MOELLER

Type: **NZMB2–M125**
Article No.: **265715**




| Ordering information | | | |
|---|---|---|---|
| Description | | | Terminal screws standard, terminals as accessories |
| Rated current = rated uninterrupted current | $I_u$ | A | 125 |
| Setting range | | | |
| Overload releases | $I_r$ | A | 100 – 125 |
| Short–circuit releases Short–circuit releases | | A | 1000 – 1750 |
| Motor rating AC–3 at 400 V 50/60 Hz | $P$ | kW | 55 |
| Rated operational current AC–3 at 400 V 50/60 Hz | $I_e$ | A | 99 |
| Switching capacity Switching capacity | | kA | 25 |
| Release system | | | Thermomagnetic release |
| Pole | | | 3 |

**Notes concerning the product group**

IEC/EN 60947–4–1 and IEC/EN 60947–2

Circuit–breakers fulfil all the demands of utilization category AC–3.

Adjustable overload release $I_r$

- 0.8 – 1 × $I$

- (ex–factory 0.8 × $I_n$)

- )

– NZM...1–M...: with single–phasing sensitivity
– Tripping class 10 A

Adjustable short–circuit release $I_i$

- 8 – 14 × $I_n$ (ex–factory 12 × $I_n$)

– NZM...–M32: 10 – 14 × $I_n$ (ex–factory12 × $I_n$)
– NZM...1–M100: 8 – 12.5 × $I_n$ (ex–factory 12 × $I_n$)

Fixed short–circuit release $I_i$

- 350 A With $I_n$ = 20 – 25 A

**Notes concerning the product group**

Notes for terminals → 260042

| **General** | | | |
|---|---|---|---|
| Standards | | | IEC/EN 60947 |
| Protection against direct contact | | | Finger and back of hand proof to VDE 0106 Part 100 |
| Climatic proofing | | | Damp heat, constant, according to IEC 60068–2–78 Damp heat, cyclical to IEC 60068–2–30 |
| Mechanical shock resistance (IEC/EN 60068–2–27) | | | |
| Shock resistance | | g | 20 (half–sinusoidal shock 20 ms) |
| Safe isolation to VDE 0106 Part 101 and Part 101/A1 | | | |
| Between auxiliary contacts and main contacts | | V AC | 500 |
| between the auxiliary contacts | | V AC | 300 |
| Dimensions | | | |
| Weight | | | |
| Weight | | kg | 2,345 |
| Mounting position | | | |
| Direction of incoming supply | | | As required |

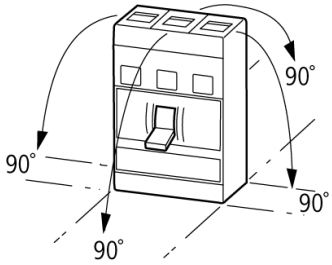
| | | | |
|---|---|---|---|
| Degree of protection | | | |
| Device | | | In the operating controls area: IP20 (basic degree of protection) |
| Enclosures | | | With insulating surround: IP40, with door coupling rotary handle: IP66 |
| Terminations | | | Tunnel terminal: IP10<br>Phase isolator and strip terminal: IP00 |
| **Circuit–breakers** | | | |
| Rated impulse withstand voltage $U_{imp}$ | | | |
| Main contacts | | V | 8000 |
| Auxiliary contacts | | V | 6000 |
| Rated operational voltage | $U_e$ | V AC | 690 |
| Overvoltage category/pollution degree | | | III/3 |
| Rated insulation voltage | $U_i$ | V | 1000 |
| **Switching capacity** | | | |
| Rated short–circuit making capacity | | | |
| 240 V | $I_{cm}$ | kA | 63 |
| 400/415 V | $I_{cm}$ | kA | 53 |
| 440 V | $I_{cm}$ | kA | 53 |
| 525 V | $I_{cm}$ | kA | 30 |
| Rated short–circuit breaking capacity $I_{cn}$ | | | |
| $I_{cu}$ to IEC/EN 60947 operating sequence O–t–CO | | | |
| 240 V 50/60 Hz | $I_{cu}$ | kA | 30 |
| 400/415 V 50/60 Hz | $I_{cu}$ | kA | 25 |
| 440 V 50/60 Hz | $I_{cu}$ | kA | 25 |
| 525 V 50/60 Hz | $I_{cu}$ | kA | 15 |
| $I_{cu}$ to IEC/EN 60947 operating sequence O–t–CO–t–CO | | | |
| 240 V 50/60 Hz | $I_{cs}$ | kA | 30 |
| 400/415 V 50/60 Hz | $I_{cs}$ | kA | 25 |
| 440 V 50/60 Hz | $I_{cs}$ | kA | 25 |
| 525 V 50/60 Hz | $I_{cs}$ | kA | 15 |
| **Technical data, divergent from the products for the IEC market**<br>switching capacity NA switches (UL489, CSA 22.2 No. 5.1) | | | |

