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IMC BACnet® MODULE KIT

INSTALLATION INSTRUCTIONS FOR IMC BACnet® MODULE KIT USED WITH LG/LC/LH AND SG/SC PACKAGED UNITS

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Shipping and Packing List

Package 1 of 1 contains:

- 1- IMC BACnet® module (BP1) with 4 plastic stand-offs installed
- 1- Installation Instructions (this document)

General

The IMC BACnet® Module (BP1) allows communication between the Lennox IMC M1-8 controller and a BACnet® MS/TP network. This module is mounted directly to the M1-8 Integrated Modular Controller and is not compatible with M1-7 IMC and earlier versions. Replacement for earlier remote mounted IMC BACnet® modules requires replacing existing parts with the M1-8 IMC and the new IMC BACnet Module.

The IMC BACnet® Module has been developed to communicate with building automation systems that support the BACnet Application Specific Controller (B-ASC) device profile.

A Lennox zone sensor, a BACnet® network zone sensor, or a BACnet® thermostat may be used to send the zone temperature or thermostat demands to the IMC.

! WARNING

Improper installation, adjustment, alteration, service or maintenance can cause property damage, personal injury or loss of life. Installation and service must be performed by a qualified installer or service agency.

Network Cable

The IMC BACnet® Module is compatible with MS/TP EIA-485 daisy-chain networks communicating at 38.4

kbps. Connect the BACnet® MS/TP network cable to the IMC BACnet® module. The module operates at up to 76.8K baud rate. It is compatible with twisted pair, shielded 22AWG minimum cable such as Belden 8761, 88761 and Lennox catalog numbers 27M19, 94L63 or 68M25. A maximum of 31 IMC BACnet® modules can be included per network. Up to 127 units can be connected using repeaters between networks.

The network cable should be routed using best practices to avoid induced noise. Do not route alongside high voltage wiring or in proximity to high-voltage or high-frequency devices, such as ignition controls and variable frequency drives. The BACnet® MS/TP maximum total bus length (without repeater) of 4000 ft. (1219m) applies to this device. Daisy-chain each module to the network and connect the network cable shield to the earth ground at the control panel, and at the G terminal of each IMC BACnet® module in the chain.

Network Bus Termination

When the IMC BACnet® module is at the end of a daisy chain, connect the jumper across the pins of S1 for bus termination (see figure 1, Detail A). Every BACnet® MS/TP chain must have a termination at each end of the chain (exactly two terminations; see figure 2).

! IMPORTANT

Install S1 jumper on the END module only. Do not add a resistor to each module.

! IMPORTANT

A qualified systems integrator with adequate training and experience is required to integrate and commission the IMC BACnet® Module into a third party BACnet building automation system. A BACnet configuration software tool is required to commission the BACnet network.



Installation

NOTE - No tools are required to install the BACnet module.

1. Remove power to the unit and IMC.
2. Open the compressor access doors.
3. Install the IMC BACnet module (see BP1 in figure 1) onto the IMC connector P4 in the upper left corner of the IMC. Be careful not to bend connection pins or damage any parts on the module or IMC board.
4. Connect the BACnet network wiring to the BACnet module as shown in figure 1.
5. No adjustment is necessary to the IMC BACnet module unless the module is at the end of a daisy-chained configuration. In that case, move the jumper across the S1 pins (see figure 1, detail A).
6. Upon power up, the IMC will recognize the IMC BACnet module and begin communications provided the network has been correctly configured.
7. To configure a BACnet Network or IMC, refer to the BACnet Service Literature and the IMC manual.

