FAN FILTER UNIT
WALL MOUNTED SPEED CONTROLLER, PSC MOTOR

WALL KIT FOR PSC MOTOR:
HIGH VOLTAGE AND REQUIRES FIELD SUPPLIED CONDUIT AND JUNCTION BOX. IT IS SUPPLIED LOOSED FOR FIELD INSTALLATION IN PLACE OF A SPEED CONTROLLER USUALLY LOCATED ON THE FAN FILTER UNIT. AS OPPOSED TO STANDARD SPEED CONTROLLER IT IS EASILY ACCESSIBLE AND COMES WITH A KNOB THAT CAN BE ADJUSTED WITHOUT THE USE OF A TOOL.

ALL METRIC DIMENSIONS () ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.
**NOTE 1:**
Connect 0-10 VDC output to 'BAS SIG' input on PRICE ECM speed controller (P/Ns 232953-100, 232953-230).

Each 0-10 output can control a max of 15 ECM speed controllers (for a total of 30 per wall mounted speed controller). Connect common to 'BAS COMMON' on ECM speed controller.

**NOTE 2:**
Each 0-10 output can support a max cable length of 100 feet. Cables shall be shielded for electrical noise and must be run away from all power lines.

**NOTE 3:**
Contact closure input - when contacts open, dial will control fan speed from off to 100%. Proportionally: when contacts shorted, 0-10 outputs 7 and 8 will go to 0 volts, and all associated ECM speed controllers will default to their local setting.

**NOTE 4:**
Turning dial from min to max position will proportionally increase voltage from each 0-10 VDC output from 1.5 VDC (fan off) to 10 VDC (fan max speed).

**LEGEND**
- - - - FIELD WIRING

**DIAL MODEL**
250061-300

**FIELD INSTALLED POWER SOURCE.**
(BY OTHERS)

**24 VAC HOT AND COMMON POLARITY IS CRITICAL!**
Ensure proper polarity on fan speed dial and all ECM speed controllers.

**WALL MOUNTED SPEED CONTROLLER**

**PROJECT:**
FFUCS - FAN FILTER UNIT CONTROL SYSTEM
WALL MOUNTED SPEED CONTROLLER (WMSC-30)

**ENGINEER:**
DK

**CUSTOMER:**
FFUCS
FFU CONTROL SYSTEM
WALL MOUNTED SPEED CONTROLLER

**SUBMITTAL DATE:**
JAN 2019

**SPEC. SYMBOL:**
269849

© Copyright PRICE INDUSTRIES 2019

ALL METRIC DIMENSIONS ( ) ARE SOFT CONVERTED. IMPERIAL DIMENSIONS ARE CONVERTED TO METRIC AND ROUNDED TO THE NEAREST MILLIMETER.
FFU - FAN FILTER UNIT
BACnet FLOW CONTROLLER (BFC)

Input / Output Description

Analog Outputs
A01: Configurable for Unit Pressure, CFM (Air Flow), RPM (Motor Speed), Filter Load & BAS
A02: Configurable for Unit Pressure, CFM (Air Flow), RPM (Motor Speed), Filter Load & BAS

Binary Outputs
B01: Red LED Out
B02: Green LED Out
B03: Common

Analog Inputs
A11: Input Voltage for Remote Fan Speed Control
A12: Spare

Inputs
- Thermistor Input: Analog Input for Monitoring Air Over Filter Temperature, 10k Type J Thermistor
- Contact Closure: Binary Input for Night Setback

All metric dimensions ( ) are soft converted. Imperial dimensions are converted to metric and rounded to the nearest millimeter.
Fan Filter Unit (Roomside Controls)
2X3 & 2x4 Top Side and Room Side Accessible Control Box

WARNING
• SHOCK HAZARD. DISCONNECT POWER BEFORE SERVICING UNIT
• ROTATING FAN BLADES. ENSURE FAN HAS STOPPED BEFORE SERVICING UNIT

ROOM SIDE ACCESSIBLE CONTROLS
• REMOVE FACE, FILTER AND GASKETED CONTROLS LID TO ACCESS CONTROL BOX ASSEMBLY

NOTE:
For ducted applications, reference FFU Service and Installation manual for balancing procedure.

ROOM SIDE CONTROLS VIEW

TOP SIDE CONTROLS VIEW

FILTER
FACE ASSEMBLY
GASKETED CONTROLS LID SECURED USING BOLTS

Baffle Outlet Covered by Protective Screen
Disconnect Switch

CONTROL HEIGHT DETAIL

dimensions (inches) are soft converted. imperial dimensions are converted to metric and rounded to the nearest millimeter

© Copyright PRICE INDUSTRIES 2020

PROJECT: FFU ROOM SIDE CONTROLS RSR, 2x3/2x4
ENGINEER: KC
CUSTOMER: 271781
SUBMITTAL DATE: MAR 2020
SPEC. SYMBOL: FFU-1-X
Fan Filter Unit (Roomside Controls)
2x2 Top Side and Roomside Accessible Control Box

WARNING
- SHOCK HAZARD, DISCONNECT POWER BEFORE SERVICING UNIT
- ROTATING FAN BLADES, ENSURE FAN HAS STOPPED BEFORE SERVICING UNIT

ROOM SIDE ACCESSIBLE CONTROLS
- REMOVE FACE, FILTER, BAFFLE AND GASKETED CONTROLS LID TO ACCESS CONTROL BOX ASSEMBLY

NOTE:
For ducted applications, reference FFU Service and Installation manual for balancing procedure.
**FFUCS - FAN FILTER UNIT CONTROL SYSTEM**

**FRONT END BACnet SYSTEM**

---

**WEB SERVER**

**FEATURES:**
- Interface to BACnet MS/TP devices in building via web address
- Displays status of Ethernet LAN via green and red LEDs
- Can be configured for remote access via web address
- Animated graphic screens (to view variables such as filter status, CFM, for each FFU & modify set points as needed
- Reference standard submittal 265512 for additional information

---

**IP ETHERNET ROUTER**

**FEATURES:**
- Connects BACnet to building network
- Displays status of power, Ethernet LAN & WAN via diagnostic LEDs
- Can be configured in the field via web browser
- Stateful firewall, PAT, NAT & port forwarding properties
- Reference standard submittal 265511 for additional information

---

**BACnet ROUTER**

**FEATURES:**
- Connects BACnet IP/ETHERNET to BACnet MS/TP segments
- Displays status of power & Ethernet via diagnostic LEDs
- Can be configured in the field via web browser
- Reference standard submittal 265510 for additional information

---

**IP ETHERNET SWITCH**

**FEATURES:**
- Five port unmanaged Ethernet switch provides 100Mbps performance on all ports
- Accepts either cross-over or straight through cables using auto-mdix protocol
- Reference standard submittal 265513 for additional information

---

**PROJECT:**

**ENGINEER:**

**CUSTOMER:**

**SUBMITTAL DATE:**

**SPEC. SYMBOL:**

---

© Copyright PRICE INDUSTRIES 2019