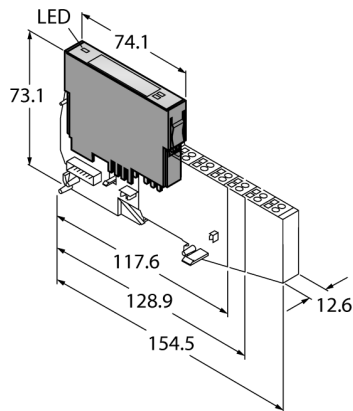


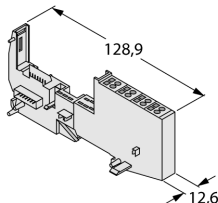
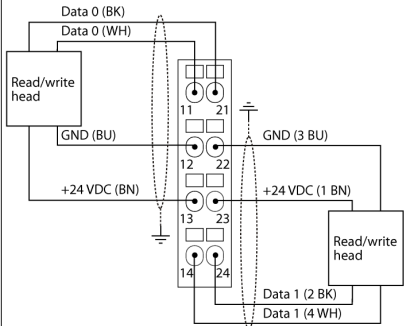
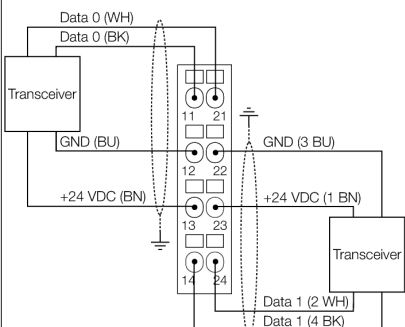
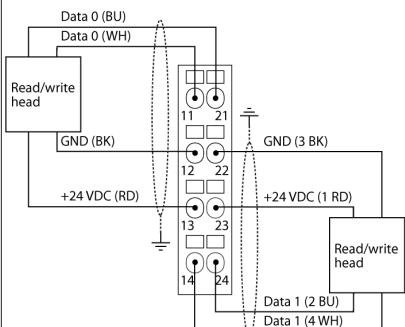

Functional principle

BL20 electronic modules are plugged into the purely passive base modules which are used for connection of field devices. Maintenance is significantly facilitated due to separation of the connection level from the module electronics. Furthermore flexibility is enhanced because the base modules provide a choice of tension spring or screw connection technology.

The electronic modules are completely independent of the type of higher level field bus through the use of gateways.

Type designation	BL20-2RFID-A
Ident-No.	6827233
Number of channels	2
Rated voltage from the supply terminal	24 VDC
Nominal current from field supply	≤ 100 mA
Nominal current from module bus	≤ 30 mA
Power dissipation, typical	≤ 1 W
Transmission rate	115.2 kbps
Cable length	50 m
Electrical isolation	Electronics and field level isolated via optocouplers
Output connectivity	Screw, tension spring
Sensor supply	0.25 A per channel, short-circuit proof
Number of diagnostics bytes	4
Number of parameter bytes	8
Number of input bytes	4
Number of output bytes	4
Dimensions (W x L x H)	12.6 x 74.1 x 55.4mm
Approvals	CE, cULus, zone 2, Class I, Div. 2
Operating temperature	0 to +55 °C
Storage temperature	-25...+85 °C
Relative humidity	5 to 95% (internal), Level RH-2, no condensation (at 45 °C storage)
Vibration test	acc. to EN 61131
Shock test	acc. to IEC 68-2-27
Drop and topple	acc. to IEC 68-2-31 and free fall to IEC 68-2-32
Electromagnetic compatibility	acc. to EN 50,082-2
Protection class	IP20
MTTF	242 years acc. to SN 29500 (Ed. 99) 40 °C

Compatible base modules

Dimension drawing	Type	Pin configuration
	BL20-S4T-SBBS 6827046 Tension spring connection	Connector .../S2500 
	BL20-S4S-SBBS 6827047 Screw connection	Connector .../S2501 
		Connectors .../S2503 

