



## MOTOR PROTECTION, START.PKZM0

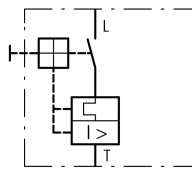



Powering Business Worldwide™

Part no. **PKZM0-0,63**

Article no. **072733**

### Delivery programme

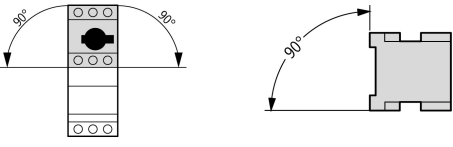
|                             |   |    |  |  |
|-----------------------------|---|----|--|--|
| Product range               |   |    |  | PKZM0 motor protective circuit-breakers up to 32 A                                 |
| Basic function              |   |    |  | Motor protection   |
| Connection technique        |   |    |  | Screw terminals  |
| Contact sequence            |   |    |  |  |
| 220 - 240 V                 |   |    |  |  |
| AC-3                        |   |    |  |  |
| 220 V 230 V 240 V           | P   | kW |  | 0.09   |
| 380 V 400 V 415 V           | P   | kW |  | 0.12   |
| 440 V                       | P   | kW |  | 0.18   |
| 500 V                       | P   | kW |  | 0.25   |
| 660 V 690 V                 | P   | kW |  | 0.25   |
| Rated uninterrupted current | $I_u$   | A  |  | 0.63   |
| <b>Setting range</b>        |   |    |  |  |
| Overload releases           | $I_r$   | A  |  | 0.4 - 0.63   |
| Short-circuit releases      |   |    |  |  |
| max.                        | $I_{rm}$  | A  |  | 8.8  |
| <b>Notes</b>                | <p>Phase failure sensitivity to IEC/EN 60947-4-1, VDE 0660 part 102.<br/>           Can be snap-fit to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height</p> |    |  |  |
|                             |  <p>PTB 10 ATEX 3013, see manual</p>                                       |    |  |  |

### Approbationen

|                           |  |
|---------------------------|--|
| UL approval               | Yes  |
| CSA approval              | Yes  |
| Product Standards         | UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking                                       |
| UL File No.               | E36332   |
| UL CCN                    | NLRV   |
| CSA File No.              | 12528  |
| CSA Class No.             | 3211-05  |
| NA Certification          | UL listed, CSA certified   |
| Specially designed for NA | No   |
| Suitable for              | Branch circuit: Manual type E if used with terminal, or suitable for group installations |

### General

|                     |  |    |  |
|---------------------|--|----|--|
| Standards           |  |    | IEC/EN 60947, VDE 0660   |
| Climatic proofing   |  |    | Damp heat, constant to IEC 60068-2-78<br>Damp heat, cyclic to IEC 60068-2-30 |
| Ambient temperature |  | °C |  |
| Storage             |  | °C | -40 - +80  |
| Open                |  | °C | -25 - 55   |
| Enclosed            |  | °C | -25 - 40   |

|   |  |                 |   |
|---|--|-----------------|---|
| Mounting position   |  |                 |  |
| Direction of incoming supply  |  |                 | as required   |
| Degree of protection  |  |                 |   |
| Device  |  |                 | IP20  |
| Terminations  |  |                 | IP00  |
| Protection against direct contact   |  |                 | Finger and back-of-hand proof   |
| Mechanical shock resistance half-sinusoidal shock 10 ms to IEC 60068-2-27 |  | g               | 25  |
| Altitude  |  | m               | 2000  |
| Terminal capacity screw terminals   |  | mm <sup>2</sup> |   |
| Solid   |  | mm <sup>2</sup> | 1 x (1 - 6)<br>2 x (1 - 6)  |
| Flexible with ferrule to DIN 46228  |  | mm <sup>2</sup> | 1 x (1 - 6)<br>2 x (1 - 6)  |
| Solid or stranded   |  | AWG             | 18 - 10   |
| Terminal capacity springloaded terminals                                  |  |                 |   |
| Solid   |  | mm <sup>2</sup> | 1 x (1...2.5)<br>2 x (1...2.5)  |
| Flexible with ferrule to DIN 46228  |  | mm <sup>2</sup> | 1 x (1...2.5)<br>2 x (1...2.5)  |
| Solid or stranded   |  | AWG             | 18...14   |
| Specified tightening torque for terminal screws                           |  |                 |   |
| Main cable  |  | Nm              | 1.7   |
| Control circuit cables  |  | Nm              | 1   |

