

E6 Programmable Sequencer

Industrial Dust Collection and Air Filtration

The E6 is a new generation timer designed with smart maintenance functions. The 6 output timer is controlled with a intuitive three button digital menu and can control up to 16 outputs when connected to the optional extension card. Available as a stand-alone timer, or with an enclosure to suit the surrounding environmental requirements, the E6 is a solid state sequencer designed to provide an adjustable pulse to operate pilot valves in Reverse Jet Pulse Dust Collectors.

Operational benefits

When compared to a basic analogue timer with manual dials the E6 digital programmable sequencer has a number of operational benefits for the user.

The first is the accuracy of the on and off times. On a basic timer the manual analogue dials only approximate values due to the coarseness of the resistive dials. This results in incorrect on and off times and increased air consumption or results in ineffective cleaning. The E6 screen, three buttons and digital processing software allows the user to exactly specify these parameters improving operational efficiency.

The second is the identification of faulty solenoid coils in either short or open circuit. A coil in short circuit can damage a normal controller due to over current and a coil in open circuit will result in ineffective cleaning as the entire row of bags will not pulse. An alarm notification is shown on the E6 screen or raised over external alarms.

The E6 also has a number of connection and communication features not found on other basic timer controllers. The user can benefit from multiple alarm output connection options such as ModBus RTU or connecting the output relay to a PLC system to raise an alarm.



Features

- Digital, solid state timer with LCD interface
- User adjustable on and off time settings
- Displays countdown timer and next valve to pulse on HMI screen
- Maintenance mode allowing single valve pulsing for fault diagnosis
- Electronic fault detection on each solenoid valve (short and open circuit detection)

The E6 timer controller to the left is shown mounted in a polycarbonate enclosure with 5

E10 SPECIFICATIONS

TIMER

- Number of valves..... 1 - 6
- Maximum number of valves Up to 16 with optional extension card
- ON time..... 50 - 999 ms
- OFF time 1..... 1 - 999 s
- Pulsing mode..... Sequential
- Clean after shutdown..... 1 - 255 cycles

INPUTS

- Power Supply 110/240 VAC or 24 VDC. 12VDC & others by request.
- One (1) sensor Digital (dry contact) or analogue (4-20 mA)

OUTPUTS

- Solenoid valves 110 to 240 VAC or 24 VDC
- One (1) configurable alarms Dry contact (NO/NC)

EXTENSION BOARDS

- Up to 10 output each
- Up to 1 slave card
- RS 485 2 wire (master and slave communication)

DISPLAY - alphanumeric

- System status—Halted or Pulsing
- Number of the next valve to trigger
- Valve error
- Active alarms

ALARMS - standard

- Solenoid failure
- Broken filter row General or Critical

Configurable*

- Air flow
- Auxiliary
- Header pressure
- Hopper Temperature etc...

COMMUNICATIONS

- Modbus RTU

SIZE

- | | PCB only | ABS / Polycarbonate |
|----------------|-------------|---------------------|
| - Height | 150mm (6") | 180mm (7.2") |
| - Width | 120mm (10") | 180mm (11.6") |
| - Depth | 50mm (2") | 75mm (5.2") |
| - Weight | 0.3Kg (1pd) | 0.5Kg (1pd) |

* A broad range of specialist sensor/alarm configurations can be accommodated, call for details

PTronik master controllers, designed and manufactured in Australia, are supplied as PCB only or in either explosion proof EXtD, ABS, Polycarbonate, mild or stainless steel enclosures, with or without solenoid valves fitted and are manufactured to international quality standards: ISO9001:2008.