



**Motor-protective circuit-breaker, 3p+1N/0+1N/C, Ir=16-20A, screw connection, large packaging**

**Part no.** PKZM0-20/NHI-E-11-GVP2  
**Article no.** 088848  
**Catalog No.** XTPR020BC1NLF A11BP2

## Design verification as per IEC/EN 61439

| Technical data for design verification   |            |   |  |
|--|------------|---|--|
| Rated operational current for specified heat dissipation   | $I_n$      | A | 20   |
| Equipment heat dissipation, current-dependent  | $P_{vid}$  | W | 5.82   |
| Heat dissipation capacity  | $P_{diss}$ | W | 0  |
| 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 6.0

| Low-voltage industrial components (EG000017) / Motor protection circuit-breaker (EC000074)   |  |    |                  |
|--|--|----|------------------|
| Electric engineering, automation, process control engineering / Low-voltage switch technology / Circuit breaker (LV < 1 kV) / Motor protection circuit-breaker (ecl@ss8.1-27-37-04-01 [AGZ529013]) |  |    |                  |
| Overload release current setting   |  | A  | 16 - 20          |
| Adjustment range undelayed short-circuit release   |  | A  | 310 - 310        |
| Thermal protection   |  |    | No               |
| Phase failure sensitive  |  |    | Yes              |
| Switch off technique   |  |    | Thermomagnetic   |
| Rated operating voltage  |  | V  | 690 - 690        |
| Rated permanent current $I_u$  |  | A  | 20               |
| Rated operation power at AC-3, 230 V   |  | kW | 5.5              |
| Rated operation power at AC-3, 400 V   |  | kW | 9                |
| Type of electrical connection of main circuit  |  |    | Screw connection |
| Type of control element  |  |    | Turn button      |

|  |  |    |  |
|--|--|----|--|
| Device construction  |  |    | Built-in device fixed built-in technique |
| With integrated auxiliary switch                                   |  |    | Yes                                      |
| With integrated under voltage release                              |  |    | No                                       |
| Number of poles  |  |    | 3  |
| Rated short-circuit breaking capacity I <sub>cu</sub> at 400 V, AC |  | kA | 50                                       |
| Degree of protection (IP)  |  |    | IP20                                     |
| Height   |  | mm | 93                                       |
| Width  |  | mm | 45                                       |
| Depth  |  | mm | 76                                       |