### Main conducting paths

|   |             |             |  |
|---|-------------|-------------|--|
| Rated impulse withstand voltage                         | $U_{imp}$   | V<br>AC     | 6000   |
| Overvoltage category/pollution degree                   |             |             | III/3  |
| Rated operational voltage                               | $U_e$       | V<br>AC     | 690  |
| Rated uninterrupted current = rated operational current | $I_u = I_e$ | A           | 32 or current setting of the overcurrent release |
| Rated frequency   | f           | Hz          | 40 - 60  |
| Rated frequency   |             | Hz          | 40 - 60  |
| Current heat loss (3 pole at operating temperature)     |             | W           | 6  |
| Lifespan, mechanical                                    | Operations  | x<br>$10^6$ | 0.1  |
| Lifespan, electrical (AC-3 at 400 V)                    | Operations  | x<br>$10^6$ | 0.1  |
| Maximum operating frequency                             |             | Ops./<br>h  |  |
| Max. operating frequency                                |             | Ops/<br>h   | 40   |
| Short-circuit rating                                    |             |             |  |
| AC  |             |             | → Engineering                                    |
| DC  |             |             |  |
| Short-circuit rating                                    |             | kA          | 60   |
| Short-circuit rating                                    |             |             | 60 (up to PKZM0-16)<br>40 (PKZM0-20 to PKZM0-32) |
| Motor switching capacity                                |             | $kA_{rms}$  |  |
| AC-3 (up to 690 V)                                      |             | A           | 32   |
| DC-5 (up to 250 V)                                      |             | A           | 25 (3 contacts in series)                        |

### Trip blocks

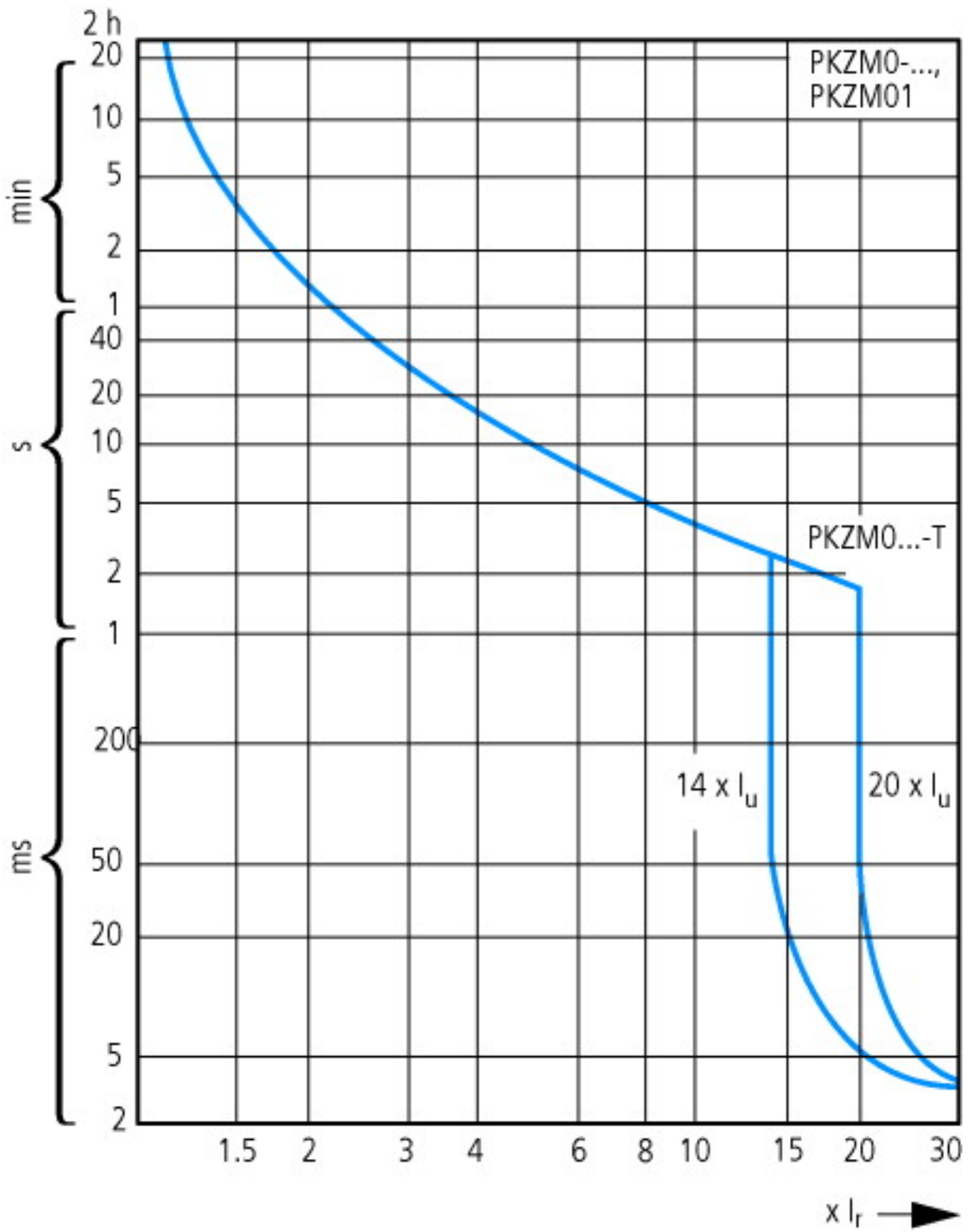
|                           |  |    |             |
|---------------------------|--|----|-------------|
| Temperature compensation  |  |    |             |
| to IEC/EN 60947, VDE 0660 |  | °C | - 5 ... 40  |
| Operating range           |  | °C | - 25 ... 55 |

