



VSUB-SERIES UNIVERSAL BLOWERS

Product & System Overview

Description:

VSUB-Series* Variable Speed Universal Blowers are suitable for providing combustion air or sidewall or vertically venting non-condensing (condensing applications require VSUBR-Series model with Ryton® coated impeller) heating appliances, dryers and ovens. Can be installed indoors or outdoors.

Use with the CPC-3 Constant Pressure Controller, Closed Loop VFD and TD-Series Pressure Transducer for an Automatic-Variable Speed system which will modulate to always deliver the perfect amount of draft or combustion air. For an Adjustable-Fixed Speed system, use an Open Loop VFD to manually adjust speed of the VSUB.

Housing Construction:

Constructed of 14-gauge, Type 316L stainless steel with continuous welds. The blower outlet rotates 180° for installation flexibility. The motor chassis slides away from the housing on polyethylene guides for easy motor and impeller access.

Impeller:

Backward inclined, high temperature coated, Class 1 impeller is both dynamically and statically balanced with permanently attached balancing weights.

Motor:

Three phase, TEFC, EPACT High Efficiency Rated, arctic-duty, thermal overload protected, permanently lubricated and sealed ball bearing.

*VSUB8 features a stainless steel impeller and can be used on condensing applications. Not Listed for use on condensing equipment in Canada.

Listings:

ETL # 56826
UL 378 - Draft Equipment / Variable Speed
UL 705 - Power Ventilators
CSA-CAN3-B255-M81



Warranty:

2 year mechanical

Standard Equipment:

- 4" x 4" weatherproof junction box with 4' conduit
- Square to round vent pipe adapter
- PSA-1 Fan Proving Switch
- FFP-1 Freeze and Fire Protection Limit (FFP-1 For combustion air applications only!)
- Condensate drain kit

Optional Controls:

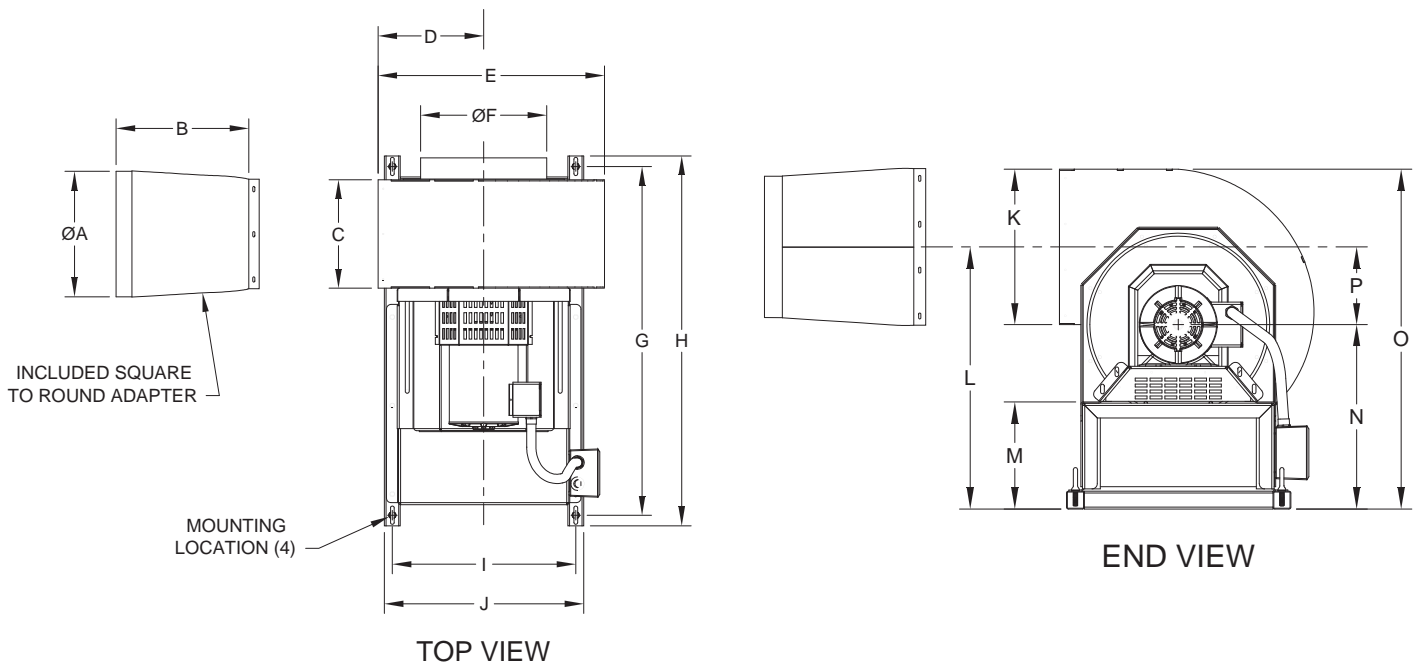
- CPC-3 Constant Pressure Controller
- IPS-1 Indoor Pressure Sensor decorative cover, fittings
- TD-2 Pressure Transducer (+0.15" to -0.60" w.c.)
For draft or "Sealed" (ducted sealed combustion air) sensing
- TD-3 Pressure Transducer (+0.10" to -0.10" w.c.)
For "Open" (room pressure) combustion air sensing
- VFD-Series Variable Frequency Drives

