# iMAC RO4 V2 MODULE

| Summary | |
|---|---|
| **News Type** | Product News |
| **Purpose** | To inform customers of the iMAC RO4 module upgrade |
| **Product Range** | iMAC RO4 Module |
| **Target Audience** | Customers of Ampcontrol's iMAC System |
| **Date of Issue** | 24th November 2017 |

## AMPCONTROL'S NEW iMAC RO4 RELAY OUTPUT MODULE

Ampcontrol has released a revised version of the iMAC RO4 module to address component obsolescence issues with the existing module.

The all new RO4 module (right) is a completely re-developed module utilising Ampcontrol's latest iMAC hardware and software platforms. The new RO4 V2 module supersedes and replaces all previous versions of the RO4 module (V0, V1).

The new RO4 V2 module has a fresh new look, but is housed in the same DIN rail enclosure. The Relay output terminals and the iMAC fieldbus terminals are in the same location as before, however the DC +/- power supply terminals have been relocated to the left most side of the terminal strip.



### Key Notices
- New RO4 V2 module to address RO4 V0 and V1 component obsolescence issues
- Utilises latest iMAC hardware/software platforms
- DC +/- power terminals relocated to left most side of the terminal strip
- Wider DC power supply operating voltage range (9-30VDC)
- Improved safety features

## SIL SAFETY INFORMATION

The new RO4 V2 module has revised safety metrics. The relationship between RO4 module versions V0, V1 and the new V2 revision is summarised in the table below.

| RO4 | V0, V1 | V2 |
|---|---|---|
| *SFF* | 98.4% | 99.1% |
| *PFD$_{avg}$* | $2.3 \times 10^{-4}$ | $2.8 \times 10^{-4}$ |
| *PFH* | $4.8 \times 10^{-8}$ | $5.7 \times 10^{-8}$ |

For further information, please refer to the products safety declaration datasheet.

## ORDERING

To minimise impact to existing customers, the RO4 part number has not changed. Any orders received for iMAC RO4 part number 101498 from November 2017 will automatically be filled with the new RO4 V2 module. Ampcontrol Manufacturing Serial Number's starting from 1711-XXXXXX will be V2 modules.

IMAC RO4 V2 Module
IMACB169 Version 1
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ampcontrolgroup.com
customerservice@ampcontrolgroup.com
+61 1300 267 373

## PROGRAMABLE MODULE PARAMATERS

The RO4 V2 module programmable parameters have not changed, however, a known issue with previous RO4 module versions V0 and V1 has been fixed. In prior versions of the RO4 module, if the "delay timer" setting for either Parameter 3 or 4 was set to 00h, the relay would remain at the last communicated state on loss of fieldbus communications. A setting of 00h should have forced the relays to operate instantaneously according to the configuration of the lower bytes of Parameter's 3 and 4. This issue has been resolved for RO4 V2 modules, if the "delay timer" for Parameter 3 or 4 is set to 00h, then the relays will operate instantaneously on loss of fieldbus communications. Refer to the iMAC RO4 V2 datasheet for further details.

The RO4 V2 module rollcall type is unchanged: Type Number = '39' = RO4 Module. However, the module's hardware revision number has been bumped from "1" to "2" to uniquely identify the new "V2" module.
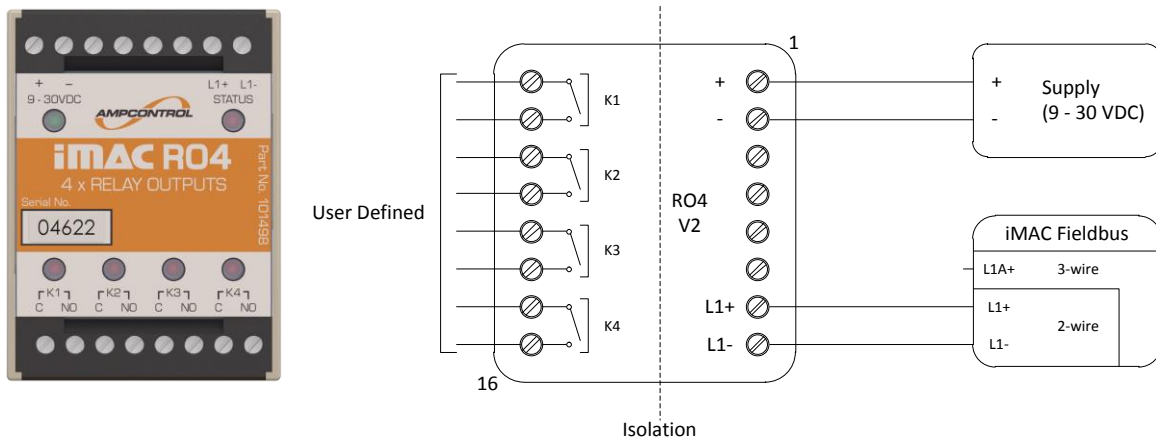
## CONNECTION DIAGRAM
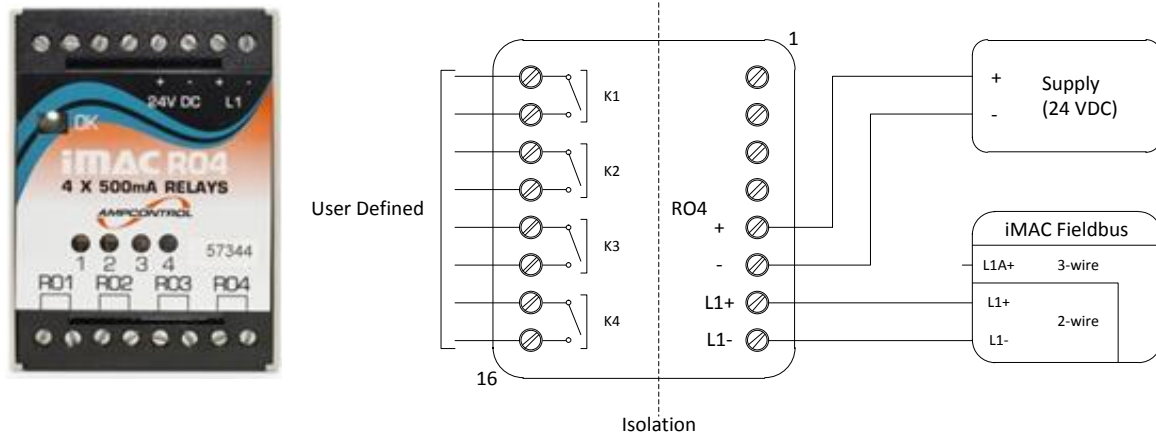


*Figure 1: New RO4 V2 Wiring Diagram*



*Figure 2: For Reference - Superseded RO4 V0/V1 Wiring Diagram*

## FIND OUT MORE

For more information on this product, contact Ampcontrol Customer Service on +61 1300 267 373 or *customerservice@ampcontrolgroup.com* or visit the Ampcontrol website: www.ampcontrolgroup.com

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