nominal UL/CSA | (120 V AC) Single Phase 1-1/2 hp (200 ... 208 V AC) Three Phase 5 hp (220 ... 240 V AC) Three Phase 5 hp (240 V AC) Single Phase 3 hp (440 ... 480 V AC) Three Phase 10 hp (550 ... 600 V AC) Three Phase 15 hp |
| Capacidad de conexión del circuito principal UL/CSA | Rigid Solid 1/2x 16-10 AWG Rigid Stranded 1/2x 16-10 AWG |
| Capacidad de conexión Circuito auxiliar UL/CSA | Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG |
| Circuito de control de la capacidad de conexión UL/CSA | Rigid Solid 1/2x 18-14 AWG Rigid Stranded 1/2x 18-14 AWG |
| Par de apriete UL/CSA | Auxiliary Circuit 11 in-lb Control Circuit 11 in-lb Main Circuit 13 in-lb |

Ambiente

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| Temperatura ambiente | Close to Contactor Fitted with Thermal O/L Relay -25 ... 60 °C Close to Contactor without Thermal O/L Relay -40 ... 70 °C Close to Contactor for Storage -60 ... +80 °C |
| Resistencia climática | Category B according to IEC 60947-1 Annex Q |
| Altitud máxima de funcionamiento permisible | Without Derating 3000 m |
| Resistencia a los golpes según IEC 60068-2-27 | Closed, Shock Direction: B1 25 g Open, Shock Direction: B1 5 g Shock Direction: A 30 g Shock Direction: B2 15 g Shock Direction: C1 25 g Shock Direction: C2 25 g |
| Resistencia a las vibraciones según IEC 60068-2-6 | 4g Closed Position & 2g Open position 5 ... 300 Hz |

Material Compliance

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| Plantilla de notificación de minerales de conflicto (CMRT) | 9AKK108467A5658 |
| Declaración REACH | 2CMT2021-006202 |
| Información sobre RoHS | 2CMT2021-006277 |
| Estado de RoHS | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |
| Ley de Control de Sustancias Tóxicas - TSCA | 2CMT2023-006525 |
| WEEE B2C / B2B | Business To Business |
| Categoría RAEE | 5. Small Equipment (No External Dimension More Than 50 cm) |

Circular Value

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| Instrucciones para el final de la vida | 1SBC101080M6801 |
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Eco Transparency

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| Declaración Ambiental de Producto - EPD | 1SBD250584E3000 2TFP200035A1001 |
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Certificados y Declaraciones (Número de Documento)

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| Certificado ABS | ABS_20-2060694-PDA |
| Certificado BV | BV_2634H24898C0 |
| Certificado CB | CB_SE-113345 |
| Certificado CCC | CCC_2010010304445624 |
| Certificado CQC | CQC2010010304445624 CQC2020010304298240 |
| Declaración de conformidad - CCC | 2020980304001253 2020980304001082 |
| Declaración de conformidad - CE | 1SBD250000U1000 |
| Declaración de conformidad - UKCA | 1SBD250031U1000 |

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| Certificado DNV | DNV_TAE00001AF-4 |
| Certificado GOST | GOST_POCCFR.ME77.B07175.pdf |
| Certificado KC | KC_HW02016-15005C |
| Certificado LR | LRS_LR23403517TA-02 |
| Certificado RINA | RINA_ELE142224XG |
| Certificado RMRS | RMRS_1802705280 |
| Certificado UL | UL-US-2150887-5 UL-CA-2142658-5 |
| Tarjeta de listado UL | E312527 |

Información de Embalaje

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| Embalaje Nivel 1 Unidades | box 1 piece |
| Embalaje Nivel 1 Ancho | 87 mm |
| Embalaje Nivel 1 Largo | 79 mm |
| Embalaje Nivel 1 Alto | 47 mm |
| Embalaje Nivel 1 Peso | 0.31 kg |
| Embalaje Nivel 1 EAN | 3471523110649 |
| Embalaje Nivel 2 Unidades | box 27 piece |
| Embalaje Nivel 2 Ancho | 250 mm |
| Embalaje Nivel 2 Largo | 300 mm |
| Embalaje Nivel 2 Alto | 315 mm |
| Embalaje Nivel 2 Peso | 8.37 kg |
| Paquete Nivel 3 Unidades | 1296 piece |

Clasificaciones

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| Código de clasificación de objetos | Q |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| ETIM 9 | EC000066 - Power contactor, AC switching |
| Clase electrónica | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| Código de categoría granular de IDEA (IGCC) | 4758 >> Iec Contactors |
| Número E (Finlandia) | 3706244 |
| Número E (Suecia) | 3211374 |

Categorías

Productos y sistemas de baja tensión → Aparatos de control → Contactores → Contactores → AF Contactors → AF16

