

Application

The Coperion K-Tron Series 4 MPC Controller controls up to 24 vacuum receivers on one blower with one back-up blower. The Series 4 MPC 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 Coperion 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, allowing for a less expensive electrical installation.

* Quick-connect plugs not available for stainless steel version.

Design

The controller consists of a central control unit which features an easy-to-use, touch-sensitive keypad. The operator controls the whole system, including turning receivers on and off, setting draw times from one central location and starting the systems blower package. The standard enclosure is made of enameled painted steel. A stainless steel version is available for use in pharmaceutical applications.

The Series 4 MPC Controller can be integrated into the Coperion K-Tron SmartConnex feeder controls, providing one simple control solution for both feeders and vacuum sequencing receivers. It can operate as a slave to the K-Vision Line Controller or Coperion K-Tron Smart Commander process visualization software. The unit is shipped pre-programmed, eliminating complex logic programming.

Technical Data

Standard Mechanical Specifications

- Mild steel painted with IP65, NEMA 12 enclosure or stainless steel IP66, NEMA 4X
- LED visual indicators inform operator of receiver's status
- Easy on-screen system setup
- Back-up blower capability
- Blower shutdown feature to allow in-line filters to pulse-clean
- 3 levels of password protection to restrict access
- Rated for -10 to 60°C [14 to 140°F]
- Network capability and computer interface for data acquisition
- Standard RS-485 Modbus 4-wire host communication serial channel
- Quick-connect cabling for fast and trouble-free installation (not available on stainless steel version)
- CE compliant
- Power supply data 88-264 VAC input / 24 VDC 150 Watt output
- 300 Watts max
- 5 languages available: English, German, French, Spanish, Italian

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

Hazardous Location

NEC Class II, Div. 2, Group F & G

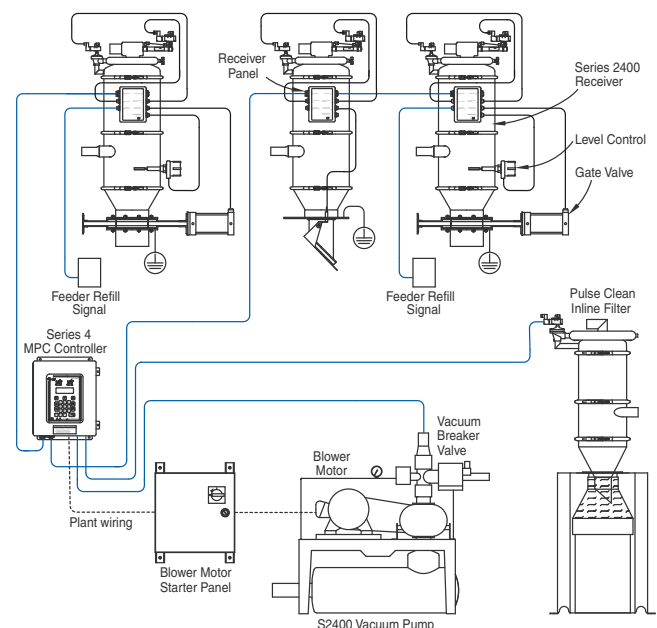


MPC Controller shown with mild steel painted enclosure

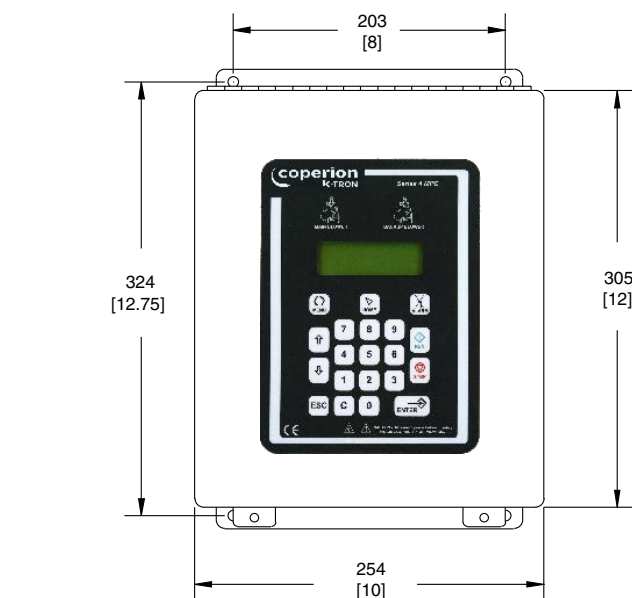


MPC Controller shown with stainless steel enclosure

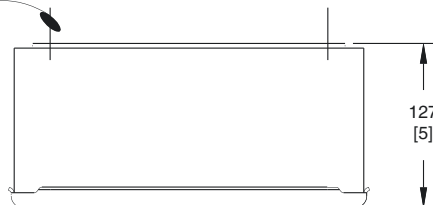
Sample Communication Configuration



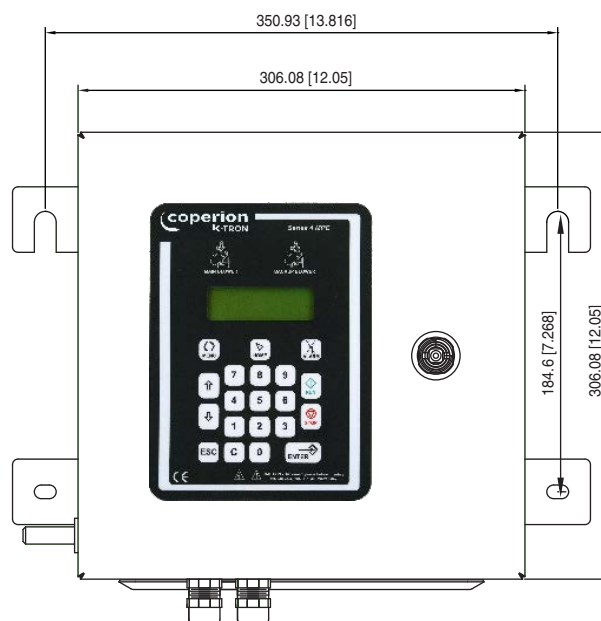
Dimensions mm [in]



(4) 8 [.31] DIA
MOUNTING HOLES



Mild Steel Painted Enclosure

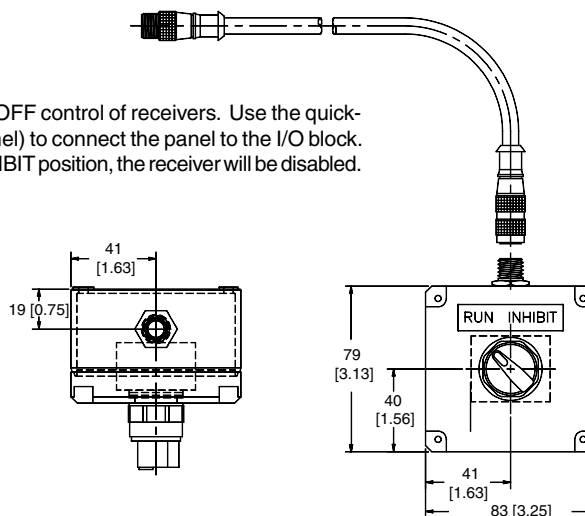


Stainless Steel Enclosure

Part No.	# of Receivers	# of Blowers	Supply Voltage	Receiver Voltage
5741-94	1 to 24	1 + spare	88-264 VAC	24 VDC
5741-118 (Stainless Steel)	1 to 24	1 + spare	88-264 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.

Part No. 5741-81



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