| | | | |
|---|---|---|---|
| 240 V 60 Hz | | kA | 35 |
| 480V 60Hz | | kA | 25 |
| 600 V 60 Hz | | kA | 18 |
| Utilization category to IEC/EN 60947–2 | | | A |
| Lifespan, mechanical | Operations | | 20000 |
| Maximum operating frequency | | | |
| Max. operating frequency | | Ops/h | 120 |
| Lifespan, electrical | | | |
| AC–1 | | | |
| 400/415 V 50/60 Hz | Operations | | 10000 |
| 690 V 50/60 Hz | Operations | | 7500 |
| AC––3 | | | |
| 400/415 V 50/60 Hz | Operations | | 6500 |
| 690 V 50/60 Hz | Operations | | 5000 |
| Current heat loss per pole at $I_u$ | | W | 19 |
| Overload releases | | | |
| Temperature compensation for NZM2 to IEC/EN 60947, residual error in the range –25 °C/+70 °C (reference temperature 40 °C) | | | |
| Electronic | | | 0 |
| Total opening delay at short–circuit | | ms | < 10 |
| **Terminal capacities** | | | |
| Standard equipment | | | Screw terminal |
| Accessories | | | Box terminal<br>Tunnel terminal<br>Connection on rear |
| Cu conductors, Cu cable | | | |
| Box terminal | | | |
| Solid | | $mm^2$ | 1 × (4 – 16)<br>2 × (4 – 16) |
| Stranded | | $mm^2$ | 1 × (25 – 185)<br>2 × (25 – 70) |
| Tunnel terminal | | | |
| Solid | | $mm^2$ | 1 × (16 – 185) |
| Stranded | | | |
| Single hole | | $mm^2$ | 1 × (25 – 185) |
| Bolt terminal and rear–side connection | | | |
| Direct on the switch | | | |

| | | | |
|---|---|---|---|
| Solid | | $mm^2$ | 1 × (4 – 16)<br>2 × (4 – 16) |
| Stranded | | $mm^2$ | 1 × (25 – 185)<br>2 × (25 – 70) |
| Al conductors, Cu cable | | | |
| Tunnel terminal | | | |
| Solid | | $mm^2$ | 1 × 16 |
| Stranded | | | |
| Single hole | | $mm^2$ | 1 × (25 – 185)<br>je nach Kabelhersteller bis zu 240 $mm^2$ anschließbar |
| Bolt terminal and rear–side connection | | | |
| Direct on the switch | | | |
| Solid | | $mm^2$ | 1 × (10 – 16)<br>2 × (10 – 16) |
| Stranded | | $mm^2$ | 1 × (25 – 50)<br>2 × (25 – 50) |
| Cu strip (number of segments x width x segment thickness) | | | |
| Box terminal | | | |
| | min. | $mm^2$ | 2 × 9 × 0.8 |
| | max. | $mm^2$ | 10 × 16 × 0.8 |
| Bolt terminal and rear–side connection | | | |
| Flat copper strip, with holes | min. | mm | 2 × 16 × 0.8 |
| Flat copper strip, with holes | max. | mm | 10 × 16 × 0.8 |
| Copper busbar (width × thickness) | | | |
| Bolt terminal and rear–side connection | | | |
| Screw connection | | | M8 |
| Direct on the switch | | | |
| | min. | $mm^2$ | 16 × 5 |
| | max. | $mm^2$ | 20 × 5 |
| **Dimensions** | | | |
| | | | Blow out area, minimum clearance to other parts 60 mm |
| Explaination | | | Motor protection |
| Explaination | | | 1 half–shaft |

