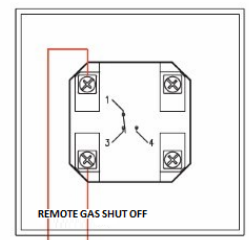


**Legend**

- 1) A 100-240VAC electrical supply should be supplied to the panel. This should be externally fused at 3 Amps using a fused spur and should be connected to the terminals marked "LNE Power".
  - 2) The gas solenoid valve should be powered using the terminals on the Merlin 2000S marked "Gas Valve".
  - 3) This terminal is disabled on this system.
  - 4) This terminal is disabled on this system.
  - 5 & 6) These terminals are used to receive an input signal from external air pressure switches or external current monitors. These are linked out as a factory setting. Wiring to the air pd switches & current monitors should be made using two-core volt free connections. Links should be left in any terminals not being used.
  - 7) Terminal connections are available on the circuit board for connections to Building Management systems. The terminal can accept up to 3amps.
  - 8) The terminals marked pressure sensor "+ - IN". These wire to the gas pressure transducer which is screwed into the downstream port of the gas solenoid valve. Please ensure this is wired as instructed. Minimum operating pressure = 0.17psi, Maximum operating pressure = 1.45psi.
  - 9) The terminal for remote emergency shut-off buttons is detailed on the circuit board as "EM REMOTE". These connections are linked out as a factory setting. Remote emergency shut-off buttons should be volt free and wired to the Merlin 2000S using two-core cable.
  - 10) The terminal detailed on the circuit board as "GAS DETECTOR". These connections are "+,-" and "LJ", these can be wired to a Merlin Natural Gas, Carbon Monoxide or LPG detector. If no detector is being used leave the link in between the "LJ". Other detector types are available.
  - 11) This terminal switches when the key is turned on and off. This can be linked to a fan switch (panel supplied separately) which can provide power to the fans when the control panel is switched on.
  - 12) This terminal can be wired to a CO2 monitor to shut off the system in the event of High CO2 levels. If no CO2 monitor is supplied leave the terminal link in.
  - 13) This is a permanent 12v DC output when there is power at the panel. (Usually used to power a PM2 current monitor)
- Note: All low voltage connections should be made using a screened cable. To avoid electrical interference this should not be in the same conduit as mains cable as per the low voltage directive.  
For further information please refer to American Gas Safety LLC operating and installation instructions.



- 100-240 VOLT MAINS LIVE
- NEUTRAL
- EARTH
- LOW VOLTAGE



Client	
Job Title	
Drawing Title	

**Notes**  
All discrepancies between information shown on the drawing and information in the specification to be referred to American Gas Safety prior to proceeding.

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Amendments		
Scale	Date	Drawn
N.T.S.		BT
Drp. No. 2000S		Rev. 1