Controller for machine automation

Eckelmann (Germany) produces the CANopen-capable EXC controller platform with selectable processor performance, memory and programming. The EXC66 model is suited for CNC (ENC66), PLC (ELC66) and motion (EMC66) control applications.

THE ELC66 IS PROGRAMMABLE WITH CODESYS (IEC 61131-3 compatible). The EMC66 provides an additional motion library for up to 64 axes according to PLCopen. The ENC66 includes an additional NC operating system, a standard HMI (human machine interface) for PCs, and NC programming for 16 axes. The device offers four galvanic isolated CAN interfaces (e.g. for CANopen I/O modules, drives or operator panels) on RJ45 connectors with pilot LEDs. It also features a real-time clock. A 16-MiB Flash for programming and a 64 MiB SDRAM with 512 KiB battery-buffered RAM for data are available. Memory extension is possible via an SD card slot and a USB interface. The controller may be programmed via the EIA-232 and Ethernet interfaces. It also provides a 7-segment LED for status and error messages. The IP20-rated device with dimensions of 45 mm x 100 mm x 115 mm may operate at temperatures from 0 °C to +50 °C.

The company is offering an export version of the EXC66 controller that may be exported to countries outside the EU without a permit. The functional scope of the export version is, pursuant to 2D002 (export list category according to the European/German export list), limited to a maximum of four interpolating axes for simultaneous contouring control; according to EU and German law no permit is required for this. A total of eight axes are available, enabling the control of e.g. additional four auxiliary axes or four gantry axes on machine portals. Thus, the occasionally time-consuming permitting procedures handled by the Federal Office of Economics and Export Control (BAFA) are omitted and delivery times are shortened.