



Circuit-breaker, 4p, 1600A, fixed

Part no. IZM32N4-V16F
 Catalog No. 124095

Delivery program

| | | | |
|--|-----------------------------|----|--|
| Product range | | | Air circuit-breakers/switch-disconnectors |
| Product range | | | Open circuit-breakers |
| Current Range | | | 4000 to 6300 A |
| Protective function | | | Selective operation |
| Installation type | | | Fixed |
| Construction size | | | IZM32 |
| Standard/Approval | | | IEC |
| Number of poles | | | 4 pole |
| Degree of Protection | | | IP20, IP55 with protective cover, IP41 with door sealing frame |
| Rated current = rated uninterrupted current | $I_n = I_u$ | A | 1600 |
| Rated ultimate short-circuit breaking capacity up to 440V/690V 42/42 | I_{cu} | kA | 85 |
| Rated service short-circuit breaking capacity up to 440V/690V 42/42 | I_{cs} | kA | 85 |
| Overload release, min. | I_r | A | 640 |
| Overload release, max. | I_r | A | 1600 |
| Non-delayed  | $I_i = I_n \times \dots$ | | 2 - 10, OFF |
| Delayed  | $I_{sd} = I_r \times \dots$ | | 2 - 10 |
| Notes | | | |
| Including rear connection main terminals and secondary terminal blocks according to ordered breaker options. | | | |

Technical data

| | | | |
|------------------------------|----------|----|--|
| General | | | |
| Standards | | | IEC/EN 60947 |
| Ambient temperature | | | |
| Storage | θ | °C | -25 - +70 (device with LCD-display -20 - +70) |
| Operating (open) | | °C | -25 - +70 (device with LCD-display -20 - +70) |
| Mounting position | | |  |
| Utilization category | | | B |
| Degree of Protection | | | IP20, IP55 with protective cover, IP41 with door sealing frame |
| Direction of incoming supply | | | as required |

Main conducting paths

| | | | |
|---|-------------|---|------|
| Rated current = rated uninterrupted current | $I_n = I_u$ | A | 1600 |
| Rated uninterrupted current at 50 °C | I_u | A | 1600 |
| Rated uninterrupted current at 60 °C | I_u | A | 1600 |
| Rated uninterrupted current at 70 °C | I_u | A | 1600 |

| | | | |
|---|-----------|------|-------|
| Rated impulse withstand voltage | U_{imp} | V AC | 8000 |
| Rated operational voltage | U_e | V AC | 690 |
| Use in IT electrical power networks up to $U = 440$ V | I_{IT} | kA | 23 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated insulation voltage | U_i | V | 1000 |

Switching capacity

| | | | |
|---|--------------|----|-------|
| Rated short-circuit making capacity | I_{cm} | | |
| up to 440 V 50/60 Hz | I_{cm} | kA | 178 |
| up to 690 V 50/60 Hz | I_{cm} | kA | 179 |
| Rated short-time withstand current 50/60 Hz | | | |
| $t = 1$ s | I_{cw} | kA | 85 |
| $t = 3$ s | I_{cw} | kA | 65 |
| Rated short-circuit breaking capacity I_{cn} | I_{cn} | | |
| IEC/EN 60947 operating sequence I_{cu} 0-t-CO | | | |
| up to 240 V 50/60 Hz | I_{cu} | kA | 85 |
| up to 440 V 50/60 Hz | I_{cu} | kA | 85 |
| up to 690 V 50/60 Hz | I_{cu} | kA | 85 |
| IEC/EN 60947 operating sequence I_{cs} 0-t-CO-t-CO | | | |
| up to 240 V 50/60 Hz | I_{cs} | kA | 85 |
| up to 440 V 50/60 Hz | I_{cs} | kA | 85 |
| up to 690 V 50/60 Hz | I_{cs} | kA | 85 |
| Operating times | | | |
| Closing delay via spring release | | ms | 30 |
| Break times | | ms | 40 |
| Total opening delay via shunt release | | ms | 35 |
| Total opening delay via undervoltage release | | ms | 35/70 |
| Total opening delay on non-delayed short-circuit release (up to complete arc quenching) | | ms | 35 |
| Maximum operating frequency | Operations/h | | 60 |
| Heat dissipation at rated current I_n | | | |
| Fixed mounting | | W | 120 |
| Withdrawable units (switch with cassette) | | W | 240 |

Weight

| | | | |
|----------------|--|----|-----|
| Fixed mounting | | | |
| 3-pole | | kg | 68 |
| 4-pole | | kg | 86 |
| Withdrawable | | | |
| 3-pole | | kg | 80 |
| 4-pole | | kg | 102 |
| Cassette | | | |
| 3 pole | | kg | 34 |
| 4 pole | | kg | 38 |

Terminal capacities

| | | | |
|--|--|----|---|
| Copper bar | | | |
| Fixed mounting | | | |
| Black | | mm | 2 x 5 x 100 |
| Withdrawable units | | | |
| Black | | mm | 2 x 5 x 100 |
| | | | Permissible continuous current for circuit-breakers operating in switchboards at various internal ambient temperatures. The switchboard's internal ambient temperature should be estimated using the calculation methods of IEC regulation. |
| Other technical data (sheet catalogue) | | | Tripping characteristics for universal and selective protection Notes - tripping characteristics |

Design verification as per IEC/EN 61439

| | | | |
|--|--|--|--|
| Technical data for design verification | | | |
|--|--|--|--|

| | | |
|------------------------------------|----|-----|
| Operating ambient temperature max. | °C | -25 |
| Operating ambient temperature max. | °C | 70 |

Dimensions



Additional product information (links)

| | |
|---|---|
| Notes - tripping characteristics | http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=18.88 |
| Tripping characteristics for universal and selective protection | http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=18.79 |