# GE GE □□□ Series Service Manual

IS420YDOAS1B

## 1. Description

IS420YDOAS1B Technical Specifications

## 2. Specifications

| Specification | Value |
|---|---|
| Technology | **Surface-Mount** |
| Relay | **and Coil Monitoring 12 Relay/Coil Monitors** |
| Redundancy | **Compatibility Simplex or TMR** |
| Processor | **Board BPPC** |
| Part | **Number IS420YDOAS1B** |
| Ambient | **Temperature Range -40 to 158 °F** |
| I/O | **Pack Response Time 6 ms** |
| Functional | **Abbreviation YDOA** |
| Dimensions | **H 3.25 in x W 1.65 in x D 4.78 in** |
| About | **the IS420YDOAS1B** |
| Greater | **Product Series Information** |
| As | **detailed above in our brief product description, this IS420YDOAS1B device was initially manufactured for General Electric's Mark VIe Turbine Control System Series. The Mark VIe Turbine Control System Series is self-explanatory, given the fact that it exists:** |

## 3. Product Information

IS420YDOAS1B Technical Specifications

Technology Surface-Mount

Relay and Coil Monitoring 12 Relay/Coil Monitors

Redundancy Compatibility Simplex or TMR

Processor Board BPPC

Part Number IS420YDOAS1B

Ambient Temperature Range -40 to 158 °F

I/O Pack Response Time 6 ms

Functional Abbreviation YDOA

Dimensions H 3.25 in x W 1.65 in x D 4.78 in

About the IS420YDOAS1B

Greater Product Series Information

As detailed above in our brief product description, this IS420YDOAS1B device was initially manufactured for General Electric's Mark VIe Turbine Control System Series. The Mark VIe Turbine Control System Series is self-explanatory, given the fact that it exists:

with a series of set specific applications in the management and control systems of popular and GE-compatible wind, gas, and steam turbine automated drive assemblies

lauded for its existence as one of the very last-developed GE Mark product series to utilize the company's signature Speedtronic control system technology

not as the originally-manufactured device of its specific Mark VIe or VIeS Series functional role

the IS420YDOAS1 parent Discrete Output I/O Pack Module not making use of this IS420YDOAS1B device's singular B-rated primary functional product revision

Hardware Tips and Specifications

Discrete Output I/O Pack IS420YDOAS1B can provide:

electrical interfaces between up to two Ethernet input-output networks

a discrete output terminal board.

diagnostic LEDs; typically the twelve LEDs will be yellow to provide an indication for each output that command is energizing the relay.

This pack can control up to twelve relays and will accept terminal board-specific feedback. All of the inputs to the I/O pack will be sent through dual Ethernet RJ454 connectors as well as three-pin power input. A DC37 pin connector is used for the outputs which will connect directly to the associated terminal board connectors. If visual diagnostics are needed they will be provided through the LED indicators on the front of the pack.

IS420YDOAS1B Diagnostic/Revision Information

The BBPx processor LEDs will be used to indicate the diagnostics needed as well. There is an ATTN LED that will be red or green and either solid or flashing. Some of the patterns for the green ATTN LED are 2 Hz 50% and two 4 HZ pulses every four seconds; the latter of the patterns indicates that the application is online and functioning as needed.

There are a variety of common diagnostic alarms that can pop up during the operation of the IS420YDOAS1B pack, some examples are two, three, and five. All of these alarms have different causes and solutions, the description, causes, and potential solutions for alarm five are the I/O pack being in remote I/O mode, some causes for this are that the hardware has failed and the module configuration of the I/O pack might be invalid, to fix these errors replace the I/O pack or module entirely or rebuild the system and reconfigure the I/O pack.

This IS420YDOAS1B device makes use of a special base printed circuit board protective strategy involving the installation of a protective outer chassis around this IS420YDOAS1B device's interior circuitry.