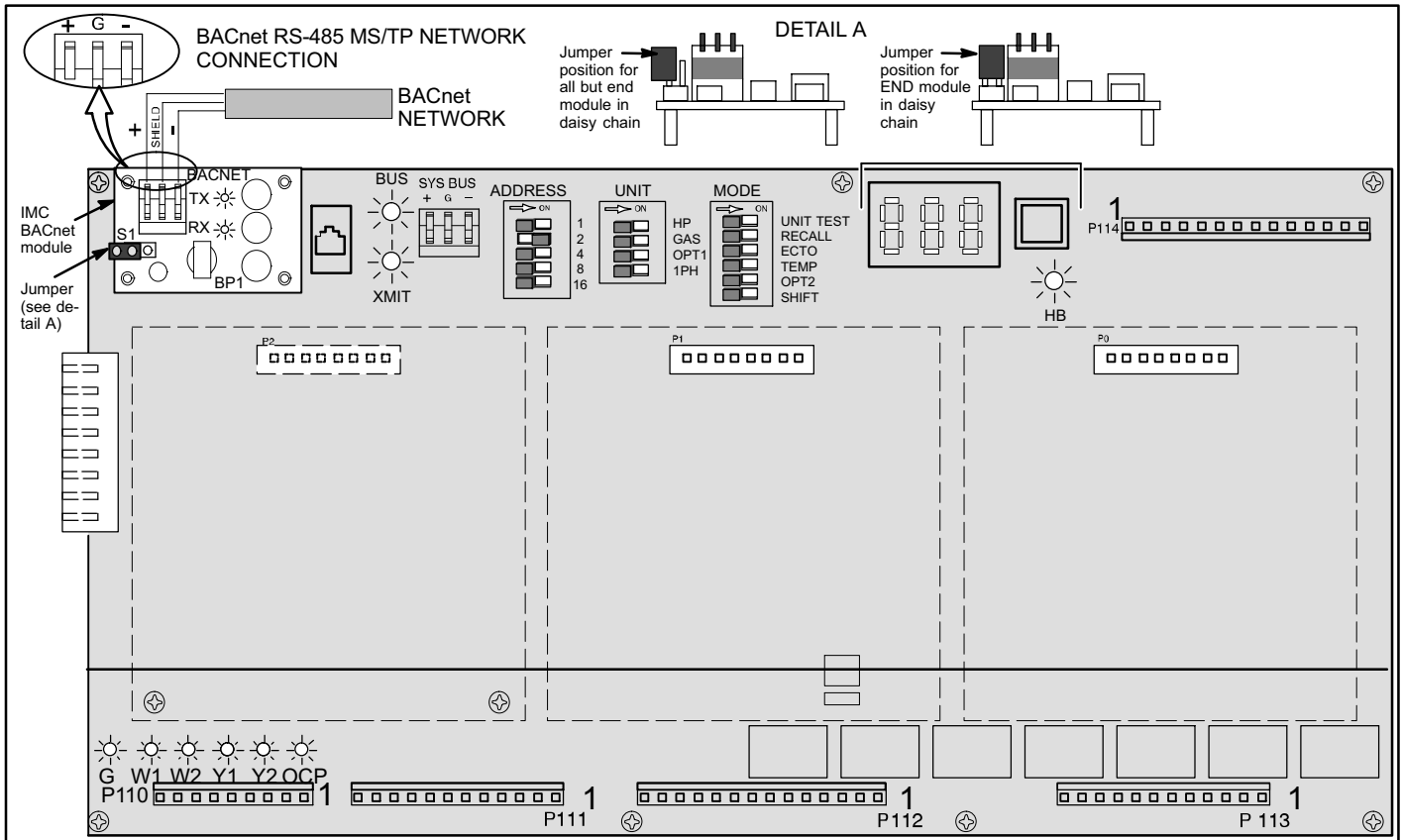


Figure 1. IMC BACnet® Module (BP1)

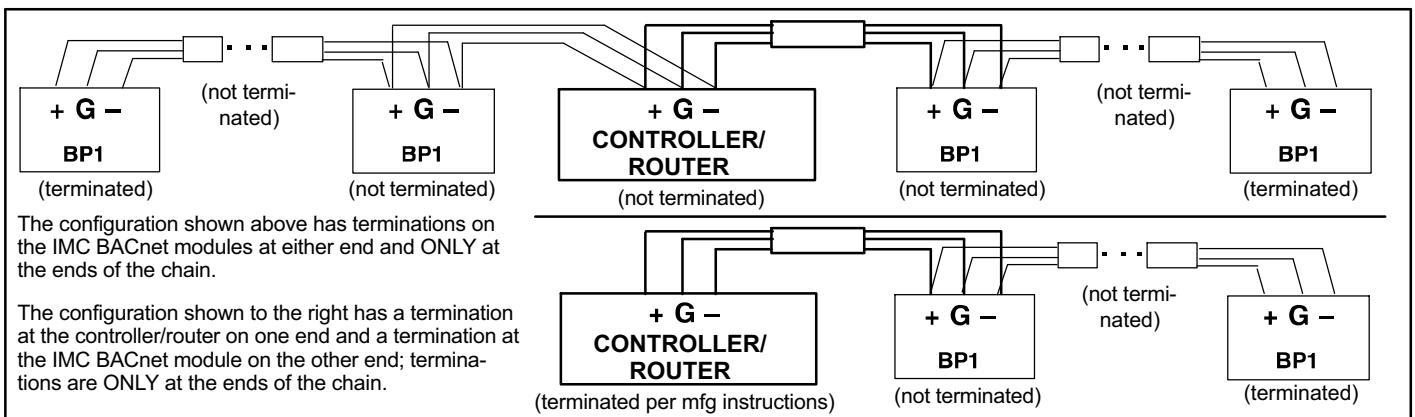


Figure 2. Terminating ends of daisy-chained networks