CIRCUIT CONTROL TECHNOLOGY

Product Data Sheet

KX6400

Differential Pressure Monitor

OVERVIEW

■ *The **KX6400 Differential Pressure Monitor** is one of the latest additions to our current range of advanced Microprocessor controlled peripherals. Aimed at Dust Extraction and Air Flow applications, the Monitor unit has an intelligent control system and via the high resolution LCD display and it's push button controls, the user may easily set it's modes of operation in a way that is intuitive and less prone to error.*

The relay activated output stage on this unit allows external devices or systems to be triggered by the unit, this control relay is turned on and off when the user defined high and low pressure states are reached, a further two relays are activated by user defined high and low alarm conditions. This allows separate handling of normal pressure ranges and either excessively high or low pressure situations. The KX6400 can be used in conjunction with a remote pressure sensor such as our ZX41 unit this enables pressure readings to be taken externally as well as via the units internal sensor. The unit has it's own on-board eprom memory that saves user settings prior to disconnection or power failure ensuring seamless operation at all times. Attractively packaged & weather-proof to IP65 specifications , the unit may be used with many systems and where ever versatile and accurate DP monitoring is required.

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Features

ADVANCED MICRO-PROCESSOR CONTROL

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

FOUR PRESSURE SCALES

- The KX6400 Differential Pressure Monitor allows reading across four different pressure scales 0-100, 0-250, 0-700 mm of water and 4-20 Milliamps, this allows matching of the units input to an external source. The KX6400 introduces the option to take differential pressure readings internally, when this mode is selected only the 0-700 mm WG scale is used. Where external readings are needed our range of ZX41 remote pressure sensors operate across the 0-100, 0-250 & 0-700 mmWG DP pressure ranges and are guaranteed to be 100% compatible with the KX range.

ONBOARD EPROM MEMORY

- Ensures system settings are retained during power failure or disconnection of the Monitor Unit.

EASY TO USE 3 BUTTON CONTROL

- MODE: Move forward through options
- UP: Increases values selected by mode
- DOWN: Decreases values selected by mode

HIGH RESOLUTION LCD DISPLAY

- Easily view and adjust system setup.
- Displays pressure readings in real time.
- Alarm warnings displayed on screen.

HIGH/LOW PRESSURE ALARMS

- In addition to the standard output relay, the KX6400 Differential Pressure Monitor has a further two relay outputs. These are activated when the differential pressure in the system reaches the user defined settings for a high alarm or low alarm situation.
- The relay outputs may be used to trigger any amount of external events and allow the system malfunction to be handled immediately and effectively. The dual relay system means that high and low pressure events may be handled differently and trigger a separate chain of events to warn of, and handle the situation.
- The units LCD display will carry a warning message if high or low pressure alarm levels are reached.

