



VSUBR-SERIES UNIVERSAL BLOWERS

Product & System Overview

Description:

VSUBR-Series Variable Speed Universal Blowers (with Ryton® coated impellers) are suitable for providing combustion air or sidewall or vertically venting heating appliances, dryers and ovens. Suitable for use on condensing equipment. 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 VSUBR.

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, Ryton® coated, Class 1 impeller is both dynamically and statically balanced with permanently attached balancing weights.

Motor:

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

Listings:

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

*Not Listed for use on condensing equipment in Canada.



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:

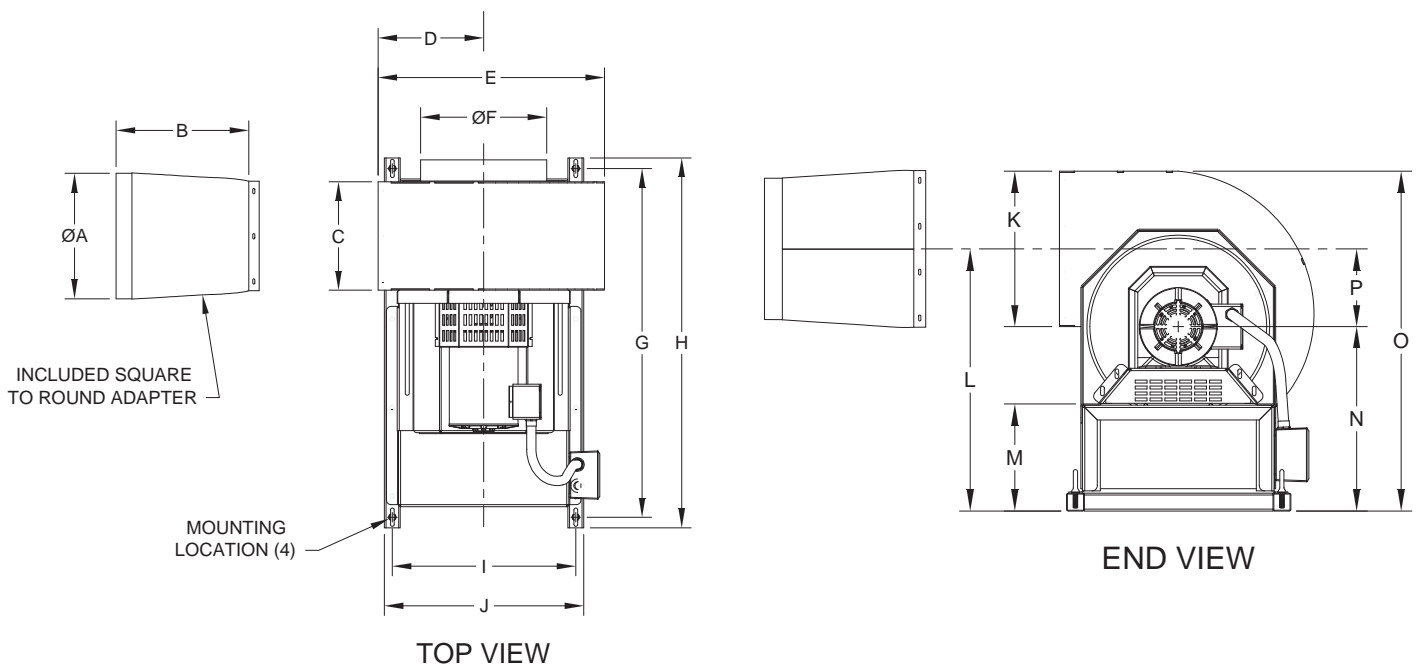
- CPC-3 Constant Pressure Controller
- IPS-1 Indoor Pressure Sensor decorative cover, fittings
- TD-2 Pressure Transducer (+0.15" to -0.60" w.c.)
For draft or "Sealed" (ducted sealed combustion air) sensing
- TD-3 Pressure Transducer (+0.10" to -0.10" w.c.)
For "Open" (room pressure) combustion air sensing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

Temperature Rating:

