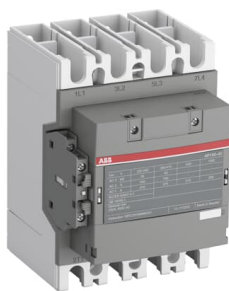




 PRODUCT-DETAILS

AF190B-40-22-12

AF190B-40-22-12 Contactor



General Information

| | |
|-----------------------|---------------------------|
| Extended Product Type | AF190B-40-22-12 |
| Product ID | 1SFL487263R1222 |
| EAN | 7320500511251 |
| Catalog Description | AF190B-40-22-12 Contactor |

| | |
|------------------|--|
| Long Description | <p>The AF190B-40-22-12 is a 4 pole - 1000 V IEC or 600 V UL contactor with pre-mounted auxiliary contacts and standard ferrules, controlling motors up to 90 kW / 400 V AC (AC-3) / and switching power circuits up to 275 A (AC-1) or 230 A UL general use. Thanks to the AF technology, the contactor has a wide control voltage range (48-130 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> |
|------------------|--|

Ordering

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

Popular Downloads

| | |
|-----------------------------------|-----------------|
| Data Sheet, Technical Information | 1SBC100214C0202 |
| Instructions and Manuals | 1SFC100008M0201 |
| CAD Dimensional Drawing | 2CDC001079B0201 |

Dimensions

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|----------------------------|--------|
| Product Net Width | 140 mm |
| Product Net Depth / Length | 153 mm |
| Product Net Height | 196 mm |
| Product Net Weight | 3.3 kg |

Technical

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| Number of Main Contacts NO | 4 |
| Number of Main Contacts NC | 0 |
| Number of Auxiliary Contacts NO | 2 |
| Number of Auxiliary Contacts NC | 2 |
| Rated Operational Voltage | Main Circuit 1000 V |
| Rated Operational Current AC-1 (I _e) | (1000 V) 40 °C 250 A (1000 V) 55 °C 225 A (1000 V) 60 °C 225 A (1000 V) 70 °C 185 A (690 V) 40 °C 275 A (690 V) 55 °C 250 A (690 V) 60 °C 250 A (690 V) 70 °C 200 A |
| Rated Operational Current AC-3 (I _e) | (415 V) 55 °C 190 A (440 V) 55 °C 190 A (380 / 400 V) 55 °C 190 A (220 / 230 / 240 V) 55 °C 190 A |
| Rated Operational Power AC-3 (P _e) | (415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW |
| Rated Operational Power AC-3e (P _e) | (415 V) 90 kW (440 V) 110 kW (500 V) 110 kW (690 V) 132 kW (1000 V) 110 kW (380 / 400 V) 90 kW (220 / 230 / 240 V) 55 kW |
| Rated Short-time Withstand Current Low Voltage (I _{cw}) | at 40 °C Ambient Temp, in Free Air, from a Cold State 10 s 1520 A at 40 °C Ambient Temp, in Free Air, from a Cold State 15 min 275 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 min 621 A at 40 °C Ambient Temp, in Free Air, from a Cold State 1 s 1900 A at 40 °C Ambient Temp, in Free Air, from a Cold State 30 s 878 A |
| Rated Operational Current DC-1 (I _e) | (100 V) 1 Pole, 40 °C 250 A (100 V) 1 Pole, 60 °C 250 A |

- (100 V) 1 Pole, 70 °C 200 A
- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (175 V) 2 Poles in Series, 40 °C 250 A
- (175 V) 2 Poles in Series, 60 °C 250 A
- (175 V) 2 Poles in Series, 70 °C 200 A
- (200 V) 2 Poles in Series, 40 °C 250 A
- (200 V) 2 Poles in Series, 60 °C 250 A
- (200 V) 2 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (260 V) 3 Poles in Series, 40 °C 250 A
- (260 V) 3 Poles in Series, 60 °C 250 A
- (260 V) 3 Poles in Series, 70 °C 200 A
- (300 V) 3 Poles in Series, 40 °C 250 A
- (300 V) 3 Poles in Series, 60 °C 250 A
- (300 V) 3 Poles in Series, 70 °C 200 A
- (350 V) 4 Poles in Series, 40 °C 250 A
- (350 V) 4 Poles in Series, 60 °C 250 A
- (350 V) 4 Poles in Series, 70 °C 200 A
- (400 V) 4 Poles in Series, 40 °C 250 A
- (400 V) 4 Poles in Series, 60 °C 250 A
- (400 V) 4 Poles in Series, 70 °C 200 A
- (72 V) 1-Pole, 40 °C 250 A
- (72 V) 1-Pole, 60 °C 250 A
- (72 V) 1-Pole, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A
- (90 V) 1 Pole, 40 °C 250 A
- (90 V) 1 Pole, 60 °C 250 A
- (90 V) 1 Pole, 70 °C 200 A

Rated Operational Current DC-3 (I_e)

- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A

Rated Operational Current DC-5 (I_e)

