

# ENERVEX®

## EBC 24 MODULATING FAN CONTROL

020.3050.0421 02.24

Product Information

### Use

The EBC 24 is a Modulating Fan Control used with up to two appliances to monitor and maintain a constant draft or pressure in a chimney or duct. This is achieved by modulating the speed of a chimney fan or ventilator. The EBC 24 can be used with models RSV, BESF, BEF, BPV, SFTA and TDF. It can control the fan speed directly or via a EDrive motor controller.

The EBC 24 is typically used to control the draft in systems requiring one or two boilers or water heaters. It also can be used in combustion only applications.

### Description

The control monitors the draft in a chimney system via connection to a bi-directional pressure sensor (XTP) attached to the chimney, and maintains it by modulating the fan speed. The control has an integrated safety system that assures the heating appliance is shut down in case of fan failure or control failure.

The use of the EBC 24 is not restricted to any type of fuel or type of heating appliance. When the appliance thermostat closes and calls for heat, the control will send voltage to the chimney fan or EDrive. When the necessary draft is achieved, the control will allow boiler firing and regulate the voltage to the fan or EDrive, so the required draft is maintained (the value can be viewed in the display). In case of insufficient draft, the control will assure the burner will be shut down after 15 seconds (Can be adjusted). When the appliance has satisfied the thermostat and shuts down, the control will turn off the fan.

The control can be used in one of two ways:

- Interlocked with the appliance to pre-purge the chimney prior to boiler start-up and post-purge the chimney for a variable time after boiler shut down
- Set to run the fan continuously

The control has an integrated safety function. It can be operated with either a manual reset function (reset button) or an automatic reset function. All terminal connections are monitored by LEDs for easy service and troubleshooting.

### Material

Enclosure is made of polycarbonate and is NEMA 4x rated.



### Standard Equipment

- EBC 24 Control Unit
- XTP Sensor
- Stack Probe
- Silicone Tubing
- Jumpers

### Listings

The EBC 24 is UL Listed in the U.S. and certified for Canada under Underwriters Laboratories Inc. file no. E484712:

- ANSI/UL 60947-1 & 60947-4-1 Switches, Industrial Control
- CSA C22.2 No. 14-10 Standard for Industrial Control Equipment

### Approvals

- CE Compliant
- Manufactured at ISO9001 certified plant

### Warranty

2-Year Factory Warranty. Complete warranty conditions are available from ENERVEX Inc.



UL File E484712

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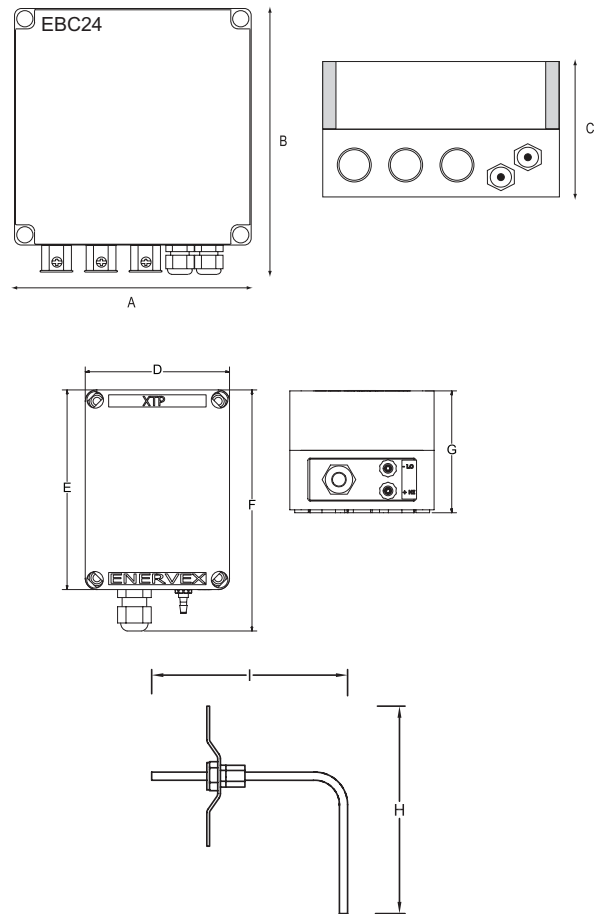
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## Specifications

<b>EBC 24 Control</b>		
Power supply	V	1x120VAC / 60 Hz
Amperage	A	0.4T/6.3T/250V(JDYX2/8)
Operating temperature	°F/°C	-4 to 122 / -20 to 50
Range of operation	inWC / Pa	-1.00 to + 1.00 / -250 to +250
Tolerance	inWC / Pa	0.01 / 3 +/-10%
Output Current	mA	max. 10
Max. Load		120 VAC / 8A
Real-time PID Control Method		Infinitely variable
Real-time PID Signal Stability		+/- 0.5%
Ramp Up/Down Time	Seconds	max 20
Output	VAC	10-120
	VDC	0-10
Dimensions	A in / mm	6.9 / 175
	B in / mm	6.9 / 175
	C in / mm	3.94 / 100
Weight	lbs/kg	3.0 / 1.5
EMC standard	Emission	UL 60947
	Immunity	EN50 082-2
<b>XTP Sensor</b>		
Mode		Bi-directional
Power supply	VDC	14-36
Amperage	mA	6
Output	VDC	0-10
Operating temperature	°F / °C	0 to 160 / -18 to 71
Accuracy		+/- 0.25%
Dimensions	D in / mm	3.70 / 94
	E in / mm	5.12 / 130
	F in / mm	6.18 / 157
	G in / mm	3.13 / 80
Weight	lbs / kg	.6 / .3
<b>Stack Probe</b>		
Dimensions	H in / mm	4.25 / 108
	I in / mm	3.50 / 89



Specifications are subject to change without notice.

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