**Mounting position**

Vertical and 90° in all directions



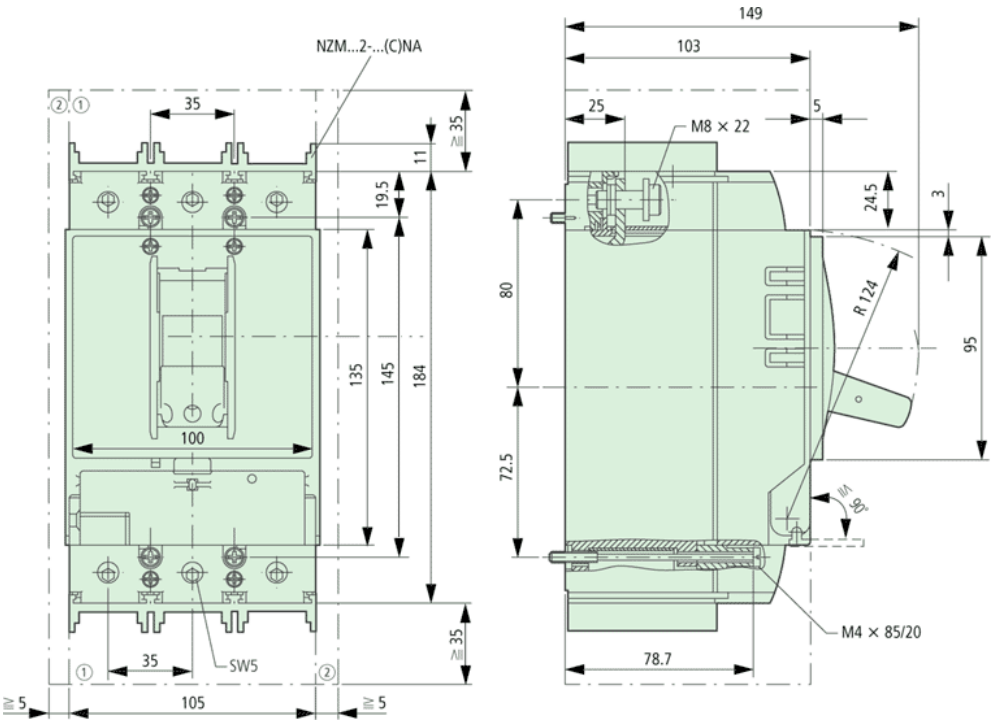

With plug–in adapter NZM2: vertical, 90° right/left

With withdrawable unit NZM3: vertical, 90° left NZM4: verticalwith remote operator: NZM2, NZM3, NZM4: vertical and 90° in all directions

