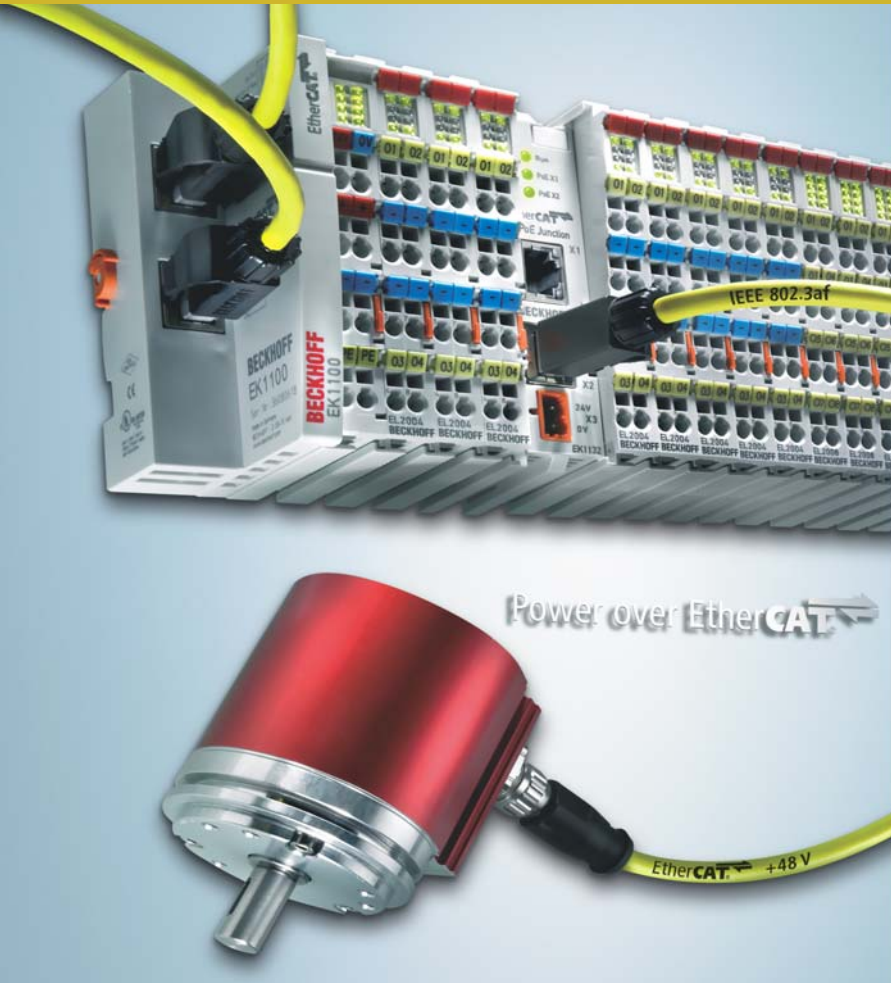


EtherCAT branch terminal for PoE sensors

Power over EtherCAT has arrived

- The EtherCAT I/O Terminal system from Beckhoff takes optimum advantage of the technological features of EtherCAT. To this end, this I/O system has been complemented with an additional terminal: the EK1132 EtherCAT branch terminal that supports Power over EtherCAT, based on the IEEE standard 802.3af. A standard EtherCAT/Ethernet cable is used for the fieldbus signal and the power supply.

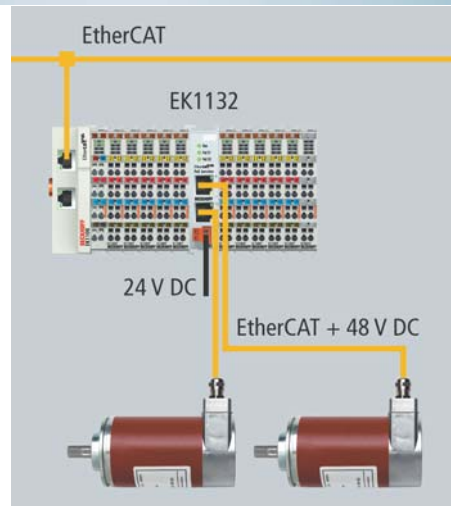


The EK1132 EtherCAT branch terminal is particularly suitable for sensors such as shaft encoders or length measuring devices that can now be connected via a single cable. The sensor supply voltage of 48 V is generated in the branch terminal from the 24 V voltage used as the industry standard. The maximum current input of the terminal devices is 350 mA. The signal and energy transfer takes place on the same wire so four-wire cables can be used. The Power over EtherCAT (PoE) sensors are connected via a 4-pin connector, e.g. M12. The maximum cable length is 100 m.

The EK1132 uses the "resistive power discovery" procedure to determine whether the connected EtherCAT device supports Power over EtherCAT and to which performance class (as defined in the standard) it belongs. If PoE is supported, the supply is enabled. An intelligent power distribution system detects which consumer belongs to which performance class and distributes the total available power (15.4 W) to the connected devices accordingly.

Like the 2-port EK1122 EtherCAT branch terminal, the EK1132 also enables configuration of EtherCAT star topologies. Through TwinCAT and other suitable EtherCAT masters, the EK1132 also supports coupling and uncoupling of EtherCAT devices during operation (Hot Connect).

→ www.beckhoff.com/EtherCAT



Connection of two PoE sensors to the 2-channel EK1132 EtherCAT branch terminal