### **DATASHEET - M22-XAMP**



Buzzer BA9s, 18-30V, pulsed tone

Part no. M22-XAMP
Catalog No. 229028
Alternate Catalog M22-XAMP0

No

**EL-Nummer** 4355448

(Norway)



## **Delivery program**

| Product range              | Accessories   |
|----------------------------|---|
| Basic function accessories | Buzzer for acoustic device  |
| Single unit/Complete unit  | Single unit   |
| Description                | 83  dB/10 cm, $18 - 30  mA$ , positive pole at X1, f = $2300  Hz$ |
| Function                   | Pulsed tone, 24 V DC (+10 %/-15 %)                                |
| Type of tone               | Pulsed tone   |
| For use with               | BA9s base   |
| Connection to SmartWire-DT | no  |

## **Technical data**

#### General

| donorui                 |    |                          |                     |
|-------------------------|----|--------------------------|---------------------|
| Ambient temperature     |    |                          |                     |
| Open                    | °C | -25 - +70                |                     |
| shipping classification |    | DNV<br>GL<br>LR          |                     |
|                         |    | J&                       | Lloyd's<br>Register |
|                         |    | DIV V Germanischer Lloyd | TYPE<br>Approved    |

# Design verification as per IEC/EN 61439

| Rated operational current for specified heat dissipation In A 0  Heat dissipation per pole, current-dependent Pvid W 0  Equipment heat dissipation, current-dependent Pvid W 0  Static heat dissipation, non-current-dependent Pvs W 0.4  Heat dissipation capacity Pdiss W 0  Operating ambient temperature min. °C -25  Operating ambient temperature max. °C 70   | •  |                   |    |  |
|--|--|-------------------|----|--|
| Heat dissipation per pole, current-dependent Pvid W 0 Static heat dissipation, current-dependent Pvid W 0 Static heat dissipation, non-current-dependent Pvid W 0.4  Heat dissipation capacity Pdiss W 0.4  Heat dissipation capacity Pdiss W 0.7  Operating ambient temperature min. Pvid W 0.4  Heat dissipation capacity Poerating ambient temperature min. Pvid W 0.4  Poerating ambient temperature max. Pvid V 0.4  Poerating ambient temperature max. Peculous temperature max. Peculous standard's requirements. Meets the product standard's requirements. Please enquire Please enquire Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Poerating vivial vivi | Technical data for design verification                                     |                   |    |  |
| Equipment heat dissipation, current-dependent Pvid W 0.4  Heat dissipation capacity Pdiss W 0.4  Heat dissipation capacity Pdiss W 0.5  Operating ambient temperature min. Pc 2-25  Operating ambient temperature max.  **C 70  IEC/EN 61439 design verification  10.2 Strength of materials and parts 10.2.2 Corrosion resistance 10.2.3.1 Verification of thermal stability of enclosures 10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects 10.2.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects 10.2.5 Lifting 10.2.6 Mechanical impact 10.2.7 Inscriptions 10.3 Degree of protection of ASSEMBLIES  Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated. Does not apply, since the entire switchgear needs to be evaluated.  | Rated operational current for specified heat dissipation                   | In                | Α  | 0  |
| Static heat dissipation, non-current-dependent  Pos W 0.4  Heat dissipation capacity  Pdiss W 0  Operating ambient temperature min.  Pos °C -25  Operating ambient temperature max.  Pos °C 70  IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects  10.2.3.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of ASSEMBLIES  W 0.4  Occ 70  Pos 70  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.   | Heat dissipation per pole, current-dependent                               | P <sub>vid</sub>  | W  | 0  |
| Heat dissipation capacity  Operating ambient temperature min.  Operating ambient temperature max.  Operating ambient temperature max.  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  Neets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  | Equipment heat dissipation, current-dependent                              | P <sub>vid</sub>  | W  | 0  |
| Operating ambient temperature min.  Operating ambient temperature max.  **C 70  **C 70  **EC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of ASSEMBLIES  **C 70  **Meets the product standard's requirements.  Meets the product standard's requirements.  Meets the product standard's requirements.  **Meets the product standard's requirements.  **Does not apply, since the entire switchgear needs to be evaluated.  **Meets the product standard's requirements.  **Does not apply, since the entire switchgear needs to be evaluated.  **Does not apply, since the entire switchgear needs to be evaluated.  **Does not apply, since the entire switchgear needs to be evaluated.  **Does not apply, since the entire switchgear needs to be evaluated.  **Does not apply, since the entire switchgear needs to be evaluated.   | Static heat dissipation, non-current-dependent                             | $P_{vs}$          | W  | 0.4  |