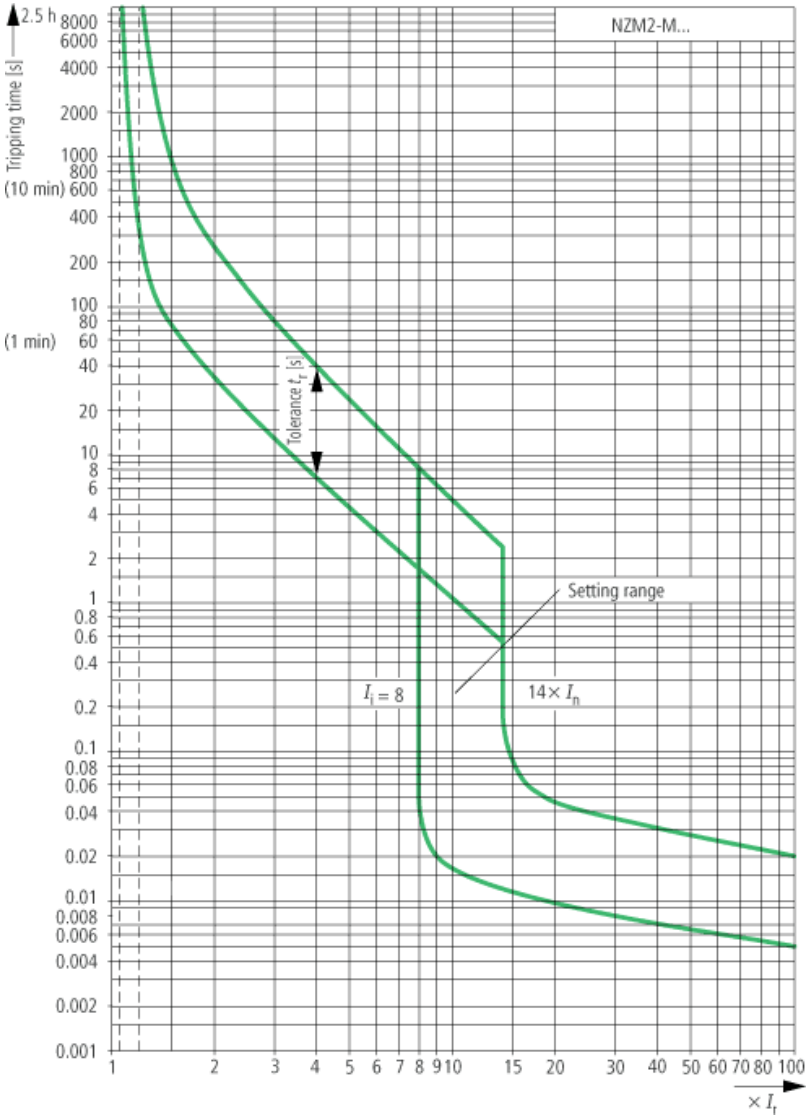
## Overview

| | | | | |
|---|---|---|---|---|
| Basic equipment | | | | |
| Box terminal | ● | – | – | – |
| Screw connection | – | ● | ● | ● |
| Accessories | | | | |
| Box terminal | – | ● | ● | – |
| Screw connection | ● | – | – | ● |
| Tunnel terminal | ● | ● | ● | ● |
| Connection on rear | ● | ● | ● | ● |
| Flat conductor terminal | – | – | – | ● |

## Dimensions




## Characteristic curve

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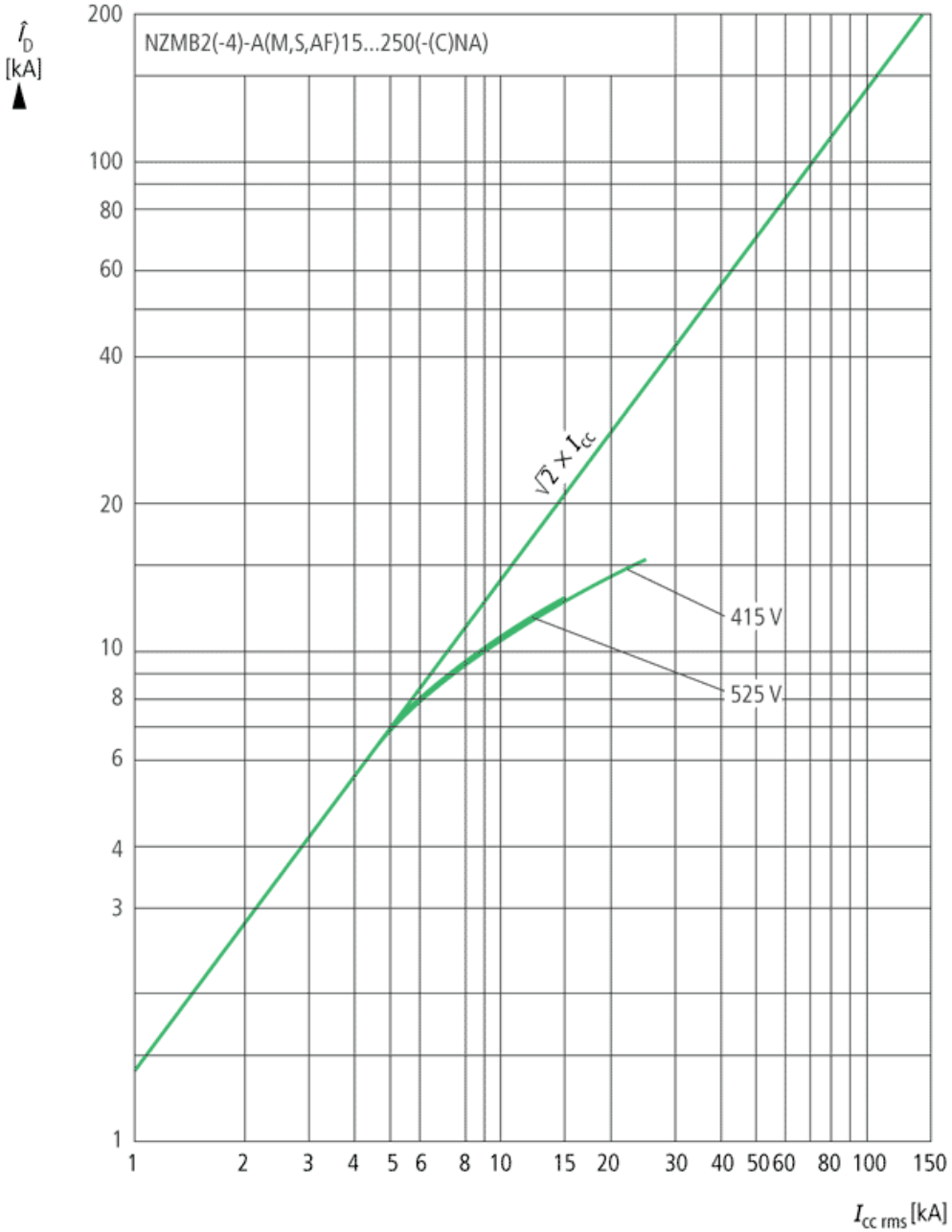


