

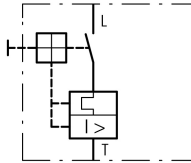
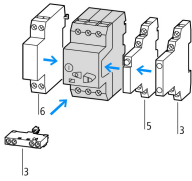


## Motor-prot.circuit breaker PKZM01-0,25

Part no. **PKZM01-0,25**

Article no. **278476**

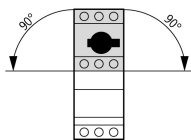
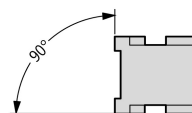
### Program

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |          |    |                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----|------------------------------------------------------------------------------------|
| Contact sequence                                                                                                                                                                                                                                                                                                                                                                                                                                                                |          |    |  |
| 220 - 240 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |          |    |                                                                                    |
| AC-3                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |    |                                                                                    |
| 380 V<br>400 V<br>415 V                                                                                                                                                                                                                                                                                                                                                                                                                                                         | P        | kW | 0.06                                                                               |
| 440 V                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | P        | kW | 0.06                                                                               |
| Rated uninterrupted current                                                                                                                                                                                                                                                                                                                                                                                                                                                     | $I_u$    | A  | 0.25                                                                               |
| <b>Setting range</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |          |    |                                                                                    |
| Overload releases                                                                                                                                                                                                                                                                                                                                                                                                                                                               | $I_r$    | A  | 0.16 - 0.25                                                                        |
| Short-circuit releases                                                                                                                                                                                                                                                                                                                                                                                                                                                          |          |    |                                                                                    |
| max.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | $I_{rm}$ | A  | 3.5                                                                                |
| <b>Notes</b><br> <p><b>Accessories</b><br/> 3 Standard auxiliary contact<br/> 5 Trip-indicating auxiliary contact<br/> 6 Shunt release, undervoltage release<br/> Single-phasing sensitivity according to IEC/EN 60947-4-1, VDE 0660 Part 102.<br/> Can be snap-fitted to IEC/EN 60715 top-hat rail with 7.5 or 15 mm height</p> <p><b>Page</b><br/> → 072896<br/> → 072898<br/> → 073187</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 | - 25 - 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                       |
| Specified tightening torque for terminal screws                           |  |                 |                               |
| Main cable                                                                |  | Nm              | 1.7                           |
| Control circuit cables                                                    |  | Nm              | 1                             |

### Main conducting paths

|                                                         |                                 |                      |                                                  |
|---------------------------------------------------------|---------------------------------|----------------------|--------------------------------------------------|
| Rated impulse withstand voltage                         | U <sub>imp</sub>                | V<br>AC              | 6000                                             |
| Overvoltage category/pollution degree                   |                                 |                      | III/3                                            |
| Rated operational voltage                               | U <sub>e</sub>                  | V<br>AC              | 690                                              |
| Rated uninterrupted current = rated operational current | I <sub>u</sub> = I <sub>e</sub> | A                    | 16 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 <sup>6</sup> | 0.05                                             |
| Lifespan, electrical (AC-3 at 400 V)                    | Operations                      | x<br>10 <sup>6</sup> | 0.05                                             |
| Maximum operating frequency                             |                                 | Ops./<br>h           |                                                  |
| Max. operating frequency                                |                                 | Ops./<br>h           | 25                                               |
| Short-circuit rating                                    |                                 |                      |                                                  |
| AC                                                      |                                 |                      |                                                  |
|                                                         |                                 |                      | → Engineering                                    |
| DC                                                      |                                 |                      |                                                  |
| Short-circuit rating                                    |                                 | kA                   | 60                                               |
| Short-circuit rating                                    |                                 |                      | 60                                               |
| Motor switching capacity                                |                                 | kA <sub>rms</sub>    |                                                  |
| AC-3 (up to 690 V)                                      |                                 | A                    | 16                                               |
| DC-5 (up to 250 V)                                      |                                 | A                    | 16 (3 contacts in series)                        |

