

X20(c)BM31

1 General information

The bus module serves as a basis for all double-width X20 I/O modules. The internal I/O supply is interconnected.

- Bus module for double-width I/O modules
- The internal I/O supply is interconnected

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
	Bus modules	
X20BM31	X20 bus module for double-width modules, 24 VDC keyed, internal I/O supply continuous	
X20cBM31	X20 bus module, coated, for double-width modules, 24 VDC keyed, internal I/O supply continuous	

Table 1: X20BM31, X20cBM31 - Order data

4 Technical data

Model number	X20BM31		X20cBM31	
Short description				
Bus module	Bus module for double-width modules, 24 VDC keyed, internal I/O supply continuous			
General information				
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 IP20, Ta (see X20 user's manual) FTZÜ 09 ATEX 0083X			
UL	cULus E115267 Industrial control equipment			
HazLoc	cCSAus 244665 Process control equipment for hazardous locations Class I, Division 2, Groups ABCD, T5			
DNV GL	Temperature: B (0 - 55°C) Humidity: B (up to 100%) Vibration: B (4 g) EMC: B (bridge and open deck)			
LR	ENV1			
KR	Yes			
EAC	Yes			
KC	Yes		-	
I/O power supply				
Nominal voltage	24 VDC			
Permissible contact load	10 A			
Operating conditions				
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			
Ambient conditions				
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			
Mechanical properties				
Pitch	25 ^{+0.2} mm			

Table 2: X20BM31, X20cBM31 - Technical data

5 Voltage routing

