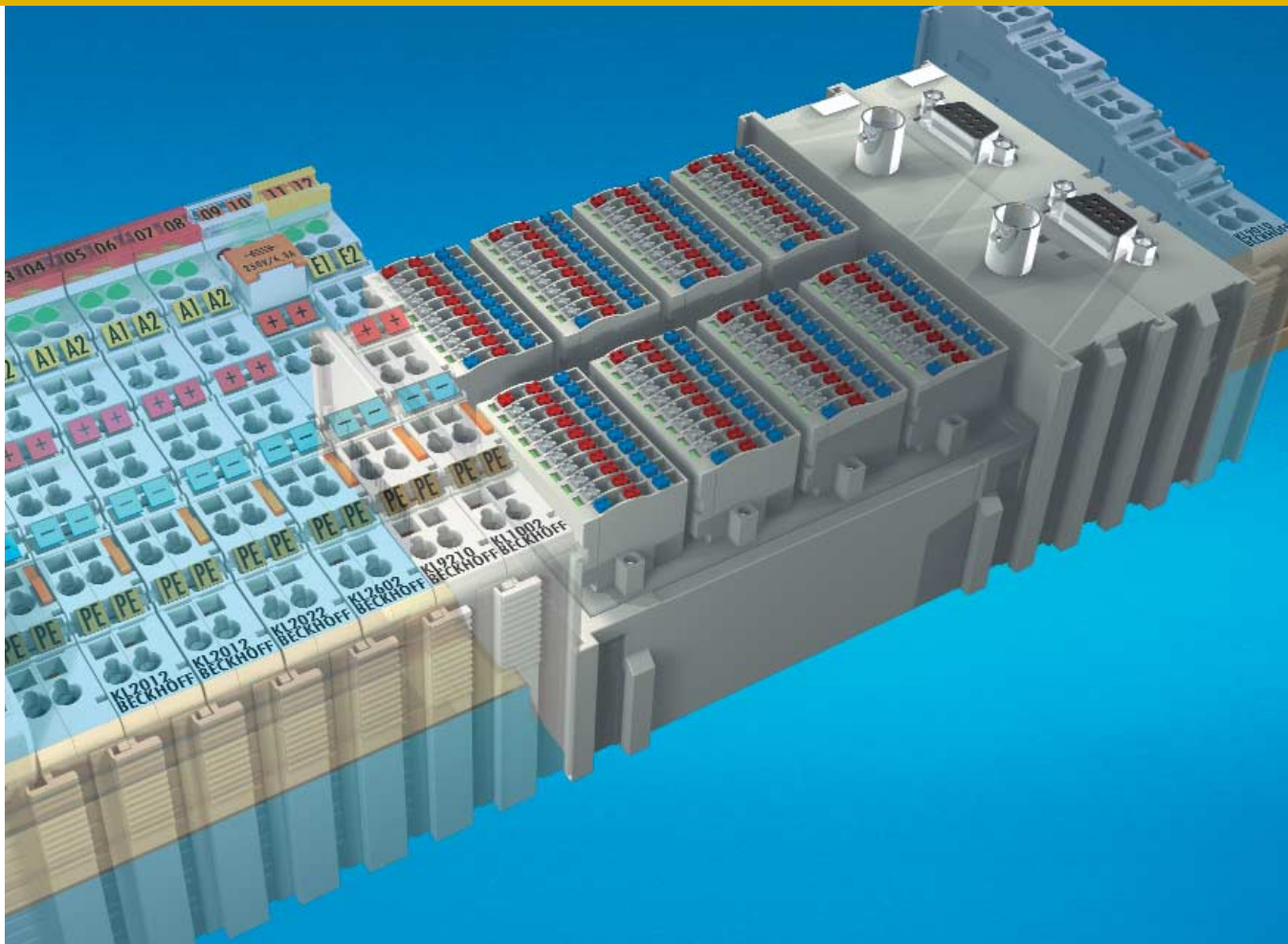


Beckhoff terminal modules open up new areas of application

Terminal modules – the logical extension of the Bus Terminal system

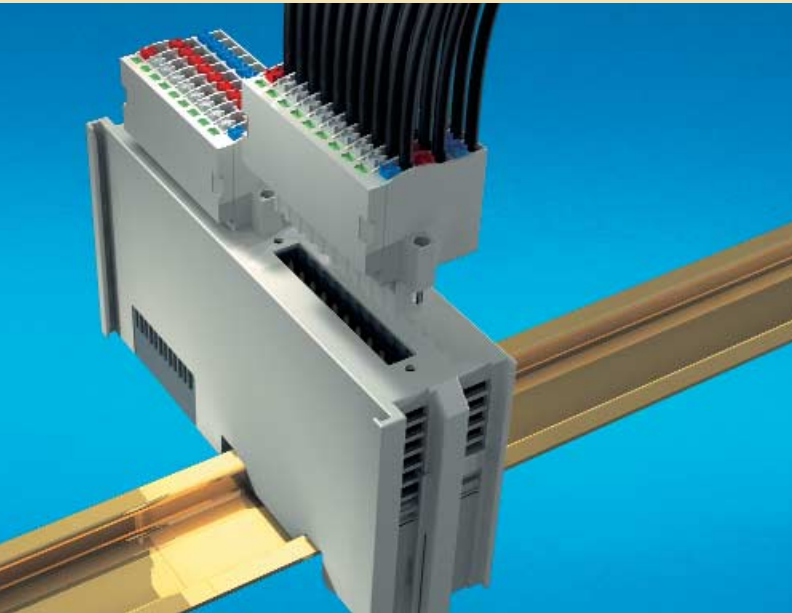
→ More sensor and actuator functionality makes machines and systems more and more powerful. The Bus Terminal I/O system reliably meets increased requirements for I/O signals through its modularity and compact design. The existing Bus Terminal system is now complemented by the KMxxx terminal module with increased packing density. In many areas of application, cost benefits can be realized through lower overall installed size and application-specific signal mix.



