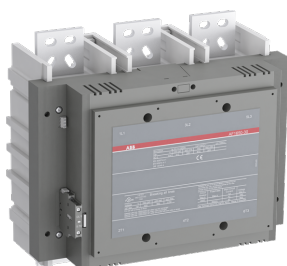


PRODUCT-DETAILS

AF1650-30-11-70

AF1650-30-11 100-250V 50/60Hz / 100-250V DC Contactor



General Information

| | |
|-----------------------|---|
| Extended Product Type | AF1650-30-11-70 |
| Product ID | 1SFL677001R7011 |
| EAN | 7320500249703 |
| Catalog Description | AF1650-30-11 100-250V 50/60Hz / 100-250V DC Contactor |

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|------------------|---|
| Long Description | <p>The AF1650-30-11-70 is a 3 pole - 1000 V IEC or 1000 V UL contactor pre-mounted auxiliary contacts and Main Circuit Bars, controlling motors up to 560 kW / 400 V AC (AC-3) or 900 hp / 480 V UL and switching power circuits up to 1650 A (AC-1) or 1650 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (100-250 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.</p> |
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Ordering

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

Popular Downloads

| | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100192C0206 |
| Instructions and Manuals | 1SFC101002M5501 |
| Dimension Diagram | 53540930-7 |

Dimensions

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|----------------------------|--------|
| Product Net Width | 438 mm |
| Product Net Depth / Length | 244 mm |
| Product Net Height | 392 mm |
| Product Net Weight | 33 kg |

Technical

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| Number of Main Contacts NO | 3 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 1 |
| Number of Auxiliary Contacts NC | 1 |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Frequency (f) | Main Circuit 50/60 Hz |
| Conventional Free-air Thermal Current (I_{th}) | acc. to IEC 60947-4-1, Open Contactors $q = 40^\circ\text{C}$ 1650 A |
| Rated Operational Current AC-1 (I_e) | (1000 V) 40°C 1650 A (1000 V) 55°C 1450 A (1000 V) 70°C 1270 A (690 V) 40°C 1650 A (690 V) 55°C 1450 A (690 V) 70°C 1270 A |
| Rated Operational Current AC-3 (I_e) | (415 V) 55°C 1060 A (440 V) 55°C 1060 A (500 V) 55°C 970 A (690 V) 55°C 970 A (1000 V) 55°C 400 A (380 / 400 V) 55°C 1060 A (220 / 230 / 240 V) 55°C 1060 A |
| Rated Operational Power AC-3 (P_e) | (415 V) 630 kW (440 V) 710 kW (500 V) 710 kW (690 V) 1000 kW (1000 V) 600 kW (380 / 400 V) 560 kW (220 / 230 / 240 V) 315 kW |
| Rated Making Capacity AC-3 acc. to IEC 60947-4-1 | 10 x I_e AC-3 |
| Rated Short-time Withstand Current (I_{cw}) | at 40°C Ambient Temp, in Free Air, from a Cold State 10 s 10000 A at 40°C Ambient Temp, in Free Air, from a Cold State 15 min 2200 A at 40°C Ambient Temp, in Free Air, from a Cold State 1 min 5500 A at 40°C Ambient Temp, in Free Air, from a Cold State 1 s 12000 A at 40°C Ambient Temp, in Free Air, from a Cold State 30 s 7500 A |
| Maximum Breaking Capacity | $\cos \phi = 0.45$ ($\cos \phi = 0.35$ for $I_e > 100$ A) at 440 V 12000 A |
| Maximum Electrical Switching Frequency | (AC-1) 60 cycles per hour (AC-2 / AC-4) 60 cycles per hour (AC-3) 60 cycles per hour |
| Rated Operational Current DC-1 (I_e) | (110 V) 1-Pole, 40°C 1650 A (110 V) 2 Poles in Series, 40°C 1650 A (220 V) 3 Poles in Series, 40°C 1650 A (600 V) 3 Poles in Series, 40°C 1650 A (850 V) 3 Poles in Series, 40°C 1650 A |
| Rated Operational Current DC-3 (I_e) | (220 V) 3 Poles in Series, 40°C 1650 A (600 V) 3 Poles in Series, 40°C 1650 A (850 V) 3 Poles in Series, 40°C 1650 A |
| Rated Operational Current DC-5 (I_e) | (220 V) 3 Poles in Series, 40°C 1650 A (600 V) 3 Poles in Series, 40°C 1650 A (850 V) 3 Poles in Series, 40°C 1650 A |
| Rated Insulation Voltage | acc. to IEC 60947-4-1 and VDE 0110 (Gr. C) 1000 V |

