



## BK7000 | ControlNet Bus Coupler

**ControlNet** The Bus Coupler BK7000 connects the ControlNet bus system with the electronic terminal blocks, which can be extended in modular fashion. One unit consists of one Bus Coupler, any number from 1 to 64 terminals and one end terminal.

The Bus Coupler recognises the connected terminals and automatically generates the affiliations of the inputs/outputs to the bytes of the process image. The first input/output signal is inserted in the first bit of one word (LSB), beginning from the left. The Bus Coupler inserts further signals in this word. Inputs and outputs are clearly separated. The Bus Coupler automatically begins a further word if the number of inputs or outputs exceeds 16 bits.

ControlNet has been an open fieldbus system since 1997. The ControlNet system has a bus structure, and up to 99 stations can be operated in one system. Transmission speed is 5 Mbit/s, and coax cables are used as the data transfer medium. The ControlNet protocol allows both cyclic and non cyclic data to be exchanged via the bus without cross-influence between them. The Bus Coupler BK7000 supports the use of redundant bus cables and has an integrated network access port (NAP) for the direct connecting of ControlNet tools.

System data	ControlNet   BK7000
Number of I/O stations	99 (per link)
Number of I/O points	depending on controller
Data transfer medium	coax cable RG-6, optionally redundant
Max. cable length	250...1,000 m per segment
Data transfer rates	5 Mbaud

Technical data	BK7000
Number of Bus Terminals	64
Max. number of bytes fieldbus	512 byte input and 512 byte output
Digital peripheral signals	512 inputs/outputs
Analog peripheral signals	256 inputs/outputs
Configuration possibility	via KS2000
Data transfer rates	5 Mbaud
Bus interface	2 x BNC female connector + NAP
Power supply	24 V DC (-15 %/+20 %)
Input current	70 mA + (total K-bus current)/4, 500 mA max.
Starting current	2.5 x continuous current
Recommended fuse	≤ 10 A
Current supply K-bus	1750 mA
Power contacts	24 V DC max./10 A max.
Electrical isolation	500 V (power contact/supply voltage/K-bus)
Weight	approx. 170 g
Operating/storage temperature	0...+55 °C/-25...+85 °C
Relative humidity	95 %, no condensation
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Protect. class/installation pos.	IP 20/variable
Approvals	CE, UL, Ex

Accessories	
KS2000	configuration software for extended parameterisation
<b>Cordsets</b>	cordsets and connectors

Ordering information	Description
BK7000	ControlNet Bus Coupler for up to 64 Bus Terminals