GDP2 Gas Detection & Control System

Product Overview:

The GDP2 is a two-zone gas detection panel which can be used in many applications, e.g. Mechanical rooms, chiller rooms, shopping malls and the most common being a boiler house application.

Many varieties of detectors are compatible with GDP2, e.g. Natural Gas, Carbon Monoxide, LPG, Refrigerant Gas and Oxygen Depletion/Enrichment. Up to 6 detectors can be used in any combination.

Also multiple heat detector links can be used, when wired in series. The GDP2 can be integrated with a BMS, fire alarm and remote EPO buttons. Gas detectors are fixed remote from the GDP2 panel & should be wired back to the GDP2 panel with three wire low voltage cable.
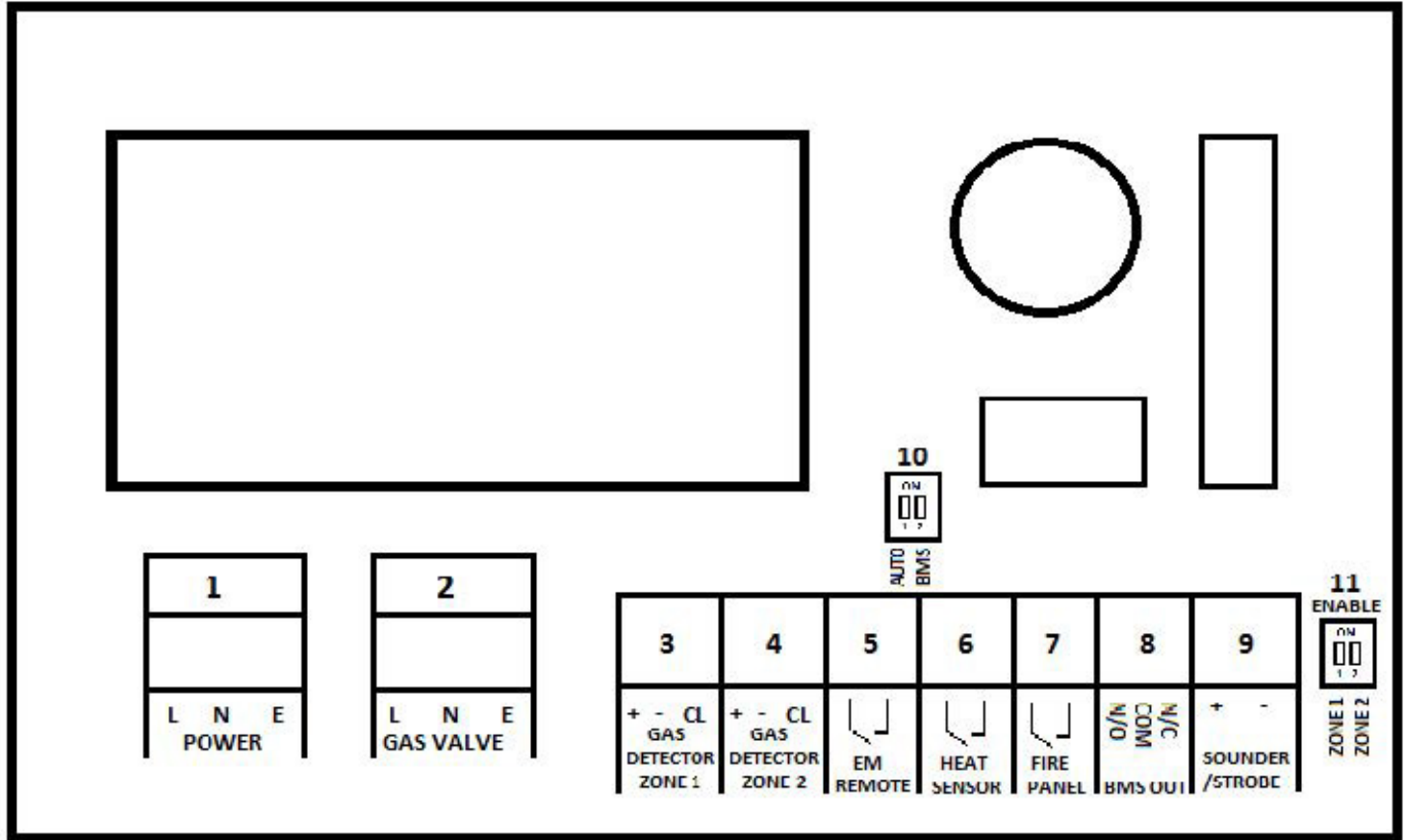
Technical Specifications

General	
Model:	MerlinGDP2
Use:	Indoor, Safe Areas (not to be used in explosive atmospheres)
Indicators	LED
Mounting	Wall Mounting
Max. Power Consumption	20W Max (Full Load)
Power Voltage Input Range	230VAC
Gas Valve Output Range	230VAC
I/Os	2x 24VDC Outputs & 3x Open/Close Switches
BMS Terminal	Volt Free Dry Contact (Normally Closed / Common / Normally Open) 3A Max
Relay(s)	2x 230VDC 10A (Latching) Configurable Normally Open or Normally Closed (Switch)
Terminal Wire Ratings	Copper 18AWG (0.75mm2) Min. 24 x Screw Terminals
Fuse	3.15A
Dimensions (H x W x D)	140 x 190 x 62mm / 5.51 x 7.48 x 2.44"
Unit Weight (Approx.)	0.7kg / 24.7oZ
Housing Material	Polylac - PA765
Ingress Protection	IP65 (Pre-Installation)
Storage Conditions	Dry. Cool. Flat
Operating Conditions	-10 ~ 50ºC / 14 ~ 122ºF 30 ~ 80% rh
Compliance	EN 61326-1 / BS EN IEC 61010-1

GDP2 PCB Overview

POWER / LINE IN
100-240vac mains power supplied to the [POWER/LINE IN] connector using a 3-core cable and fused at 3A. On connecting the mains supply to the panel the power LED indicator will light up – this is located on the front cover.

VALVE OUT
100-240vac electrical power output from the [VALVE OUT] connector using a 3 core cable can be connected to a gas solenoid valve which can shut the gas supply on alarm status. Refer to your valve manual for more information.

GAS DETECTOR (ZONES 1-2)
24vdc power supply to gas detectors are wired to [GAS DETECTOR ZONE] terminals. For more information, see section: Wiring your detector.

EM STOP
Open/close connections for external shut-off buttons. If using multiple shut off buttons, wire in parallel.

HEAT SENSOR
Open/close connections for heat sensors/thermal links.

BMS OUTPUT
Volt free connections are available on the board for Building Management Systems.
This is a relay that changes state in alarm or when the gas line is on/off and can be used in conjunction with the 24vdc output and other external relays that affect other devices and controls such as purge fans and audible alarms etc.

FIRE PANEL Open/close connections for fire alarms/panels.

SOUNDER-STROBE 24vdc connections for an external sounder alarm/ strobe lighting to activate on alarm.