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| (U _i) | acc. to UL/CSA 1000 V |
| Rated Impulse Withstand Voltage (U _{imp}) | Main Circuit 8 kV |
| Mechanical Durability | 0.5 million |
| Maximum Mechanical Switching Frequency | 300 cycles per hour |
| Coil Operating Limits | (acc. to IEC 60947-4-1) 0.85 x U _c Min. ... 1.1 x U _c Max. (at θ ≤ 70 °C) |
| Rated Control Circuit Voltage (U _c) | 50 Hz 100 ... 250 V 60 Hz 100 ... 250 V DC Operation 100 ... 250 V |
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage 50 Hz 48 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 48 V·A Holding at Max. Rated Control Circuit Voltage DC 20.5 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 2450 V·A Pull-in at Max. Rated Control Circuit Voltage DC 2290 V·A |
| Operate Time | Between Coil De-energization and NC Contact Closing 35 ... 55 ms Between Coil De-energization and NO Contact Opening 35 ... 55 ms Between Coil Energization and NC Contact Opening 50 ... 80 ms Between Coil Energization and NO Contact Closing 50 ... 80 ms |
| Connecting Capacity Main Circuit | Bar 100 mm ² |
| Connecting Capacity Auxiliary Circuit | Flexible with Ferrule 2x 0.75 ... 2.5 mm ² Flexible with Insulated Ferrule 1x 0.75 ... 2.5 mm ² Flexible 2x0.75 ... 2.5 mm ² Solid 2 x 1 ... 4 mm ² Stranded 2 x 1 ... 4 mm ² |
| Degree of Protection | acc. to IEC 60529, IEC 60947-1, EN 60529 Coil Terminals IP20 acc. to IEC 60529, IEC 60947-1, EN 60529 Main Terminals IP00 |
| Terminal Type | Main Circuit: Bars |

Technical UL/CSA

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|----------------------------------|--|
| Maximum Operating Voltage UL/CSA | Main Circuit 1000 V |
| General Use Rating UL/CSA | (1000 V AC) 1650 A (600 V AC) 1650 A |
| Horsepower Rating UL/CSA | (220 ... 240 V AC) Three Phase 450 hp (440 ... 480 V AC) Three Phase 900 hp (550 ... 600 V AC) Three Phase 1150 hp |

Environmental

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| Ambient Air Temperature | Close to Contactor Fitted with Thermal O/L Relay (0.85 ... 1.1 U _c) -25 ... +50 °C Close to Contactor without Thermal O/L Relay (0.85 ... 1.1 U _c) -40 ... +70 °C Close to Contactor for Storage -40 ... +70 °C |
| Maximum Operating Altitude Permissible | 3000 m |
| RoHS Status | Following EU Directive 2011/65/EU and Amendment 2015/863 July 22, 2019 |

Certificates and Declarations (Document Number)

| | |
|---------------------------------|--|
| ABS Certificate | 15-LD1408622-PDA |
| BV Certificate | BV_13409-C0BV |
| CB Certificate | SEMKO_SE-74013 |
| CCC Certificate | CQC_2003010304101933 |
| CCS Certificate | GB14T00030 |
| CQC Certificate | CQC2003010304101933 CQC2015010304752548 |
| cUL Certificate | UL_20130904-E73397 |
| Declaration of Conformity - CCC | 2020980304001303 2020980304001043 |

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|-----------------------------------|------------------------------------|
| Declaration of Conformity - CE | 2CMT2019-005796 |
| DNV GL Certificate | TAE00001W1 |
| EAC Certificate | 9AKK107046A8618 |
| Environmental Information | 1SFC101014D0201 1SAC200046H0008 |
| GL Certificate | GL_20263-04HH |
| Instructions and Manuals | 1SFC101002M5501 |
| LOVAG Certificate | SE-201993 |
| LR Certificate | 16-20064 |
| PRS Certificate | TE_2092_880423_16 |
| RINA Certificate | ELE060313XG_002 |
| RMRS Certificate | 9AKK107045A6978 |
| RoHS Information | 2CMT2019-005796 |
| UL Listing Card | UL_E73397 |

Container Information

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|-----------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 555 mm |
| Package Level 1 Depth / Length | 365 mm |
| Package Level 1 Height | 500 mm |
| Package Level 1 Gross Weight | 35 kg |
| Package Level 1 EAN | 7320500249703 |
| Package Level 2 Units | 1 piece |

Classifications

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|---------------------------------------|---|
| 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 |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors |
| E-Number (Finland) | 3709258 |
| E-Number (Norway) | 4115390 |
| E-Number (Sweden) | 4115390 |

Categories

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

