

Over current switch, 13A, 3Np, D-Char, AC

Part no. FAZ-D13/3N Article no. 278996 Catalog No. FAZ-D13/3N



Similar to illustration

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|-----|--------|-------|------|
| 110 | INCEN | DECAR | Om |
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| Basic function | | | Miniature circuit breakers |
|-------------------------------------------------|----|----|----------------------------------------------------------------|
| Number of poles | | | 3 pole+N |
| Tripping characteristic | | | D |
| Application | | | Switchgear for industrial and advanced commercial applications |
| Rated current | In | Α | 13 |
| Rated switching capacity acc. to IEC/EN 60947-2 | | kA | 15 |
| Product range | | | FAZ |

Technical data

Electrical

| Standards LEC/EN 60847 -2 LEC/EN 60847 -2 LEC/EN 60888 Rated operational voltage Ue V Ue VB VAC 230/400 Rated switching capacity acc. to IEC/EN 60947 -2 kA 15 Operational switching capacity acc. to IEC/EN 60947 -2 kA 7.5 Characteristic B, C, D D Max. back-up fuse A gL/g6 125 Selectivity Class 3 3 Lifespan Operations > 10000 Direction of incoming supply > 10000 Mechanical mm 45 Standard front dimension mm 45 Enclosure height mm 80 Terminal protection mm 80 Mounting width per pole mm 17.5 Mounting width per pole mm 17.5 Mounting and bottom IEC/EN 60715 top-hat rail IEC/EN 60715 top-hat rail Terminal capacities mm² IEC/EN 60715 top-hat rail | Licotricui | | | |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|----------------|-----------------|-----------------------------------------|
| Rated switching capacity acc. to IEC/EN 60947-2 Rated switching capacity acc. to IEC/EN 60947-2 Operational switching capacity Characteristic Max. back-up fuse Selectivity Class Lifespan Operations Operations Operations Operations Tirection of incoming supply Mechanica Standard front dimension Enclosure height Terminal protection Mounting Mounting Mounting Degree of Protection Terminals top and bottom Terminals top and bottom Terminal capacities Wax Agl/96 | Standards | | | |
| Rated switching capacity acc. to IEC/EN 60947-2 Rated switching capacity acc. to IEC/EN 60947-2 Characteristic Max. back-up fuse Selectivity Class Lifespan Operations Direction of incoming supply Mechanical Standard front dimension Enclosure height Terminal protection Mounting width per pole Mounting width per pole Mounting Degree of Protection Terminals top and bottom Terminals top and bottom Terminal capacities Wide acceptance V DC 48 (per pole) 49 (per pole) 49 (per pole) 49 (per pole) 49 (per pole) 40 (per pole) 41 (per pole) 42 (per pole) 42 (per pole) 42 (per pole) 43 (per pole) 42 (per pole) 42 (per pole) 43 (per pole) 44 (per pole) 45 (per pole) 46 (per pole) 47 (per pole) 48 (per pole) 49 (per pole) 40 (per pole | Rated operational voltage | U _e | V | |
| Rated switching capacity acc. to IEC/EN 60947-2 Operational switching capacity Characteristic Max. back-up fuse Selectivity Class Lifespan Operations Direction of incoming supply Mechanical Standard front dimension Enclosure height Terminal protection Mounting width per pole Mounting Degree of Protection Terminals top and bottom Terminals top and bottom Terminal capacities KA 15 KA 7.5 KA 7.5 R.C, D B, C, D 125 3 126 3 127 3 129 48 49 49 49 49 49 49 49 49 4 | | U _e | V AC | 230/400 |
| Operational switching capacity KA 7.5 Characteristic B, C, D Max. back-up fuse A gL/g6 125 Selectivity Class 3 3 Lifespan Operations > 10000 Direction of incoming supply as required Mechanical mm 45 Enclosure height mm 80 Enclosure height Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Degree of Protection Twin-purpose terminals Terminals top and bottom mm² mm² | | | V DC | 48 (per pole) |
| Characteristic B, C, D Max. back-up fuse A gL/g6 Selectivity Class 3 Lifespan Operations > 10000 Direction of incoming supply as required Mechanical Standard front dimension mm 45 Enclosure height mm 80 Terminal protection Mounting width per pole mm 17.5 Mounting Width per pole mm 17.5 Mounting Degree of Protection | Rated switching capacity acc. to IEC/EN 60947-2 | | kA | 15 |
