



KL6021 | Serial interface RS422/RS485

The KL6021 serial interface allows devices with an RS422 or RS485 interface to be connected. The device connected to the terminal communicates with the automation device via the Bus Coupler. The active communication channel operates independently of the higher-level bus system in full or half duplex mode at up to 19,200 baud. The transmission of differential signals conforms to RS422 and guarantees high immunity to interference through electrically isolated signals.

Technical data	KL6021 KS6021
Technology	RS422/RS485
Data transfer channels	TxD and RxD, full/half duplex
Data transfer rates	1200...19,200 baud; default: 9600 baud, 8 data bits, no parity and one stop bit
Bit transfer	with differential signal
Line impedance	120 Ω
Cable length	approx. 1000 m twisted pair
Power supply	via the K-bus
Current consumption K-bus	typ. 65 mA
Current consumption power contacts	– (no power contacts)
Electrical isolation	500 V (K-bus/signal voltage)
Data buffer	128 bytes receive buffer, 16 bytes transmit buffer
Bit width in the process image	input/output: 3 x 8 bit user data, 1 x 8 bit control/status (up to 5 x 8 bit user data are possible)
Configuration	no address setting, configuration via Bus Coupler or controller
Special features	high interference immunity, electrically isolated signals
Weight	approx. 60 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
Pluggable wiring	for all KSxxxx Bus Terminals
Approvals	CE, UL, Ex

Special terminals	
KL6021-0020	standard format 5 bytes of user data (rest default)
KL6021-0021	standard format 5 bytes of user data (7 bits, even, 1 stop bit, 9600 baud)
KL6021-0023	serial Bus Terminal for processing the RS485 signals from the KL6023 wireless adapter with EnOcean radio technology

Accessories	
TS6340	IEC 61131-3 software library for TwinCAT PLC for communication via serial devices
TS6341	license for using the software library for communication via serial Bus Terminals or PC COM ports using the protocol 3964R/RK512
TS6255	IEC 61131-3 software library for TwinCAT PLC with Modbus RTU function blocks for serial communication with Modbus devices

System	
RS485	For further RS485 products please see the system overview .