- (110 V) 2 Poles in Series, 40 °C 250 A
- (110 V) 2 Poles in Series, 60 °C 250 A
- (110 V) 2 Poles in Series, 70 °C 200 A
- (110 V) 3 Poles in Series, 40 °C 250 A
- (110 V) 3 Poles in Series, 60 °C 250 A
- (110 V) 3 Poles in Series, 70 °C 200 A
- (220 V) 3 Poles in Series, 40 °C 250 A
- (220 V) 3 Poles in Series, 60 °C 250 A
- (220 V) 3 Poles in Series, 70 °C 200 A
- (72 V) 2 Poles in Series, 40 °C 250 A
- (72 V) 2 Poles in Series, 60 °C 250 A
- (72 V) 2 Poles in Series, 70 °C 200 A
- (72 V) 3 Poles in Series, 40 °C 250 A
- (72 V) 3 Poles in Series, 60 °C 250 A
- (72 V) 3 Poles in Series, 70 °C 200 A

Mechanical Durability

5 million

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|---|--|
| Maximum Mechanical Switching Frequency | 300 cycles per hour |
| Rated Control Circuit Voltage (U _c) | 50 Hz / 60 Hz 48 ... 130 V DC Operation 48 ... 130 V |
| Coil Consumption | Holding at Max. Rated Control Circuit Voltage 50 Hz 4 V·A Holding at Max. Rated Control Circuit Voltage 60 Hz 4 V·A Pull-in at Max. Rated Control Circuit Voltage 50 Hz 180 V·A Pull-in at Max. Rated Control Circuit Voltage 60 Hz 180 V·A Pull-in at Max. Rated Control Circuit Voltage DC 150 W |
| Terminal Type | Main Circuit: Bars |

Technical UL/CSA

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|---------------------------|--|
| General Use Rating UL/CSA | (600 V AC) 230 A |
| Horsepower Rating UL/CSA | (200 ... 208 V AC) Three Phase 20 Hp (200 V AC) Three Phase 50 hp (208 V AC) Three Phase 50 hp (220 ... 240 V AC) Three Phase 25 Hp (220 ... 240 V AC) Three Phase 60 hp (440 ... 480 V AC) Three Phase 60 Hp (440 ... 480 V AC) Three Phase 125 hp (550 ... 600 V AC) Three Phase 75 Hp (550 ... 600 V AC) Three Phase 150 hp |

Material Compliance

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|---|--|
| Conflict Minerals Reporting Template (CMRT) | 9AKK108467A5658 |
| REACH Declaration | 2CMT2021-006202 |
| RoHS Information | 2CMT2021-006277 |
| RoHS Status | Following EU Directive 2011/65/EU |
| Toxic Substances Control Act - TSCA | 2CMT2023-006525 |
| WEEE B2C / B2B | Business To Business |
| WEEE Category | 5. Small Equipment (No External Dimension More Than 50 cm) |

ABB EcoSolutions

| | |
|---|---|
| ABB EcoSolutions | Yes |
| Environmental Product Declaration - EPD | 1SFC100095D0201 |
| Circular Design Principles Recyclability Rate | Design for Closing Resource Loops - Standard EN45555 - 79.2 % |
| Sustainable Material Content | Recycled Metal - 35 % |
| Group Waste to Landfill Target | Non-hazardous waste is sent to a landfill, where there is no alternative option available within 100km of a facility |
| Improved Resource Efficiency for Customers | Product Efficiency - Product requires less energy to operate compared to similar product on market or older products from the same line |
| End of Life Instructions | 1SFC100112M0001 |

Certificates and Declarations

| | |
|-----------------|---------------------|
| CB Certificate | SE-82315 |
| CQC Certificate | CQC2014010304676685 |

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|----------------------------------|------------------|
| Declaration of Conformity - CCC | 2020980304001306 |
| Declaration of Conformity - CE | 2CMT2015-005440 |
| Declaration of Conformity - UKCA | 2CMT2020-006124 |
| EAC Certificate | 9AKK107046A8618 |
| UL Certificate | 20140925-E73397 |

Container Information

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|--------------------------------|---------------|
| Package Level 1 Units | box 1 piece |
| Package Level 1 Width | 166 mm |
| Package Level 1 Depth / Length | 238 mm |
| Package Level 1 Height | 180 mm |
| Package Level 1 Gross Weight | 3.9 kg |
| Package Level 1 EAN | 7320500511251 |

Classifications

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|------------------------------------|--|
| Object Classification Code | Q |
| ETIM 7 | EC000066 - Power contactor, AC switching |
| ETIM 8 | EC000066 - Power contactor, AC switching |
| ETIM 9 | EC000066 - Power contactor, AC switching |
| eClass | V11.0 : 27371003 |
| UNSPSC | 39121529 |
| IDEA Granular Category Code (IGCC) | 4755 >> Contactors |
| E-Number (Sweden) | 3210469 |

Categories

Low Voltage Products and Systems → Control Products → Contactors → Block Contactors → AF Contactors → AF190