Extension Module for Use with Function Module or with Programmable Gateway

BL ident® RFID Module for Connection of 2 Read/Write heads (HF/UHF) BL20-2RFID-A

LED Displays

LED	Color	Status	Meaning
D		OFF	No error message or diagnostics active.
	RED	ON	Failure of module bus communication. Check if more than two adjacent electronic modules are pulled. Relevant modules are located between the gateway and this module.
	RED	FLASHING (0.5 Hz)	Pending module diagnostics.
RW0/RW1		OFF	No tag, no active diagnostics
	GREEN	ON	Tag available
	GREEN	FLASHING (2 Hz)	Data exchange with tag enabled
	RED	ON	Read/write head error
	RED	FLASHING (2 Hz)	Short-circuit in the supply line of read/write head

Compatible gateways

Ident. no.	Type	Communication	Version and higher	Application
6827234	BL20-GW-DPV1	PROFIBUS-DP	FW 1.11	PLC systems with PROFIBUS-DP master. Acyclic services or function modules are not required.
6827168	BL20-GWBR-DNET	DeviceNet™	FW 6.02	PLC systems with DeviceNet™ scanner (master).
6827167	BL20-GWBR-CANOPEN	CANopen	FW 3.02	PLC systems with CANopen master. Special services or function modules are not required.

Compatible economy gateways

Ident. no.	Type	Communication	Version and higher	Application
6827250	BL20-E-GW-DP	PROFIBUS-DP	FW 1.12	PLC systems with PROFIBUS-DP master. DPV1 services are not required.
6827301	BL20-E-GW-DN	DeviceNet™	FW 1.16	PLC systems with DeviceNet™ scanner (master).
6827252	BL20-E-GW-CO	CANopen	FW 2.00	PLC systems with CANopen master. Special services or function modules are not required.
6827329	BL20-E-GW-EN	Modbus TCP PROFINET EtherNet/IP™	FW 1.0.0.1	PLC systems with Modbus TCP master or PC-based solution using Modbus driver software. PLC systems with EtherNet/IP™ scanner (master). PLC systems with PROFINET Master.
6827377	BL20-E-GW-PN	PROFINET IRT	FW 1.0.0.2	PLC systems with PROFINET Master.
6827380	BL20-E-GW-EC	EtherCAT®	FW 1.1.1.0	PLC systems with EtherCAT® master.
6827381	BL20-E-GW-RS-MB/ET	Modbus RTU / ASCII	FW 1.1.1.0	PLC systems with Modbus RTU/ASCII master.

Compatible CODESYS V3 programmable gateways

Ident. no.	Type	Communication	Version and higher	Application
6827393	BL20-PG-EN-V3	Modbus TCP PROFINET EtherNet/IP™	FW V1.0.7.0	PLC systems with Modbus TCP master or PC-based solution using Modbus driver software. PLC systems with EtherNet/IP™ scanner (master). PLC systems with PROFINET Master.
6827398	BL20-PG-EN-V3-WV	Modbus TCP PROFINET EtherNet/IP™	FW 1.0.7.0	PLC systems with Modbus TCP master or PC-based solution using Modbus driver software. PLC systems with EtherNet/IP™ scanner (master). PLC systems with PROFINET Master.

Compatible CODESYS V2 programmable gateways

Ident. no.	Type	Communication	Version and higher	Application
6827249	BL20-PG-EN	Modbus TCP	FW 1.5.0.2	PLC systems with Modbus TCP master or PC-based solution using Modbus driver software.

Extension Module for Use with Function Module or with Programmable Gateway**BL ident® RFID Module for Connection of 2 Read/Write heads (HF/UHF)****BL20-2RFID-A**

6827248	BL20-PG-EN-IP	EtherNet/IP™	FW 1.9.0.11	PLC systems with EtherNet/IP™ scanner (master).
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