

Modulating Pressure Control

EBC 30

Use

The EBC 30 is a draft or pressure control device that can monitor and maintain a constant draft or pressure by varying the speed of a fan(s) or the position of an actuator. It can be used with models RSV, IPVB, BESB and MDF.

Typical uses are: 1) Controlling draft in a mechanical draft system serving boilers and water heaters, 2) Controlling position of an over-draft damper serving boilers and water heaters, 3) Controlling duct pressure in a dryer venting system or a ventilation system, or 4) Controlling the supply of combustion air to a mechanical room.

Description

The EBC 30 features "Plug-n-Play" to automatically detect connections, setting requirements and accessories during initial start-up. A rotation check feature makes it easy to determine the rotation of a 3-phase fan motor.

The control can provide a 0-10V signal to a Variable Frequency Drive (VFD) or actuator. An add-on board can supply 0-120VAC power directly to the mechanical draft fan or air supply ventilator. It can interlock with up to 6 heating appliances, and an unlimited number of additional heating appliances can be handled by using one or more ES12, Relay Box. An integrated Proven Draft Switch function assures that if sufficient draft cannot be maintained, the control will lock out the appliance(s) within an adjustable time period. Automatic reset avoids nuisance lockouts and the need for manual reset.

The EBC 30 can be set up for intermittent operation so it pre-purges the stack prior to the boiler(s) start and post-purges up to 30 minutes after boiler stop. Alternatively, it can be set up for continuous operation where the fan runs continuously but modulates and runs at idle speed, if no appliances are operating.

The programmable processor allows manual overrides, manual operation; low and high limit fan speeds. An Operating Priority set up option allows one or more appliance to operate during electrical or mechanical failure of the fan(s) provided the draft requirement can be met and safe operation assured. It automatically checks for fan operation every two hours and goes back to normal operation, if appropriate.

A bearing cycle activation rotates the fan motor(s) once every 24 hours if the fan(s) has not operated within the last 24 hours.

Required draft and pressures can be maintained and shown via a LCD-panel. A self-diagnostics panel with LED-diodes verifies proper operation. The control maintains an error log including the last 10 fault codes.

Material

The housing is made in steel and is NEMA 1 rated.



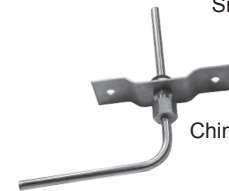
Controller



XTP2 Sensor



Silicone Tubing



Chimney Probe

Standard Equipment

Control box and XTP2 Sensor with 6' silicone tubing and a stack probe.

Listings

ETL listed to UL508 and CSA C22.2 No. 14-95 – Standard for Industrial Control Equipment (ETL Report 3028824A)

Component in ETL listed CASV System (ETL Report 045099A)

Component in ETL listed MCAS System (ETL Report J99*18091-003)

Component in ETL listed MDVS System (ETL Report J99*18091-004)

CE Compliant

Manufactured at ISO 9001 certified plant.

Approvals

OSHPD Preapproval Of Manufacturer's Certification (OPM) No.

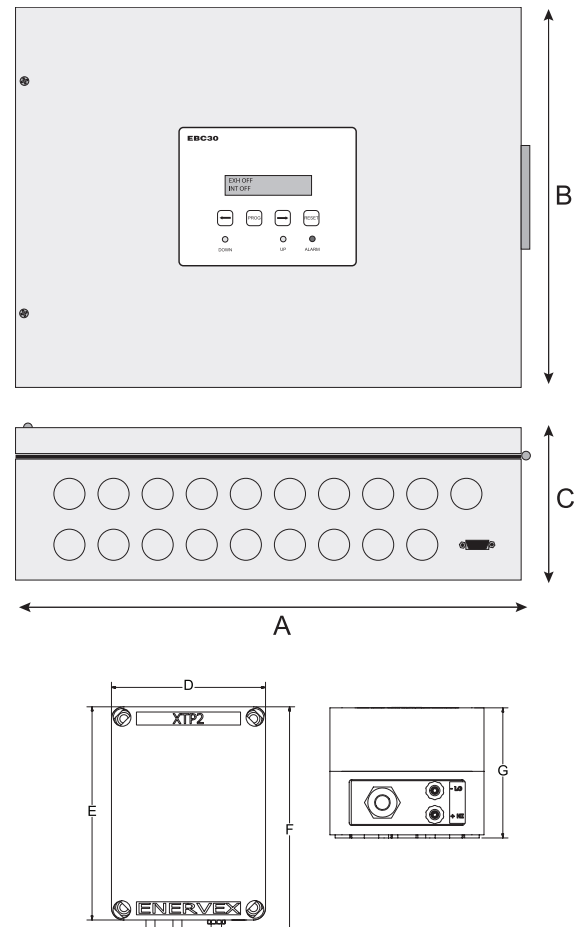
OSP-0343-10

Warranty

2-Year Factory Warranty

Specifications

EBC 30 Control		
Power Supply	V	1x120VAC
Amperage	A	6.3
Operating Temperature	°F/°C	-4 to 122/-20 to 50
Range of Operation	inWC/Pa	0-0.6/0-150
Tolerance	inWC/Pa	0.01/3 +/-10%
Control Signal	mA	max. 10
Control Relay		Max. 120 VAC/8A
Output	VAC	10-120
	VDC	0-10
Dimensions	A in/mm	14.65/372
	B in/mm	11.03/280
	C in/mm	4.22/107
Weight	lbs/kg	8.9/4.0
EMC Standard	Emission	EN 50 081-1
	Immunity	EN 50 082-2
XTP2 Sensor		
Power Supply	VDC	12-36
Amperage	mA	<20
Output	VDC	0-10
Operating Temperature	°F/°C	0 to 160 / -18 to 71
Range of Operation	inWC/Pa	0-0.6/0-150
Accuracy	inWC/Pa	+/-0.08%
Dimensions	D in/mm	3.70 / 94
	E in/mm	5.12 / 130
	F in/mm	6.18 / 157
Weight	lbs/kg	.6 / .3
Stack Probe		
Dimensions	H in/mm	4.25/108
	I in/mm	3.50/89



Programmable features:

1. Rotation check
2. Exhaust (draft) setting
3. Exhaust mode
4. Exhaust pre-purge time and speed mode
5. Exhaust post-purge time and speed mode
6. Exhaust sensor range
7. Exhaust alarm limit
8. Exhaust alarm delay
9. Exhaust speed min and max
10. Intake set
11. Intake mode
12. Intake pre-purge time and speed mode
13. Intake post-purge time and speed mode
14. Intake sensor range
15. Intake alarm limit
16. Intake alarm delay
17. Intake speed min and max
18. Language
19. Display units
20. Display light
21. Alarm reset
22. Service triac board
23. Service override exhaust
24. Service override intake
25. Service override alarm mode
26. Option priority mode
27. Option bearing cycle
28. Manual exhaust/intake