

# BK3120 | PROFIBUS Economy plus Bus Coupler

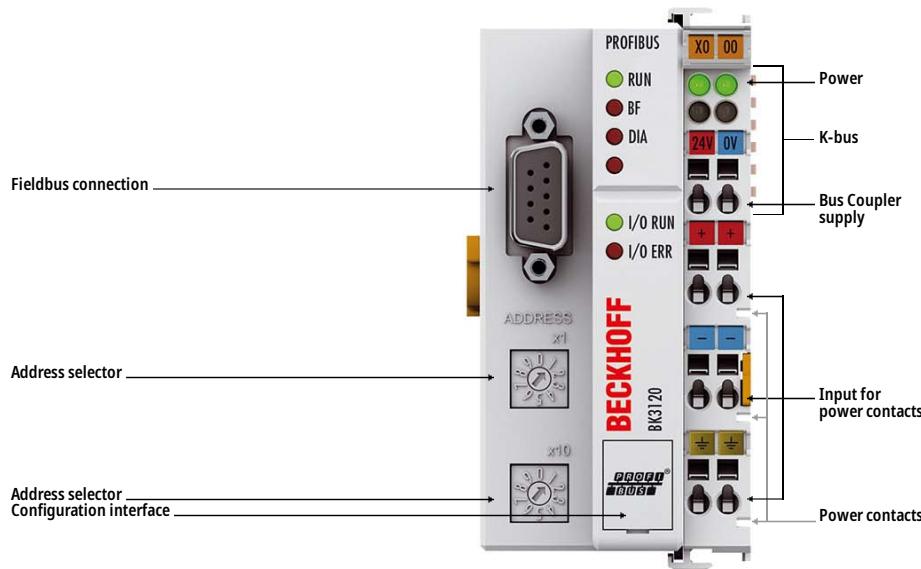


Image similar, may contain optional accessories

## Product status: regular delivery

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 parameterization or to set/correct limit values for analog Bus Terminals.

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

## Product information

### Technical data

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

<b>Data transfer medium</b>	shielded copper cable, 2 x 0.25 mm <sup>2</sup>
<b>Power supply</b>	24 V DC (-15%/+20%)
<b>Input current</b>	70 mA + (total K-bus current)/4, 500 mA max.
<b>Current supply K-bus</b>	1750 mA
<b>Power contacts</b>	max. 24 V DC/max. 10 A
<b>Electrical isolation</b>	500 V (power contact/supply voltage/fieldbus)
<b>Weight</b>	approx. 170 g
<b>Operating temperature</b>	-25...+60°C
<b>Storage temperature</b>	-40...+85°C
<b>Relative humidity</b>	95%, no condensation
<b>Vibration/shock resistance</b>	conforms to EN 60068-2-6/EN 60068-2-27
<b>EMC immunity/emission</b>	conforms to EN 61000-6-2/EN 61000-6-4
<b>Protect. rating/installation pos.</b>	IP20/variable
<b>Approvals/markings</b>	CE, CCC, UL, ATEX, IECEEx, DNV, cFMus
<b>Ex marking</b>	<p>ATEX: II 3G Ex ec IIC T4 Gc</p> <p>IECEEx: Ex ec IIC T4 Gc</p> <p>cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec IIC T4 Gc</p>

<b>Housing data</b>	BKxxxx, BCxxxx
<b>Design form</b>	compact terminal housing with signal LEDs
<b>Material</b>	polycarbonate
<b>Installation</b>	on 35 mm DIN rail, conforming to EN 60715 with lock
<b>Side by side mounting by means of</b>	double slot and key connection
<b>Marking</b>	labeling of the BZxxxx series
<b>Wiring</b>	solid conductor (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver
<b>Connection cross-section</b>	<p>s*: 0.08...2.5 mm<sup>2</sup>,            st*: 0.08...2.5 mm<sup>2</sup>,            f*: 0.14...1.5 mm<sup>2</sup></p>
<b>Stripping length</b>	8...9 mm
<b>Current load power contacts</b>	I <sub>max</sub> : 10 A
<b>Dimensions (W x H x D)</b>	51 mm x 100 mm x 69 mm

\*s: solid wire; st: stranded wire; f: with ferrule