|   |  |                  |                                     |
|---|--|------------------|-------------------------------------|
| Temperature compensation residual error for T > 40 °C |  |                  | $\leq$ 0.25%/K                      |
| Setting range of overload releases                    |  | x I <sub>u</sub> | 0.6 - 1                             |
| Short-circuit release fixed                           |  | x I <sub>u</sub> | 14                                  |
| Fixed short-circuit release                           |  |                  | Basic device 14 x I <sub>u</sub>    |
| Short-circuit release tolerance                       |  |                  | ± 20%                               |
| Phase-failure sensitivity                             |  |                  | IEC/EN 60947-1-1, VDE 0660 Part 102 |

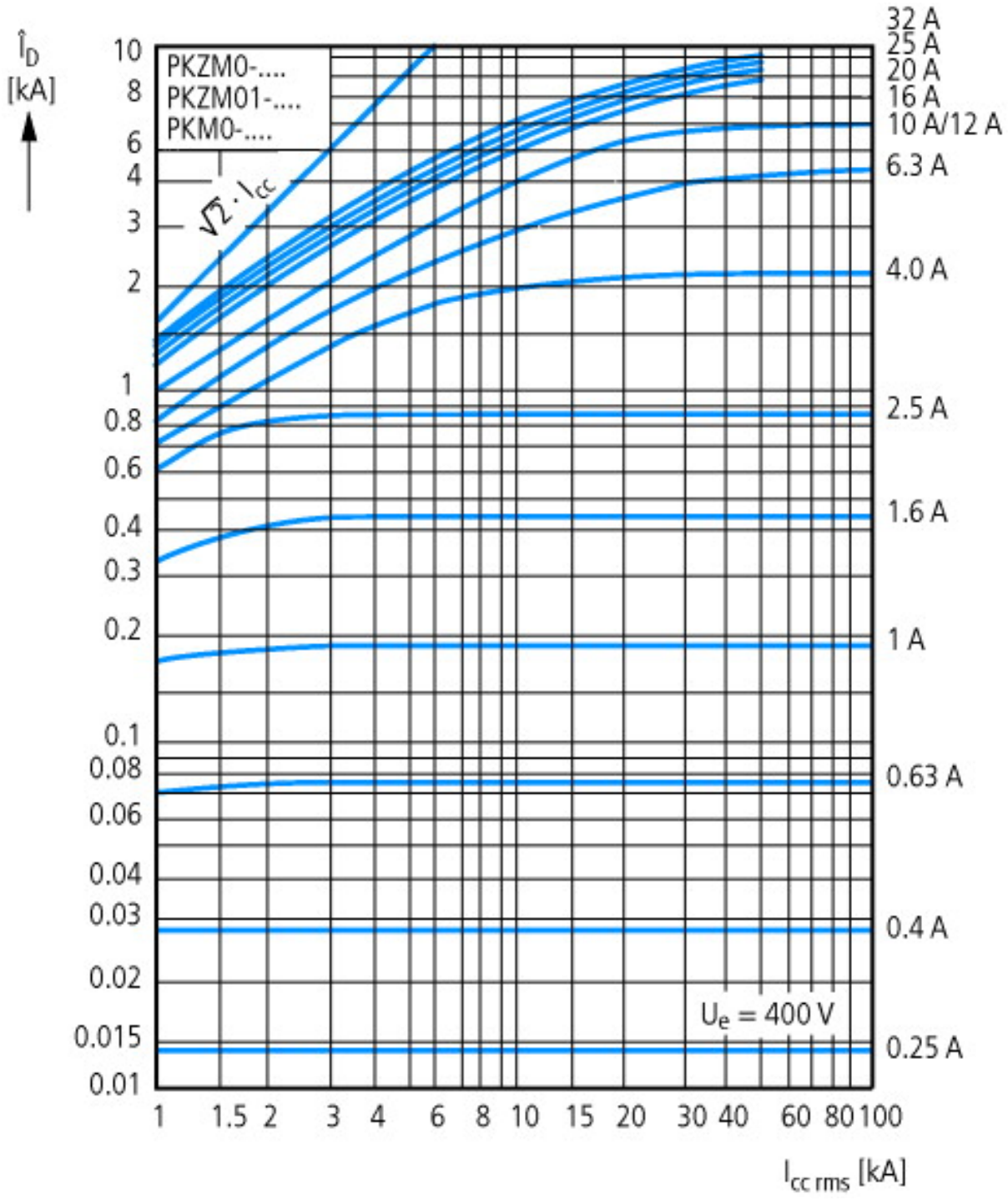
### Technical data ETIM 4.0

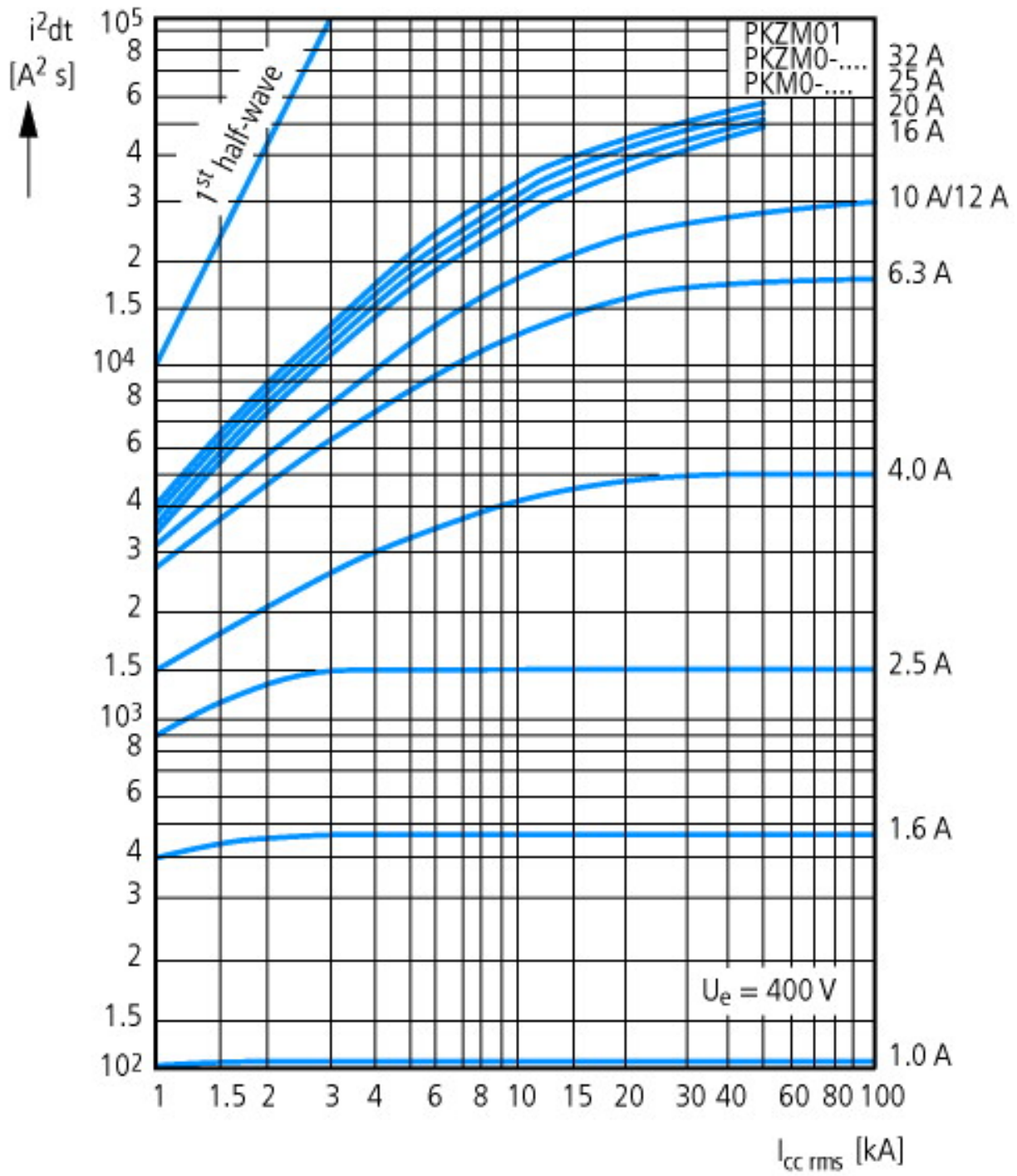
|  |  |     |                  |
|--|--|-----|------------------|
| Rated operation power at AC-3, 400 V   |  | kWh | 0.12             |
| With integrated auxiliary switch       |  |     | No               |
| Rated permanent current I <sub>u</sub> |  | A   | 0.63             |
| With integrated under voltage release  |  |     | No               |
| Number of poles                        |  |     | 3                |
| Degree of protection (IP)              |  |     | IP20             |
| Connection type main current circuit   |  |     | Screw connection |

