

# 6. Ethernet Connection

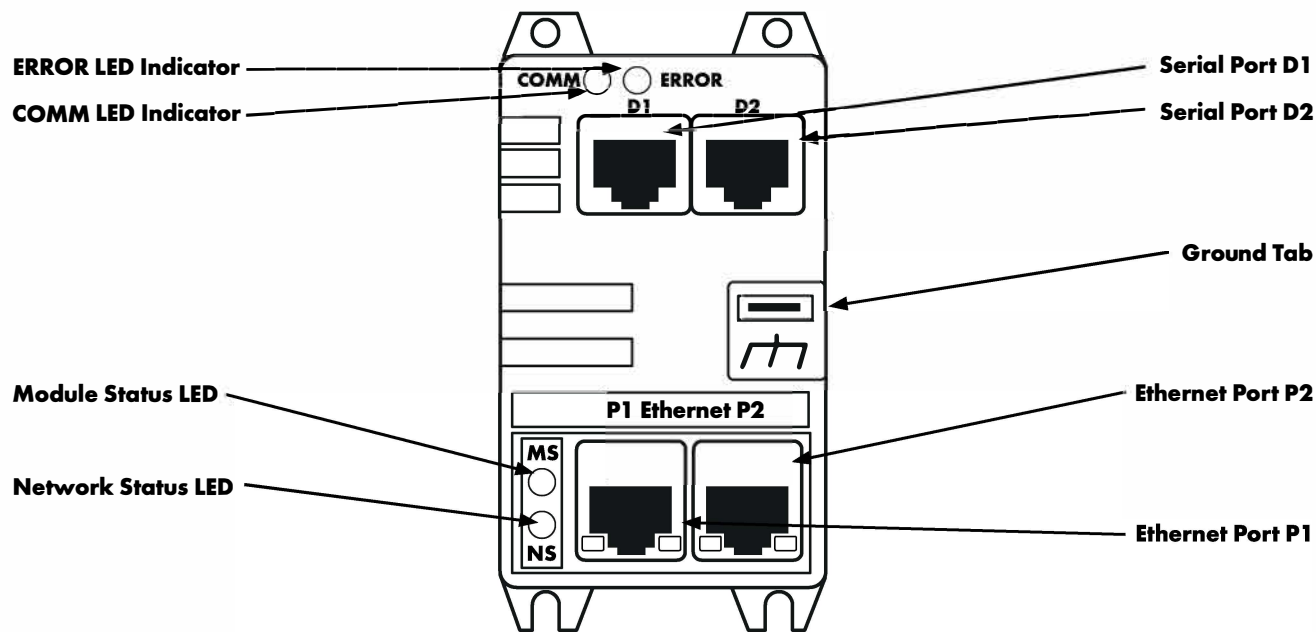
## 6.1. Available Interface Options

Ethernet interfaces are optionally available for Optidrive E3 and Optidrive Compact 2 products which support either Ethernet/IP protocol or Modbus TCP protocol. Part numbers for these interfaces are shown in the table below. The correct interface should be selected according to the drive type.

| Drive Family        | Interface Type  | Ethernet/IP Interface Model Code | Modbus TCP Interface Model Code |
|---------------------|-----------------|----------------------------------|---------------------------------|
| Optidrive E3 IP20   | External Option | OPT-2-ETHEG-IN                   | OPT-3-MTPEG-IN                  |
| Optidrive E3 IP66   | Internal Option | Drive Model Code + "-EIP"        | Drive Model Code + "-MTP"       |
| Optidrive Compact 2 | Plug in Option  | OPT-2-ETHIG-IN                   | OPT-2-MTPEG-IN                  |

