

# X20(c)BM01

## 1 General information

The bus module is the base for all power supply modules.

- Basis for all power supply modules
- For creating potential groups
- The internal I/O power supply is interrupted to the left.

## 2 Coated modules

Coated modules are X20 modules with a protective coating for the electronics component. This coating protects X20c modules from condensation and corrosive gases.

The modules' electronics are fully compatible with the corresponding X20 modules.

**For simplification purposes, only images and module IDs of uncoated modules are used in this data sheet.**

The coating has been certified according to the following standards:

- Condensation: BMW GS 95011-4, 2x 1 cycle
- Corrosive gas: EN 60068-2-60, method 4, exposure 21 days



### 2.1 -40°C starting temperature

The starting temperature describes the minimum permissible ambient temperature when the power is switched off at the time the coated module is switched on. This is permitted to be as low as -40°C. During operation, the conditions as specified in the technical data continue to apply.

#### Information:

**It is important to absolutely ensure that there is no forced cooling by air currents in a closed control cabinet, for example using a fan or ventilation slots.**

## 3 Order data

| Model number | Short description  | Figure |
|--------------|--|--------|
| X20BM01      | <b>Bus modules</b><br>X20 power supply bus module, 24 VDC keyed, internal I/O supply interrupted to the left |        |
| X20cBM01     | X20 power supply bus module, coated, 24 VDC keyed, internal I/O supply interrupted to the left               |        |

Table 1: X20BM01, X20cBM01 - Order data

## 4 Technical data

| Model number   | X20BM01  | X20cBM01               |
|--|--|------------------------|
| <b>Short description</b>   |  |                        |
| Bus module   | Power supply bus module, 24 VDC keyed, internal I/O supply interrupted to the left   |                        |
| <b>General information</b>                                       |  |                        |
| Power consumption  |  |                        |
| Bus  | 0.13 W   |                        |
| Internal I/O   | -  |                        |
| Additional power dissipation caused by actuators (resistive) [W] | -  |                        |
| Certifications   |  |                        |
| CE   | Yes  |                        |
| ATEX   | Zone 2, II 3G Ex nA nC IIA T5 Gc<br>IP20, Ta (see X20 user's manual)<br>FTZU 09 ATEX 0083X   |                        |
| UL   | cULus E115267<br>Industrial control equipment  |                        |
| HazLoc   | cCSAus 244665<br>Process control equipment<br>for hazardous locations<br>Class I, Division 2, Groups ABCD, T5                            |                        |
| DNV GL   | Temperature: <b>B</b> (0 - 55°C)<br>Humidity: <b>B</b> (up to 100%)<br>Vibration: <b>B</b> (4 g)<br>EMC: <b>B</b> (bridge and open deck) |                        |
| LR   | ENV1   |                        |
| KR   | Yes  |                        |
| EAC  | Yes  |                        |
| KC   | Yes  | -                      |
| <b>I/O power supply</b>  |  |                        |
| Nominal voltage  | 24 VDC   |                        |
| Permissible contact load   | 10 A   |                        |
| <b>Operating conditions</b>                                      |  |                        |
| Mounting orientation   |  |                        |
| Horizontal   | Yes  |                        |
| Vertical   | Yes  |                        |
| Installation elevation above sea level                           |  |                        |
| 0 to 2000 m  | No limitations   |                        |
| >2000 m  | Reduction of ambient temperature by 0.5°C per 100 m  |                        |
| Degree of protection per EN 60529                                | IP20   |                        |
| <b>Ambient conditions</b>  |  |                        |
| Temperature  |  |                        |
| Operation  |  |                        |
| Horizontal mounting orientation                                  | -25 to 60°C  |                        |
| Vertical mounting orientation                                    | -25 to 50°C  |                        |
| Derating   | -  |                        |
| Storage  | -40 to 85°C  |                        |
| Transport  | -40 to 85°C  |                        |
| Relative humidity  |  |                        |
| Operation  | 5 to 95%, non-condensing   | Up to 100%, condensing |
| Storage  | 5 to 95%, non-condensing   |                        |
| Transport  | 5 to 95%, non-condensing   |                        |
| <b>Mechanical properties</b>                                     |  |                        |
| Pitch  | 12.5 <sup>+0.2</sup> mm  |                        |

Table 2: X20BM01, X20cBM01 - Technical data

## 5 Voltage routing

