

# Product Data Sheet

## KX6300dc[\*\*\*\*\*]

### Differential Pressure Sensor

0-100mm WG, 0-250mm WG, 0-700mm WG



## O V E R V I E W

- *The **KX6300dc Differential Pressure Sensor** is the latest in our range of advanced Microprocessor controlled peripherals. Aimed at Dust Extraction and Air Flow applications, the Sensor unit has an intelligent control system and via the high resolution LCD display and its 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 function may be set to produce a latched output and high alarm signals across 2 relays, our KX7400 Master Controller may be set to use this input or many other similar systems inc alarms may be triggered by this means. The **KX6300dc** can be used in conjunction with a remote pressure sensor such as our ZX41 unit, enabling pressure readings to be taken externally or via the internal sensor (factory set). The unit has on-board eeprom 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.*

## Contents

Features	2
Programmable Features	3
Technical Specifications	4
Technical Drawing	5

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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.

## THREE PRESSURE SCALES

- The KX6300dc Differential Pressure Sensor allows reading across three different pressure scales 0-100, 0-250 & 0-700 mm of water (factory set). This allows matching of the units input to an external source. The KX6300dc introduces the option to take differential pressure readings internally across the 0-100, 0-250 & 0-700 mm WG DP (factory set) pressure ranges. Externally, our range of ZX41 pressure sensors operate across the 0-100, 0-250 & 0-700 mm WG 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 Sensor 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.

## HIGH ALARM & LATCHED OUTPUT

- The relay activated output is set to produce a latched output. When high pressure setting is reached, this remains present until the low pressure setting is reached.
- High Alarm output is activated across the second relay when high alarm set point is reached and deactivated when a reading below the high point is reached.
- Using these two types of outfit from the unit, many types of external systems can be activated and run by the Sensor Unit.

## INTERNAL OR EXTERNAL READINGS (FACTORY SET)

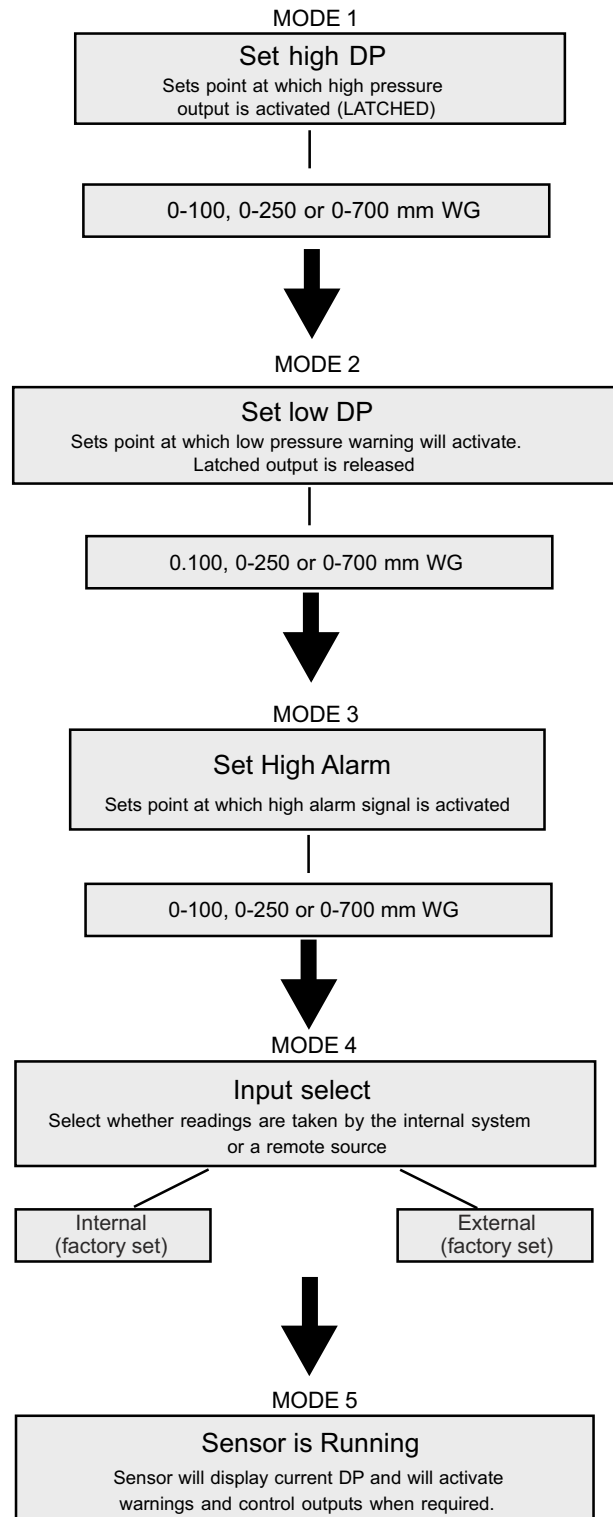
- The KX6300dc Differential Pressure Sensor may be set to take pressure readings from its own internal system or alternatively a remote source. From time to time an installation may require that the KX6300dc Differential Pressure Sensor unit is located so as to allow easy access for an operator. This 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 mm WG DP pressure ranges and are guaranteed to be 100% compatible with the KX range of sensors. The ZX41 has the additional benefit of being 2 wire loop powered directly from the KX sensor unit and unlike some available units, does not require a power supply of its own.

## 4-20 MILLIAMP OUTPUT

- As well as its 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 enables the KX6300dc Pressure Sensor 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 KX6300dc Differential Pressure Sensor. The options available in each mode are explained in an easy to follow format.



# Technical Specifications

UNIT :	Part Number KX6300dc-100-INT (for 0-100 WG internal) Part Number KX6300dc-250-INT (for 0-250 WG internal) Part Number KX6300dc-700-INT (for 0-700 WG internal) Part Number KX6300dc-100-EXT (for 0-100 WG external) Part Number KX6300dc-250-EXT (for 0-250 WG external) Part Number KX6300dc-700-EXT (for 0-700 WG external)
INPUT SUPPLY:	24VDC $\pm$ 10%
INPUT FUSES:	Fuse: 500 mA Axial type
POWER SUPPLY:	OV 24VDC
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 (in Internal & External Mode).
DP PRESSURE CONNECTIONS:	2 x 5mm (outside diam) pneumatic compression connectors suitable to accept nylon hose.
CONSTRUCTION:	Solid state microprocessor components mounted onto a double sided glass fibre P.C.B. with component legend.
INDICATION :	High resolution LCD.
AMBIENT TEMPERATURE AT BOARD SURFACE:	0 to +45 deg.C.
STORAGE TEMPERATURE:	-10 to + 60 deg.C.

# Technical Drawing

