



# EAP 300

## REMOTE ANNUNCIATOR

### INSTALLATION MANUAL

r.0454A



PM084 Rev 0 08/06/20



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## 1. **WARNINGS AND LEGAL INFORMATION**

### **Legal information and responsibility**

Thomson Technology takes no responsibility for installation or operation of the engine set. If there is any doubt about how to install or operate the engine controlled by the unit, the company responsible for the installation or the operation of the set must be contacted.

**The EAP 300 must be installed in accordance with the NEC (United States) or the CEC (Canada) standards.**

### **Electrostatic discharge awareness**

Sufficient care must be taken to protect the terminals against static discharges during the installation. Once the unit is installed and connected, these precautions are no longer necessary.

### **Safety issues**

Installing the unit implies work with dangerous currents and voltages. Therefore, the installation should only be carried out by authorized personnel who understand the risks involved in working with live electrical equipment.



**Be aware of the hazardous live currents and voltages. Do not touch any AC measurement inputs as this could lead to injury or death.**

### **Factory settings**

The unit is delivered with certain factory settings. Given the fact that these settings are based on average values, they are not necessarily the correct settings for matching the individual engine. Thus precautions must be taken to check the settings before running the engine.

### **Definitions**

Throughout this document a number of notes and warnings will be presented. To ensure that these are noticed, they will be highlighted in order to separate them from the general text.

### **Notes**

**NOTE:**

The notes provide general information, which will be helpful for the reader to bear in mind.

### **Warning**



**The warnings indicate a potentially dangerous situation, which could result in death, personal injury or damaged equipment, if certain guidelines are not followed.**

## 2. DESCRIPTION

The annunciator panel (EAP 300) which can be connected to the MEC 310 via a CANbus communication line. The EAP 300 has 16 configurable LEDs and 8 configurable buttons, which are programmed with the TPS 300 PC utility software. It can be used as an interface to the MEC 310 for indication of status and alarms together with buttons for e.g. remote alarm acknowledge and mode selection.

### Contents:

A DC/DC converter for the EAP 300 DC supply voltage and cable with an RJ12 plug in one end and stripped wires in the other end is included in the EAP 300 Kit.

**NOTE:**

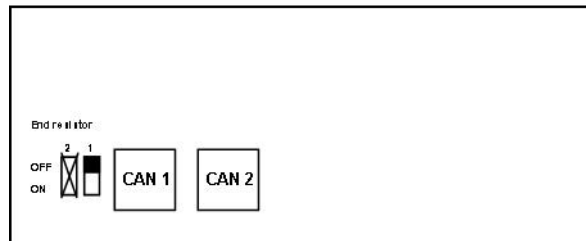
A maximum of 2 EAP 300 units can be connected to each MEC 310.

**NOTE:**

The maximum length of the CANbus line is 200m.

## REAR VIEW

EAP 300



### Connectors:

- CAN 1: DC supply (input) and CANbus communication to/from MEC 310 or other EAP 300 units.
- CAN 2: CANbus communication to/from other MEC 310 or EAP 300 units and status relay output.
- End resistor: Dip switch for 120 Ω end resistor for the CANbus communication. *Dip switch 2 is not used*
- Torque: 4 lb-in

### 3. INSTRUCTIONS

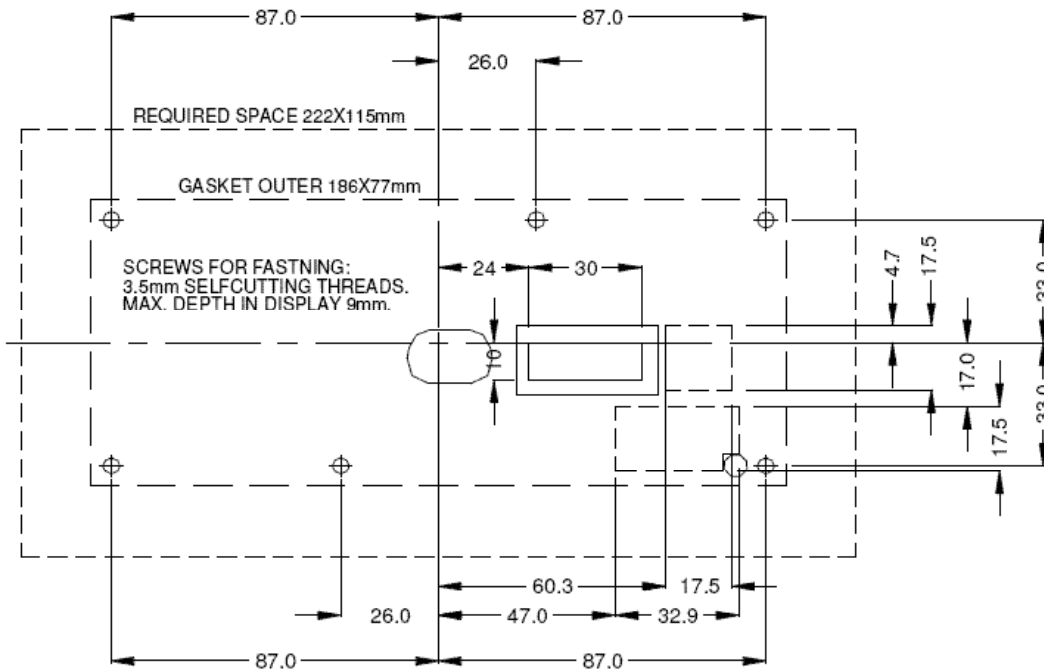
#### FRONT VIEW:



The configurable LEDs are named 1 to 16. Buttons are named 1 to 8.

