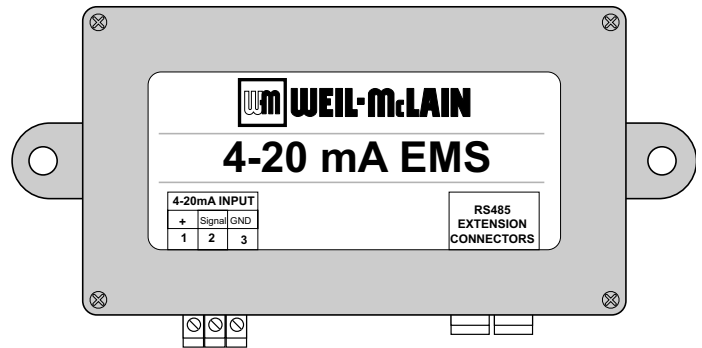


# WEIL-McLAIN 420MOD

ADDS 4-20mA SET POINT CAPABILITY TO BMC AND BCP8

## INSTALLATION AND OPERATION INSTRUCTIONS MANUAL

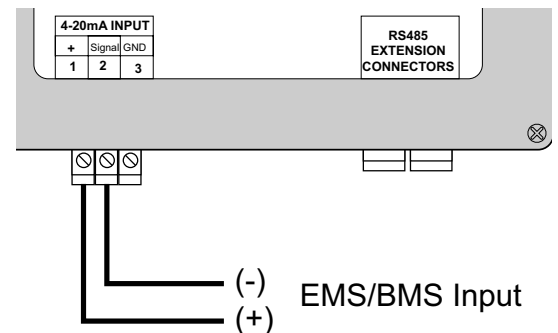
The 420MOD Interface provides the BMC and BCP8 series controls with the capability of receiving an external Set Point as a 4-20mA signal through an Energy Management or Building Management Systems (EMS/BMS). The External Set Point can be either temperature or Pressure depending on the control and its settings. In addition, the BMC and the BCP8 controls can be shutdown by the EMS/BMS system.



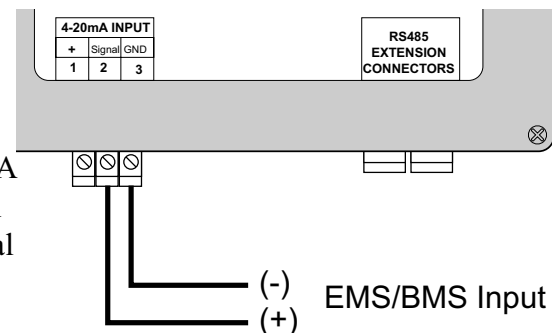
### WIRING

#### Wiring the EMS Signal

- The signal must be a two-wire 4-20mA.
- A system sensor must be installed to the BMC or BCP8 control.
- The External Set Point must be set up correctly (See BMC and BCP8 documentation). These settings will allow the BMC and BCP8 to read and monitor the system temperature and also monitor the 4-20mA input to remotely adjust the set point to the desired value.
- The 420MOD Interface can source the current for the 4-20mA input signal. It provides an excitation DC current. If using the 420MOD Interface to source the power, attach the (+) side of the EMS/BMS signal to the 420MOD Interface terminal marked +. Attach the (-) side of the EMS/BMS signal to the 420MOD Interface terminal marked SIGNAL.
- If the EMS/BMS or other equipment signal sources the current (provides the excitation voltage), attach the (+) side of the 4-20mA input to the 420MOD Interface terminal marked SIGNAL. Attach the (-) side of the 4-20mA input to the 420MOD Interface terminal marked GND.