| Max. back-up fuse Selectivity Class Selectivity Class Lifespan Operations Direction of incoming supply Mechanical Standard front dimension Enclosure height Terminal protection Mounting width per pole Mounting Degree of Protection Terminals top and bottom Terminals top and bottom Terminal capacities A gL/gG 125 3 4 0000 as required *** *** *** *** *** *** *** *** *** | Operational switching capacity | | kA | 7.5 |
| Selectivity Class Lifespan Operations > 10000 Direction of incoming supply as required Mechanical Standard front dimension mm 45 Enclosure height mm 80 Terminal protection Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting Degree of Protection IEC/EN 60715 top-hat rail Degree of Protection Terminals top and bottom Terminal capacities mm² Terminal capacities mm² | Characteristic | | | B, C, D |
| Lifespan Operations > 10000 Direction of incoming supply as required Mechanical Standard front dimension mm 45 Enclosure height mm 80 Terminal protection Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Terminal capacities mm² Terminal capacities > 10000 Directions > 10000 mm 45 Enclosure Height mm 80 Finger and back-of-hand proof to BGV A2 IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Twin-purpose terminals | Max. back-up fuse | | A gL/gG | 125 |
| Direction of incoming supply Mechanical Standard front dimension Enclosure height Terminal protection Mounting width per pole Mounting Degree of Protection Terminals top and bottom Terminal capacities as required mm 45 Finder B0 Finger and back-of-hand proof to BGV A2 mm 17.5 IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Twin-purpose terminals mm² | Selectivity Class | | | 3 |
| Mechanical Standard front dimension mm 45 Enclosure height mm 80 Terminal protection Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting IEC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal capacities mm² | Lifespan | Operations | | > 10000 |
| Standard front dimension mm 45 Enclosure height mm 80 Terminal protection Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting Degree of Protection Iteminals top and bottom Iteminal capacities mm² Mounting Terminal capacities mm² Mounting Width per pole mm 17.5 Mounting IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Twin-purpose terminals | | | | as required |
| Enclosure height mm 80 Terminal protection Finger and back-of-hand proof to BGV A2 Mounting width per pole mm 17.5 Mounting Degree of Protection Iteminals top and bottom Iteminal capacities mm ² | Mechanical | | | |
| Terminal protection Mounting width per pole Mounting Mounting Degree of Protection Terminals top and bottom Terminal capacities Finger and back-of-hand proof to BGV A2 mm 17.5 IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Twin-purpose terminals | Standard front dimension | | mm | 45 |
| Mounting width per pole mm 17.5 Mounting LEC/EN 60715 top-hat rail Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal capacities mm² | Enclosure height | | mm | 80 |
| Mounting Degree of Protection Terminals top and bottom Terminal capacities IEC/EN 60715 top-hat rail IP20, IP40 (when fitted) Twin-purpose terminals | Terminal protection | | | Finger and back-of-hand proof to BGV A2 |
| Degree of Protection IP20, IP40 (when fitted) Terminals top and bottom Twin-purpose terminals Terminal capacities mm ² | Mounting width per pole | | mm | 17.5 |
| Terminals top and bottom Terminal capacities Terminal capacities Terminal capacities Terminal capacities | Mounting | | | IEC/EN 60715 top-hat rail |
| Terminal capacities mm ² | Degree of Protection | | | IP20, IP40 (when fitted) |
| and the second s | Terminals top and bottom | | | Twin-purpose terminals |
| mm^2 1 x 25 | Terminal capacities | | mm ² | |
| | | | mm ² | 1 x 25 |
| mm ² 2 x 10 | | | mm ² | 2 x 10 |
| Thickness of busbar material mm 0.8 2 | Thickness of busbar material | | mm | 0.8 2 |
| Mounting position As required | Mounting position | | | As required |