| Operating ambient temperature max.  Operating ambient temperature max.  **C 70  **EC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.   | Heat dissipation capacity  | P <sub>diss</sub> | W  | 0  |
| IEC/EN 61439 design verification  10.2 Strength of materials and parts  10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of ASSEMBLIES  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  | Operating ambient temperature min.   |                   | °C | -25  |
| 10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.2 Verification of resistance of insulating materials to abnormal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  Please enquire  Does not apply, since the entire switchgear needs to be evaluated.  10.2.7 Inscriptions  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  | Operating ambient temperature max.   |                   | °C | 70   |
| 10.2.2 Corrosion resistance  10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  Please enquire  10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  10.2.7 Inscriptions  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.   | IEC/EN 61439 design verification   |                   |    |  |
| 10.2.3.1 Verification of thermal stability of enclosures  10.2.3.2 Verification of resistance of insulating materials to normal heat  10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  10.2.5 Lifting  10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  Meets the product standard's requirements.  Please enquire  Does not apply, since the entire switchgear needs to be evaluated.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  | 10.2 Strength of materials and parts                                       |                   |    |  |
| 10.2.3.2 Verification of resistance of insulating materials to normal heat 10.2.3.3 Verification of resistance of insulating materials to abnormal heat and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  Please enquire  10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.   | 10.2.2 Corrosion resistance  |                   |    | 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  10.2.4 Resistance to ultra-violet (UV) radiation  Please enquire  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.  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.  | 10.2.3.1 Verification of thermal stability of enclosures                   |                   |    | Meets the product standard's requirements.                         |
| and fire due to internal electric effects  10.2.4 Resistance to ultra-violet (UV) radiation  Please enquire  10.2.5 Lifting  Does not apply, since the entire switchgear needs to be evaluated.  10.2.6 Mechanical impact  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.  | 10.2.3.2 Verification of resistance of insulating materials to normal heat |                   |    | 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.   |  |                   |    | Meets the product standard's requirements.                         |
| 10.2.6 Mechanical impact  10.2.7 Inscriptions  10.3 Degree of protection of ASSEMBLIES  Does not apply, since the entire switchgear needs to be evaluated.  Does not apply, since the entire switchgear needs to be evaluated.   | 10.2.4 Resistance to ultra-violet (UV) radiation                           |                   |    | Please enquire   |
| 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.   | 10.2.5 Lifting   |                   |    | Does not apply, since the entire switchgear needs to be evaluated. |
| 10.3 Degree of protection of ASSEMBLIES  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.                         |
| 10.4 Clearances and creepage distances  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**

| Toolinour data Erim 7.0   |   |    |            |
|---|---|----|------------|
| Low-voltage industrial components (EG000017) / Acoustic indicator (EC001026)  |   |    |            |
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Acoustic alarm unit (ecl@ss10.0.1-27-37-12-14 [AKF032014]) |   |    |            |
| Type of acoustic signal   |   |    | Pulse tone |
| Loudness  | ( | dB | 83         |
| Operating voltage at AC 50 Hz   | \ | V  | 0 - 0      |
| Operating voltage at AC 60 Hz   | \ | V  | 0 - 0      |
| Operating voltage at DC   | \ | V  | 24 - 24    |
| Voltage type  |   |    | DC         |

## **Approvals**

| Product Standards           | IEC/EN 60947-5; UL 508; CSA-C22.2 No. 14-05; CE marking |
|-----------------------------|---|
| UL File No.                 | E29184  |
| UL Category Control No.     | NKCR  |
| CSA File No.                | 012528  |
| CSA Class No.               | 3211-03   |
| North America Certification | UL listed, CSA certified                                |