

## **RS-485 Communications (For monitoring & control)**

The RS-485 Port is provided for process control and monitoring by a remote controller (e.g. Computer). It provides communications to the controller using standard RS-485 protocols through an RJ-12 jack. It is designed to be used with standard laboratory networking software, but may also be used with any custom software that supports RS-485 communication.

**Note: Bellco does not supply software or computers for this signal to the end user.**

### Factory Default settings

Stop Bit = 2 (Range: 1-2)

Data Length = 7 (Range: 7-8)

Parity = even (Range: even, odd, none)

Baud Rate = 9.6 (Range: 1.2, 2.4, 4.8, 9.6, 19.2 Kb)

Local Address = 0 (Range: 0-99)

### RJ-12 Jack connections (Mating plug wire colors)

Red: RS-485 A (+)

Green: Optional (4-20) +

Black: RS-485 B (-)

White: Optional (4-20) -

Yellow: Power common

Blue: N/C

## **Remote Alarm Jack (non-monitoring)**

The remote alarm jack is a 1/4" phone jack located on the back of the unit. The process (Omron) controller has two alarm set points which monitor the rpm (PV) of the unit. The alarm output is a contact closure only; customer must provide his own alarm system. E.g. light, buzzer, power supply, etc. The contact limits are 1 amp at up to 125 VAC or DC. These alarm points are non-latching and non-failsafe, and are not intended to provide process monitoring. Use the RS-485 port for process monitoring. The AL-1 alarm setpoint is for lower deviation and the AL-2 alarm set point is for upper deviation based on the SP value. They are intended to provide a remote signal if the PV value exceeds the alarm set points during equipment operation. External connections may be made to the tip and ring circuits of the supplied phone jack. The shell (ground) connection is not used.

Bellco Equipment is preprogrammed with the controllers set to match the specifications given in this document. As such, they are shipped with the programming option disabled. This prevents the accidental erasure or modification of Bellco factory settings. If you believe you have a need to change the default values, contact Bellco Service department at 1-800-257-7043 for a copy of the controller's specifications, and instructions on how to enable these features.