BK9053 | PROFINET Compact Bus Coupler

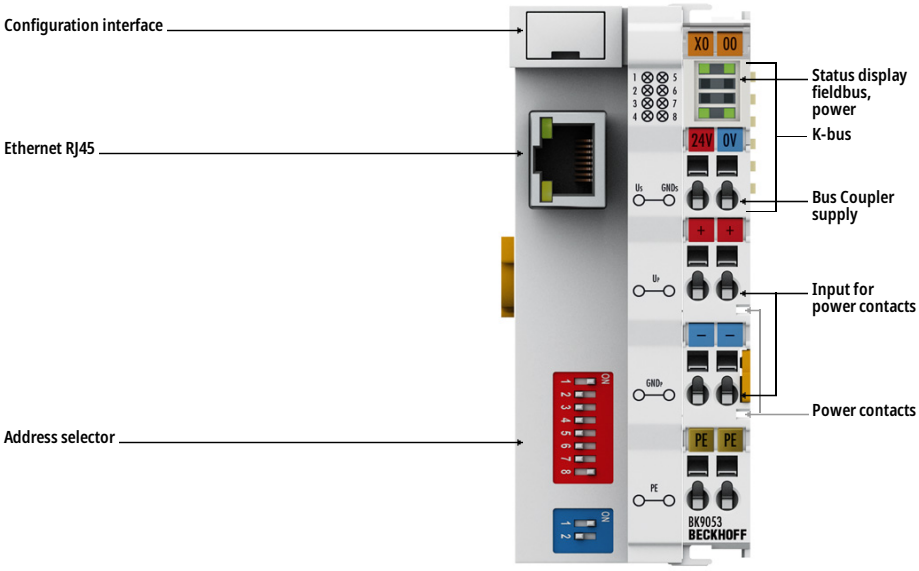

Image similar, may contain optional accessories

Product status: regular delivery

PROFINET is the open Industrial Ethernet standard of the PNO (PROFIBUS Nutzerorganisation). Internationally established IT standards are used for communication. PROFINET RT describes the data exchange between controllers and field devices and can be used in standard Ethernet networks. Commercial switches are used for networking purposes. Linking to any PROFINET controller takes place via the GSDML basic device file.

The BK9053 Bus Coupler connects PROFINET with the modular, extendable electronic terminal blocks. One unit consists of one Bus Coupler, any number from 1 to 64 terminals (255 with K-bus extension) and one end terminal.

The Bus Couplers recognize the terminals to which they are connected, and perform the assignment of the inputs and outputs to the words of the process image automatically.

Product information

Technical data

Technical data	BK9053
Number of Bus Terminals	64 (255 with K-bus extension)
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	via KS2000
Protocol	PROFINET RT (Class B)
Data transfer rates	10/100 Mbit/s, automatic recognition of the transmission rate
Bus interface	1 x RJ45
Data transfer medium	4 x 2 twisted pair copper cable; category 3 (10 Mbit/s), category 5 (100 Mbit/s)
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	max. 24 V DC/max. 10 A
Electrical isolation	500 V (power contact/supply voltage/fieldbus)
Topology	star wiring
Distance between stations	100 m between hub/switch and bus coupler or between bus coupler and bus coupler
Weight	approx. 100 g
Operating temperature	0...55°C
Storage temperature	-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. rating/installation pos.	IP20/variable
Approvals/markings	CE, CCC, UL, ATEX, IECEx
Ex marking	ATEX: II 3 G Ex ec IIC T4 Gc IECEx: Ex ec IIC T4 Gc

Housing data	**BKxx50, BCxx50**
Design form	compact terminal housing with signal LEDs
Material	polycarbonate
Installation	on 35 mm DIN rail, conforming to EN 60715 with lock
Side by side mounting by means of	double slot and key connection
Marking	labeling of the BZxxxx series
Wiring	solid conductor (s), flexible conductor (st) and ferrule (f): spring actuation by screwdriver
Connection cross-section	s*: 0.08...2.5 mm^2, st*: 0.08...2.5 mm^2, f*: 0.14...1.5 mm^2
Stripping length	8...9 mm

Current load power contacts	I_{max}: 10 A
Dimensions (W x H x D)	44 mm x 100 mm x 68 mm

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