Compact drive technology – space-saving, system-integrated and safe

The servo terminals in the Beckhoff EtherCAT Terminal system integrate a complete servo drive to facilitate highly dynamic positioning tasks in a standard I/O terminal housing. With the new EL72x1-9014 version, STO (Safe Torque Off) safety functionality is now available in an extremely compact terminal design for DIN rail installation. The new servo terminals enable space-saving drive solutions with safety-related functions that can be directly integrated within the EtherCAT Terminal system.
The EL72x1-9014 servo terminals streamline the implementation of STO (Safe Torque Off) safety functions, corresponding to safety level Cat 3/PL d, according to EN ISO 13849-1:2015. In conjunction with One Cable Technology (OCT), safety integration in an I/O terminal form factor results in a heightened ability to implement space-saving and cost-effective solutions with safety-related drive functionality. In addition, a 2-channel shut-off with corresponding contactors in the motor cable provides a considerable reduction in cabling, space requirements and cost; a single cable connects the safety output (e.g. EL2904) and the STO input of the servo terminal. In addition, the OCT solution minimises cable costs and space needed for the motor connection.

The EL7201-9014 variant comes in a 12 mm terminal housing and supplies an output current of up to 2.8 ARMS, while the 24 mm EL7211-9014 version can supply a maximum of 4.5 ARMS. Both are suitable for powering servomotors from the AM8100 series. The integrated electronic type plate of the AM8100 motors can be read-in automatically by the servo terminals, simplifying commissioning considerably.