

# X20IF1074

## 1 General information

The module is an interface module for the X20 fieldbus CPU.

- CAN bus connection
- Integrated terminating resistor

**Information:**

This module does not support CAN RTR messages with extended CAN identifiers (29-bit) (memory/performance bottleneck).

## 2 Order data


| Model number | Short description   | Figure   |
|--------------|---|--|
|              | <b>System modules for fieldbus CPUs</b>   |  |
| X20IF1074    | X20 interface module, for SGC, 1 CAN bus interface, max. 1 Mbit/s, electrically isolated, order 1x TB2105 terminal block separately |  |
|              | <b>Required accessories</b>   |  |
|              | <b>Terminal blocks</b>  |  |
| 0TB2105.9010 | Accessory terminal block, 5-pin, screw clamps 2.5 mm²   |  |
| 0TB2105.9110 | Accessory terminal block, 5-pin, push-in terminal block 2.5 mm²   |  |


Table 1: X20IF1074 - Order data

### 3 Technical data

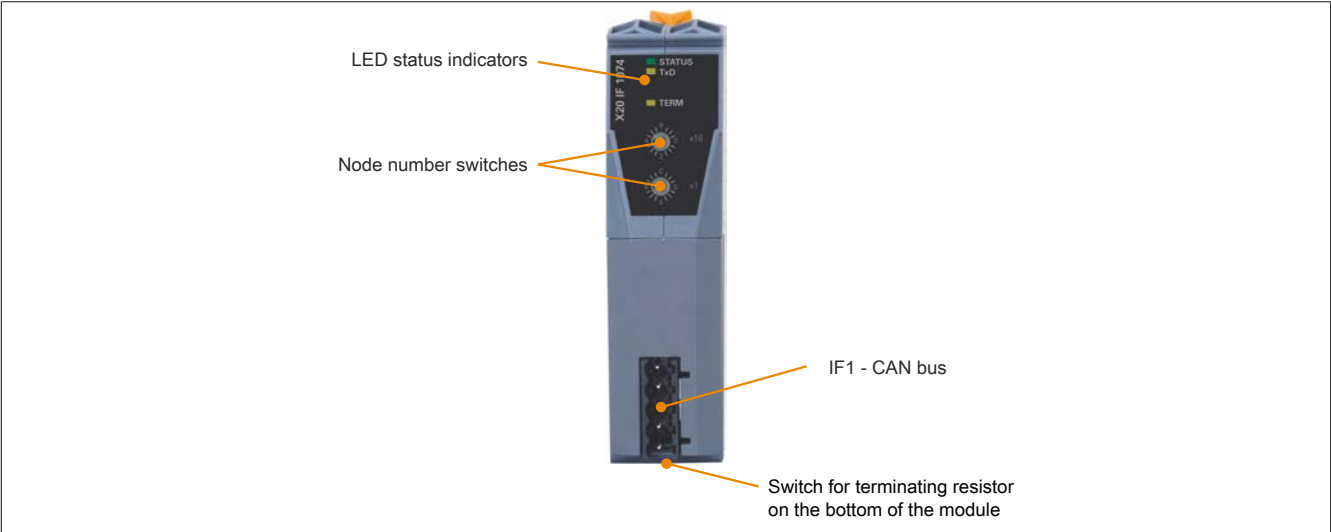
|  |  |
|--|--|
| <b>Model number</b>  | <b>X20IF1074</b>   |
| <b>Short description</b>   |  |
| Communication module   | 1x CAN bus   |
| <b>General information</b>                                       |  |
| B&R ID code  | 0xA399   |
| Status indicators  | Module status, data transfer, terminating resistor   |
| Diagnostics  |  |
| Module status  | Yes, using status LED  |
| Data transfer  | Yes, using status LED  |
| Terminating resistor   | Yes, using status LED  |
| Power consumption  | 0.69 W   |
| Additional power dissipation caused by actuators (resistive) [W] | -  |
| Certifications   |  |
| CE   | Yes  |
| KC   | Yes  |
| EAC  | Yes  |
| 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                            |
| ATEX   | Zone 2, II 3G Ex nA nC IIA T5 Gc<br>IP20, Ta (see X20 user's manual)<br>FTZÜ 09 ATEX 0083X   |
| 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  |
| <b>Interfaces</b>  |  |
| Interface IF1  |  |
| Signal   | CAN bus  |
| Variant  | 5-pin male multipoint connector  |
| Max. distance  | 1000 m   |
| Transfer rate  | Max. 1 Mbit/s  |
| Terminating resistor   | Integrated in the module   |
| Controller   | SJA 1000   |
| <b>Electrical properties</b>                                     |  |
| Electrical isolation   | PLC isolated from CAN (IF1)  |
| <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   |
| Storage  | 5 to 95%, non-condensing   |
| Transport  | 5 to 95%, non-condensing   |
| <b>Mechanical properties</b>                                     |  |
| Note   | Order 1x TB2105 terminal block separately  |
| Slot   | In X20 fieldbus CPU  |

