



EDI-V7 ELECTRONIC DISTRIBUTOR CONTROL



Bulletin EDC-16

EDI-V7 ELECTRONIC DISTRIBUTOR CONTROL

The patented EDI-C7 system is the most advanced distributor control on the market. First introduced in 1994, this control has evolved a rich set of operator friendly and highly intelligent operating features that set it apart from all others. No longer are numerous limit switches and the associated expensive wiring required. With no individual switch adjustments to make and maintain, installation and setup is a breeze. In the standard configuration for stand alone operation, there is nothing else to buy.

Our EDI-C7 system consists of an efficient and compact drive and reading mechanism at the distributor that assures low maintenance and all weather operation. A 3-phase fractional horsepower motor and torque limited gearing provide highly reliable and rapid positioning, yet can handle mechanical jams without damage to any of the drive components.

The distributor drive is operated by the EDI-C7 electronic control. This control is a major upgrade to the earlier versions of our EDI controls. Building on the success of its predecessor, the EDI-C7 is a complete re-design of the electronic and electrical components using the latest in microprocessor, memory and drive components.

When using the optional UIO interface module, you can easily integrate the EDI control with a PLC or computer so that one or many distributors can be operated from a single industry standard communication port. The most important feature when doing this is that the PLC only requests a position. The distributor control is responsible for all of the moving and reporting of the spout position, eliminating this burden from the PLC. The UIO allows many protocol options for PLC communication.

These powerful features provide the utmost in reliability, versatility and precision control for our complete line of EDI distributors.

OPERATION

Operator control is performed at the easily readable keypad/display terminal on the face of the enclosure.

The EDI-C7 control is dust proof and weather proof and is featured with the same highly visible; VFD 4-line display and 20 key keypad but now in a smaller footprint. This panel mounted unit incorporates the entire EDI control including communications circuitry.

The EDI-C7 allows you to name your positions and access numbers for each spout outlet but now there is an added **Spout Directory** key so you can look through the on screen list to find the position you want. A new **Menu** key allows direct access to many of the customizing functions available in the C7 control.

When directed to move to a new position, the spout moves in the direction of the shortest route.

Remote terminals are available if it is necessary to control the distributor from multiple locations.



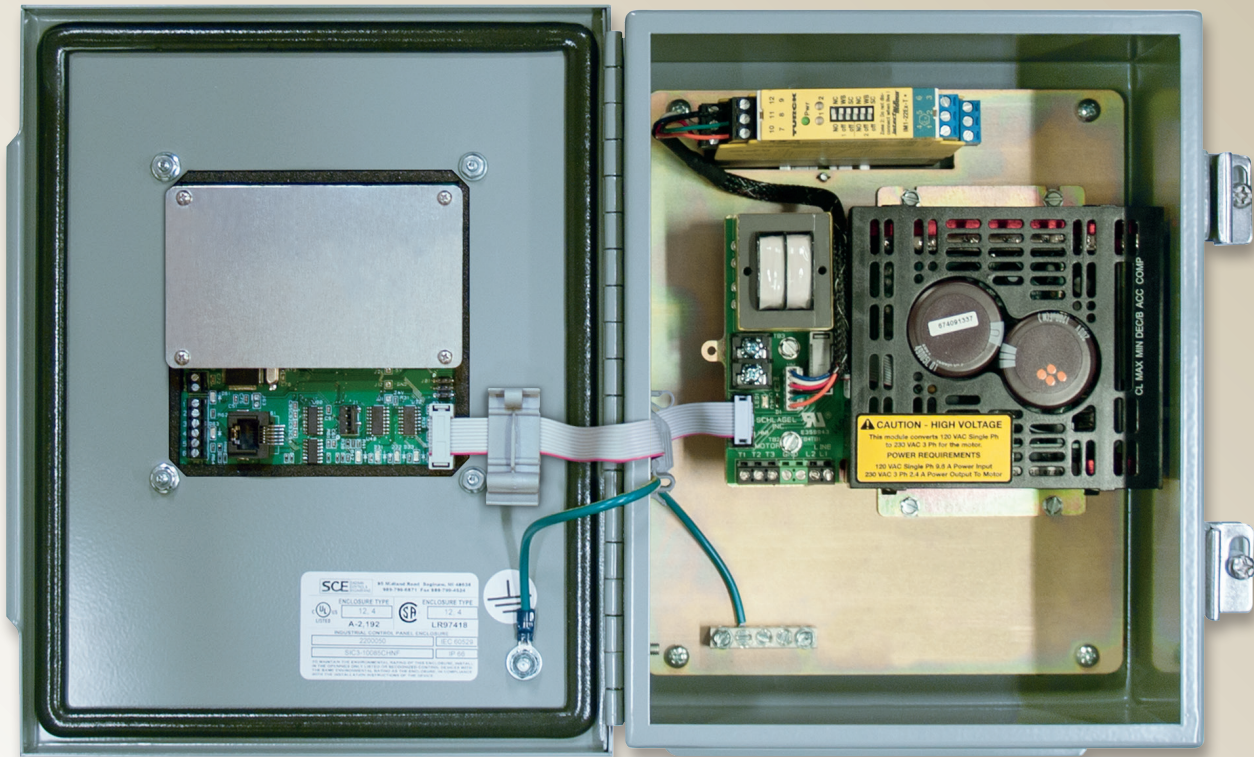
RELIABILITY

Knowing that the distributor, located hundreds of feet from the operator, will position accurately and hold in place during operation is the most important attribute of the design. When moving the spout to another position, error checking is taken into consideration in every facet of the operation, making sure things are working properly during the move, that it stops properly in the requested position and that it stays in position while in use. All errors are alarmed promptly on the display. A single distributor has been subjected to millions of moves during the testing and development of the C7 control. This was done without a single error and no preventative maintenance was performed during the test.

