

Application

The Series 4 PLC Central Controller consists of two models: one controls up to 24 vacuum receivers any combination on 2 blowers. The other controls up to 32 vacuum receivers on 4 blowers with up to 8 receivers per blower. The Series 4 PLC Controller is designed to be used with both P-Series and 2400 Series Receivers. It can control traditional "keep full" receivers that fill and dump until a vessel below is full and/or K-Tron's line of "refill" receivers that fill and hold material until a dump request is received. A low-voltage cable system with quick-connect plugs allows the receivers to be connected to the central controller without tools. In addition, low-voltage wiring generally does not require an electrician or conduit, allowing for a less expensive electrical installation.

Design

The Series 4 PLC controller features a user-friendly touchscreen for system status and control with an alarm message screen. From one central location, the operator can turn receivers on and off, set fill times and control and view all system functions. The Series 4 PLC controller is pre-programmed for a full system of receivers. No changes are needed to add receivers at a later date. Detailed help screens are provided with system installation, programming and troubleshooting information. A dry contact alarm output is provided for customer connection to a horn or beacon.

Technical Data

Standard Mechanical Specifications

- 425 x 362 x 159 mm [16.75 x 14.25 x 6.25 in] enclosure
- 178 mm [7 in] color touchscreen with screensaver
- Allen-Bradley Micrologix 1400 programmable logic controller or Siemens S7 Series programmable logic controller
- Rated for 0 to 55°C [32 to 131°F]
- IP65 / NEMA 12 enclosure
- CE compliant
- 1200 Watts maximum

Standard Programmable Features

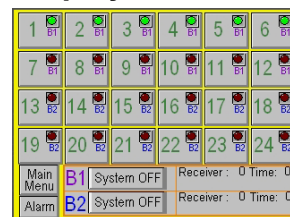
- Program receivers to fill to level switch or by time
- 4 programmable receiver modes
- 4 programmable pulse-clean modes
- Access protection
- Blower shutdown
- Blower select

Options

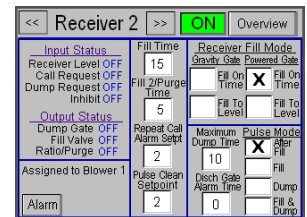
- EEPROM memory backup available
- Telephone modem for remote access by Coperion K-Tron for support and troubleshooting
- Inhibit panel available for local Run/Inhibit control



