



KL6904 | TwinSAFE Logic Bus Terminal

TwinSAFE enables networks with up to 1,024 TwinSAFE devices. The KL6904 TwinSAFE Logic Bus Terminal can establish 15 connections (TwinSAFE connections). Multiple Logic Terminals are cascable within a network. The Bus Terminal features certified safety function blocks, which are configured according to the application to be realised. Functions such as emergency stop, safety door monitoring, etc. can thus easily be selected and linked. All blocks can be freely connected among each other and are complemented by operators such as AND, OR, etc. The required functions are configured via the TwinCAT System Manager and loaded into the KL6904 Logic Terminal via the fieldbus. The TwinSAFE logic terminal has four safe, local outputs, so that safety applications can be realised with only two components (KL1904 and KL6904). The KL6904 is suitable for applications up to DIN EN ISO 13849-1:2008 (Cat 4, PL e) and IEC 61508:2010 (SIL 3).

Technical data	KL6904
Technology	TwinSAFE Logic
Safety standard	DIN EN ISO 13849-1:2008 (Cat 4, PL e) and IEC 61508:2010 (SIL 3)
Number of outputs	4
Protocol	TwinSAFE/Safety over EtherCAT
Status display	8 LEDs: 1 per output, 4 diagnostic
Cycle time	4...100 ms
Current consumpt. K-bus	250 mA
Fault response time	≤ watchdog time (parameterisable)
Bit width in the process image	6...192 bytes
Supply voltage	24 V DC (-15 %/+20 %)
Output current	0.5 A max./20 mA min. (per channel)
Special features	4 safe outputs
Weight	approx. 90 g
Operating/storage temperature	0...+55 °C/-25...+70 °C
Permitted degree of contamination	2
Climate class EN 60721-3-3	3K3
EMC immunity/emission	conforms to EN 61000-6-2/EN 61000-6-4
Vibration/shock resistance	conforms to EN 60068-2-6/EN 60068-2-27
Installation position	horizontal
Protection class	IP 20
Approvals	CE, UL, Ex, TÜV SÜD

Special terminals	
KL6904-0001	TwinSAFE Logic Bus Terminal, pre-configured ex factory to 15 TwinSAFE connections