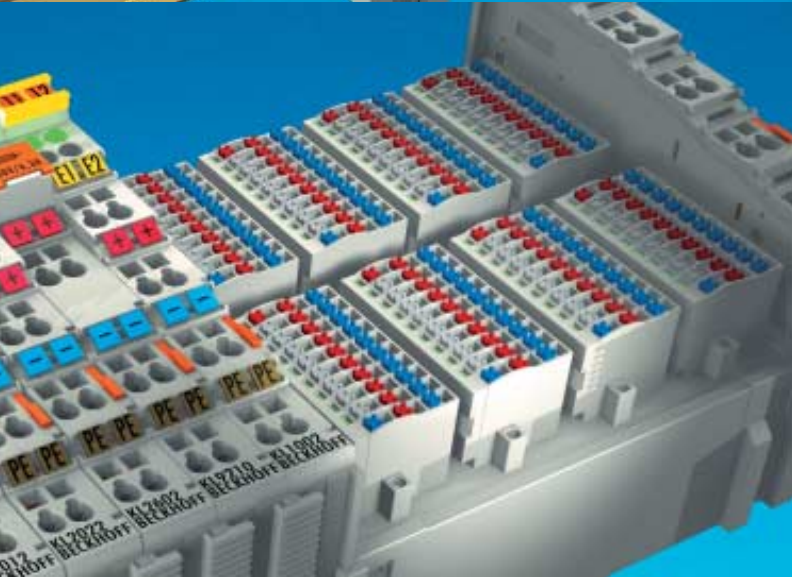
The Beckhoff Bus Terminal is the most open and flexible I/O system for all common fieldbuses. The wide range of electronic terminal blocks covers all I/O channels required in automation applications, from the digital and analog world to the serial interface. The Bus Terminals with 1, 2, 4 or 8 channels are only 12 mm wide and enable bit-precise configuration of the required I/O channels. From the wide range of signals it is possible to tailor a specific solution, as if from a toolkit. The new terminal modules are fully system-compatible. Like the Bus Terminals, they can be operated with any Beckhoff Bus Coupler or Bus Terminal Controller.

Like the standard Bus Terminals, the KM modules are integrated in the I/O system and connected with the internal terminal bus. Bus Terminals and terminal modules can be combined without restriction. Like the Bus Terminals, no tools are required for the wiring since spring-loaded technology is used; however the connection layer is now pluggable. The terminal modules combine 16, 32 or 64 digital inputs or outputs on a very small area. This compact and slimline design enables very high packing densities, leading to smaller control cabinets and terminal boxes.

Plug-in wiring: Variable provision for supply voltage; sensor supply is maintained if connector is pulled; LED directly at the wire.



The new Beckhoff terminal modules for the Bus Terminal system.



Terminal modules – the logical extension of the Bus Terminal system:

- | Full system compatibility
- | Any fieldbus
- | Any signal
- | More compact overall solution
- | Greater signal variety
- | Faster, signal-specific connections

Flexible plug connector: Depending on the connection type, the terminal modules are available with 1-, 2- or 3-pin connector.

Digital I/O modules with up to 64 channels

The KM modules are used, for example, in applications with high demand for standard signal types such as digital I/Os. The very compact digital KM1xxx and KM2xxx input/output terminal modules have 16, 32 or 64 channels. Each I/O connector has 8 inputs or outputs. LEDs integrated into the connector indicate the signal state for each channel directly at the wire. Depending on the connection type, the terminal modules are available with 1-, 2- or 3-pin plug connector and enable connection with 1, 2 or 3 wires.

Customer-specific signal mix

In addition to the standard I/O types, the terminal modules are also available as customer-specific types, e. g. for use in production machines with repeatable I/O combinations. The combination type terminal modules can consolidate typical building automation signal combinations within a single module. This enables smaller size and fewer parts with significant cost savings.

Interface standard in the Bus Terminal

In addition to plug-in wiring, sensor-specific plug connectors such as D-sub, RJ 45 or BNC will in future further simplify the application of the Bus Terminal system. Sensors and actuators with pre-assembled connectors can be connected directly and quickly with the Bus Terminal system. Relay or power modules are also in preparation, which will either be equipped with standard relays or with integrated electronics to connect up to 16 A.

 **Product announcement**

Product announcement: estimated market release 3rd/4th quarter 2004