PROGRAMMABLE IS CONTROLLER

IECEx ITA 07.0003X Ex ia I

Applications

Ampcontrol's Gasguard Programmable IS Controller is designed to operate with a range of gas sensors currently supplied by Ampcontrol and other manufacturers.

Features

- 4-20mA or 0.4–2V Selectable Input Channels
- Control and fault relay outputs
- 4-20mA outputs (for PLC monitoring)
- User programmable
- Start-up time delay
- Programmable Input/Output isolation
- RS485 Modbus Slave communications
- 12VDC powered
- DIN rail or foot mount
- Approved Intrinsically Safe – Ex ia
- LCD Display
- LED Indication to aid fault finding

Product description

The IS Controller is supplied with four (4) selectable 4-20mA or 0.4-2V programmable input channels. Each input channel has three (3) programmable setpoints with a hysteresis adjustment of 5%. Setpoints can be configured during programming to operate on a falling or rising action.

The controller has four IS relay outputs that can be assigned to any channel and are used for control and fault indication. The controller can be programmed to latch the relays, maintaining the relay status during a loss of power. A relay reset is provided on the front fascia of the controller.

The IS Controller also has three 4-20mA repeater outputs to operate remote displays or to allow monitoring by a PLC/SCADA system. This feature allows a single 4-20mA repeater output to be assigned to one or more channels to provide information of high and low gas readings.

The IS Controller is DIN rail mounted and has been approved to be intrinsically safe for use in a Zone 0 hazardous area. The Controller is powered from a 12V Intrinsically Safe power supply.

A two line LCD Display and a keypad provide an easy to operate user interface. The LCD Display provides access to all available information. A simple procedure allows adjustment of the IS Controller's settings.

There are seven (7) status LEDs located on the fascia. These provide indication of any alarms or faults, as well as indication of the relay outputs.
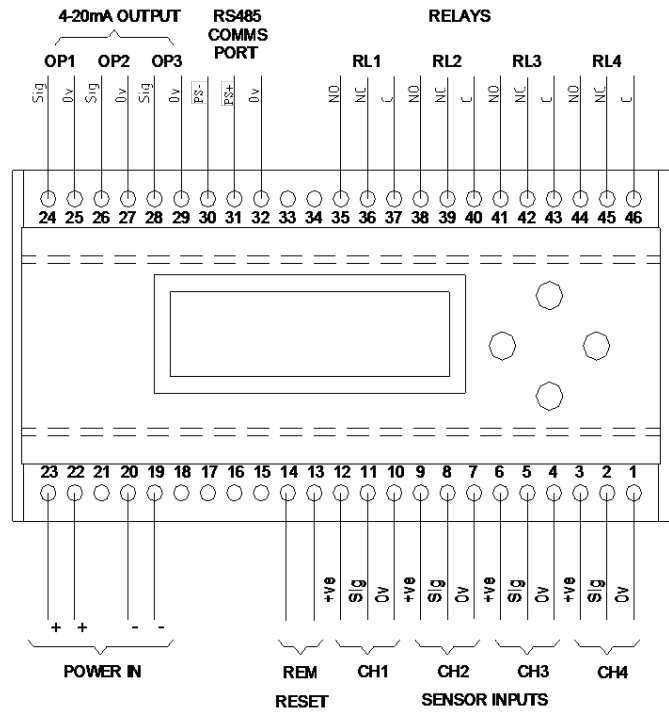
Programming

Parameters of the IS Controller are programmed by using the arrows and LCD Display located on the fascia of the Controller.

Programming allows control of functions including assigning channels and gas type, adjusting setpoint levels, calibrating input, assigning relay outputs, isolating channels/relays/outputs, setting direction of alarms, measuring supply voltage and setting the RS485 Modbus Address.

See User Manual for full programming details.

Technical Datasheet Gasguard Programmable IS Controller
GSB005 REV 5
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Connection Diagram

Specifications	
General	
Voltage	9 to 16VDC (Nominal 12V IS Supply)
Input Channels	Four Channels, 4-20mA or 0.4-2V (Selectable)
Outputs	
Relay Outputs	Four IS relay outputs – can be configured normally energised, normally de-energise or latched
Contacts	1 C/O, 2A, 30VDC (Resistive)
Repeater	Three 4-20mA programmable outputs
Setpoints	3 programmable setpoints per channel
Hysteresis	5%
Communications	RS485 Modbus Slave

Mechanical	
Dimensions (HxWxD)	110x148x74mm

Ordering Information	
Part Number	**Description**
105232	CONTROLLER G/G IS 4CH*
120875	MANUAL USER G/G CONTROLLER

DISCLAIMER

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