INTERNAL & EXTERNAL READINGS

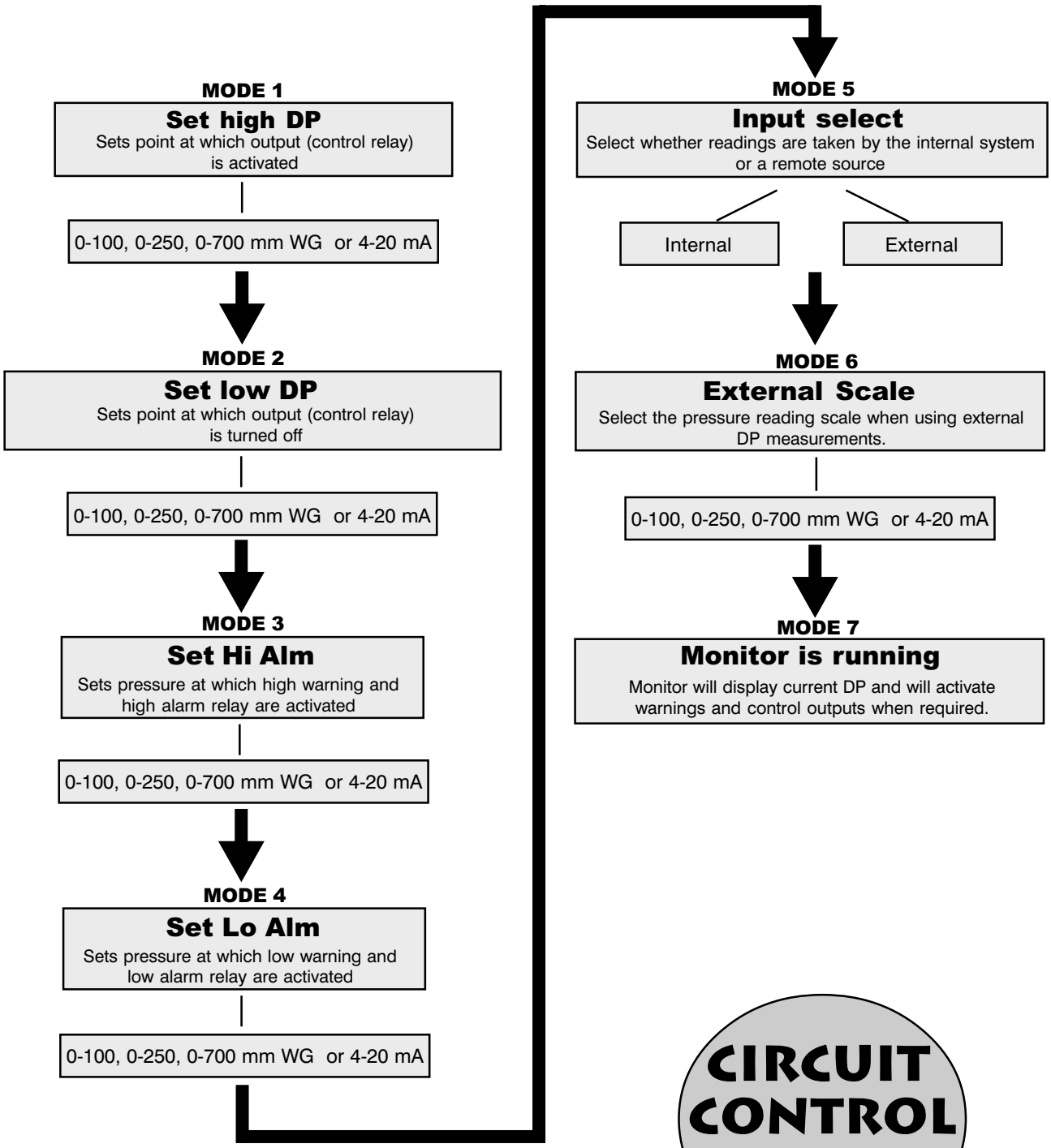
- The KX6400 Differential Pressure Monitor may be set to take pressure readings from it's own internal system or alternatively a remote source.
  From time to time an installation may require that the KX6400 Differential Pressure Monitor unit is located so as to allow easy access for an operator. This can occasionally mean installation quite some way from where the actual reading must be taken. In this case, any external sensors can be connected to and read by the unit.
- Where external readings are needed we recommend the use of our ZX41 remote pressure sensors. These operate across the 0-100, 0-250 & 0-700 mmWG DP pressure ranges and are guaranteed to be 100% compatible with the KX range.
  The ZX41 has the additional benefit of being 2 wire loop powered directly from the KX Monitor unit and unlike some available units, does not require a power supply of it's own.

4-20 MILLIAMP OUTPUT

- As well as it's relay activated output stage, the unit features a 4-20 mA output which may be used to send pressure information to other devices or system controllers. This feature enbles the KX6400 Differential Pressure Monitor to communicate with any device that will accept this type of input and allow integration into virtually any application.

Programmable features

The following is a flow chart of the programmable settings available on the KX6400 Differential Pressure Monitor. The options available in each mode are explained in an easy to follow format.



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Technical Specifications

UNIT:	Part Number KX6400.
INPUT SUPPLY:	115 - 230 V +10% -15% @ 50/60HZ.
INPUT FUSES:	500mA 230 V HBC 5mm x 20mm .
POWER SUPPLY:	6-Way 1.5mm 16 Amp top entry plug and socket insulated terminal block which is marked: POWER IN, AC VOLTS, E (Earth), N (Neutral) 115, 230.
OUTPUT CONNECTIONS:	2 x 12 Way 1.5mm 16 Amp top entry plug and socket insulated terminal block which is marked: LOW ALARM: RLA1A (NC, COM, NO) RLA1B (NO, COM, NC), HIGH ALARM: RLA2A (NC, COM, NO) RLA2B (NO, COM, NC), CONTROL: RLA3A (NC, COM, NO RLA3B (NO, COM, NC), 4-20 mA LOOP: (LOOP OUT, 0V,+, LOOP IN: 0V, +, 12V+).
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.
START UP SEQUENCE:	The unit is arranged so that dP reading and output control will start immediately.
DIFFERENTIAL PRESSURE CONTROL:	The microprocessor uses a single analog input for external readings.
PRESSURE SCALE:	0 - 100, 0 - 250, 0 - 700mmWG and 4-20 mA. (Internal 0-700 only).
CONSTRUCTION:	Solid state microprocessor components mounted onto 3 double sided glass fibre P.C.B.'s with component legend.
INDICATION:	High resolution LCD.
AMBIENT TEMPERATURE AT BOARD SURFACE:	-10 to +45 deg.C.
STORAGE TEMPERATURE:	-20 to + 70 deg.C.

CCT reserve the right to change product design and specifications at any time and without prior notification.