Design verification as per IEC/EN 61439

| Technical data for design verification | | | |
|----------------------------------------------------------|-------------------|----|-----------------------------------------------------------------------------|
| Rated operational current for specified heat dissipation | In | Α | 13 |
| Heat dissipation per pole, current-dependent | P_{vid} | W | 0 |
| Equipment heat dissipation, current-dependent | P _{vid} | W | 6.1 |
| Static heat dissipation, non-current-dependent | P_{vs} | W | 0 |
| Heat dissipation capacity | P _{diss} | W | 0 |
| Operating ambient temperature min. | | °C | -40 |
| Operating ambient temperature max. | | °C | 75 |
| | | | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity |

| /EN 61439 design verification | |
|------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| 10.2 Strength of materials and parts | |
| 10.2.2 Corrosion resistance | Meets the product standard's requirements. |
| 10.2.3.1 Verification of thermal stability of enclosures | Meets the product standard's requirements. |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat | 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. |
| 10.2.4 Resistance to ultra-violet (UV) radiation | Meets the product standard's requirements. |
| 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 observed. |
| 10.12 Electromagnetic compatibility | Is the panel builder's responsibility. The specifications for the switchgear must observed. |
| 10.13 Mechanical function | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed. |

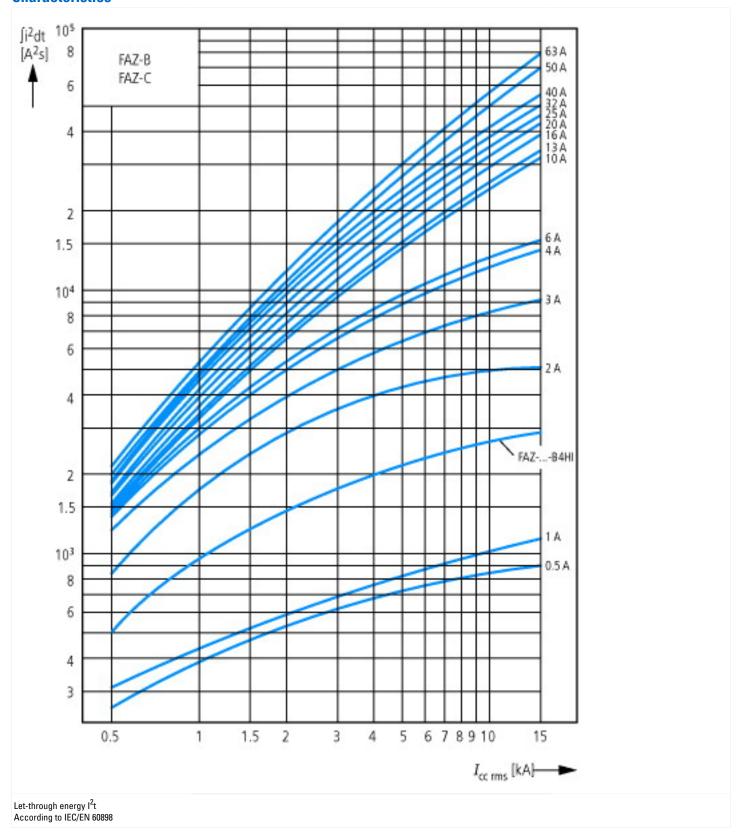
Technical data ETIM 6.0

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

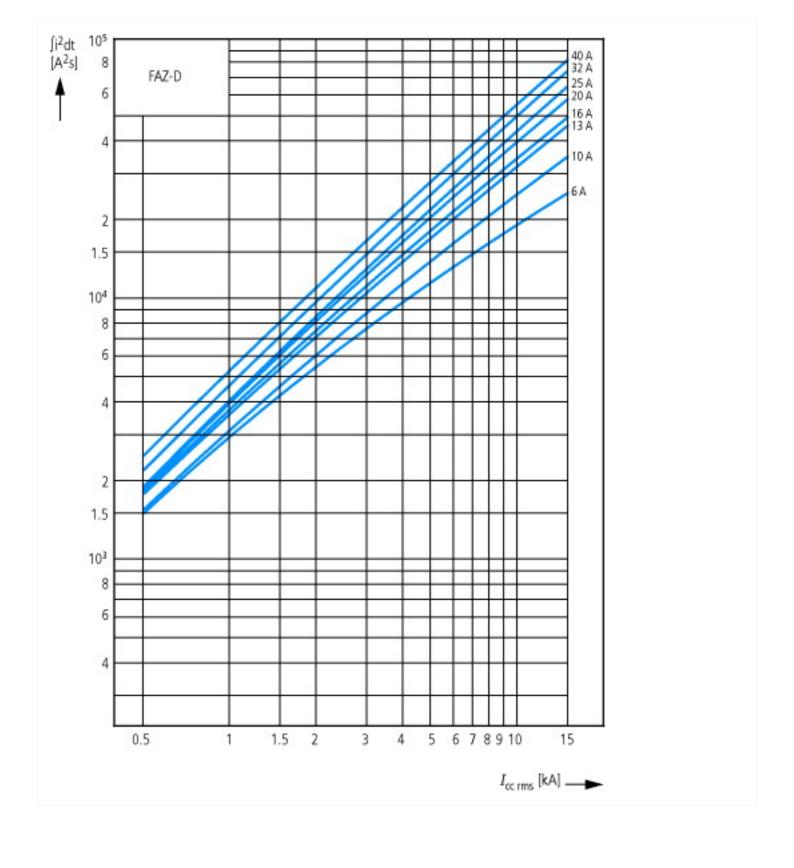
Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ecl@ss8.1-27-14-19-01 [AAB905011])