### Trip blocks

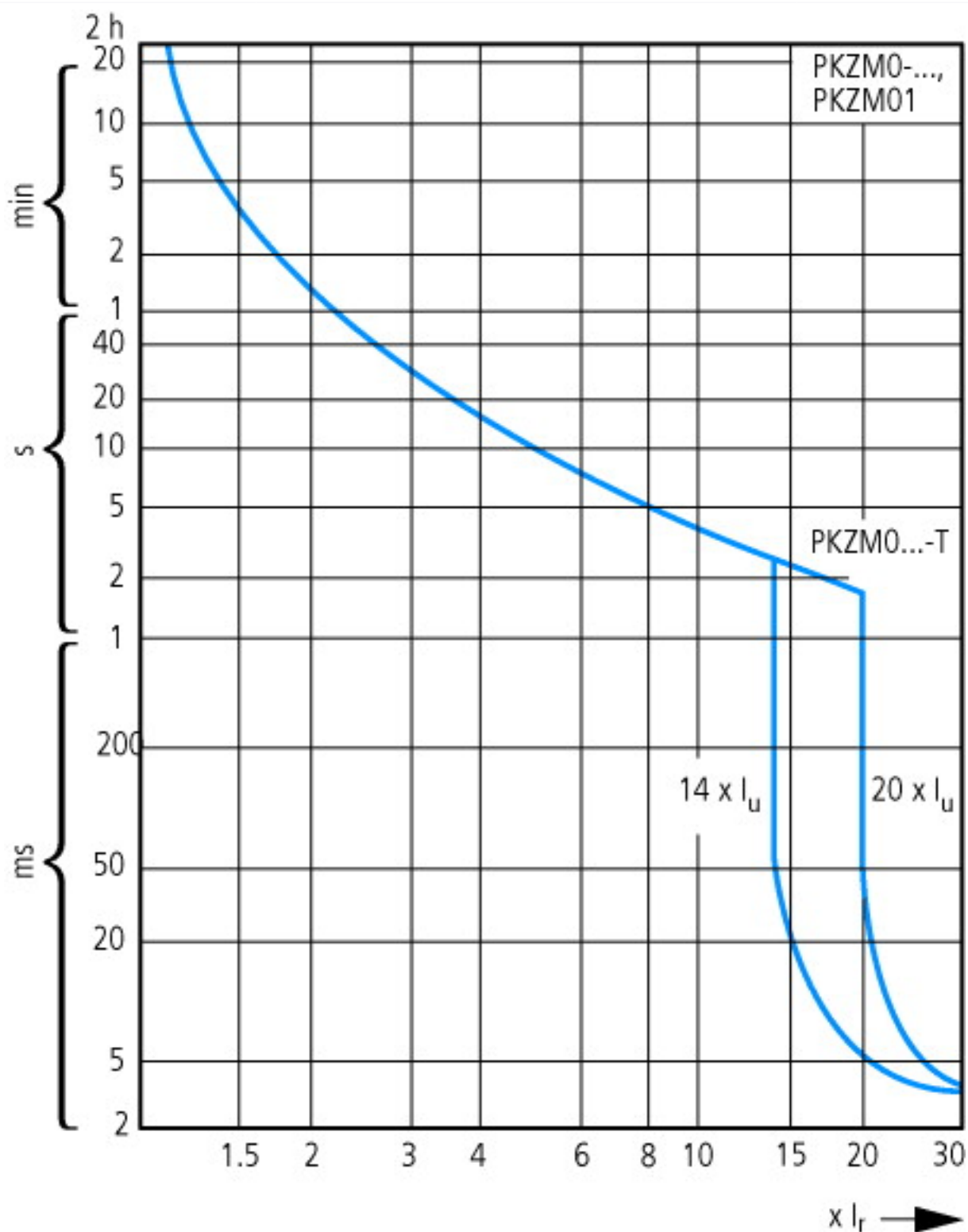
|                                                       |  |                  |                                     |
|-------------------------------------------------------|--|------------------|-------------------------------------|
| Temperature compensation                              |  |                  |                                     |
| to IEC/EN 60947, VDE 0660                             |  | °C               | - 5 ... 40                          |
| Operating range                                       |  | °C               | - 25 ... 55                         |
| Temperature compensation residual error for T > 40 °C |  |                  | ≤ 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 60947-4-1, VDE 0660 Part 102 |

