



SYSTEM OVERVIEW

- *The KX range is designed to serve reverse jet dust extraction systems and formulated specifically to address their needs .
The KX7404 Valve Controller is intended for small (up to 4 valves) installations but incorporates many of the features only found in much larger systems. The unit offers the latest in Microprocessor technology in a compact enclosure, affording unparalleled levels of user friendliness, system flexibility, and tamper-proof operation.*
- *The KX7404 Valve Controller takes care of system control. Using just four push buttons and the high resolution LCD Display, all aspects of system operation can easily be programmed for optimum performance. A tamper-proof version of the Controller is available.*

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Features

ADVANCED MICRO-PROCESSOR CONTROL.

- Operating at over a million instructions per second the onboard micro-processor provides ease of use and a level of control which was virtually impossible with old plc or Cmos systems.

ONBOARD EPROM MEMORY

- Ensures system settings are retained during power failure or disconnection of the Master Controller

EASY TO USE 4 BUTTON CONTROL

- **MODE:** Move forward through options
- **UP:** Increases values selected by mode
- **DOWN:** Decreases values selected by mode
- **START/STOP:** Run or halt the system

HIGH RESOLUTION LCD DISPLAY

- Easily view and adjust system setup.
- Displays pressure readings in real time.
- Monitor system status

BUILT-IN DIFFERENTIAL PRESSURE SENSOR

- The KX7404 has its own internal differential pressure sensor. This allows display of and reaction to differential pressure changes without the need for additional hardware and electrical connections.

REAL TIME SYSTEM MONITORING

- Whilst the system is running, Differential Pressure and system status can be monitored in real time. Differential pressure is displayed constantly whenever the Controller is active along with the number of the valve currently being pulsed in the cleaning sequence. One quick glance at the display will tell the operator system status and position in the cleaning cycle.

BUILT-IN OUTPUT AMPLIFIERS AND POWER SUPPLY

- The unit has its own internal 24 Volt Power supply. Power output to solenoid valves is provided directly from the controller using the internal power amplifiers.



**CIRCUIT
CONTROL
TECHNOLOGY**

CONTROLLER:

Part Number KX7404.

INPUT SUPPLY:

115 - 230 V +10% -15% @ 50/60HZ.

INPUT FUSES:

Fuse 1: 1 Amp 230 V HBC 20mm .

VALVE OUTPUT FUSE:

Fuse 2: 2 Amp 24 V HBC 20mm.

INPUT CONNECTIONS:

6-Way 1.5mm 16 Amp top entry plug and socket insulated terminal block which is marked: 110, Neut, 230, E (Earth), 5V, FAN

MAINS FAILURE:

In the event of mains failure, the unit will operate to specification as soon as the voltage level comes within the above limits.

OUTPUT VOLTAGE:

24Vdc, regulation as input.

OUTPUT LOAD PER OUTLET:

36W continuous, 44W pulsed into solenoid valves.

I.O. CONNECTIONS:

8 way 1.5mm 16 Amp top entry plug and socket insulated terminal block which is marked: 01, C1, 02, C2, 03, C3, 04, C4.

START UP SEQUENCE:

The unit is arranged so that it will always start at output 1.

PRESSURE SCALE:

0 - 700mmWG.

CONSTRUCTION:

Solid state microprocessor components mounted onto a double sided glass fibre P.C.B. with component mask.

INDICATION:

Valve Numbers 1-4 will be displayed as each output is energised in sequence.

AMBIENT TEMPERATURE AT BOARD SURFACE:

-10 to +45 deg.C. Storage Temperature: -20 to +70 deg.C.

VIBRATION SPEC:

Not greater than BEAMA Group 2.

CONDUCTING MATERIALS:

Standard PCB's can be supplied with their surfaces coated with a layer of Parylene C. This material is to MOD standard 59-47/4, and MIL-1-46 and reduces the risk of damage through moisture.

MICRO-PRO SEQUENCER:

Hinge opening Polycarbonate box to IP65 with clear LCD viewing window. Lower panel with 2 retaining screws houses terminals. Size 195 x 94 x 160mm.

CCT reserve the right to change or revise product specifications at any time without prior notification.

Programmable features

The following is a flow chart of the programmable settings available on the KX7404 Valve Controller. The options available in each mode are explained in an easy to follow format.

