

2.1 BK3000, BK3010, BK3100, BK3110, BK3120, LC3100

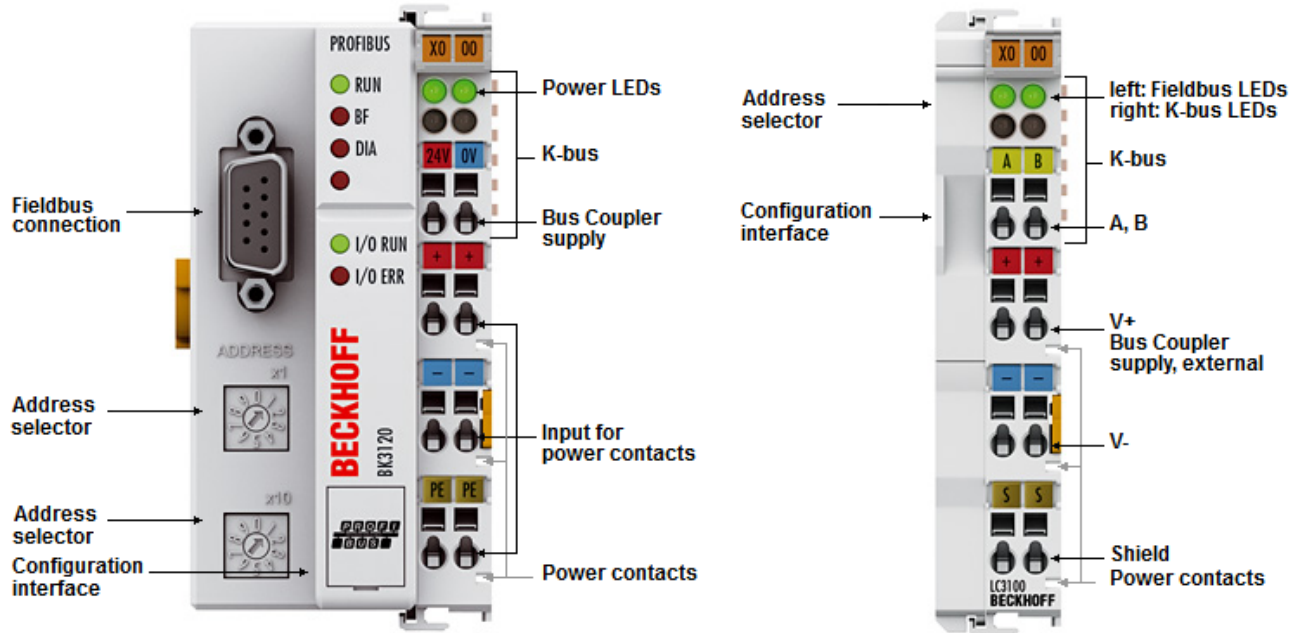


Fig. 1: BK3120 and LC3100 - Bus Couplers for PROFIBUS DP

Technical data

Type	BK3120
Number of Bus Terminals	64 (255 with K-bus extension)
Digital peripheral signals	max. 1020 inputs/outputs
Analog peripheral signals	max. 64 inputs/outputs
Configuration possibility	Via the KS2000 configuration software or the controller
Max. number of bytes (inputs and outputs)	128 bytes
Baud rate (automatic detection)	up to max. 12 Mbaud
Bus connection	1 x D-sub plug, 9-pin with shielding
Power supply	24 V _{DC} (-15 % / +20 %)
Input current	70 mA + (total K bus current)/4, max. 500 mA
Starting current	2.5 x continuous current
Recommended fuse	maximum 10 A
K-bus current up to	1750 mA
Power contact voltage	maximum 24 V _{DC}
Power contact current load	maximum 10 A
Electrical isolation	Power contact / supply / fieldbus
Dielectric strength	500 V (power contact / supply / fieldbus)
Weight	approx. 170 g
Permissible ambient temperature (operation)	-25°C ... +60°C
Permissible ambient temperature (storage)	-25°C ... +85°C
Permissible 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
Protection class / Installation position	IP20 / variable
Approvals / markings	CE, UKCA, cULus, EAC, GL, ATEX [▶ 33], IECEx [▶ 34], cFMus [▶ 36]
Ex markings	ATEX: II 3 G Ex nA IIC T4 Gc II 3 D Ex tc IIIC T135 °C Dc IECEx: Ex nA IIC T4 Gc Ex tc IIIC T135 °C Dc cFMus: Class I, Division 2, Groups A, B, C, D Class I, Zone 2, AEx ec IIC T4 Gc

*) Real applicable approvals/markings see type plate on the side (product marking).

Type	BK3000, BK3010	BK3100, BK3110	LC3100
Number of Bus Terminals	64		64
Digital peripheral signals	BK3000, BK3100: 512 inputs/outputs BK3010, BK3110: 256 inputs/outputs		256 inputs/outputs
Analog peripheral signals	BK3000, BK3100: 128 inputs/outputs BK3010, BK3110: -		-
Configuration possibility	Via the KS2000 configuration software or the controller		
Max. number of bytes (inputs and outputs)	BK3000: 244 bytes	BK3100: 64 bytes (DP and FMS operation) 128 bytes (DP operation only)	32 bytes
	BK3010: 32 bytes	BK3110: 32 bytes	
Baud rate (automatic detection)	up to max. 1.5 Mbaud	up to max. 12 Mbaud	
Bus connection	1 x D-sub plug, 9-pin with shielding		spring-loaded terminals
Power supply	24 V _{DC} (-15 % / +20 %)		
Input current	70 mA + (total K-bus current)/4, 500 mA max. (BK3x00) 70 mA + (total K-bus current)/4, 200 mA max. (BK3x10)		70 mA + (total K bus current)/4, max. 200 mA
Starting current	2.5 x continuous current		
Recommended fuse	maximum 10 A		
K-bus current up to	1750 mA (BK3x00) 500 mA (BK3x10)	500 mA	
Power contact voltage	maximum 24 V _{DC}		
Power contact current load	maximum 10 A		
Electrical isolation	Power contact / supply / fieldbus		Power supply / fieldbus
Dielectric strength	500 V (power contact / supply / fieldbus)		500 V (supply / fieldbus)
Weight	approx. 170 g	approx. 150 g	approx. 100 g
Permissible ambient temperature (operation)	0°C ... +55°C		0°C ... +55°C
Permissible ambient temperature (storage)	-25°C ... +85°C		
Permissible 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		
Protection class	IP20		
Installation position	variable		
Approvals / markings*	CE, UKCA, cULus, EAC, GL, ATEX [▶ 32]		CE, UKCA, cULus, EAC, ATEX [▶ 32]
Ex marking	ATEX: II 3 G Ex nA IIC T4 Gc		

*) Real applicable approvals/markings see type plate on the side (product marking).