### Technical data according to ETIM 4.0

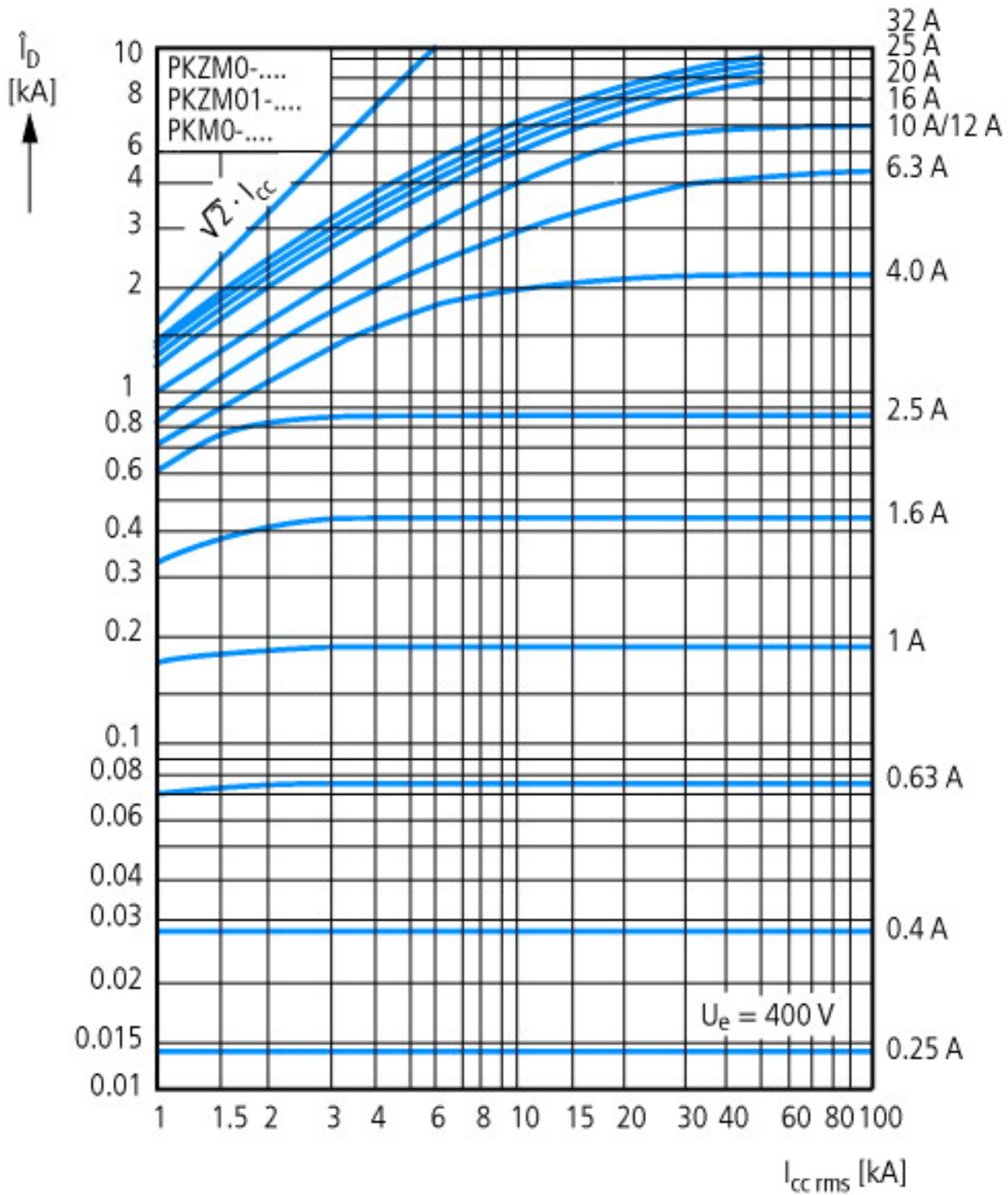
|                                        |  |     |      |
|----------------------------------------|--|-----|------|
| Rated operation power at AC-3, 400 V   |  | kWh | 0.06 |
| With integrated auxiliary switch       |  |     | No   |
| Rated permanent current I <sub>u</sub> |  | A   | 0.25 |
| With integrated under voltage release  |  |     | No   |