Temperature Rating:

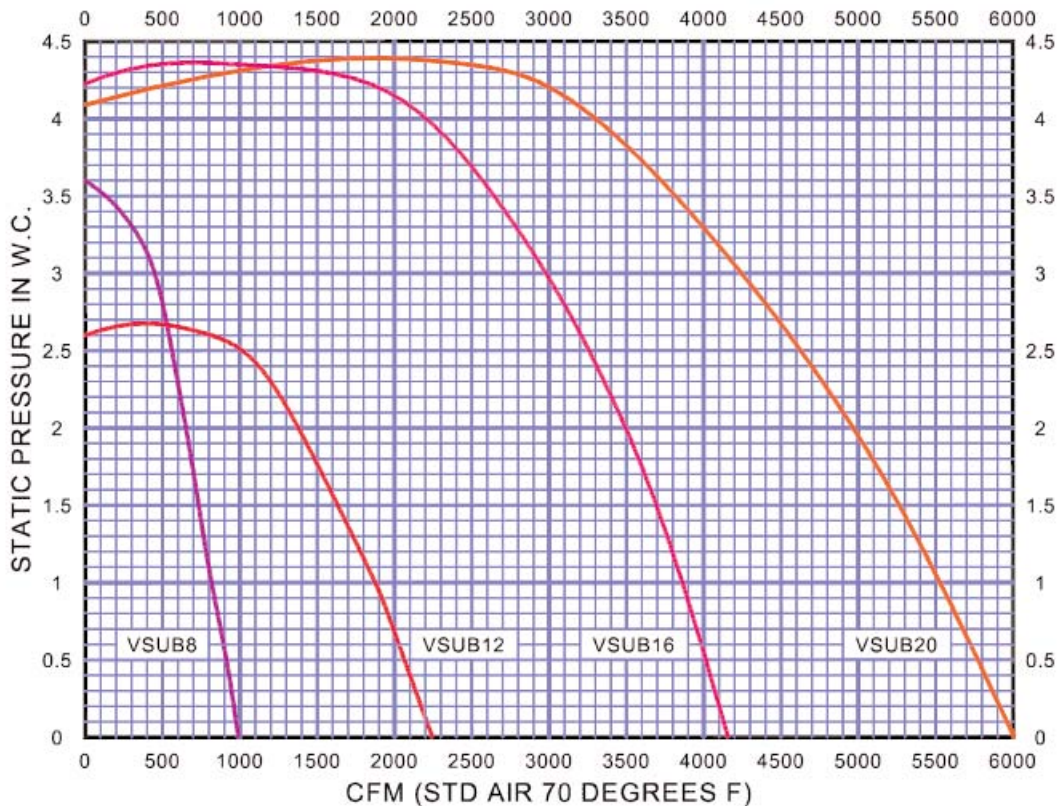
U.S. and Canada 575°F / 300°C

VSUB-SERIES PERFORMANCE AND DIMENSIONAL DATA

VSUB SERIES	VSUB8	VSUB12	VSUB16	VSUB20
Fan Type	Utility Blower	Utility Blower	Utility Blower	Utility Blower
Voltage	3x208-230 / 3x460	3x208-230 / 3x460	3x208-230 / 3x460	3x208-230 / 3x460
Amps A	1.5-1.6 / 0.8	3.2-3.0 / 1.5	6.0-5.6 / 2.8	8.8-8.2 / 4.1
Power Rating HP	1/3	1	2	3
Weight	118 Lbs / 54 kg	205 Lbs / 93 kg	285 Lbs / 129 kg	370 Lbs / 168 kg
Dimension A	7 7/8"	11 7/8"	15 7/8"	19 7/8"
Dimension B	10"	12 1/2"	14"	14"
Dimension C	5 1/4"	9 5/8"	11 15/16"	14 7/16"
Dimension D	7 5/8"	10 1/8"	13 5/16"	15 1/8"
Dimension E	16 1/2"	21 7/16"	27 1/2"	32 11/16"
Dimension F	7 15/16"	11 15/16"	15 7/8"	19 11/16"
Dimension G	28 1/2"	33"	41 11/16"	45 3/16"
Dimension H	30 1/2"	35"	43 11/16"	47 3/16"
Dimension I	14 9/16"	17 3/8"	23 1/4"	26 7/16"
Dimension J	16 1/16"	18 7/8"	24 3/4"	27 15/16"
Dimension K	10 1/8"	13 1/4"	16"	20 1/8"
Dimension L	19"	21 13/16"	26 13/16"	33 1/2"
Dimension M	8 3/8"	8 7/8"	11 3/4"	15 3/8"
Dimension N	13 3/4"	15 7/16"	18 7/8"	23 7/16"
Dimension O	24"	28 7/16"	34 13/16"	43 1/2"
Dimension P	5 1/8"	6 5/16"	7 15/16"	10"