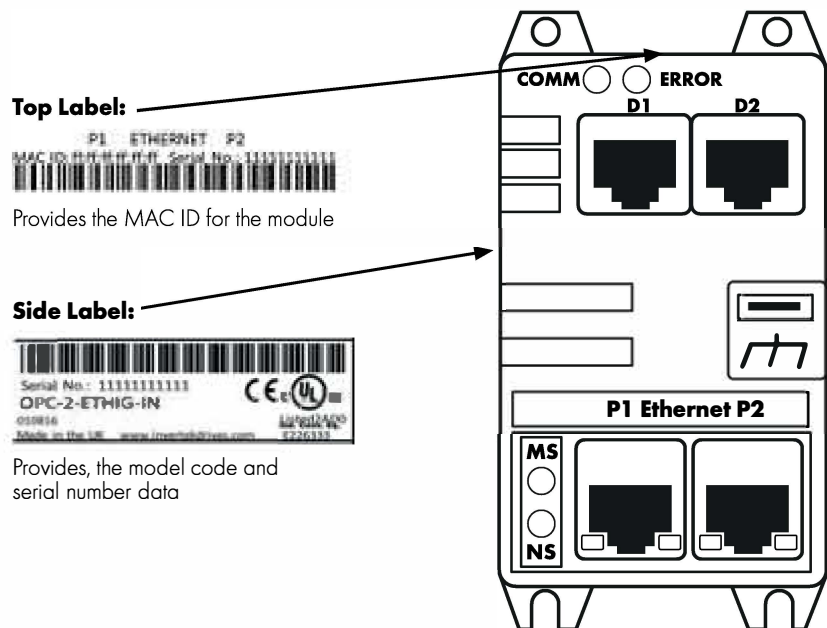
## 6.2. External Interface

### 6.2.1. Layout



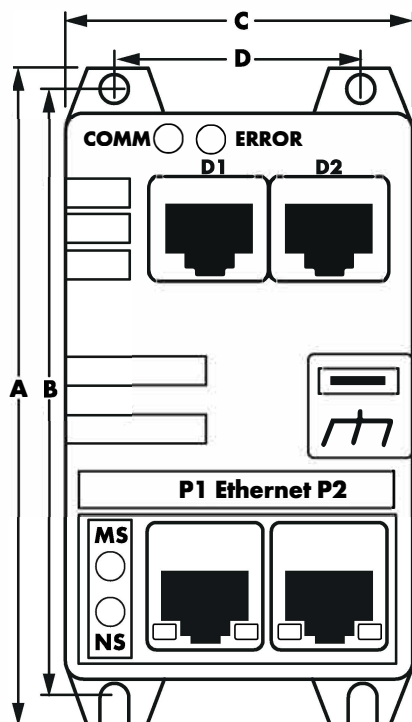
### 6.2.2. Labelling

There are two labels:



### 6.2.3. Mechanical Installation

- The Ethernet IP interface is intended for mounting inside a control cabinet adjacent to the drive.
- The unit should be mounted in a vertical position only, on a flat, flame resistant, vibration free mounting.
- The unit must be installed in a pollution degree 1 or 2 environment only.
- Use the module as a template to mark the locations for drilling the mounting screws.
- Drill and tap the holes as required.
- Secure the unit to the backplate using suitable screws, 1 Nm.



