

I/O Interface Module for the GEM80-500 Controller

Part Number 9717-4020

BOX CONTENTS

This box contains one 9717-4020 GEM80-500 I/O Interface Module.

APPLICATION

For use with the GEM80-500 Controller in GEM80-141/142/160/163/164/165 and /166 Controller upgrade applications.

The earlier versions of GEM80 controllers detailed above can be upgraded by removal of their power supply unit and central highway modules, and a GEM80-500 Controller mounted in the subrack instead.

The GEM80-500 I/O Interface module will accept one Basic I/O ribbon cable (via PL4) and/or one Verification I/O ribbon cable, (via PL5) from a GEM80-500 I/O Sub-module. The module connects these ribbons directly to the subrack backplane.

In this way, any I/O modules already housed in the subrack may be retained, avoiding the cost of installing a new subrack.

The GEM80-500 I/O Interface module provides a second pair of ribbon header connectors to allow the Basic and/or the Verification I/O ribbons cables to be looped out to further I/O subracks if required at PL1 and PL3 respectively.

NOTE:

1. A +15Vdc supply from the GEM80-500 Controller's internal power supply is fed to the I/O ribbons to power the I/O modules. The current available is 2.7Amps, which should be adequate for the number of I/O modules housed in the original controller subrack.
2. If the complete I/O system supported by any one GEM80-500 Controller would exceed this 2.7 Amp level, then the I/O modules located in other subracks must be provided with a separate +15V supply.
3. All Verification I/O modules will require a separate +5V supply to their respective backplanes.

FITTING

The GEM80-500 I/O Interface module is housed in the slot vacated by either an 8172 Basic I/O Interface module or 8191, Verification I/O module, which will have been removed as part of the upgrade.

The mechanical coding pegs for the backplane connector are set at Upper socket 4, 5, and 10 on the I/O Interface module and will therefore fit either an 8172 or 8191 location without the need for coding modification.

PRODUCT COMPLIANCE

This product complies with the essential safety requirements of the Low Voltage Directive (1), and the Electromagnetic Compatibility Directive (2). However, it is outside the scope of the Electromagnetic Directive, and the CE Marking and Declaration of Conformity requirements of the Directives applies only to the Low Voltage Directive.

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| (1) | Low Voltage Directive | 73/23/EEC of 19 February 1973. |
| | amended by | |
| | The CE Marking Directive | 93/68/EEC of 22 July 1993. |
| (2) | Electromagnetic Compatibility Directive | 589/336/EEC of 3 May 1989. |
| | amended by | |
| | The Directive | 92/31/EEC of 28 April 1992 |

RELATED DOCUMENTS

GEM80/500 Series Controller Technical Manual, publication T2025.
Technical Manual(s) as appropriate for the Controller type to be upgraded using this product.

Warning: Failure to comply with any of the general requirements for installation, operation and maintenance provided in this document and the technical manuals will significantly increase the risk of maloperation, fire or electric shock.

1. Hazardous Voltages

Hazardous voltages and energy levels can exist on plant wiring to the controller. Ensure that plant supplies are disconnected before fitting, removing or wiring to plant connectors. Also ensure that any shrouds or covers provided are securely replaced.

2. Plant Wiring

Due to the high concentration of plant wiring and terminations that may occur in a typical GEM80 system,

All terminations to screw terminals should be terminated using bootlace ferrules.

All plant wiring must be suitably supported and restrained.

All plant wiring must be routed and segregated from other wiring categories as detailed in the Controller Technical Manuals.

CUSTOMER SERVICES

The Customer Service Department at Kidsgrove is available for help if you have any queries about this product.