#### 4-20 mA EMS Interface Sources DC Excitation Voltage

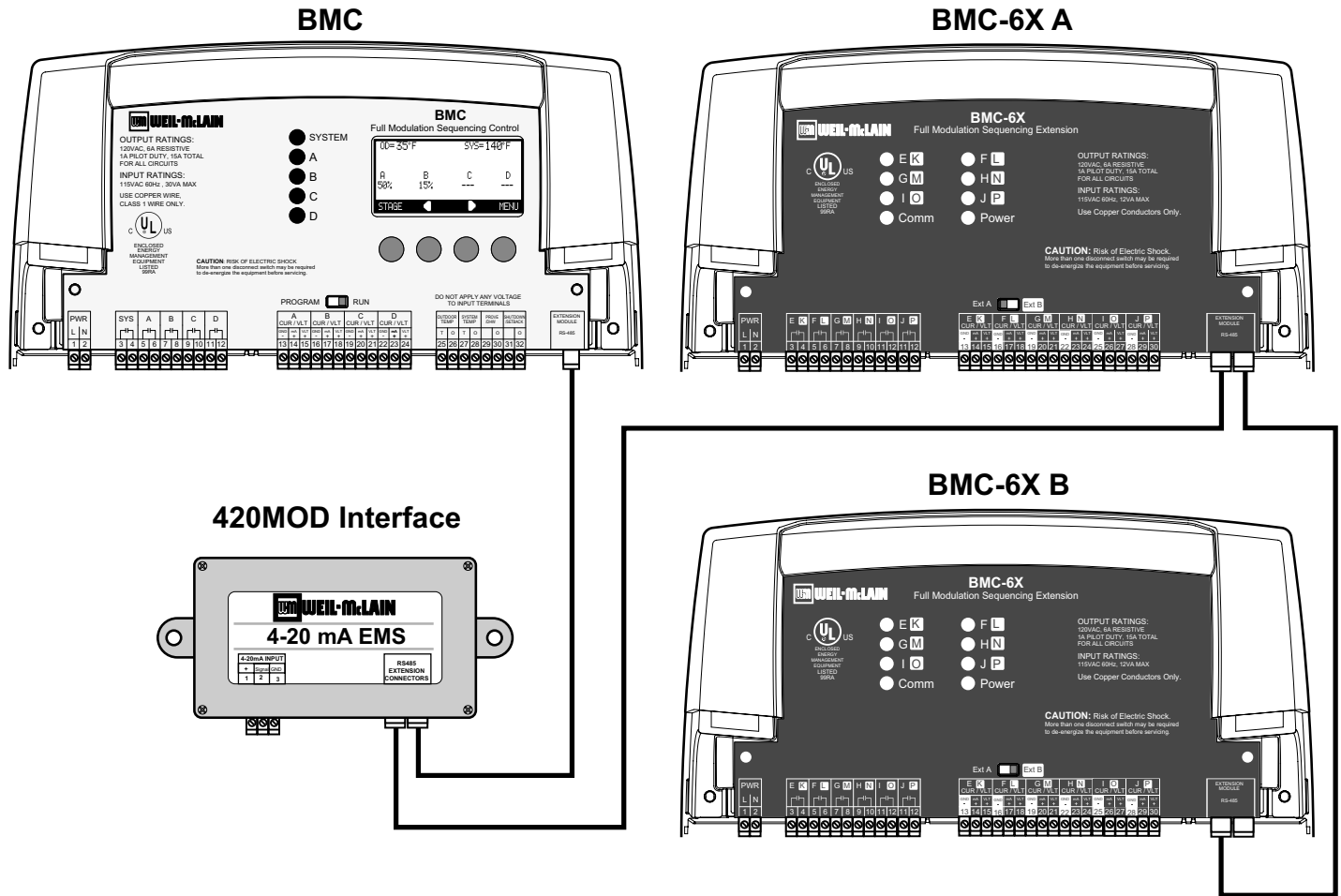


#### EMS/BMS Sources Excitation Voltage

**⚠ WARNING**

The 420MOD interface can either source DC current or accept DC current from an EMS/BMS System. Each configuration has a different wiring schematic. Wiring the current to the “+” and “Signal” terminals will damage the 420MOD interface.

**Connecting 420MOD Interface to BMC with Two Extension Panels using RS485**



**Connecting the 420MOD interface to the BMC or BCP8**

- The 420MOD Interface connects to the BMC or BCP8 using an RS485 (phone plug).
- When having to use the RS485 to connect to Extensions, use the extra RS485 (phone plug).
- The control, 420MOD Interface, and two Extensions can be connected in series using the RS485.