## **DATASHEET - M22-WRK3**



Changeover switch, RMQ-Titan, With thumb-grip, maintained, 3 positions, Bezel: titanium  $\,$ 



Part no. M22-WRK3

216872

EL Number

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| General specifications            |   |
| Product name                      | Eaton Moeller® series M22 Changeover switch   |
| Part no.                          | M22-WRK3  |
| EAN                               | 4015082168728   |
| Product Length/Depth              | 46 millimetre   |
| Product height                    | 30 millimetre   |
| Product width                     | 30 millimetre   |
| Product weight                    | 0.013 kilogram  |
| Compliances                       | CE Marked   |
| Certifications                    | CSA Std. C22.2 No. 94-91 UL 508 CSA Std. C22.2 No. 14-05 IEC 60947-5 EN 60947-5 VDE IEC/EN 60947 CSA CSA-C22.2 No. 14-05 CE UL File No.: E29184 UL Category Control No.: NKCR IEC/EN 60947-5 VDE 0660 CSA File No.: 012528 UL CSA C22.2 No. 94-91 DNV GL LR |
| Product Tradename                 | M22   |
| Product Type                      | Changeover switch   |
| Product Sub Type                  | None  |
| Features & Functions              |   |
| Bezel color                       | Titanium  |
| Bezel material                    | Plastic   |
| Color                             | Black   |
| Design                            | With thumb-grip<br>Classical  |
| Fitted with:                      | Plunger bridge for the middle contact Front ring  |
| Functions                         | Stay-put/spring-return function, can be changed with coding parts M22-XC-Y  |
| General information               |   |
| Degree of protection              | NEMA 4X, 13   |
| Degree of protection (front side) | IP66  |
| Lifespan, mechanical              | 100,000 Operations  |
| Opening diameter                  | 22.5 mm   |
| Operating frequency               | 2000 Operations/h   |
| Operating torque                  | 0.3 N⋅m   |
| Product category                  | RMQ-Titan   |
| Size                              | Front diameter: 29.7 mm   |
| Switching angle                   | 60 °  |
| Туре                              | Selector switch actuator  |
| Ambient conditions, mechanical    |   |
| Mounting position                 | As required   |
| Shock resistance                  | Mechanical, According to IEC/EN 60068-2-27  |

| Chimatic environmental conditions  Ambient operating imperature: min  Ambient operating imperature: min  Ambient operating imperature: min  Ambient obrings imperature: min  Actuator  Actuator  Actuator  Actuator  Actuator  Actuator  Actuator inciden  Actuator inciden  Actuator inciden  Actuator inciden  Actuator or obrings imperature: min  Actuator or obrings imperature: min  Actuator or obrings imperature: min  Actuator inciden  Actuator incidence  Actuator i |  | 30 g, Mechanical, According to IEC/EN 60068-2-27, Sinusoidal shock 11 ms |
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| Ambient stronge temperature - max  Climate propring  Dump heart, constant, to IEC 80098-2-39  Dump heart, constant, to IEC 80098-2-79  Communication  Connection to SmartWire-0T  Vec With SWO-HMM connections  Actuator color Actuator color Actuator function Actuator rotor Actuator | Ambient operating temperature - max  | 70 °C  |
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| 10.2.4 Resistance to ultra-violet (UV) radiation  Please enquire  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.  10.9.2 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  10.10 Temperature rise  Not applicable.  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.  | 10.2.3.2 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.  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.  10.9.2 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  Not applicable.  10.11 Short-circuit rating  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  10.12 Electromagnetic compatibility  The device meets the requirements, provided the information in the instruction   | 10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects | Meets the product standard's requirements.                               |
| 10.2.6 Mechanical impact  10.2.7 Inscriptions  Meets the product standard's requirements.  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  Meets the product standard's requirements.  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  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.  In the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  In the panel builder's responsibility.  In the panel builder's responsibility.  In the panel builder's responsibility. The specifications for the switchgear must be observed.  In the panel builder's responsibility. The specifications for the switchgear must be observed.  | 10.2.4 Resistance to ultra-violet (UV) radiation                                 | Please enquire   |
| 10.27 Inscriptions  10.3 Degree of protection of assemblies  10.4 Clearances and creepage distances  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9 Power-frequency electric strength  10.9.1 Ingulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Not applicable.  10.11 Short-circuit rating  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  10.12 Electromagnetic compatibility  The device meets the requirements, provided the information in the instruction   | 10.2.5 Lifting   | Does not apply, since the entire switchgear needs to be evaluated.       |
| 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.  10.9.2 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 Not applicable.  10.11 Short-circuit rating Is the panel builder's responsibility. The specifications for the switchgear must be observed.  10.12 Electromagnetic compatibility The specifications for the switchgear must be observed.  10.13 Mechanical function The device meets the requirements, provided the information in the instruction  | 10.2.6 Mechanical impact   | Does not apply, since the entire switchgear needs to be evaluated.       |
| Meets the product standard's requirements.  10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Meets the product standard's requirements.  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  The specifications for the switchgear must be observed.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  The device meets the requirements, provided the information in the instruction   | 10.2.7 Inscriptions  | Meets the product standard's requirements.                               |
| 10.5 Protection against electric shock  10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Does not apply, since the entire switchgear needs to be evaluated.  Is the panel builder's responsibility.  Not applicable.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  The device meets the requirements, provided the information in the instruction   | 10.3 Degree of protection of assemblies  | Does not apply, since the entire switchgear needs to be evaluated.       |
| 10.6 Incorporation of switching devices and components  10.7 Internal electrical circuits and connections  1s the panel builder's responsibility.  10.8 Connections for external conductors  1s the panel builder's responsibility.  10.9.2 Power-frequency electric strength  1s the panel builder's responsibility.  1s the panel builder's responsibility. The specifications for the switchgear must be observed.  1s the panel builder's responsibility. The specifications for the switchgear must be observed.  1s the panel builder's responsibility. The specifications for the switchgear must be observed.  1s the panel builder's responsibility. The specifications for the switchgear must be observed.  1s the panel builder's responsibility. The specifications for the switchgear must be observed.  | 10.4 Clearances and creepage distances   | Meets the product standard's requirements.                               |
| 10.7 Internal electrical circuits and connections  10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  1s 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   | 10.5 Protection against electric shock   | Does not apply, since the entire switchgear needs to be evaluated.       |
| 10.8 Connections for external conductors  10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Not applicable.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility.  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  The device meets the requirements, provided the information in the instruction  | 10.6 Incorporation of switching devices and components                           | Does not apply, since the entire switchgear needs to be evaluated.       |
| 10.9.2 Power-frequency electric strength  10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  Not applicable.  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  Is the panel builder's responsibility. The specifications for the switchgear must be observed.  The device meets the requirements, provided the information in the instruction  | 10.7 Internal electrical circuits and connections                                | Is the panel builder's responsibility.                                   |
| 10.9.3 Impulse withstand voltage  10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  10.11 Short-circuit rating  10.12 Electromagnetic compatibility  10.13 Mechanical function  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  | 10.8 Connections for external conductors   | Is the panel builder's responsibility.                                   |
| 10.9.4 Testing of enclosures made of insulating material  10.10 Temperature rise  Not applicable.  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  | 10.9.2 Power-frequency electric strength   | Is the panel builder's responsibility.                                   |
| 10.10 Temperature rise  Not applicable.  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  | 10.9.3 Impulse withstand voltage   | Is the panel builder's responsibility.                                   |
| 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   | 10.9.4 Testing of enclosures made of insulating material                         | Is the panel builder's responsibility.                                   |
| 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  | 10.10 Temperature rise   | Not applicable.  |
| observed.  10.13 Mechanical function  The device meets the requirements, provided the information in the instruction   | 10.11 Short-circuit rating   |  |
|  | 10.12 Electromagnetic compatibility  |  |
|  | 10.13 Mechanical function  |  |

