DATASHEET - FAZT-D20/1

Part no.

FIT-N AZT-B16

Miniature circuit breaker (MCB), 20A, 1p, D-Char, AC



FAZT-D20/1 Catalog No. 142481 Eaton Catalog No. FAZT-D20/1



Similar to illustration

Technical data Electrical

| Electrical | | | |
|---|-----------------|-----------------|---|
| Standards | | | IEC/EN 60947-2 |
| Rated voltage according to IEC/EN 60947-2 | Un | V AC | 240/415 |
| Rated switching capacity acc. to IEC/EN 60947-2 | I _{cu} | kA | 20 |
| Rated insulation voltage | Ui | V | 440 |
| Rated frequency | f | Hz | 50/60 |
| Characteristic | | | B, C, D |
| Direction of incoming supply | | | as required |
| lifespan | | | |
| Electrical | Operations | | ≧ 4000 |
| Mechanical | Operations | | ≧ 10000 |
| Mechanical | | | |
| Standard front dimension | | mm | 45 |
| Enclosure height | | mm | 80 |
| Mounting width per pole | | mm | 17.5 |
| Mounting | | | Quick attachment with 3 latch positions for top-hat rail IEC/EN 60715 |
| Degree of Protection | | | IP20 |
| Terminals top and bottom | | | Twin-purpose terminals |
| Terminal protection | | | Finger- and back-of-hand proof according to BGV A3 and ÖVE-EN 6 |
| Terminal capacities | | mm ² | 1 - 25 |
| Tightening torque of fixing screws | | N/m | max. 2.4 |
| Thickness of busbar material | | mm | 0.8 (exept N 0.5 SU) |
| Mounting position | | | As required |
| | | | |