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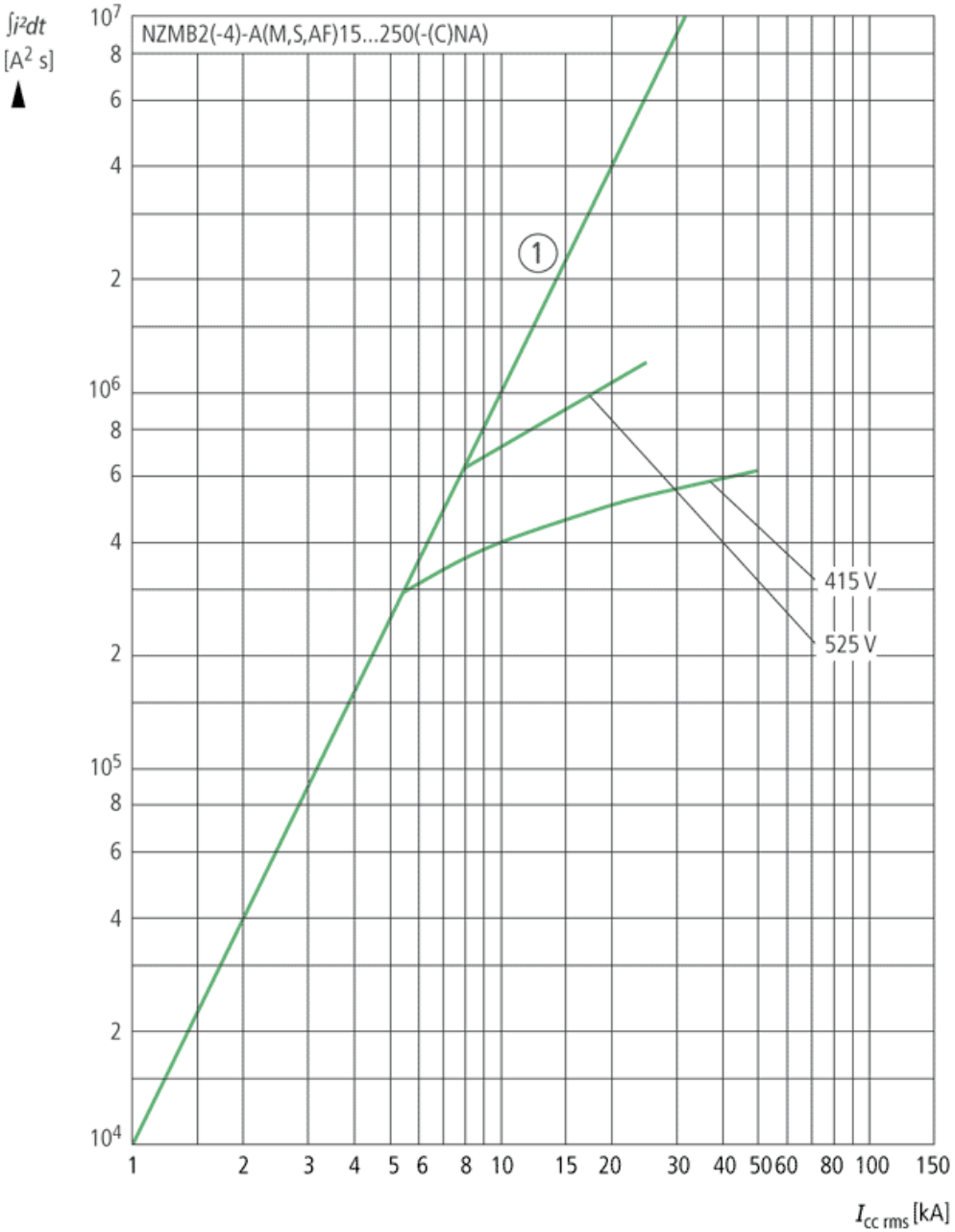


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