Faster, smarter and reliable are the trademarks of the EDI-C7 control. The list of C7 features is too lengthy to enumerate here but they are all available if you decide to upgrade your older control.

Along with industry leading technical support we are committed to keeping a very critical part of your operation up to date with the latest technology.

THE COMPLETE CONTROL



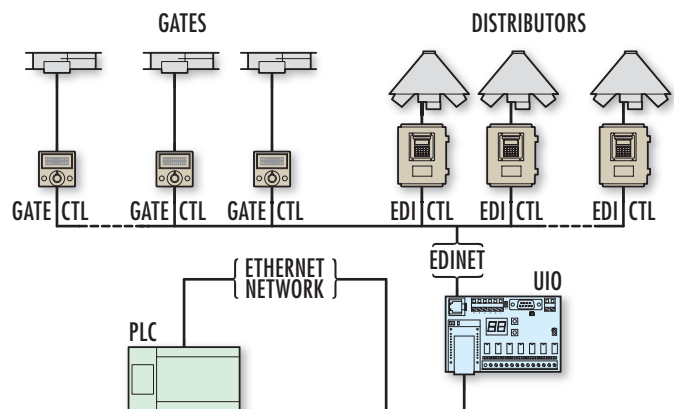
The EDI-C7 is a Complete Control System. All of the necessary components are pre-wired in a 8" x 10" x 5" NEMA 12 enclosure. With the C7 terminal the NEMA 12 rating is preserved. Just supply 120 volts to the control, 3-phase wiring to the motor, and 4 wires from the two intrinsically safe sensors at the distributor back to the control. It makes no difference whether it is a 3 duct or 62 duct distributor, the wiring is the same. No other electrical control equipment is necessary except for the safety devices required by code. C-US-UL Listed panels are available on special order.

Once properly wired, the control automatically determines the type of distributor, number of ducts and spout location adjustments. It then presets default names and numbers for each position. Once the positioning is verified at the distributor, it is ready for years of trouble free service.

AUTOMATION

The EDI-C7 is designed around the fact that plant automation is becoming a necessity instead of just a convenience. The UIO sits between the PLC and multiple EDI distributor and/or VGC gate controls. The UIO then talks directly to PLCs using a serial or Ethernet connection. Many PLC protocols are supported so that operation of the distributors is performed without writing a single rung of PLC code. Most importantly, any error information is communicated from each distributor to the PLC so the necessary remedial action may be taken.

The EDI-C7 network is fully compatible with existing EDI networks. Any distributor with an earlier version of the EDI control may be upgraded to take advantage of the C7 features.



EDI-C7 CONTROLS FEATURE FIELD UPGRADABLE FIRMWARE AS NEW FEATURES ARE ADDED. PLEASE CONTACT US FOR DETAILS ON THESE UPGRADES.

OPTIONS AND ACCESSORIES



UNIVERSAL I/O (UIO)

The Multi-function UIO Interface Module can handle digital switching as well as network control. It can communicate directly to PLCs using serial or Ethernet media and several language protocols including DF1, Modbus-RTU, Ethernet/IP and Modbus/TCP. It can also be used for direct digital switching of relays, starters, alarms, solenoids or other discrete plant devices.

REMOTE KEYPAD/DISPLAY KIT

This kit will allow a second EDI keypad/display to be mounted remotely from the control cabinet. Use this accessory when it is necessary to operate the EDI Distributor from more than one location. The kit includes the EDI display console and adapter. A display mounted in a 8" x 10" NEMA 12 enclosure is also offered.

WIRING ACCESSORIES

We have the cables and hubs required for a complete EDINet installation. The cables have RJ-12 plugs on each end and come in stock lengths of 5', 10' and 25' and 50' lengths. Hubs are available with 6 or 12 ports.

DESKTOP SIMULATOR

Simulators are available for a 30 day period to assist you in the configuration and programming of the UIO and PLC prior to site installation. A fully refundable deposit is required.

The simulator shown includes an EDI-C7 distributor control, VGC-V2 gate control and a UIO scanner with an Ethernet port. Our technical support team is available to answer any questions you may have regarding the simulator.

COMPATIBILITY

The C7 control will work on any EDI distributor we have produced. It is smaller than previous models but can be supplied in a back plane that will fit into your existing enclosure.

A new motor is generally used but you can use your existing motor if you remove the brake components and rewire it to accept 230 volts, 3 phase.

3 phase motor power is no longer supplied to the control. Instead, a 120 volt 10 Amp supply powers the entire EDI drive, the control electronics create the 3 phase power of the motor.

For further information about this product scan the QR code for the installation and operation manual.

INSTALLATION



OPERATION



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