Design verification as per IEC/EN 61439

| Rated operational current for specified heat dissipation In A 20 Heat dissipation per pole, current-dependent Pvid W 0 Equipment heat dissipation, current-dependent Pvid W 2 Static heat dissipation, non-current-dependent Pvid W 0 Heat dissipation capacity Pvids W 0 Operating ambient temperature min. Pdiss W 0 Operating ambient temperature max. Point Point Point | | | | |
|---|--|-------------------|----|---|
| International problement of the pro | Technical data for design verification | | | |
| Equipment heat dissipation, current-dependent Pvid W 2 Static heat dissipation, non-current-dependent Pvs W 0 Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. Pdiss °C -40 Operating ambient temperature max. °C -75 EEC/EN 61439 design verification Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity 10.2.3 Strength of materials and parts Metes the product standard's requirements. 10.2.3.1 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects Metes the product standard's requirements. | Rated operational current for specified heat dissipation | In | Α | 20 |
| Static heat dissipation, non-current-dependent Pvs W 0 Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. °C -40 Operating ambient temperature max. °C 5 ICE/EN 61439 design verification F F 10.2 Strength of materials and parts F F 10.2.3.1 Verification of thermal stability of enclosures F Meets the product standard's requirements. 10.2.3.2 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects F Meets the product standard's requirements. | Heat dissipation per pole, current-dependent | P _{vid} | W | 0 |
| Heat dissipation capacity Pdiss W 0 Operating ambient temperature min. °C -40 Operating ambient temperature max. °C 75 Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity IEC/EN 61439 design verification Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity 10.2 Strength of materials and parts Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity 10.2.2 Corrosion resistance Incert, per +1 °C, results in a 0.5% reduction of current carrying capacity 10.2.3.1 Verification of thermal stability of enclosures Incert, per voluct standard's requirements. 10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects Meets the product standard's requirements. | Equipment heat dissipation, current-dependent | P _{vid} | W | 2 |
| Operating ambient temperature min. °C -40 Operating ambient temperature max. °C 75 EC/EN 61439 design verification FO Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity ID.2.3 Strength of materials and parts FO Meets the product standard's requirements. 10.2.3.1 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects FO Meets the product standard's requirements. 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects Meets the product standard's requirements. | Static heat dissipation, non-current-dependent | P _{vs} | W | 0 |
| Operating ambient temperature max. °C 75 Inear, per +1 °C, results in a 0.5% reduction of current carrying capacity IEC/EN 61439 design verification Image: Period Contract Contend Contract Contract Contract Contract Con | Heat dissipation capacity | P _{diss} | W | 0 |
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| IEC/EN 61439 design verification Image: state stat | Operating ambient temperature max. | | °C | 75 |
| 10.2 Strength of materials and partsMeets the product standard's requirements.10.2.2 Corrosion resistanceMeets the product standard's requirements.10.2.3.1 Verification of thermal stability of enclosuresMeets the product standard's requirements.10.2.3.2 Verification of resistance of insulating materials to normal heatMeets the product standard's requirements.10.2.3.3 Verification of resistance of insulating materials to abnormal heatMeets the product standard's requirements.10.2.3.3 Verification of resistance of insulating materials to abnormal heatMeets the product standard's requirements. | | | | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity |
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| 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects | 10.2.3.1 Verification of thermal stability of enclosures | | | Meets the product standard's requirements. |
| and fire due to internal electric effects | 10.2.3.2 Verification of resistance of insulating materials to normal heat | | | Meets the product standard's requirements. |
| 10.2.4 Resistance to ultra-violet (UV) radiation Meets the product standard's requirements. | | | | Meets the product standard's requirements. |
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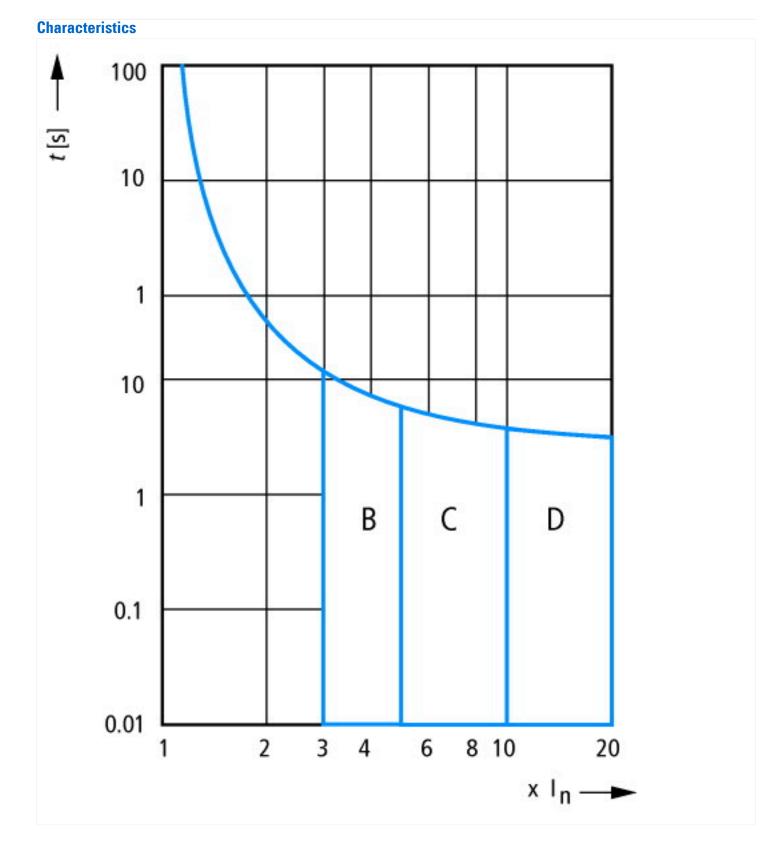
| 10.2.5 Lifting | Does not apply, since the entire switchgear needs to be evaluated. |
|--|--|
| 10.2.6 Mechanical impact | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.2.7 Inscriptions | Meets the product standard's requirements. |
| 10.3 Degree of protection of ASSEMBLIES | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.4 Clearances and creepage distances | Meets the product standard's requirements. |
| 10.5 Protection against electric shock | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.6 Incorporation of switching devices and components | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.7 Internal electrical circuits and connections | Is the panel builder's responsibility. |
| 10.8 Connections for external conductors | Is the panel builder's responsibility. |
| 10.9 Insulation properties | |
| 10.9.2 Power-frequency electric strength | Is the panel builder's responsibility. |
| 10.9.3 Impulse withstand voltage | Is the panel builder's responsibility. |
| 10.9.4 Testing of enclosures made of insulating material | Is the panel builder's responsibility. |
| 10.10 Temperature rise | The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices. |
| 10.11 Short-circuit rating | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must be observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

Technical data ETIM 7.0

Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)

Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss10.0.1-27-14-19-01 [AAB905014])

| Release characteristic | | D |
|--|-----|----------|
| Number of poles (total) | | 1 |
| Number of protected poles | | 1 |
| Rated current | А | 20 |
| Rated voltage | V | 240 |
| Rated insulation voltage Ui | V | 440 |
| Rated impulse withstand voltage Uimp | kV | 4 |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V | kA | 15 |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V | kA | 15 |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | 20 |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 20 |
| Voltage type | | AC |
| Frequency | Hz | 50 - 60 |
| Current limiting class | | 3 |
| Suitable for flush-mounted installation | | No |
| Concurrently switching N-neutral | | No |
| Over voltage category | | 3 |
| Pollution degree | | 2 |
| Additional equipment possible | | Yes |
| Width in number of modular spacings | | 1 |
| Built-in depth | mm | 70.5 |
| Degree of protection (IP) | | IP20 |
| Ambient temperature during operating | °C | -25 - 75 |
| Connectable conductor cross section multi-wired | mm² | 1 - 25 |
| Connectable conductor cross section solid-core | mm² | 1 - 25 |
| | | |



Dimensions

