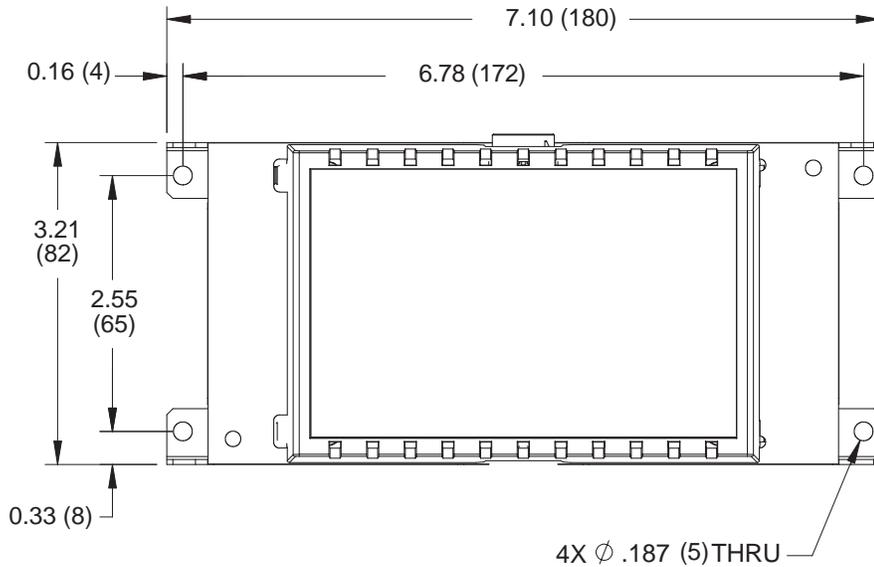


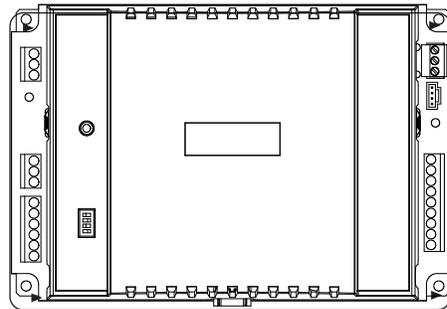
xPb Expansion Module Reference

30-3001-883 Rev D.1



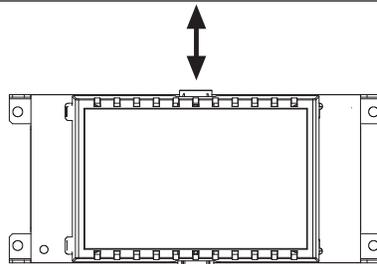
Note:

This equipment is intended for field installation within the UL Listed enclosure model UL-ENCL, used with the ACX 57xx series controller for UL 294 and UL 1076.

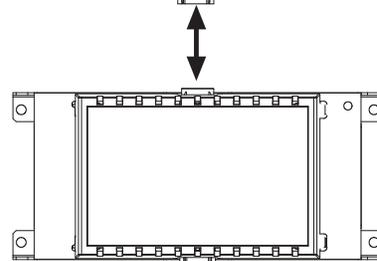


**ACX 57xx Series Controller
or
bCX1 Series Controller ***

* The bCX1 series controller is not evaluated by UL.



Caution: Earth ground (⊖) must be connected to avoid module damage



Modules Plug Together

Power must be disconnected from controller before installing any xPb module.

Adding expansion modules to the controller requires the controller to be coldstarted before it will recognize the module.



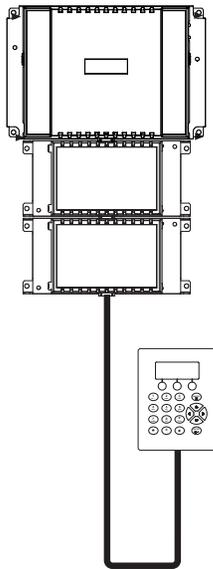
UL 916 Listed product for the United States and Canada, Open Energy Management Equipment.



