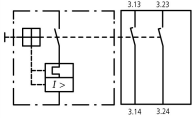




**Auxiliary contact, operates as an early-make contact, 2N/O early**

**Part no.** VH120-PKZ0  
**Catalog No.** 203595  
**Alternate Catalog No.** XTPAXFAEM20  
**EL-Nummer (Norway)** 0004315166

## Delivery program

|                                                                                                                                                          |  |                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------------------------|
| Product range                                                                                                                                            |  | Accessories                                                                                                    |
| Accessories                                                                                                                                              |  | Auxiliary contacts, early-make                                                                                 |
|                                                                                                                                                          |  | For the premature voltage application of the U-release, e.g. in EMERGENCY STOP circuits according to EN 60204. |
| <b>Contacts</b>                                                                                                                                          |  |                                                                                                                |
| N/O = Normally open                                                                                                                                      |  | 2 N/O                                                                                                          |
| Contact sequence                                                                                                                                         |  |                              |
| For use with                                                                                                                                             |  | PKZ0(4) early-make auxiliary contacts                                                                          |
| For use with                                                                                                                                             |  | PKZM0<br>PKZM0-T<br>PKM0<br>PKZM4                                                                              |
| <b>Notes</b> Can be fitted to the front of:<br>Motor protective circuit-breaker<br>Cannot be combined with:<br>PKZ0-X(R)H(-M), MSC-... and PKZM0-X...M12 |  |                                                                                                                |

## Technical data

### Auxiliary contacts

|                                              |              |               |                                                                                                                     |
|----------------------------------------------|--------------|---------------|---------------------------------------------------------------------------------------------------------------------|
| Rated impulse withstand voltage              | $U_{imp}$    | V AC          | 4000                                                                                                                |
| Overvoltage category/pollution degree        |              |               | III/3                                                                                                               |
| Rated operational voltage                    | $U_e$        | V             |                                                                                                                     |
|                                              | $U_e$        | V AC          | 440                                                                                                                 |
|                                              | $U_e$        | V DC          | 250                                                                                                                 |
| Safe isolation to EN 61140                   |              |               |                                                                                                                     |
| Between auxiliary contacts and main contacts |              | V AC          | 690                                                                                                                 |
| Rated operational current                    | $I_e$        | A             |                                                                                                                     |
| AC-15                                        |              |               |                                                                                                                     |
| 220 - 240 V                                  | $I_e$        | A             | 1                                                                                                                   |
| DC-13 L/R - 100 ms                           |              |               |                                                                                                                     |
| 24 V                                         | $I_e$        | A             | 2                                                                                                                   |
| Lifespan                                     |              | S             |                                                                                                                     |
| Lifespan, mechanical                         | Operations   | $\times 10^6$ | > 0.1                                                                                                               |
| Lifespan, electrical                         | Operations   | $\times 10^6$ | 0.1                                                                                                                 |
| Control circuit reliability                  | Failure rate | $\lambda$     | $< 10^{-8}$ , < one failure at 100 million operations<br>(at $U_e = 24$ V DC, $U_{min} = 17$ V, $I_{min} = 5.4$ mA) |
| Short-circuit rating without welding         |              |               |                                                                                                                     |
| Fuse                                         |              | A gG/gL       | 10                                                                                                                  |

### Terminal capacities

|                                           |        |            |
|-------------------------------------------|--------|------------|
| Solid or flexible conductor, with ferrule | $mm^2$ | 0,75 - 1,5 |
| Solid or stranded                         | AWG    | 18 - 16    |

### Rating data for approved types

|             |  |      |
|-------------|--|------|
| Pilot Duty  |  |      |
| AC operated |  | E150 |
| General Use |  |      |

|    |   |     |
|----|---|-----|
| AC | V | 300 |
| AC | A | 0.5 |

## Design verification as per IEC/EN 61439

|                                                                                                                        |                   |    |                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------|-------------------|----|----------------------------------------------------------------------------------------------------------------------------------|
| Technical data for design verification                                                                                 |                   |    |                                                                                                                                  |
| Rated operational current for specified heat dissipation                                                               | I <sub>n</sub>    | A  | 1                                                                                                                                |
| Heat dissipation per pole, current-dependent                                                                           | P <sub>vid</sub>  | W  | 0.03                                                                                                                             |
| Equipment heat dissipation, current-dependent                                                                          | P <sub>vid</sub>  | W  | 0                                                                                                                                |
| Static heat dissipation, non-current-dependent                                                                         | P <sub>vs</sub>   | W  | 0                                                                                                                                |
| 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 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 be observed.                                   |
| 10.12 Electromagnetic compatibility                                                                                    |                   |    | Is the panel builder's responsibility. The specifications for the switchgear must be observed.                                   |
| 10.13 Mechanical function                                                                                              |                   |    | The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.                         |