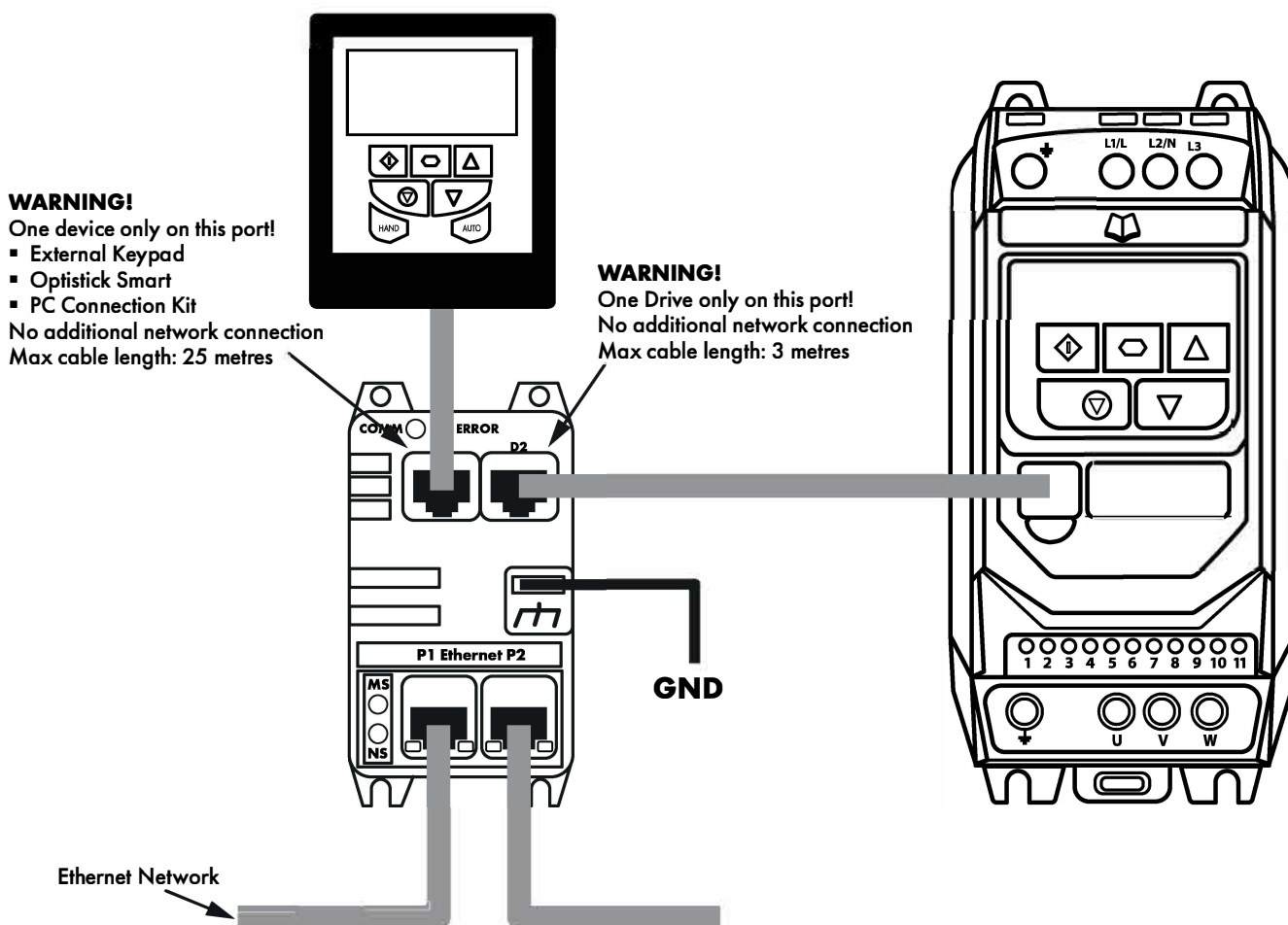
| A  |      | B  |      | C  |      | D  |      | Weight |      |
|----|------|----|------|----|------|----|------|--------|------|
| mm | in   | mm | in   | mm | in   | mm | in   | g      | oz   |
| 89 | 3.50 | 76 | 2.99 | 47 | 1.85 | 31 | 1.22 | 65     | 2.29 |

| Mounting Bolts |     |
|----------------|-----|
| Metric         | UNF |
| M4             | #8  |

## 6.2.4. Electrical Installation

**WARNING!** Do not connect Ethernet devices to ports D1 or D2. They may be damaged!  
Power supply to the module is provided from the connected drive via the RJ45 connection.