UL 294 (Access Control System Unit Subassemblies for the United States) and UL 1076 (Proprietary Burglar Alarm System Unit Subassemblies for the United States) and C22.2 No. 205-M1983 (Signal Equipment for Canada)

Note: Refer to the UL Listed Access Control/Proprietary Burglar Alarm System's installation manual (the *UL294 Access Control and UL 1076 Proprietary Burglar Alarm Systems Reference*, 30-3001-504) for specific wiring, operation, and compatibility information.

Expansion Limitations



Basic Expansion Limitations

The number of expansion modules is limited by the controller firmware and the capacity of the power supply current available from the controller. The firmware supports a maximum of two modules plus the xPDisplay as long as the power consumption does not draw more current than the controller can supply.

bCX1 Series Controllers: Maximum current available is 400mA.

ACX 57xx Series Controllers: Maximum current available is 360mA.

Module	Function	Current Draw @ 24VDC
xPBA4	4 Universal Inputs, 4 Analog Voltage Outputs	60mA
xPBD4	4 Universal Inputs, 4 Relay Outputs	125mA
xPDISPLAY	Keypad/Display Module	70mA

Normal CPU LED Pattern

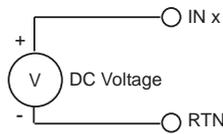
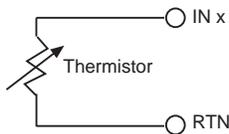
Expansion module connected closest to the controller will blink at 2Hz rate.

A module connected to the first one will display two short blinks every two seconds.

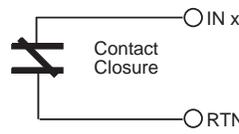
Incompatible or malfunctioning modules may display a steady ON or a short ON then completely OFF.

I/O Connections

Universal Inputs



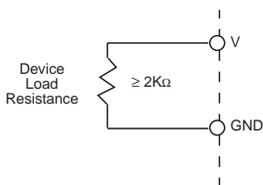
Max DC Input Voltage =5V



Analog Outputs

Voltage Output

0 - 10VDC --- , 5mA max.



Output Override Control

OFF

The output is set to zero volts. Programs and the setting on the potentiometer have no effect on the output Device when the switch is in this position.



AUTO

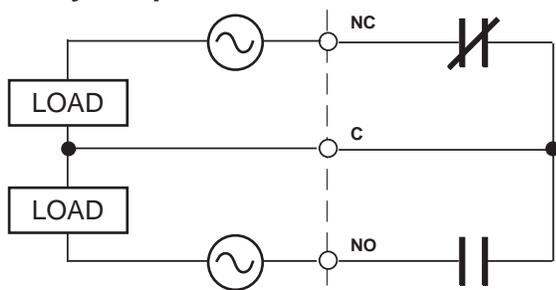
The analog signal is generated as a direct result of program control. The setting on the potentiometer has no effect on the output Device when the switch is in this position.

MANUAL

The analog signal generated by the module is controlled manually by adjusting the potentiometer. Programs have no effect on the output when the switch is in this position.

This is a variable control that allows you to manually adjust the output of the analog signal when the override switch is in the MANUAL position. Insert the tip of a small screwdriver to use this control. Turning to the right (clockwise) increases the output. Turning left (counterclockwise) decreases the output.

Relay Outputs

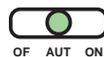


Contact Rating: 3A @ 24 VAC ~
3A @ 30 VDC ---

Output Override Control

OFF

The output relay is de-energized to an 'OFF' state manually by setting the switch to OFF. Programs have no effect on the output when the switch is in this position.



AUTO

The action of the output relay is determined as a direct result of program control.

ON

The output relay is energized to an 'ON' state manually by setting the switch to ON. Programs have no effect on the output when the switch is in this position.