## **Technical data ETIM 9.0**

Low-voltage industrial components (EG000017) / Front element for selector switch (EC000222)

Electric engineering, automation, process control engineering / Low-voltage switch technology / Command and alarm device / Front element for selector switches (ecl@ss13-27-37-12-13 [AKF031019])

| [AKF031019J)               |        |
|----------------------------|--------|
| Number of switch positions | 3      |
| Type of control element    | Toggle |
| Suitable for illumination  | No     |

| Colour indicator light cap Construction type lens Construction type  |                                       |    |          |
|--|---------------------------------------|----|----------|
| Construction type lens  Round  | Colour control element                |    | Black    |
| Indeed diameter  Indeed | Colour indicator light cap            |    | Other    |
| Width opening mm 0  Reight opening mm 0  Rewitching function latching yes  Spring-return No  With front ring Yes  Adaterial front ring Plastic  Colour front ring Titanium  Degree of protection (IP), front side III Plastic  III III Plastic  III III Plastic  III III Plastic  III III III III III III III III III I   | Construction type lens                |    | Round    |
| Height opening mm 0 Switching function latching Yes Spring-return No With front ring Yes Material front ring Plastic Colour front ring Titanium Degree of protection (IP), front side IP66   | Hole diameter                         | mm | 22.5     |
| Switching function latching  Switching function latching  Spring-return  No  Yes  With front ring  Material front ring  Plastic  Colour front ring  Degree of protection (IP), front side  Plastic  Titanium  IP66   | Width opening                         | mm | 0        |
| Spring-return  No  With front ring  Material front ring  Plastic  Colour front ring  Degree of protection (IP), front side  No  No  Yes  Plastic  Titanium  IP66   | Height opening                        | mm | 0        |
| Vith front ring Ves  Material front ring Plastic Colour front ring Degree of protection (IP), front side  IP66   | Switching function latching           |    | Yes      |
| Material front ring Plastic Colour front ring Titanium Degree of protection (IP), front side IP66  | Spring-return                         |    | No       |
| Colour front ring Titanium Degree of protection (IP), front side IP66  | With front ring                       |    | Yes      |
| Degree of protection (IP), front side  | Material front ring                   |    | Plastic  |
|  | Colour front ring                     |    | Titanium |
| Degree of protection (NEMA) 4X, 13   | Degree of protection (IP), front side |    | IP66     |
|  | Degree of protection (NEMA)           |    | 4X, 13   |