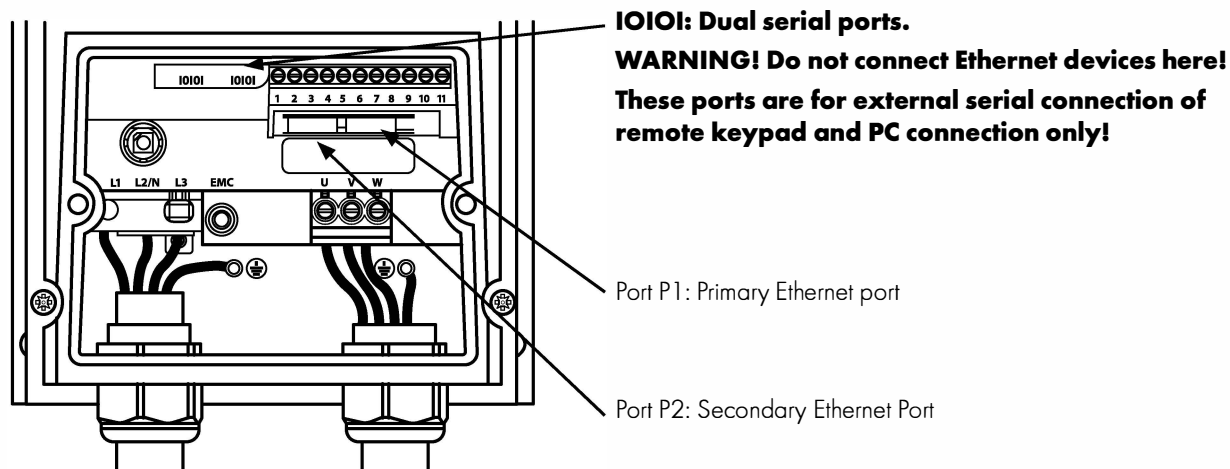
**WARNING!** Do not use cross over cables! Cables must be pin to pin connected!



Ground tab – Observe the recommended grounding procedure for the fieldbus network and if necessary, connect this tab to ground where required.

## 6.3. Internal Interface for IP66 Drives

### 6.3.1. Layout – Internal Interface



### 6.3.2. Labelling – Internal Interface

The MAC address of the device is shown below the ports.

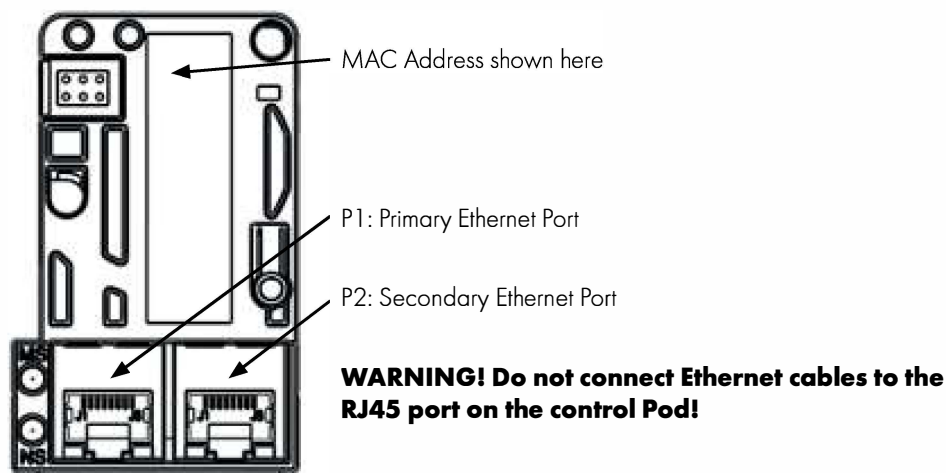
## 6.4. Optional Interface for Compact 2 Basic Drives

### 6.4.1. Installation

The Ethernet/IP interface is mounted underneath the control pod.

- Remove the control pod as described in the Compact 2 installation guide.
- Locate the Ethernet/IP interface in the slot below the control pod.
- Refit the control pod.

### 6.4.2. Layout



## 6.5. Drive Parameter Settings

### 6.5.1. Overview

The following parameter settings are required in the drive. For further description of the drive parameters, refer to the drive user guide.

| Drive Type                  | Optidrive E3 (ODE-3-...) | Setting                                                                   |
|-----------------------------|--------------------------|---------------------------------------------------------------------------|
| Parameter                   |                          |                                                                           |
| Drive Address               | P-36 Index 1             | 1                                                                         |
| Modbus RTU Baud Rate        | P-36 Index 2             | 115.2kbps                                                                 |
| Modbus RTU Data Format      | N/A                      | N-1                                                                       |
| Communication Loss Reaction | P-36 Index 3             | As required                                                               |
| Command Source Selection    | P-12                     | Select for Fieldbus Control if control of the drive operation is required |