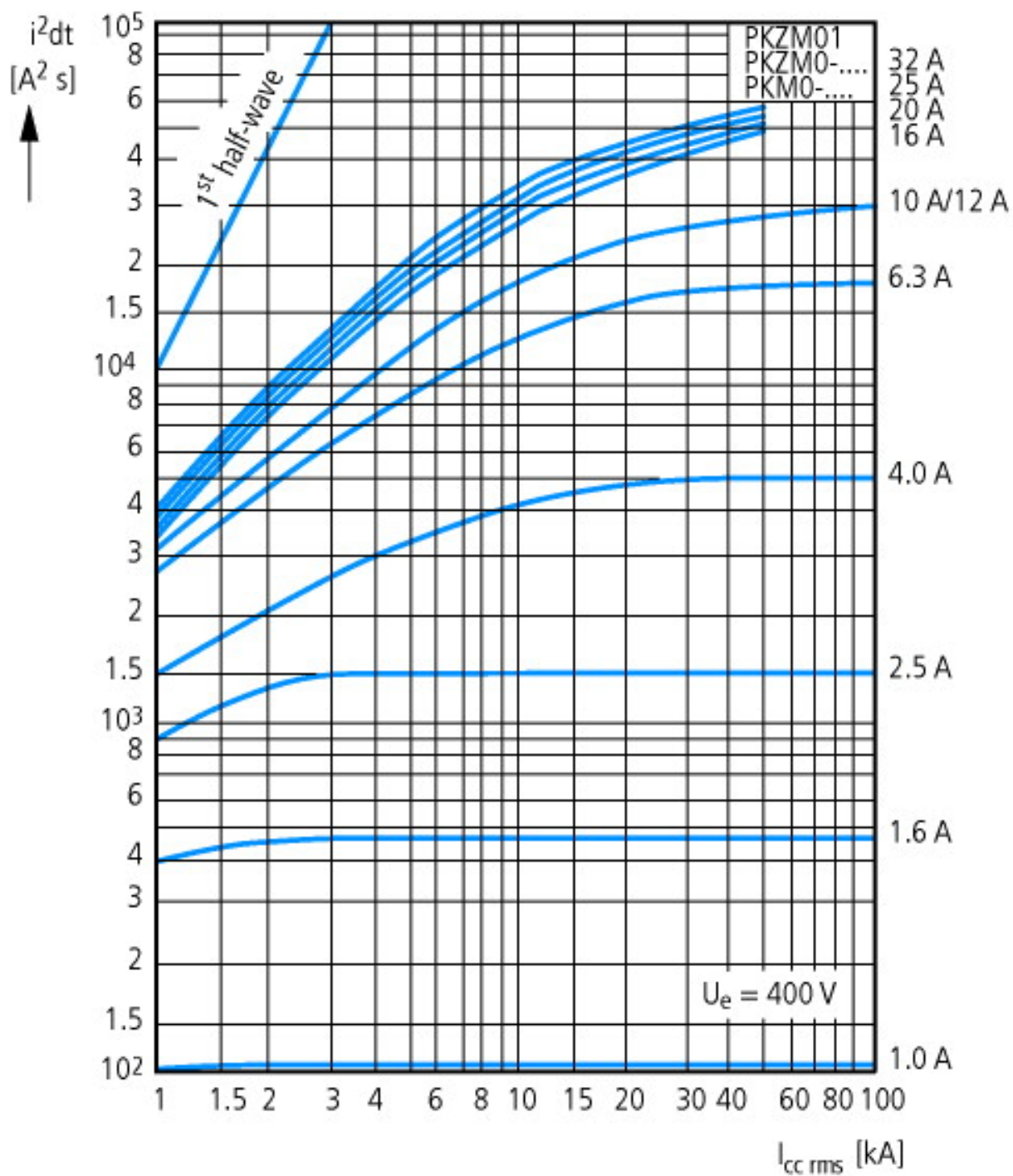
|                                      |  |                  |
|--------------------------------------|--|------------------|
| Number of poles                      |  | 3                |
| Degree of protection (IP)            |  | IP20             |
| Connection type main current circuit |  | Screw connection |