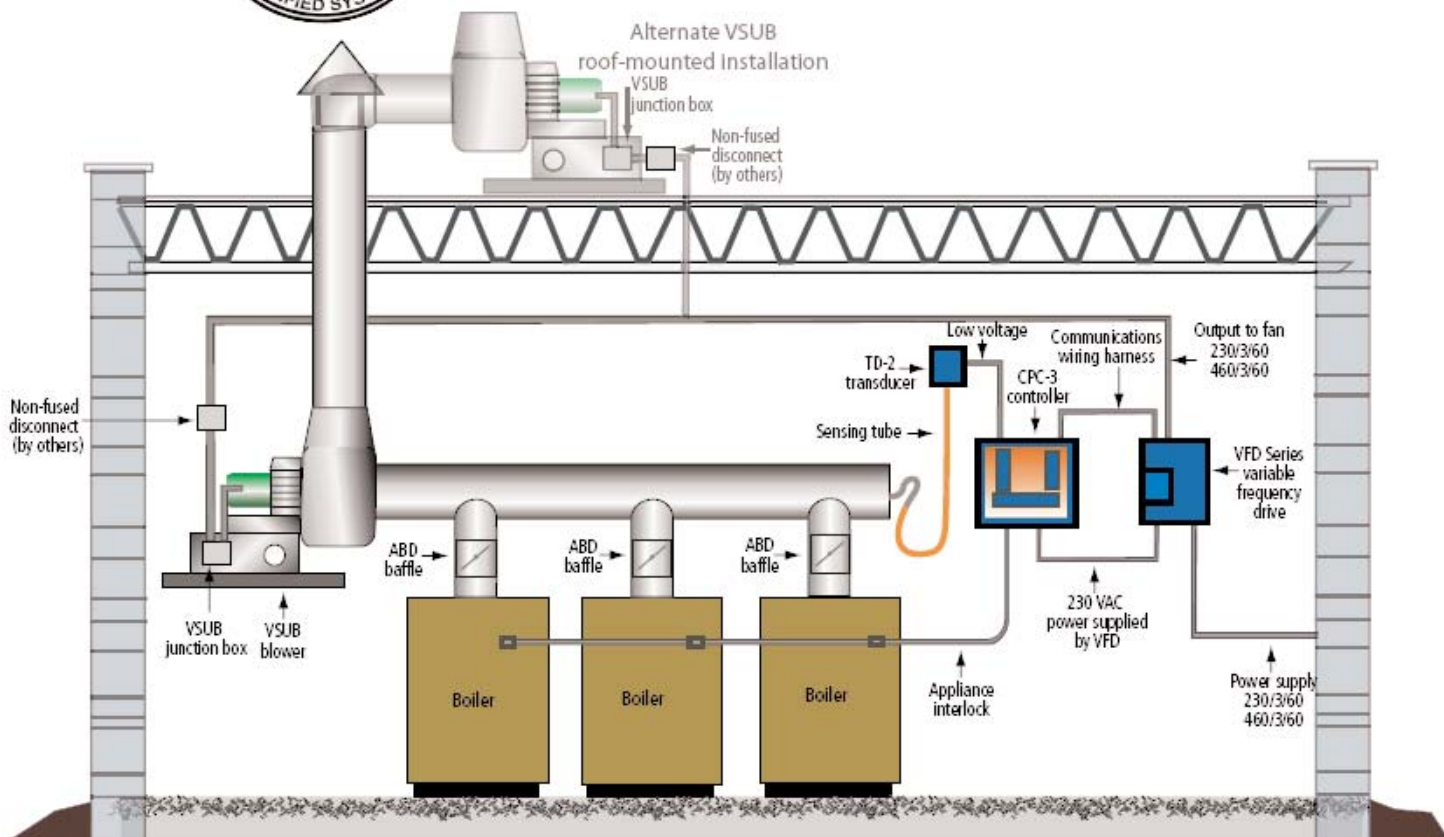
VSUB-SERIES FAN CURVES



RECOMMENDED LAYOUT DIAGRAMS



