# DATASHEET - U-PKZ0(110V50HZ)



Undervoltage release, 110V50Hz

Part no. Catalog No. Eaton Catalog No.

U-PKZ0(110V50HZ) 073132 No. XTPAXUVR110V50H



# **Delivery program**

| Delivery program                                                                                                                                                                                             |                                                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|
| Product range                                                                                                                                                                                                | Accessories                                        |
| Accessories                                                                                                                                                                                                  | Undervoltage release                               |
| Actuating voltage                                                                                                                                                                                            | 110 V 50 Hz                                        |
| Voltage type                                                                                                                                                                                                 | Standard voltage                                   |
| Current actuation                                                                                                                                                                                            | AC                                                 |
| Contact sequence                                                                                                                                                                                             | D1                                                 |
|                                                                                                                                                                                                              | D2                                                 |
| Connection technique                                                                                                                                                                                         | Screw terminals                                    |
| For use with                                                                                                                                                                                                 | Undervoltage release PKZ0(4), PKE                  |
| For use with                                                                                                                                                                                                 | PKZM0<br>PKZM4<br>PKZM0-T<br>PKM0<br>PKZM01<br>PKE |
| Notes                                                                                                                                                                                                        |                                                    |
| 1 Motorschutzschalter                                                                                                                                                                                        |                                                    |
| Notes Can be fitted to the left of:<br>Motor protective circuit-breaker<br>Cannot be combined with:<br>A-PKZO shunt release<br>When combined with circuit-breaker can be used as emergency switching-off dev | ice according to EN 60204.                         |
| <b>Notes</b> Can be fitted to left side of the motor protection switch<br>Cannot be combined with shunt release A-PKZ0<br>When combined with circuit breaker, can be used as EMERGENCY STOP device in        | accordance with IEC/EN 60204                       |
| Technical data                                                                                                                                                                                               |                                                    |

# General Terminal capacities mm<sup>2</sup> Solid or flexible conductor, with ferrule mm<sup>2</sup> Solid or stranded AWG

|                                                                                                                           |                   |                  | 2 x (18 - 14)                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------|-------------------|------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Actuating voltage                                                                                                         |                   |                  | 110 V 50 Hz                                                                                                                      |
| Pick-up-/drop-out voltage                                                                                                 |                   |                  |                                                                                                                                  |
| Pick-up voltage                                                                                                           |                   | x U <sub>c</sub> | 0,85 - 1,1                                                                                                                       |
| Drop-out voltage                                                                                                          |                   | x U <sub>c</sub> | 0,7- 0,35                                                                                                                        |
| Power consumption                                                                                                         |                   |                  |                                                                                                                                  |
| AC                                                                                                                        |                   |                  |                                                                                                                                  |
| Pull-in power                                                                                                             | Pick-up           | VA               | 5                                                                                                                                |
| Sealing power                                                                                                             | Sealing           | VA               | 3                                                                                                                                |
| Design verification as per IEC/EN 61439                                                                                   |                   |                  |                                                                                                                                  |
| Technical data for design verification                                                                                    |                   |                  |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                                  | In                | A                | 0                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                              | P <sub>vid</sub>  | W                | 0                                                                                                                                |
| Equipment heat dissipation, current-dependent                                                                             | P <sub>vid</sub>  | W                | 0                                                                                                                                |
| Static heat dissipation, non-current-dependent                                                                            | P <sub>vs</sub>   | w                | 0.5                                                                                                                              |
|                                                                                                                           |                   |                  |                                                                                                                                  |
| Heat dissipation capacity                                                                                                 | P <sub>diss</sub> | W                | 0                                                                                                                                |
| Operating ambient temperature min.                                                                                        |                   | °C               | -25                                                                                                                              |
| Operating ambient temperature max.                                                                                        |                   | °C               | 55                                                                                                                               |
| IEC/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<br>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 b observed.                                    |
| 10.12 Electromagnetic compatibility                                                                                       |                   |                  | Is the panel builder's responsibility. The specifications for the switchgear must b observed.                                    |
| 10.13 Mechanical function                                                                                                 |                   |                  | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