## Characteristics



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





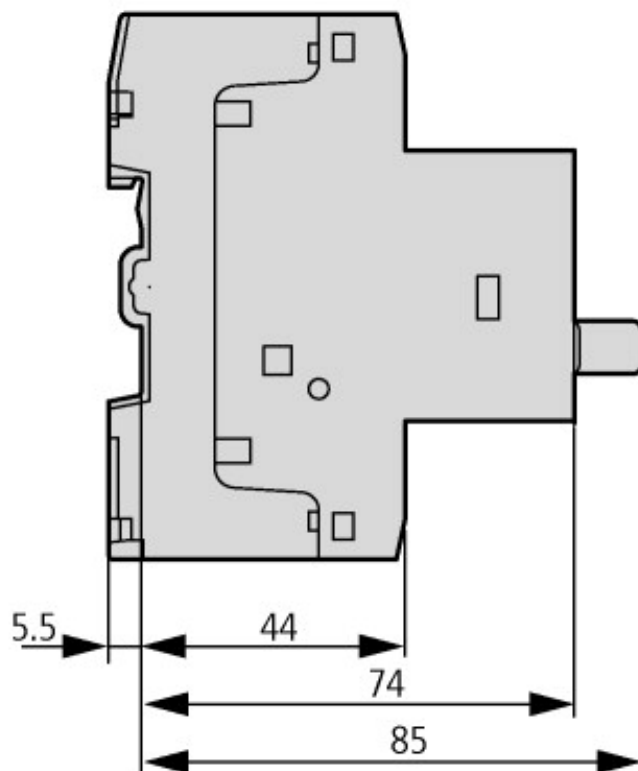
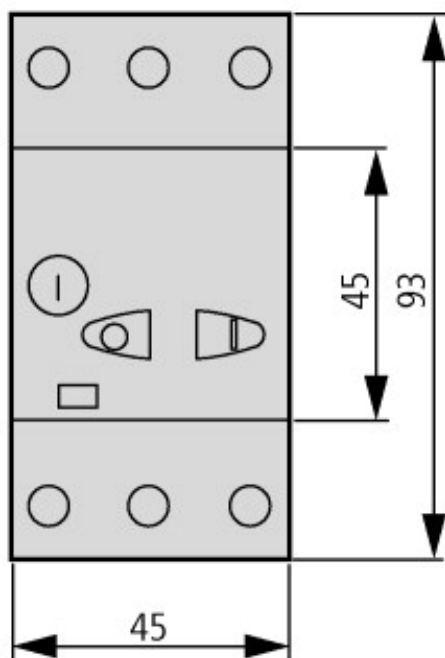
Let-through characteristics

## CAD-Data

Product standards CAD data:

<http://eaton-moeller.partcommunity.com>

## Dimensions



#### Additional product information (links)

|                                                                            |                                                                                                                                                                       |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL03407010Z (IL03407010Z) Motor-protective circuit-breaker                 | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407010Z2010_08.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407010Z2010_08.pdf</a> |
| IL03407011Z (IL03407011Z) Motor-protective circuit-breaker                 | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2010_08.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2010_08.pdf</a> |
| Motor starters and "Special Purpose Ratings" for the North American market | <a href="http://www.moeller.net/binary/ver_techpapers/ver953en.pdf">http://www.moeller.net/binary/ver_techpapers/ver953en.pdf</a>                                     |
| Busbar Component Adapters for modern Industrial control panels             | <a href="http://www.moeller.net/binary/ver_techpapers/ver960en.pdf">http://www.moeller.net/binary/ver_techpapers/ver960en.pdf</a>                                     |