

DESCRIPTION

The d.c. input block provides a robust interface between electrically noisy d.c. plant signals and a GEM 80 controller. Each block senses four input signals from the plant.

As an aid to maintenance and fault finding, an indicator lamp is provided for the state of each input.

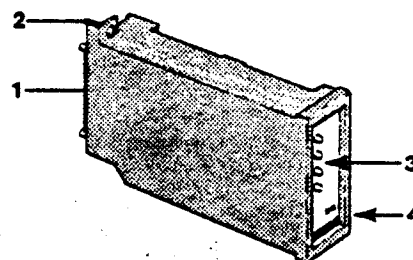
The d.c. input block is one of the GEM 80 range of compatible a.c. and d.c. input and output blocks. The I/O blocks plug into a panel which provides terminals for the plant cables. The 8960 Logic I/O Assembly data sheet describes the termination and mounting arrangements.

FEATURES

- Suitable for industrial applications.
- Rugged plug-in moulded block.
- Optical isolation.
- Input state indication.
- High noise immunity.
- Mechanical coding of block type.
- Suitable for a range of plant voltages including 24V and 48V.
- Low power consumption.

SPECIFICATION (whole block)

Number of inputs	: 4
Temperature	: 0 to 70°C operating. : -20 to 70°C storage.
Humidity	: 10 to 90% non-condensing
Dimensions	: 112 x 48 x 198mm (high x wide x deep)
Weight	: 0.37kg
Front panel colour code	: Blue
Power dissipation (all inputs ON)	: 2W typical for 66V supply
Power consumption from host controller	: 6mA @ +15V

8963**14-66V D.C. Input Block**

1. Plug for electrical connections to panel.
2. Captive screw to retain block on panel.
3. State indicated lamps for four inputs.
4. Colour code and type number.

SPECIFICATION (each of four inputs)

Input voltage for ON state	: 14V minimum : 66V maximum
Input current for ON state	: 7mA typical over range 14 to 66V
Input voltage for OFF state	: 0V nominal : 5V maximum
Input current for OFF state	: 0.7mA maximum
*Common mode isolation voltage	: 5kV pk transient
*Differential no damage voltage	: 66V pk continuous including supply reversal.

(*complies with class III of IEC 255/E)

Response time ON	: 5ms maximum
Response time OFF	: 7ms maximum

APPLICATION NOTES

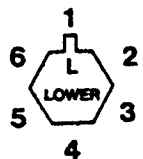
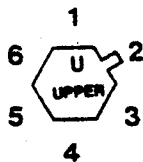
1. WARNING.

BLOCKS SHOULD NOT BE REMOVED WITH POWER ON.

2. MECHANICAL CODING

The mechanical coding recesses in the rear of the 14-66V d.c. input block are factory preset with slots in positions U2 and L1.

The user is advised to set the keys on the mechanical coding pillars of the I/O termination panel to the corresponding positions. This ensures that only blocks of the same type are interchangeable.

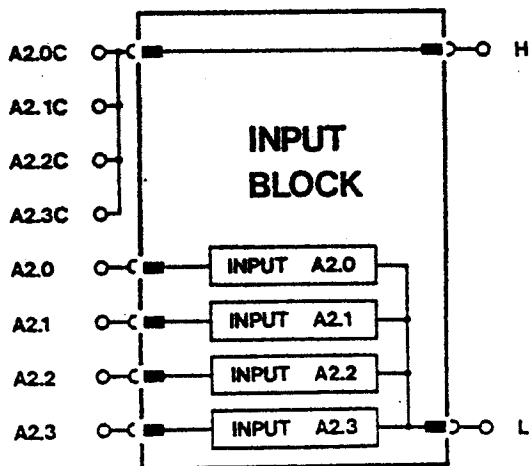


PANEL KEY POSITIONS

3. USER CONNECTIONS

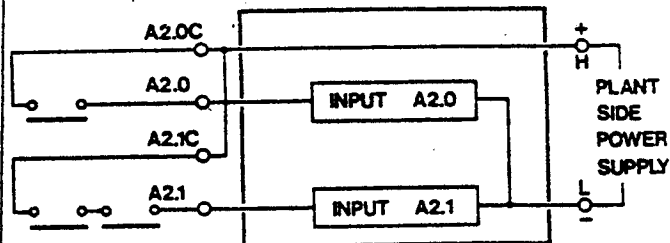
All user connections are made to terminals on the I/O block termination panel.

The input point designations and terminal numbers are determined by the position of the block on the panel. The example below illustrates the connections to the first block on a typical panel referenced A2.

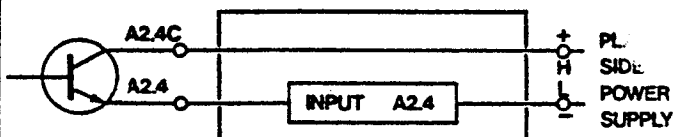


4. TYPICAL CIRCUITS

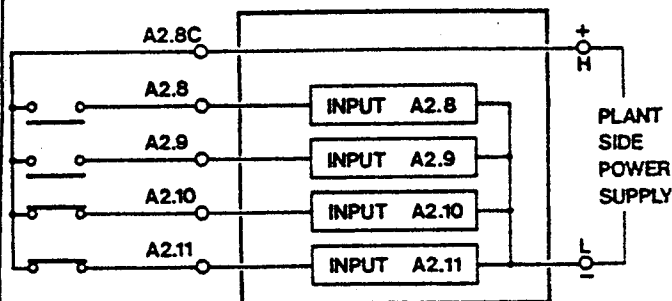
4.1 Individual contact (or series chain)



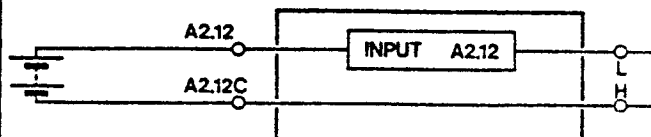
4.2 Solid state switch.



4.3 Input group with common wire.



4.4 D.C. power supply sensing.



5. ORDERING CODE

14-66V d.c. input block

8963

Note: The Company's policy is one of continuous development and improvement and therefore the right is reserved to supply products which may differ in detail from those described and illustrated in this publication. All our products and materials are sold subject to Conditions of Sale available from us on request.

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Holding Company—The General Electric Company Limited

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Printed in England