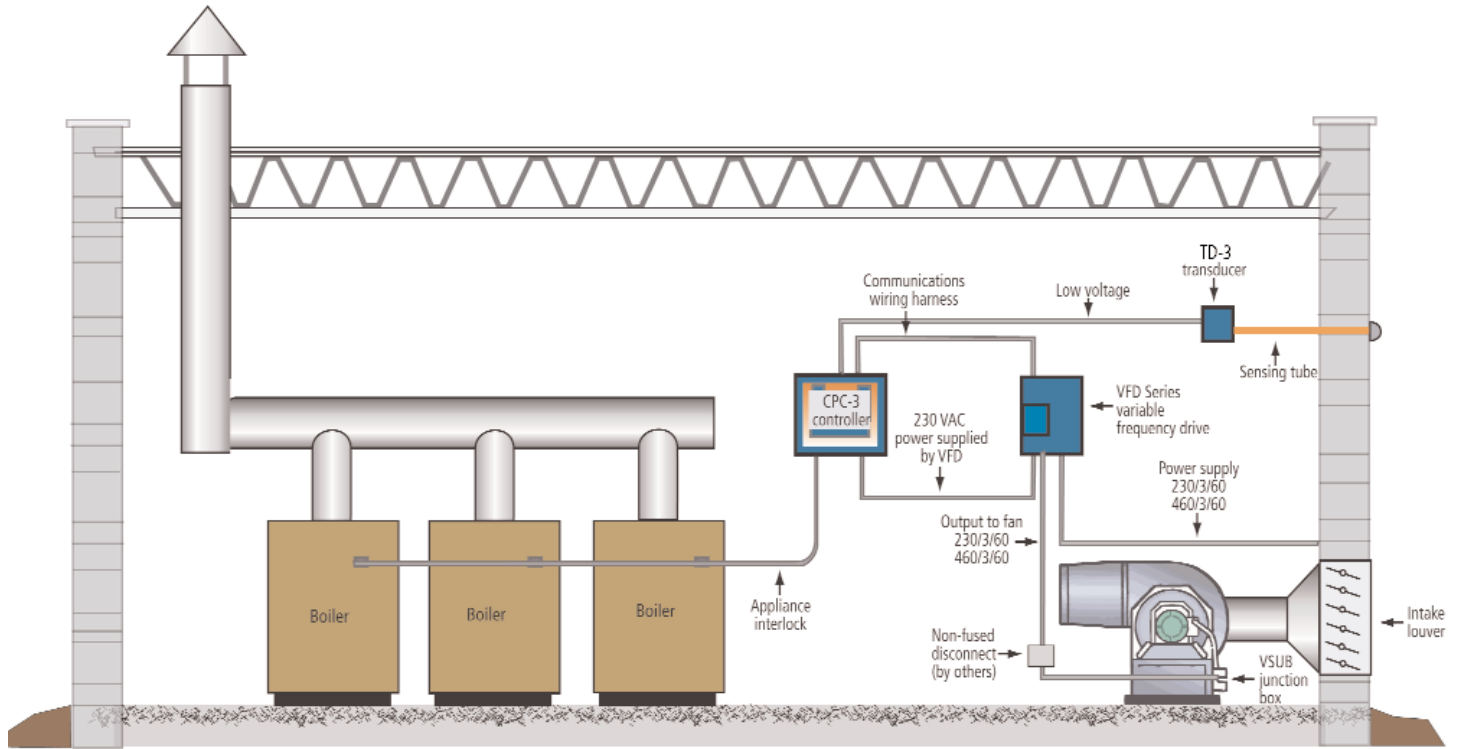
Mechanical Draft with VSUB-Series Blower



