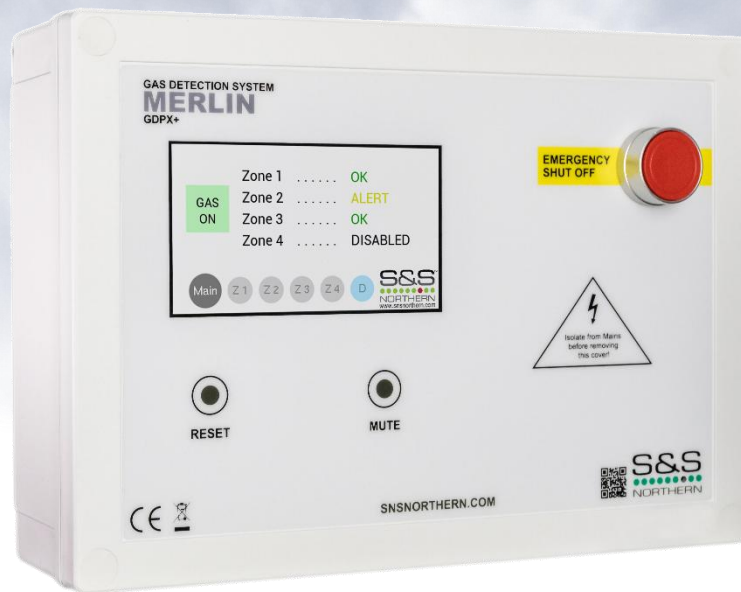




**Diamond
Controls®**

Leak Detection & Trace Heating Systems

Datasheet



GAS LEAK DETECTION

Merlin GDPX+

Addressable Safe Area
Gas Detector X Controller

Diamond Controls Ltd
21a Bessemer Road
Norwich, Norfolk
NR4 6DQ

Contact
01603 745000
sales@diamondcontrols.co.uk
www.diamondcontrols.co.uk

VAT Number: 797 771 750
Registered Company: 4113848



Procedure:	OPS08	Document ref:	GDPX+DS	Publish date:	13/11/25	Approved by:	Lee Blackett	Review date:	As Required
------------	-------	---------------	---------	---------------	----------	--------------	--------------	--------------	-------------



Applications

The Merlin GDPX+ is a 16 zone gas pressure proving & detection panel which can be used in many applications, e.g. mechanical rooms, car parks, shopping centers and the most common being a boiler house application.

Utilizing a solenoid valve and a pressure transducer the Merlin GDPX+ will check for a pressure drop or leak in the downstream line before allowing the gas to be supplied. Once gas has been supplied the unit will constantly check the incoming gas supply pressure to ensure that a naked flame cannot be extinguished by a weak draft.

The GDPX+ has a touch screen which displays two modes, the engineers mode and the user mode. A settings dip switch inside the controller allows the engineer/user to configure the system. When changes have been, the system will automatically restart once the settings switch is off.

Many varieties of detectors are compatible with GDPX+, e.g. Natural Gas, Carbon Monoxide, LPG, Hydrogen Gas and Oxygen depletion. Up to 16 detectors can be used in any combination and can be individually monitored on the GDPX+ TFT display.

Also multiple heat detector links can be used, when wired in series. The GDPX+ can be integrated with a BMS, fire alarm and remote emergency stop buttons. Gas detectors are fixed remote from the GDPX+ panel & should be wired back to the GDPX+ panel with four wire low voltage cable.

Features

- Ability to identify up to 16 individual gas detector gas levels and in which monitoring zone the detector is located.
- Built-in connectivity to existing BAS, fire alarms & MODBUS compatibility.
- Gas pressure proving for low and high pressure shut off.
- Fascia mounted EM stop, can accept remote emergency stop buttons & heat detectors.
- Clear TFT display for system indications

Dimensions

- Height - 178mm
- Width - 254mm
- Depth - 62mm



Technical Information

General	
Product:	GDPX+: Gas Detection Control Panel
Use:	Indoor, Safe Areas (not to be used in potentially explosive atmospheres)
Indicators (4.3" Touch Screen)	Main Zone Status. ID. Gas Type. Concentration Level. Measured Value. End of Life. Fault. Service.
Screen Brightness	Adjustable 0-100%
Mounting	Wall Mounting
Electrical	
Max. Power Consumption	48W Max (Full Load)
Power Voltage Input Range	100-240vac
Gas Valve Output Range	100-240vac
Electrical Contactor Output Range	100-240vac
I/Os	3x 24vdc Outputs (Detector / Strobe or Sounder / Permanent) 5x Open/Close Switches (EM Stop / Heat Sensor / Fire Panel / 2x Selectable)
BMS Terminal	Volt Free (Normally Closed / Common / Normally Open) 3A Max
Communication	RS485 MODBUS RTU
Relay(s)	3x DPCO 250VAC @ 3A (BMS & VALVE / ELECTRICAL CONTACTOR OUTPUTS)
Terminal Wire ratings	Copper 18AWG (0.75mm ²) Min. 25 x screw terminals.
Fuse	3.15A
Internet (Unavailable)	Ethernet (RJ45)
Construction	
Dimensions (H x W x D)	180 x 255 x 77 mm/ 7.08 x 10.03 x 3"
Unit Weight (Approx.)	1.1kg / 38.8oz
Housing Material	Polylac - PA765
Environmental	
Ingress Protection	IP65 (Pre-installation)
Storage Conditions	Dry. Cool. Flat
Operating Conditions	-10 ~ 50°C / 14 ~ 122°F 30 ~ 80% rf
Compliance	
CE / UKCA	EN 61326-1 / BS EN IEC 61010-1

Important: All information, including illustrations, is believed to be reliable. Users, however, should independently evaluate the suitability of each product for their application.