Table 2: X20IF1074 - Technical data

4 LED status indicators

| Figure  | LED    | Color  | Status | Description  |
|---|--------|--------|--------|--|
|  | STATUS | Green  | On     | Interface module active                                    |
|   |        | Red    | On     | CPU starting up  |
|   | TxD    | Yellow | On     | The module is sending data via the CAN bus interface       |
|   | TERM   | Yellow | On     | Terminating resistor integrated in the module switched on. |

5 Operating and connection elements



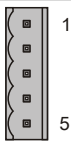
6 Node number switch



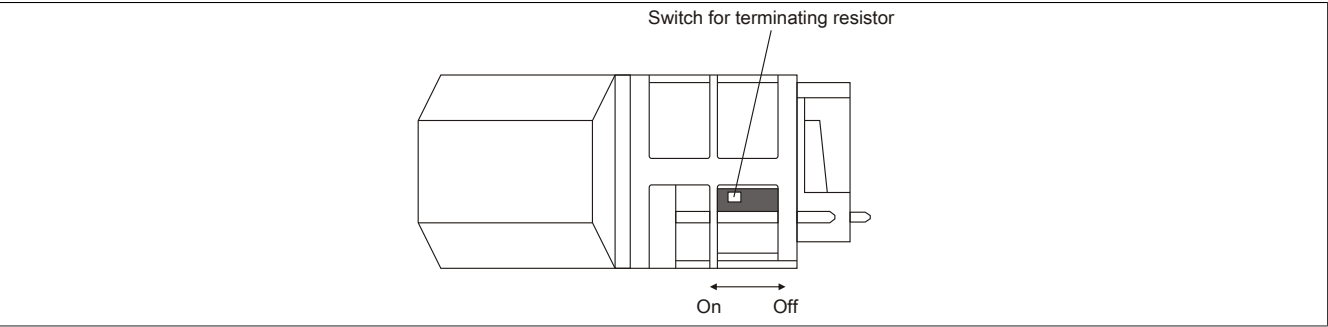
The node number for the interface is set with the two hex switches.

7 CAN bus interface

The interface is a 5-pin multipoint connector. Terminal block 0TB2105 must be ordered separately.

| Interface   |                                 | Pinout   |                             |
|---|---------------------------------|----------|-----------------------------|
|  | 5-pin male multipoint connector | Terminal | Function                    |
|   |                                 | 1        | CAN <sub>⊥</sub> CAN ground |
|   |                                 | 2        | CAN <sub>-</sub> L CAN low  |
|   |                                 | 3        | SHLD Shield                 |
|   |                                 | 4        | CAN <sub>+</sub> H CAN high |
|   |                                 | 5        | NC                          |

8 Terminating resistor



A terminating resistor is integrated in the interface module. It can be switched on or off with a switch on the bottom of the housing. A switched-on terminating resistor is indicated by LED "TERM".

9 Firmware

The module comes with preinstalled firmware. The firmware is part of Automation Studio. The module is automatically brought up to this level.

To update the firmware contained in Automation Studio, a hardware upgrade must be performed (see "Project management / Workspace / Upgrades" in Automation Help).