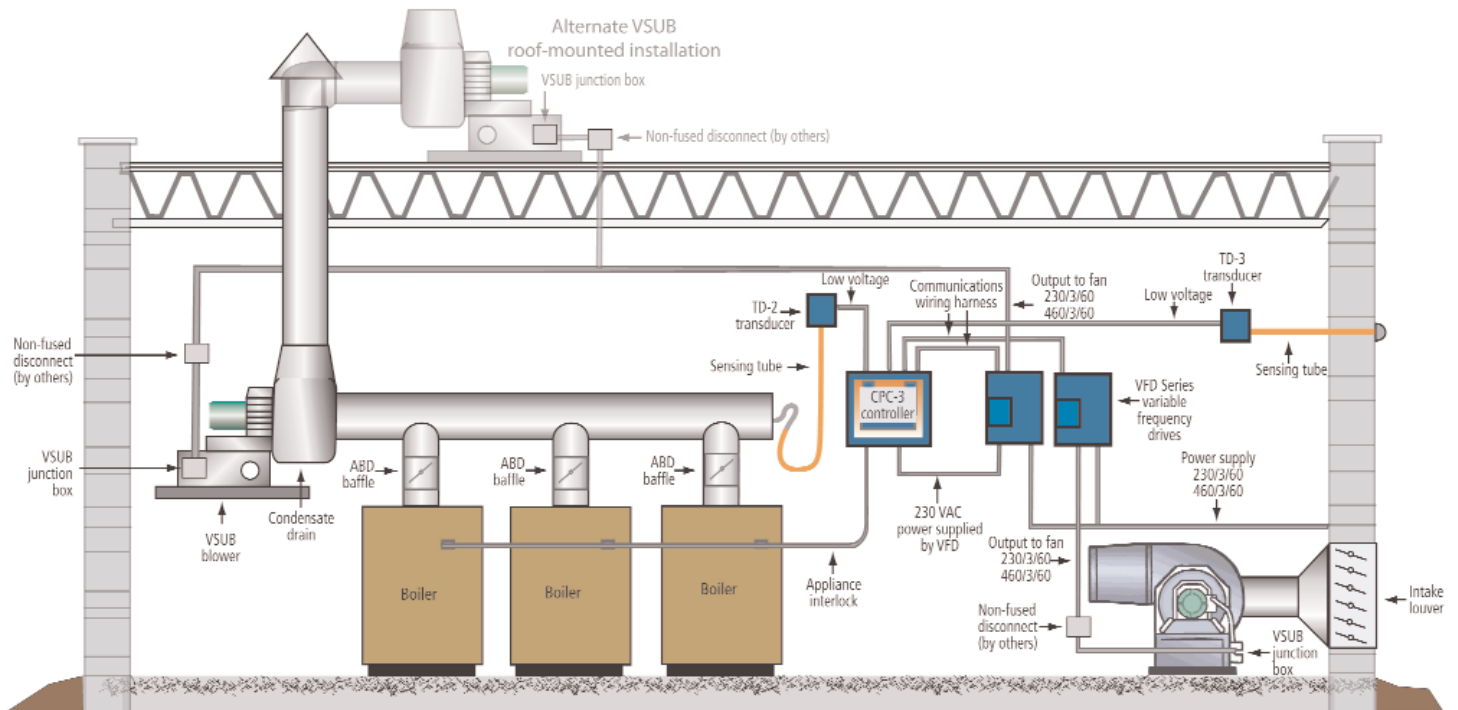
RECOMMENDED LAYOUT DIAGRAMS (Continued)