| [AAD303011]] | | | |
|----------------------------------------------------------------|-----|----------|----|
| Release characteristic | | D | |
| Number of poles (total) | | 4 | |
| Number of protected poles | | 4 | |
| Nominal rated current | Α | 13 | |
| Nominal rated voltage | V | 400 | |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V | k.A | A 10 | |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V | k.A | A 10 | |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | k.A | A 15 | |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | k.A | A 15 | |
| Voltage type | | AC | |
| Current limiting class | | 3 | |
| Frequency | Hz | z 50 - 6 | 50 |
| Concurrently switching N-neutral | | Yes | |
| Suitable for flush-mounted installation | | No | |
| Over voltage category | | 3 | |
| Pollution degree | | 2 | |
| Width in number of modular spacings | | 4 | |
| Built-in depth | mı | m 70.5 | |
| Additional equipment possible | | Yes | |
| Degree of protection (IP) | | IP20 | |
| | | | |

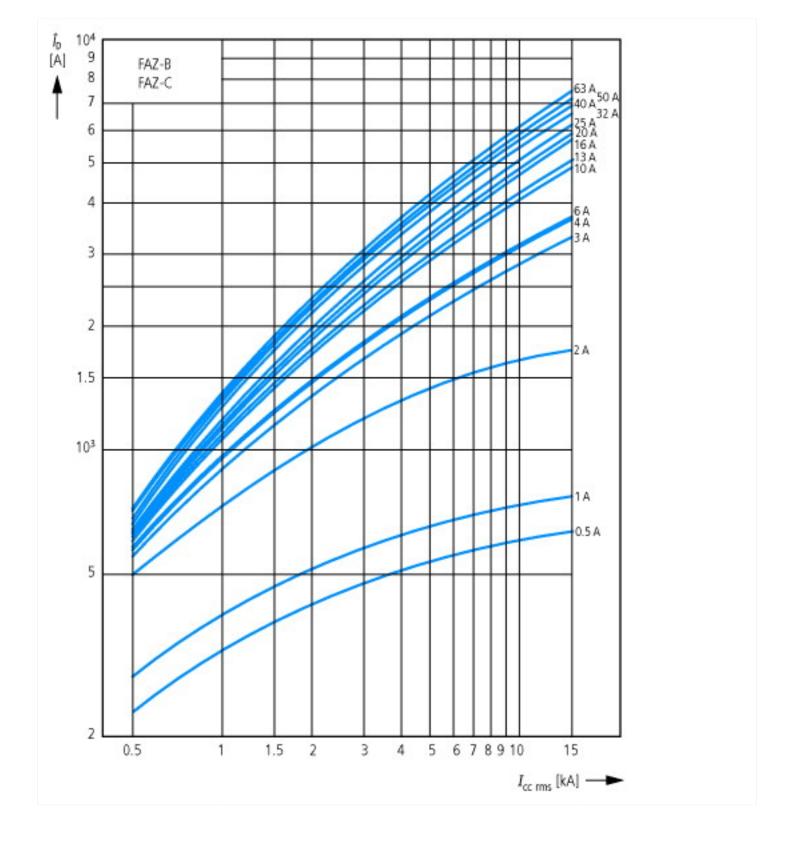


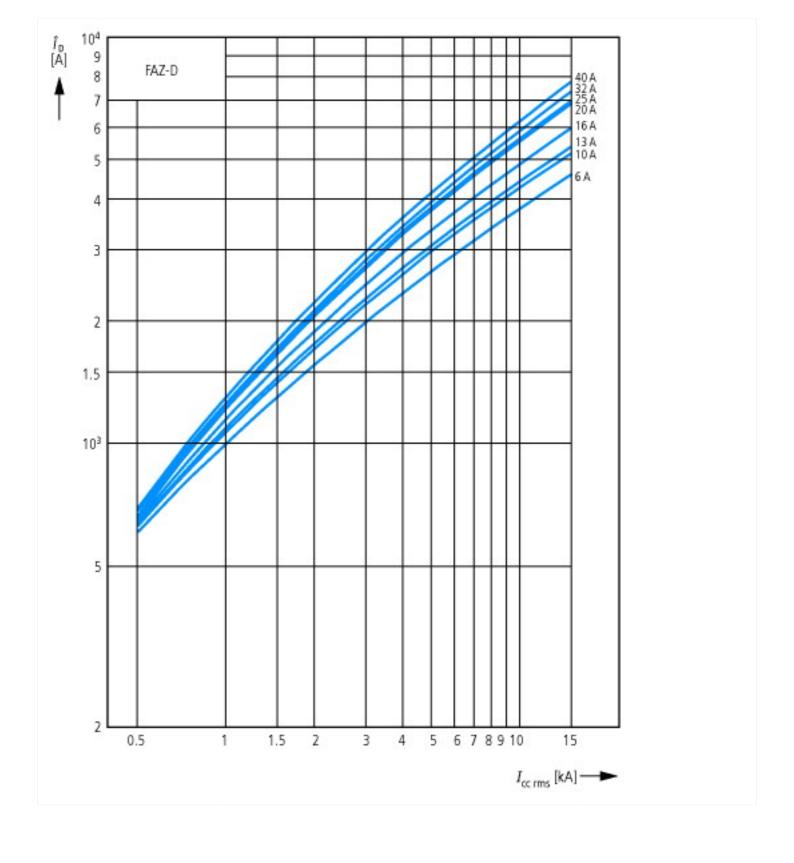


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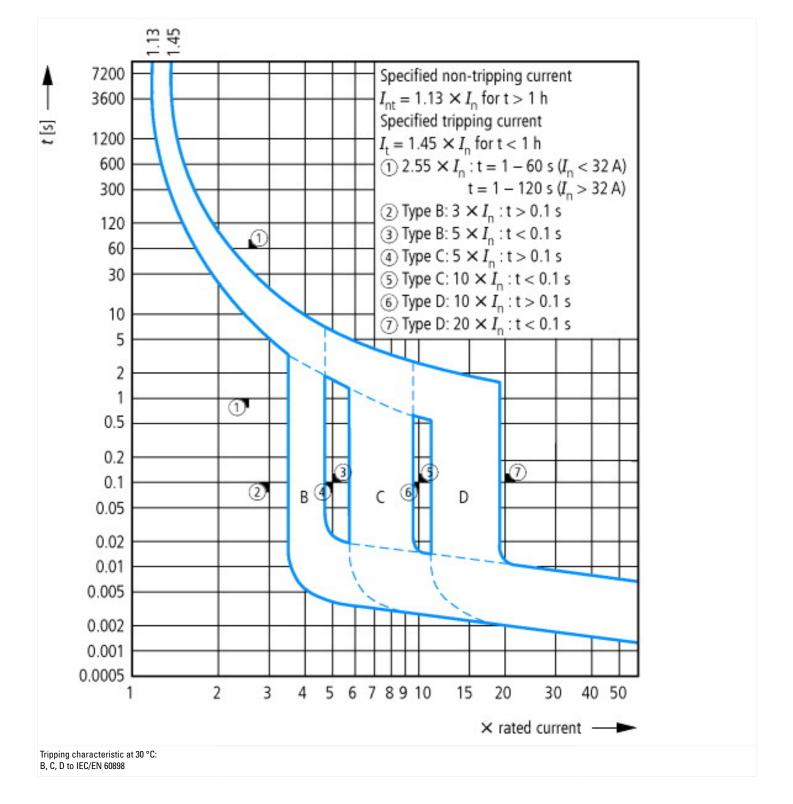


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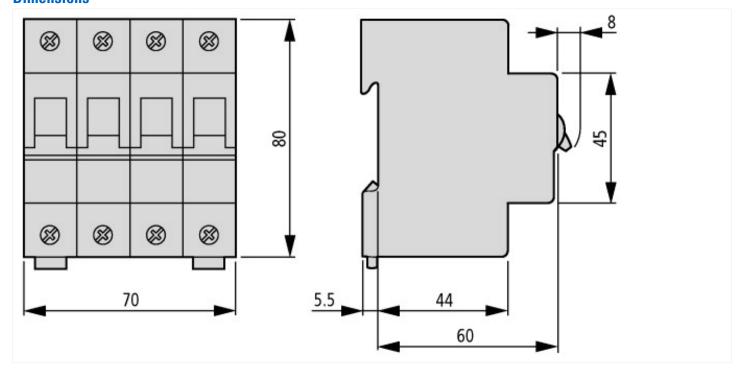




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Dimensions



Additional product information (links)

AWA1220-1755 Circiut-breaker

AWA1220-1755 Circiut-breaker

ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/17550701.pdf