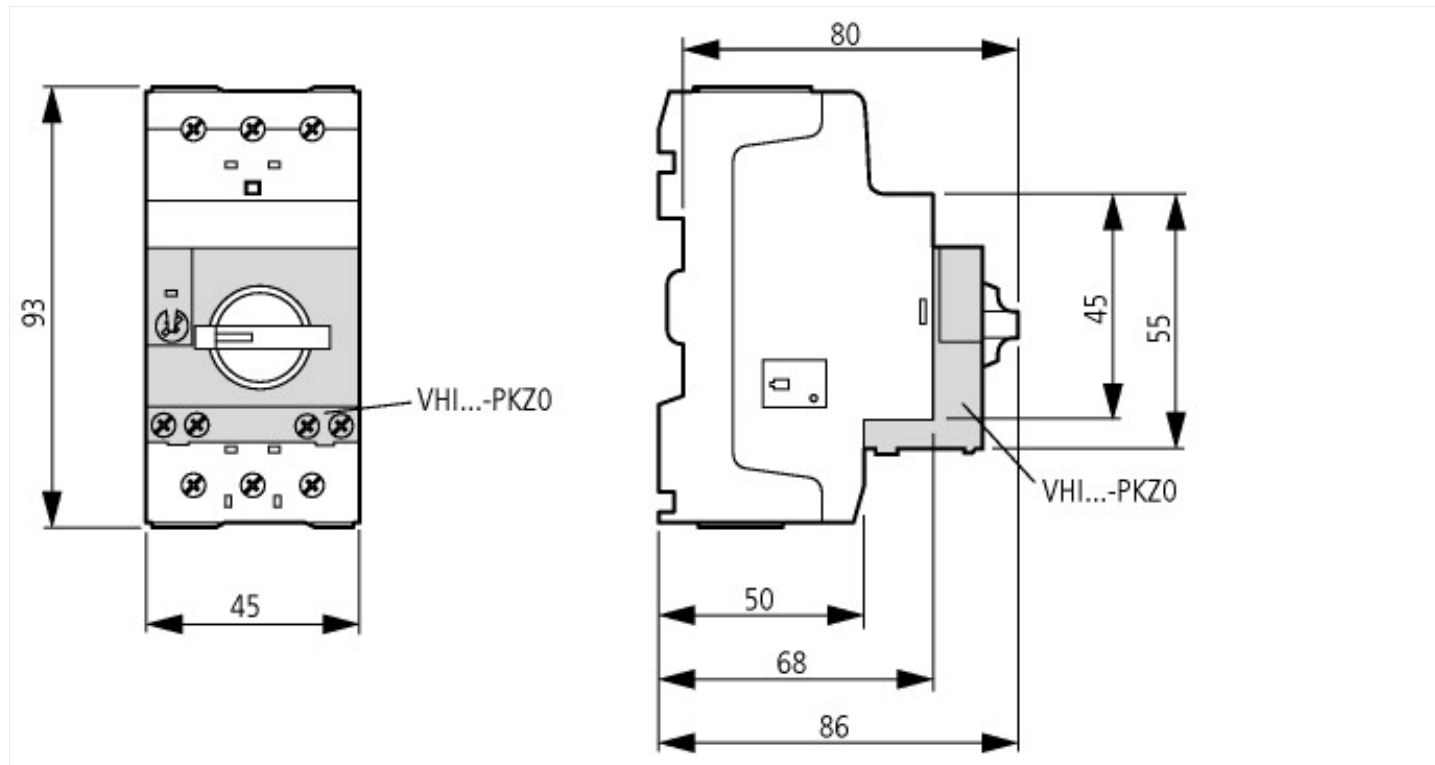
## Technical data ETIM 7.0

|                                                                                                                                                                                                                |  |   |                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|------------------|
| Low-voltage industrial components (EG000017) / Auxiliary contact block (EC000041)                                                                                                                              |  |   |                  |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Component for low-voltage switching technology / Auxiliary switch block (ec1@ss10.0.1-27-37-13-02 [AKN342013]) |  |   |                  |
| Number of contacts as change-over contact                                                                                                                                                                      |  |   | 0                |
| Number of contacts as normally open contact                                                                                                                                                                    |  |   | 2                |
| Number of contacts as normally closed contact                                                                                                                                                                  |  |   | 0                |
| Number of fault-signal switches                                                                                                                                                                                |  |   | 0                |
| Rated operation current I <sub>e</sub> at AC-15, 230 V                                                                                                                                                         |  | A | 1                |
| Type of electric connection                                                                                                                                                                                    |  |   | Screw connection |
| Model                                                                                                                                                                                                          |  |   | Top mounting     |
| Mounting method                                                                                                                                                                                                |  |   | Front fastening  |
| Lamp holder                                                                                                                                                                                                    |  |   | None             |

## Approvals

|                                      |  |                                                    |
|--------------------------------------|--|----------------------------------------------------|
| 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                                                 |

## Dimensions



## Additional product information (links)

### IL03402033Z (AWA1210-1659) Early-make auxiliary contact

|                                                                            |                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IL03402033Z (AWA1210-1659) Early-make auxiliary contact                    | <a href="ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402033Z2018_05.pdf">ftp://ftp.moeller.net/DOCUMENTATION/AWA_INSTRUCTIONS/IL03402033Z2018_05.pdf</a>                                           |
| Motor starters and "Special Purpose Ratings" for the North American market | <a href="http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.pdf">http://www.eaton.eu/ecm/groups/public/@pub/@europe/@electrical/documents/content/pct_3258146.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>                                                                               |