Mechanical Combustion Air with VSUB-Series Blower



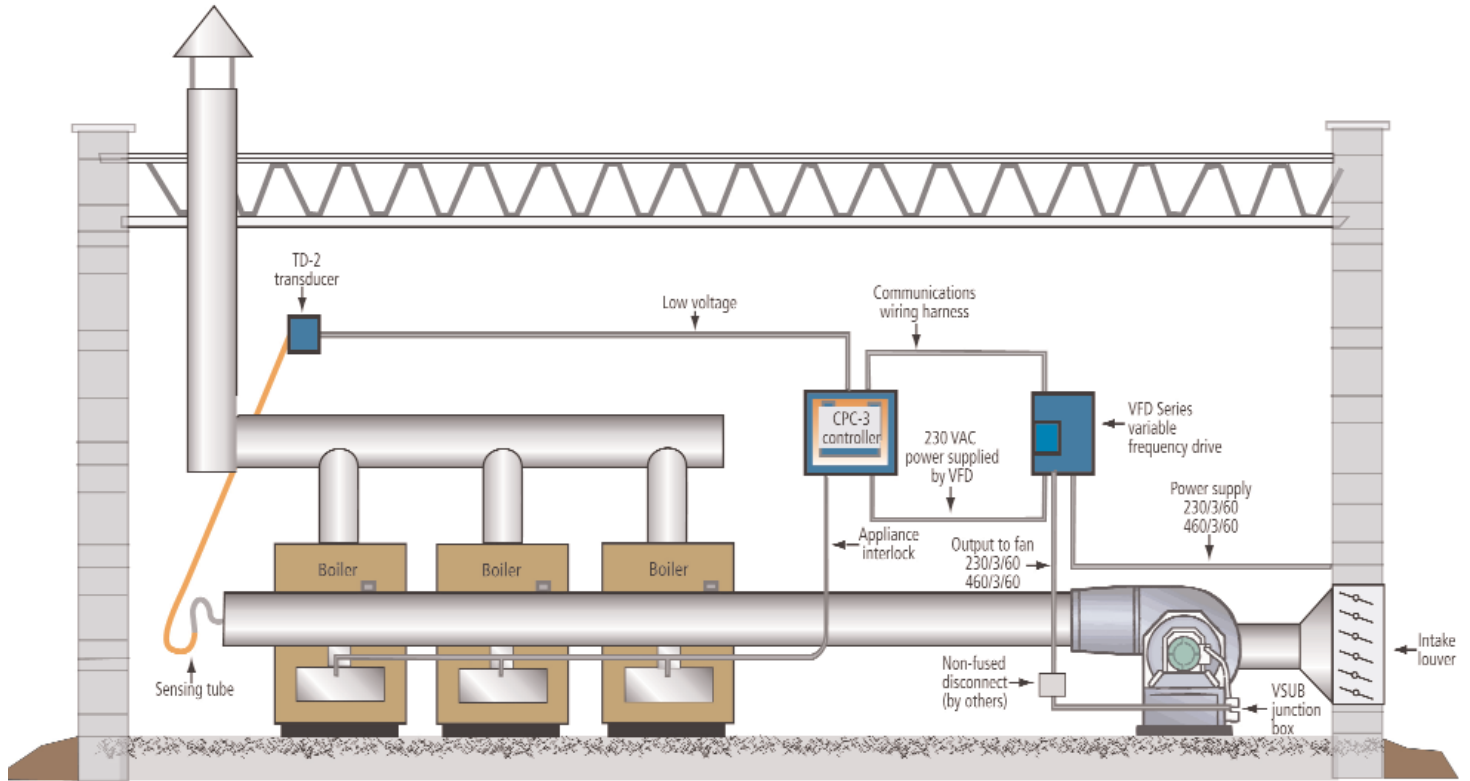
Mechanical Draft with VSUB-Series Blower and Mechanical Combustion Air with VSUB-Series Blower



RECOMMENDED LAYOUT DIAGRAMS (Continued)



Sealed Mechanical Combustion Air with VSUB-Series Blower



Sealed Mechanical Combustion Air with VSUB-Series Blower (Roof Mounted)