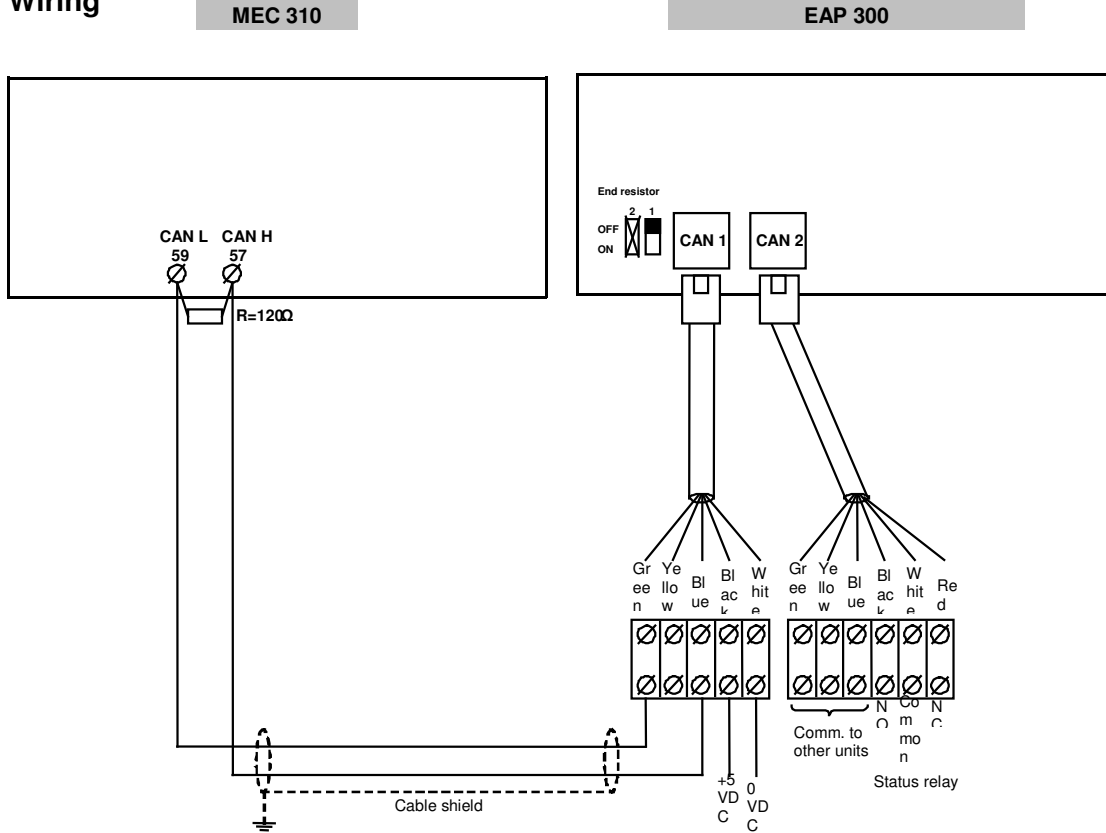
#### INSTALLATION:

Mount on a flat surface of a Type 1 Enclosure. Note the maximum ambient temperature rating is 60 °C



Panel Cut-out Detail: Dimensions in millimetres ( 1 inch = 25.4 mm )

Wiring



**End resistor:**

The 120 Ω end resistor on the MEC 310 is needed at all times. The default setting of the end resistor on the EAP 300 panel is ON. Thus, the dip switch is at the right position if only one EAP 300 is connected. If there are two EAP 300's connected, the end resistor of the EAP 300 with a connector plug in both CAN 1 and CAN 2 must be switched off.

1 unit connected:  
2 units connected:

Dip switch no. 1 on the unit should be set to ON.  
Dip switch no. 1 on EAP 300 no. 1 should be set to OFF and dip switch no. 1 on EAP 300 no. 2 should be set to ON.

**WIRE TYPE NOTES:**

Wire Size 30-12 AWG copper conductors (60-70 °C)

The cable between the terminal blocks should be shielded twisted pair (Belden 9841 or equivalent)

The maximum length of CANbus line is 200m.

**CAN ID configuration**

The CAN ID for the EAP 300 can be changed by the following procedure:

1. Push-button no. 7 and no. 8 at the same time to activate the CAN ID change menu, this will activate the LED for the present CAN ID number, and LED no. 16 will be flashing.
2. Use button no. 7 (increase) and button no. 8 (decrease) to change the CAN ID according to the table below.
3. Press button no. 6 to save the CAN ID and return to normal operation.

Selection of CAN ID:

<b>CAN ID</b>	<b>Indication of CAN ID selection</b>
0	CANbus OFF: LED 16 flashes
1	LED 1 light steady + LED 16 flashes (default value)
2	LED 2 light steady + LED 16 flashes

**Status relay**

The status relay will activate approximately 5 sec. after power up.

**Programming**

The programming of the EAP 300 is accomplished through the TPS 300 programming software.

**Error handling**

**Duplicate CAN ID**

If two units on the CANbus have the same CAN ID, LED no. 1 to 4 will flash quickly. In this case press button no. 6 to jump into the CAN ID change menu and select another CAN ID for the unit.

NOTE: The EAP 300 can be used with the supported CANbus Expansion I/O modules.