### Characteristics



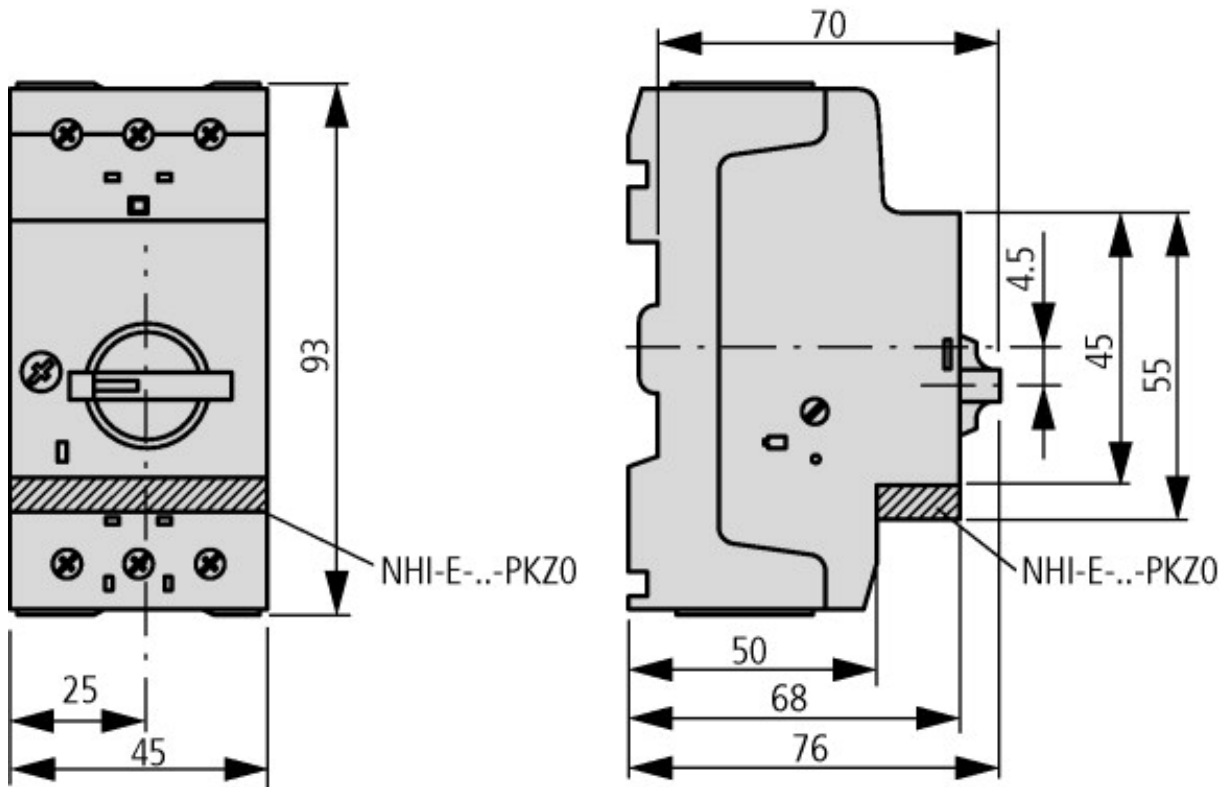
Motor-protective circuit-breaker tripping characteristic (high-capacity) compact starter, PKZM0...T (not for PKM0-...), PKZM01



