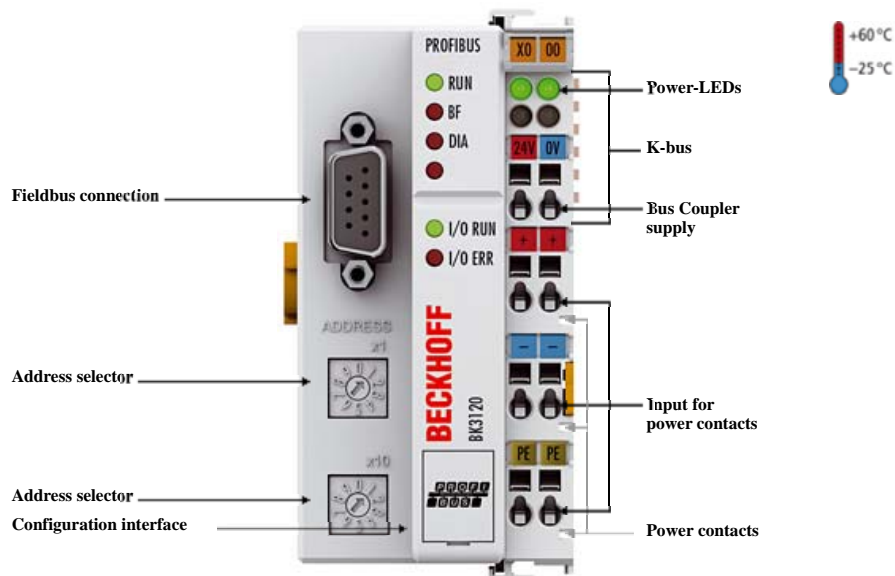


PROFIBUS

BK3120



BK3120 | PROFIBUS “Economy plus” Bus Coupler

The “Economy plus“ version extends the existing PROFIBUS Bus Coupler series BK3xx0. The K-bus extension technology allows the connection of up to 255 spatially distributed Bus Terminals to one Bus Coupler. The BK3120 has been designed to accommodate automation requirements. The PROFIBUS protocols omit FMS operation in order to be able to transfer more user data in DP mode, which for this Bus Coupler type can be 128 byte inputs and 128 byte outputs. The BK3120 incorporates the PROFIBUS DP V1 services. These services allow direct access to the Bus Coupler register and the complex Bus Terminals in order, for example, to change the parameterisation or to set/correct limit values for analog Bus Terminals.

Baud rates of up to 12 Mbaud are automatically recognised by the Bus Coupler, allowing the transmission speed to be adapted to meet the needs of the particular technical process.

| System data | PROFIBUS BK3120 | |
|-------------------------------|---|-------------|
| Number of I/O stations | 100 with repeater | |
| Number of I/O points | approx. 6,000, depending on the master | |
| Data transfer medium | shielded copper cable, 2 x 0.25 mm ² | |
| Max. cable length | 1,200 m | 1,000 m |
| Data transfer rates | 9.6/19.2/ 93.75 kbaud | 187.5 kbaud |
| Data transfer time | approx. 3 ms (10 stations for 32 bit inp) | |
| Technical data | BK3120 | |
| Number of Bus Terminals | 64 (255 with K-bus extension) | |
| Max. number of bytes fieldbus | 128 byte input and 128 byte output | |
| Data transfer rates | automatic detection up to 12 Mbaud | |
| Bus interface | 1 x D-sub 9-pin socket with shielding | |
| Power supply | 24 V DC (-15 %/+20 %) | |
| Input current | 70 mA + (total K-bus current)/4, 500 mA max. | |
| Current supply K-bus | 1,750 mA | |
| Power contacts | 24 V DC max./10 A max. | |
| Electrical isolation | 500 V (power contact/supply voltage/fieldbus) | |
| Weight | approx. 170 g | |
| Operating/storage temperature | -25...+60 °C/-40...+85 °C | |

| | |
|---|---|
| Relative humidity | 95 %, no condensation |
| Vibration/shock resistance | conforms to EN 60068-2-6/EN 60068-2-27/29 |
| EMC immunity/emission | conforms to EN 61000-6-2/EN 61000-6-4 |
| Protect. class/installation pos. | IP 20/variable |
| Approvals | CE, UL, Ex, GL |

Accessories

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|-----------------|--|
| KS2000 | configuration software for extended parameterisation |
| Cordsets | cordsets and connectors |
| FC310x | PC Fieldbus Cards with PCI interface |

Ordering information
Description

| | |
|---------------|---|
| BK3120 | PROFIBUS "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud |
| BK3010 | PROFIBUS Bus Coupler for up to 64 digital Bus Terminals, 1.5 Mbaud |
| BK3100 | PROFIBUS DP/FMS Bus Coupler for up to 64 Bus Terminals, 12 Mbaud |
| BK3110 | PROFIBUS Bus Coupler for up to 64 digital Bus Terminals, 12 Mbaud |
| BK3150 | PROFIBUS "Compact" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud |
| BK3500 | PROFIBUS Bus Coupler with fibre optic connection for up to 64 Bus Terminals, 1.5 Mbaud |
| BK3520 | PROFIBUS "Economy plus" Bus Coupler for up to 64 Bus Terminals (255 with K-bus extension), 12 Mbaud |
| LC3100 | PROFIBUS "Low Cost" Bus Coupler for up to 64 digital Bus Terminals, 12 Mbaud |
| CX8031 | PROFIBUS Embedded PC |

System

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|-----------------|--|
| PROFIBUS | For further PROFIBUS products please see the system overview |
|-----------------|--|

Product announcement

operating temperature 0...+55 °C (storage temperature -25...+85 °C) available;
operating temperature -25...+60 °C (storage temperature -40...+85 °C)
estimated market release
1st quarter 2012