



## Over current switch, 20A, 3pole+N, type B characteristic

**Part no.** PL7-B20/3N  
**Article no.** 263986

Similar to illustration

### 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 |  | 10.1   |
| 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 5.0

| Circuit breakers and fuses (EG000020) / Miniature circuit breaker (MCB) (EC000042)   |  |    |  |     |
|--|--|----|--|-----|
| Electric engineering, automation, process control engineering / Electrical installation, device / Miniature circuit breaker system (MCB) / Miniature circuit breaker (MCB) (ec1@ss8-27-14-19-01 [AAB905010]) |  |    |  |     |
| Release characteristic   |  |    |  | B   |
| Number of poles (total)  |  |    |  | 4   |
| Rated current  |  | A  |  | 20  |
| Rated voltage  |  | V  |  | 400 |
| Rated short-circuit breaking capacity EN 60898   |  | kA |  | 10  |
| Rated short-circuit breaking capacity IEC 60947-2  |  | kA |  | 0   |
| Voltage type   |  |    |  | AC  |
| Current limiting class   |  |    |  | 3   |
| Frequency  |  | Hz |  | 50  |
| Concurrently switching N-neutral   |  |    |  | No  |
| Over voltage category  |  |    |  | 3   |
| Pollution degree   |  |    |  | 2   |

|                                     |    |      |
|-------------------------------------|----|------|
| Width in number of modular spacings |    | 4    |
| Built-in depth                      | mm | 70.5 |
| Additional equipment possible       |    | Yes  |
| Degree of protection (IP)           |    | IP20 |