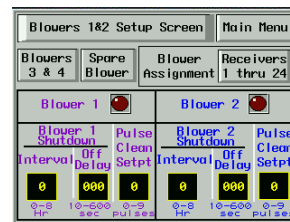
Displays



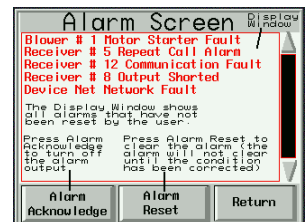
Overview Screen



Receiver Setup Screen

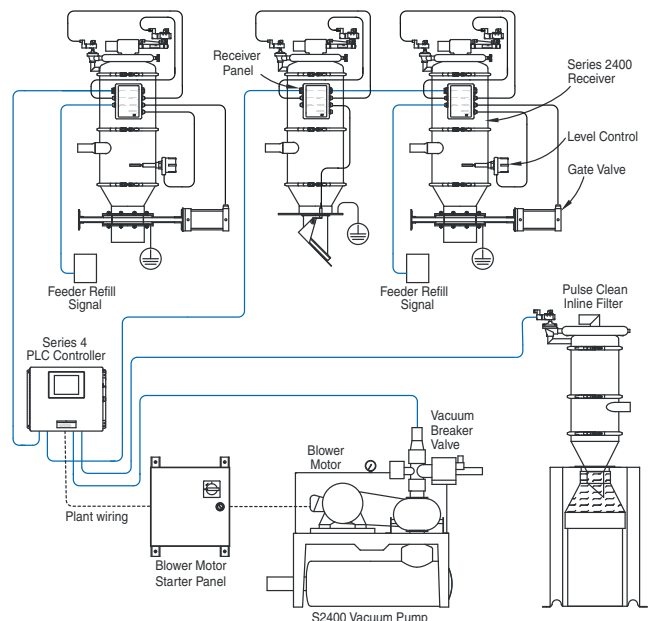


Blower Setup Screen

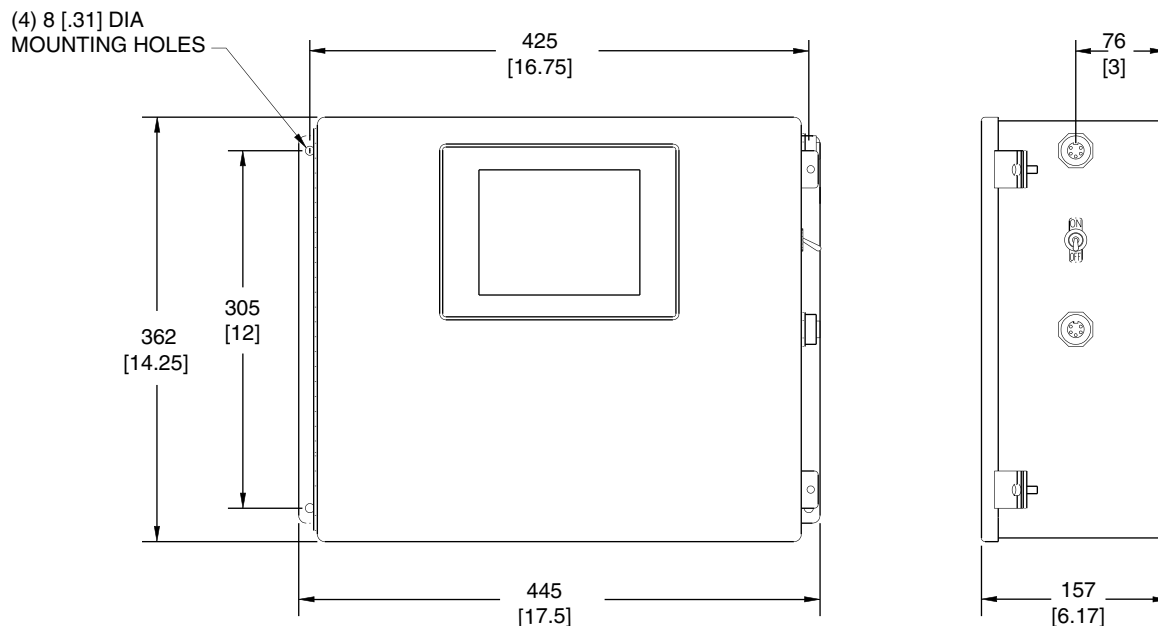


Alarm Screen

Sample Communication Configuration



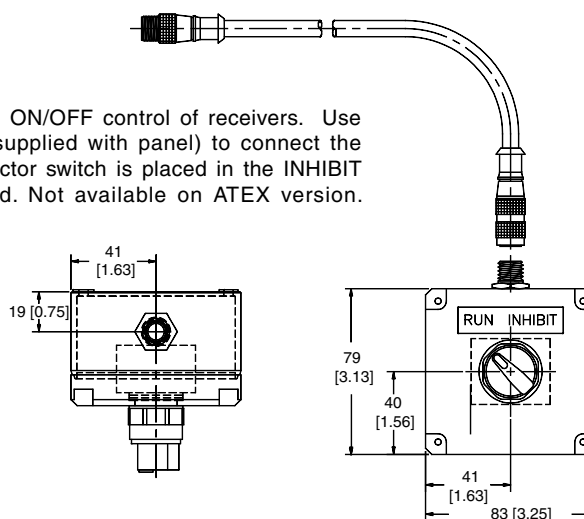
Dimensions mm [in]



Part No.	Protocol	# of Receivers	# of Blowers	Supply Voltage	Receiver Voltage
5741-95	Allen Bradley	24	2 + spare	85-265 VAC	24 VDC
5741-96	Siemens	24	2 + spare	85-265 VAC	24 VDC
5741-114	Allen Bradley	32	4 + spare	85-265 VAC	24 VDC

Optional Inhibit Panel is used for local ON/OFF control of receivers. Use the quick-connect 3 m [10 ft] cable (supplied with panel) to connect the panel to the I/O block. When the selector switch is placed in the INHIBIT position, the receiver will be disabled. Not available on ATEX version.

Part No. 5741-81



Caution: Measurements are for general reference only. Please consult dimensional drawing for exact measurements.