## **Technical data ETIM 7.0**

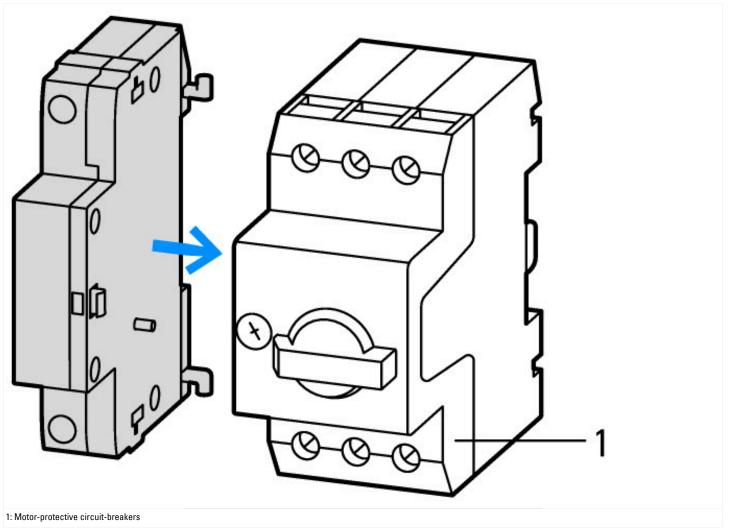
| Low-voltage industrial components (EG000017) / Under voltage coil (EC001022)                                                                                                           |   |                  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|------------------|--|--|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Undervoltage trip (ecl@ss10.0.1-27-37-04-17 [AKF015013]) |   |                  |  |  |
| Rated control supply voltage Us at AC 50HZ                                                                                                                                             | V | 110 - 110        |  |  |
| Rated control supply voltage Us at AC 60HZ                                                                                                                                             | V | 0 - 0            |  |  |
| Rated control supply voltage Us at DC                                                                                                                                                  | V | 0 - 0            |  |  |
| Voltage type for actuating                                                                                                                                                             |   | AC               |  |  |
| Type of electric connection                                                                                                                                                            |   | Screw connection |  |  |

| Number of contacts as normally open contact   | 0   |
|-----------------------------------------------|-----|
| Number of contacts as normally closed contact | 0   |
| Number of contacts as change-over contact     | 0   |
| Delayed                                       | No  |
| Suitable for power circuit breaker            | No  |
| Suitable for off-load switch                  | No  |
| Suitable for motor safety switch              | Yes |
| Suitable for overload relay                   | No  |

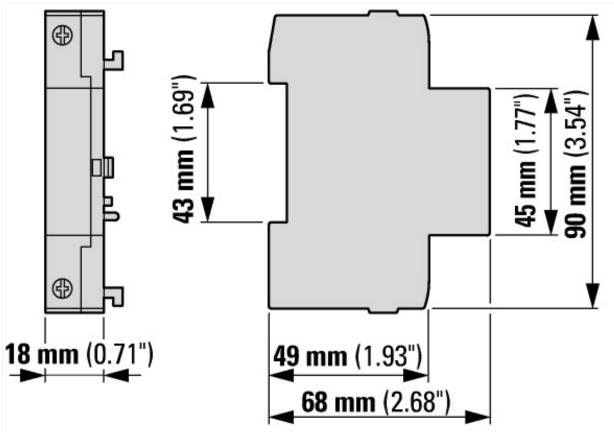
### **Approvals**

| - pp. o raio                         |                                                    |
|--------------------------------------|----------------------------------------------------|
| Product Standards                    | UL 508; CSA-C22.2 No. 14; IEC60947-4-1; CE marking |
| UL File No.                          | E36332                                             |
| UL Category Control No.              | NLRV                                               |
| CSA File No.                         | 165628                                             |
| CSA Class No.                        | 3211-05                                            |
| North America Certification          | UL listed, CSA certified                           |
| Specially designed for North America | No                                                 |

# **Characteristics**



# **Dimensions**



### **Additional product information (links)**

### IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter

| IL03402034Z (AWA1210-1945) Motor-protective circuit-breaker, Starter       | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402034Z2018_06.pdf                      |  |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|--|
| IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker                |                                                                                                  |  |
| IL03407011Z (AWA1210-1925) Motor-protective circuit-breaker                | ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03407011Z2018_04.pdf                      |  |
| Motor starters and "Special Purpose Ratings" for the North American market | http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf |  |
| Busbar Component Adapters for modern<br>Industrial control panels          | http://www.moeller.net/binary/ver_techpapers/ver960en.pdf                                        |  |