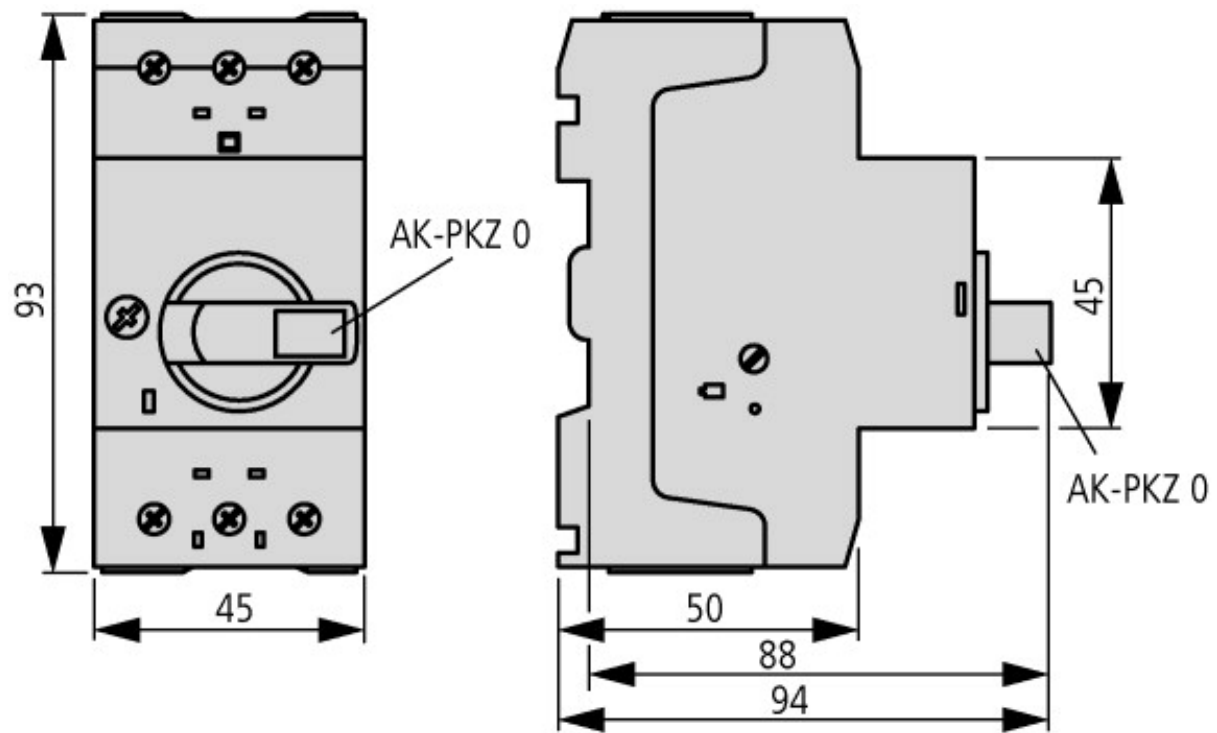


Let-through characteristics

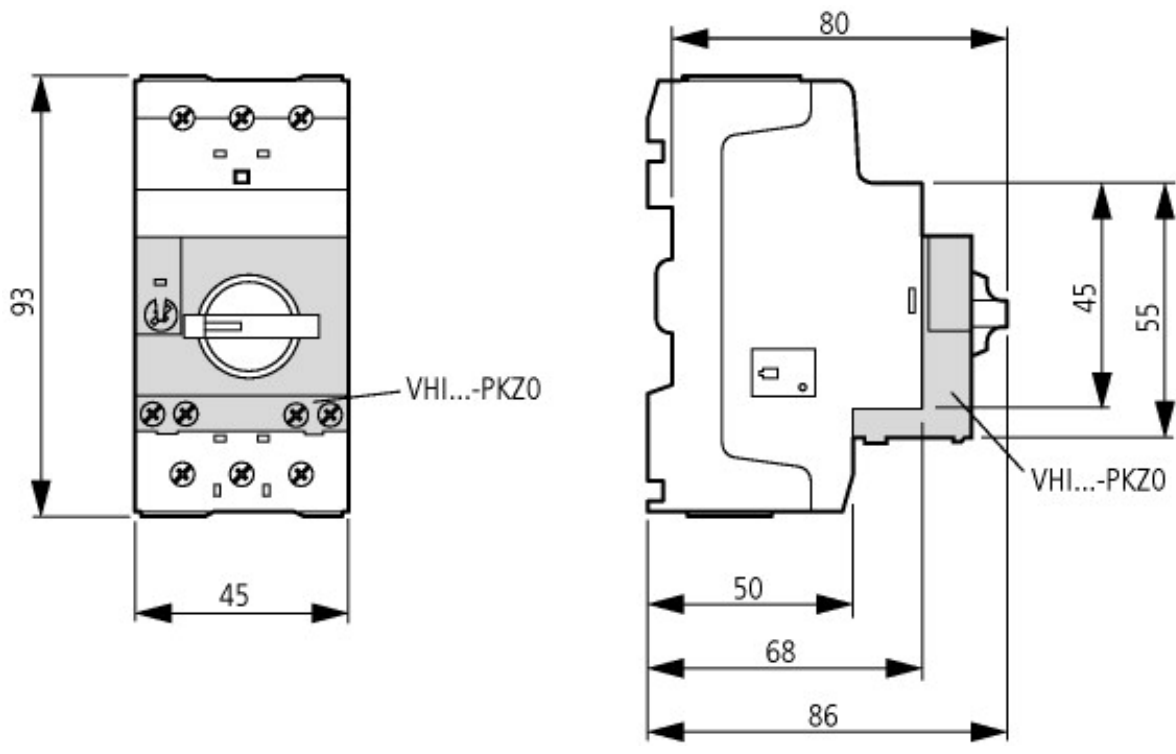
## Dimensions



Motor-protective circuit-breaker with standard auxiliary contact  
 PKZM0-...(+NHI-E...-PKZ0)  
 PKZM0-...-T(+NHI-E...-PKZ0)  
 PKM0-...(+NHI-E...-PKZ0)



Motor-protective circuit-breakers with lockable rotary handles  
 PKZM0-...+AK-PKZ0



Motor-protective circuit-breakers with early-make auxiliary contacts  
 PKZM0-...+VHI-...-PKZ0

### Additional product information (links)

#### IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

IL03407010Z (AWA1210-2138) Motor-protective circuit-breaker

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407010Z2010\\_08.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407010Z2010_08.pdf)

#### IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker

[ftp://ftp.moeller.net/DOCUMENTATION/AWA\\_INSTRUCTIONS/IL03407011Z2010\\_08.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2010_08.pdf)

#### MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors

MN03402003Z-DE/EN (AWB1210-1458) motor-protective circuit-breakers PKZM0, overload monitoring of Ex e motors - Deutsch / English

[ftp://ftp.moeller.net/DOCUMENTATION/AWB\\_MANUALS/MN03402003Z\\_DE\\_EN.pdf](ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN03402003Z_DE_EN.pdf)

Motor starters and "Special Purpose Ratings" for the North American market

[http://www.moeller.net/binary/ver\\_techpapers/ver953en.pdf](http://www.moeller.net/binary/ver_techpapers/ver953en.pdf)

Busbar Component Adapters for modern Industrial control panels

[http://www.moeller.net/binary/ver\\_techpapers/ver960en.pdf](http://www.moeller.net/binary/ver_techpapers/ver960en.pdf)