

Over current switch, 20A, 4p, C-Char, AC

Part no. PXL-C20/4 Article no. 236617



Similar to illustration

|  | Del | ivery | prod | ıram |
|--|-----|-------|------|------|
|--|-----|-------|------|------|

| Basic function                                       |    |    | Miniature circuit breakers                             |
|--|----|----|--|
| Number of poles                                      |    |    | 4 pole   |
| Tripping characteristic                              |    |    | С  |
| Application  |    |    | Switchgear for residential and commercial applications |
| Rated current  | In | Α  | 20   |
| Rated switching capacity according to IEC/EN 60898-1 |    | kA | 10   |
| Product range  |    |    | PXL  |

## **Design verification as per IEC/EN 61439**

| Design verification as per IEC/EN 61439  |                   |    |  |
|--|-------------------|----|--|
| Technical data for design verification   |                   |    |  |
| Rated operational current for specified heat dissipation   | In                | Α  | 20   |
| Heat dissipation per pole, current-dependent   |                   | W  | 0  |
| Equipment heat dissipation, current-dependent  | P <sub>vid</sub>  | W  | 12.8   |
| 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 | 75   |
|  |                   |    | linear, per +1 °C, results in a 0.5% reduction of current carrying capacity  |
| 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**

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) (ecl@ss8.1-27-14-19-01 [AAB905011])

| Number of protected poles         4         4           Nominal rated current         A         20           Nominal rated voltage         V         400           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         KA         10           Rated short-circuit breaking capacity Icu EN 60898 at 400 V         KA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         KA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         KA         0           Voltage type         AC         AC           Current limiting class         B         Y         0           Concurrently switching N-neutral         Y         Y         0           Suitable for flush-mounted installation         Y         Y         0           Over voltage category         Y         Y         0           Pollution degree         Y         2         2           Width in number of modular spacings         Y         4         4           Built-in depth         X         Y         Y         2           Widthin a lequipment possible         Y         Y         Y         Y | [AAB905011])   |    |         |
|---|--|----|---------|
| Number of protected poles         4         4           Nominal rated current         A         20           Nominal rated voltage         V         400           Rated short-circuit breaking capacity Icn EN 60898 at 230 V         KA         10           Rated short-circuit breaking capacity Icu EN 60898 at 400 V         KA         10           Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V         KA         0           Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V         KA         0           Voltage type         AC         AC           Current limiting class         B         Y         0           Concurrently switching N-neutral         Y         Y         0           Suitable for flush-mounted installation         Y         Y         0           Over voltage category         Y         Y         0           Pollution degree         Y         2         2           Width in number of modular spacings         Y         4         4           Built-in depth         X         Y         Y         2           Widthin a lequipment possible         Y         Y         Y         Y | Release characteristic   |    | С       |
| Nominal rated current Nominal rated voltage Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60987-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible   | Number of poles (total)  |    | 4       |
| Nominal rated voltage Rated short-circuit breaking capacity Icn EN 60898 at 200 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icn IEC 60947-2 at 400 V Voltage type Voltage type Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  V 400 AC  AC  No  No  No  No  AC  No  No  AC  No  No  No  No  AC  No  No  No  No  No  No  No  No  No  N  | Number of protected poles                                      |    | 4       |
| Rated short-circuit breaking capacity Icn EN 60898 at 230 V Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Current limiting class Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  KA  10  10  10  10  10  10  10  10  10  1  | Nominal rated current  | Α  | 20      |
| Rated short-circuit breaking capacity Icn EN 60898 at 400 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type Voltage type Current limiting class Frequency Concurrently switching N-neutral Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  kA  10  0  0  0  0  0  0  0  0  0  0  0  0  | Nominal rated voltage  | V  | 400     |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V  | Rated short-circuit breaking capacity Icn EN 60898 at 230 V    | kA | 10      |
| Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V Voltage type  Current limiting class  Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  KA  0  C  C  C  C  C  C  C  C  C  C  C  C  | Rated short-circuit breaking capacity Icn EN 60898 at 400 V    | kA | 10      |
| Voltage type  Current limiting class  Frequency Concurrently switching N-neutral  Suitable for flush-mounted installation Over voltage category Pollution degree  Width in number of modular spacings Built-in depth Additional equipment possible  AC  AC  AC  AC  AC  3  4  No  No  No  2  2  4  4  4  Additional equipment possible  Frequency AC  | Rated short-circuit breaking capacity Icu IEC 60947-2 at 230 V | kA | 0       |
| Current limiting class  Frequency Concurrently switching N-neutral Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Built-in depth Additional equipment possible  S 3  2  Yes  | Rated short-circuit breaking capacity Icu IEC 60947-2 at 400 V | kA | 0       |
| Frequency Concurrently switching N-neutral Suitable for flush-mounted installation Over voltage category Pollution degree Width in number of modular spacings Additional equipment possible  Hz 50-60 No No Over voltage category Pollution degree 2 2 4 Suitable for flush-mounted installation Mn 70.5 Yes  | Voltage type   |    | AC      |
| Concurrently switching N-neutral  Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  No  2  4  For a concurrently switching N-neutral  No  2  4  For a concurrently switching N-neutral  No  Additional equipment possible  No  4  For a concurrently switching N-neutral  No  Additional equipment possible  No  3  For a concurrently switching N-neutral  No  4  For a concurrently switching N-neutral  No  Additional equipment possible  No  Additional equipment possible  No  3  For a concurrently switching N-neutral  No  Additional equipment possible  No  3  For a concurrently switching N-neutral  No  Additional equipment possible  No  3  For a concurrently switch in processible  No  Additional equipment possible  No  Additional equipment possible  | Current limiting class   |    | 3       |
| Suitable for flush-mounted installation  Over voltage category  Pollution degree  Width in number of modular spacings  Built-in depth  Additional equipment possible  No  2  4  For any of the possible  mm 70.5  Yes   | Frequency  | Hz | 50 - 60 |
| Over voltage category3Pollution degree2Width in number of modular spacings4Built-in depthmm70.5Additional equipment possibleYes   | Concurrently switching N-neutral                               |    | No      |
| Pollution degree 2 Width in number of modular spacings 4 Built-in depth mm 70.5 Additional equipment possible Yes   | Suitable for flush-mounted installation                        |    | No      |
| Width in number of modular spacings 4 Built-in depth mm 70.5 Additional equipment possible Yes  | Over voltage category  |    | 3       |
| Built-in depth mm 70.5 Additional equipment possible Yes  | Pollution degree   |    | 2       |
| Additional equipment possible  Yes  | Width in number of modular spacings                            |    | 4       |
|   | Built-in depth   | mm | 70.5    |
| Degree of protection (IP)   | Additional equipment possible                                  |    | Yes     |
|   | Degree of protection (IP)                                      |    | IP20    |