EPC3000 Programmable Controller V3.03 Released

We are pleased to announce the release of V3.03 product firmware for the EPC3000 programmable controllers. V3.03 supports for many new options ;

• BACnet slave (TCP/IP communications)
• EtherNET/IP Server communications,
• 20 x 8 Segment Programmer (P20)
• Enhanced tool kit blocks, including the LIN16 function block
• OEM Security option
• 8 Gain Scheduling sets
• Two new hardware variants
  o 8 Digital Inputs/Outputs without PV2
  o 4 Digital Inputs/Outputs with Ethernet without PV2

BACnet Slave (TCP/IP)

BACnet is a data communication protocol developed by ASHRAE. BACnet is known as ANSI/ASHRAE standard 135-2008 and as the international standard ISO 16484-5. Its purpose is to standardize communications between building automation devices from different manufacturers, allowing data to be shared and equipment to work together easily.

BACnet has been designed specifically to meet the communication needs of building automation and control systems for applications such as heating, ventilating, and air-conditioning control, lighting control, access control, and fire detection systems.

EtherNET/IP Server (TCP/IP)

With the EtherNET/IP Server option, the EPC3000 range can be easily integrated with an existing instrument network and provide precision control to a PLC. EtherNet/IP Server (slave) is available in firmware versions V3.03 and above. The controller has been conformance tested to CT15. EtherNet/IP (Ethernet/Industrial Protocol) is a 'producer-consumer' communication system used to allow industrial devices to exchange time-critical data. Such devices range from simple I/O devices such as sensors/actuators, to complex control devices such as robots and PLCs. The producer-consumer model

allows the exchange of information between a single sending device (producer) and a large number of receiving devices (consumers) without having to send data multiple times to multiple destinations.

Additional 20 x 8 Segment Programmer

V3.03 provides support for the optional 20 X 8 Advanced Programmer (Twenty programs of 8 segments with up to 8 event outputs)

Enhanced Tool kit blocks

When enabled, the enhanced toolkit block option increases the available number of Logic, Math, Counter and Timer blocks.

OEM security

The OEM security option allows users, typically OEMs or distributors, to be able to protect their intellectual property by preventing unauthorized cloning of configurations via iTools. This feature includes application specific internal (soft) wiring, limited access to certain Configuration level and Operator level parameters either via comms (by iTools or a third party comms package) or via the instrument's user interface.

8 Gain Scheduling Sets

Some processes exhibit non-linear dynamics. For example, a heat treatment furnace may behave quite differently at low temperatures than at high temperatures. This is commonly due to the effects of radiant heat transfer, which occurs at around 700℃.. It is often impractical, then, for a single set of PID tuning constants to perform well over the entire process operating range. To combat this, several sets of tuning

constants can be used and 'scheduled' according to the process operating point. Two gain scheduling sets are supported as standard, with the release of V3.03, eight sets can be enabled should the option be ordered.

LIN16 function block

A LIN16 function block converts an input signal into an output PV using a series of up to 14 straight lines (16 points) to characterize the conversion.

Two new hardware variants

This release also provides two new hardware options for the EPC3004/3008 controllers; D8 (8 Digital Inputs/Outputs without PV2) and E4 (4 Digital Inputs/Outputs with Ethernet without PV2). Note: PV2 can be enabled at any time in the field using a feature passcode ordered using EPCUPG.