Decentralized acquisition of intrinsically safe signals (Ex i) from zones 0/20 and 1/21

EPX series EtherCAT I/Os combine IP67 protection rating with intrinsic safety for the first time

With the new EPX module series, Beckhoff now also offers a compact option for Ex i signal acquisition from zones 0/20 and 1/21 as an addition to the wide range of EtherCAT Box modules. With robust IP67 protection, they enable direct and decentralized installation in machines and systems, even in harsh environments. This results in numerous advantages in all areas with explosion protection requirements, both in processing plants and in discrete manufacturing applications.

As a robust alternative to IP20 solutions with their elaborate housing protections, the EPX modules with IP67 protection rating enable reliable data collection, even in hazardous areas where no control cabinet or terminal box can or should be installed.
The extremely compact modular design leads to significant space savings. Furthermore, the previously required safety barriers are no longer necessary, which also saves space and reduces costs.
Additional advantages of the new EtherCAT Box modules are their simple commissioning, the avoidance of errors due to incorrect contact assignments, and the system modularization facilitated by on-site signal acquisition.

Beckhoff Automation GmbH & Co. KG
Huelshorstweg 20
33415 Verl, Germany
Phone: +49 5246 963-0
E-Mail: info@beckhoff.com
www.beckhoff.com

Press contact
Silke Franke
Vera Schnatmeyer
Phone: +49 5246 963-140
E-Mail: press@beckhoff.com
www.beckhoff.com/press

The EPX series initially comprises three modules with four or eight input channels:

– EPX1058 is designed for direct connection of up to eight intrinsically safe NAMUR field devices and records their signals pursuant to IEC 60947-5-6. In addition to the switching state, open circuit or short circuit is also detected. Channel by channel, it is possible to select whether a positive or negative switching sensor is connected, so that both NAMUR normally open/break contacts and NAMUR normally closed/make contacts can be integrated into the control system without changes in the program. Potential-free contacts can also be used.
– EPX3158 supplies a maximum of eight measuring transducers located in the field and transmits their analog 4...20 mA measuring signals, electrically isolated, to the automation device. Appropriate 2-wire and 3-wire sensors can be connected. With a technical measuring range of +107% of the nominal range, this EtherCAT Box also supports commissioning with sensor values in the limit range and evaluation according to NAMUR NE43. Any overload or wire break is signaled by LEDs.
– EPX3184 for connection of up to four intrinsically safe HART-capable field devices provides information on the state of HART communication via LEDs and signals any communication errors. HART connectivity enables two-way communication via the analog 4...20 mA wiring and can also be used for the FDT/DTM concept. Field device DTMs can be directly integrated into the TwinCAT engineering environment via the TwinCAT FDT Container.

➔ **www.beckhoff.com/epx**

Beckhoff Automation GmbH & Co. KG
Huelshorstweg 20
33415 Verl, Germany
Phone: +49 5246 963-0
E-Mail: info@beckhoff.com
www.beckhoff.com

Press contact
Silke Franke
Vera Schnatmeyer
Phone: +49 5246 963-140
E-Mail: press@beckhoff.com
www.beckhoff.com/press

Press picture:

Picture caption:

The new EPX module series for direct connection of intrinsically safe field devices is initially comprised of three I/O device versions.

Press kit:

www.beckhoff.com/media/downloads/press/pr042022_beckhoff.zip

Beckhoff Automation GmbH & Co. KG
Huelshorstweg 20
33415 Verl, Germany
Phone: +49 5246 963-0
E-Mail: info@beckhoff.com
www.beckhoff.com

Press contact
Silke Franke
Vera Schnatmeyer
Phone: +49 5246 963-140
E-Mail: press@beckhoff.com
www.beckhoff.com/press