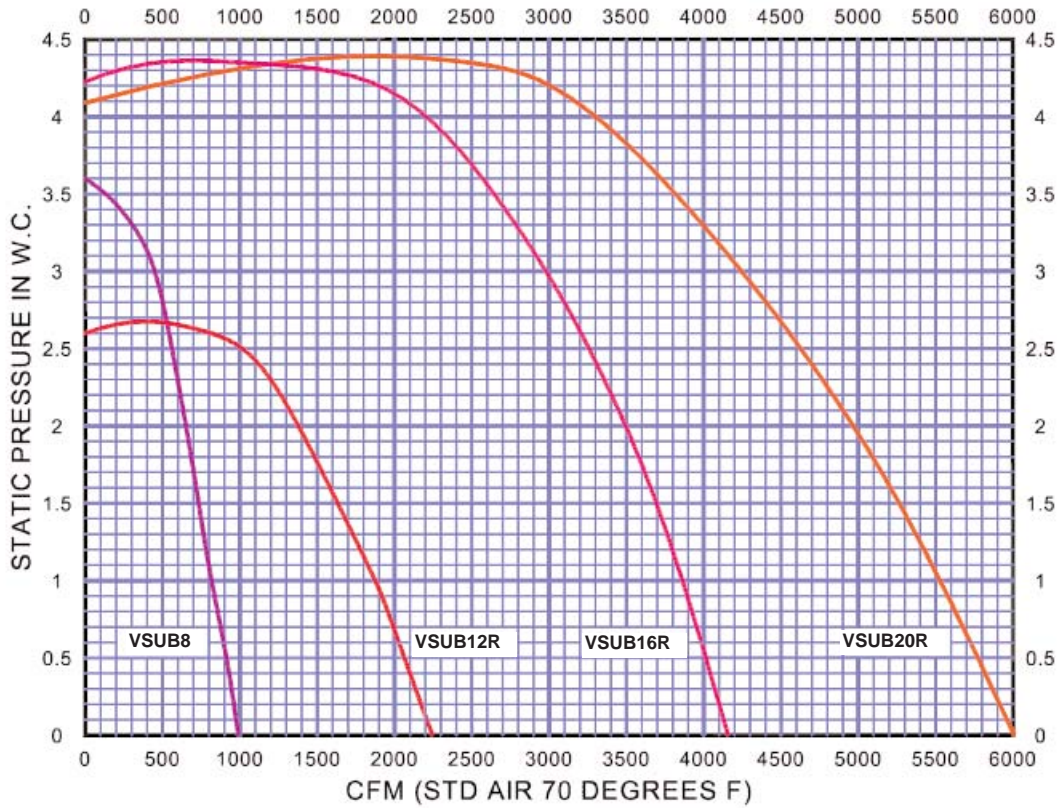
U.S. and Canada 575°F / 300°C

VSUBR-SERIES PERFORMANCE AND DIMENSIONAL DATA

VSUBR-SERIES	VSUB12R	VSUB16R	VSUB20R
Fan Type	Utility Blower	Utility Blower	Utility Blower
Voltage	3x208-230 / 3x460	3x208-230 / 3x460	3x208-230 / 3x460
Amps A	3.2-3.0 / 1.5	6.0-5.6 / 2.8	8.8-8.2 / 4.1
Power Rating HP	1	2	3
Weight	205 Lbs / 93 kg	285 Lbs / 129 kg	370 Lbs / 168 kg
Dimension A	11 7/8"	15 7/8"	19 7/8"
Dimension B	12 1/2"	14"	14"
Dimension C	9 5/8"	11 15/16"	14 7/16"
Dimension D	10 1/8"	13 5/16"	15 1/8"
Dimension E	21 7/16"	27 1/2"	32 11/16"
Dimension F	11 15/16"	15 7/8"	19 11/16"
Dimension G	33"	41 11/16"	45 3/16"
Dimension H	35"	43 11/16"	47 3/16"
Dimension I	17 3/8"	23 1/4"	26 7/16"
Dimension J	18 7/8"	24 3/4"	27 15/16"
Dimension K	13 1/4"	16"	20 1/8"
Dimension L	21 13/16"	26 13/16"	33 1/2"
Dimension M	8 7/8"	11 3/4"	15 3/8"
Dimension N	15 7/16"	18 7/8"	23 7/16"
Dimension O	28 7/16"	34 13/16"	43 1/2"
Dimension P	6 5/16"	7 15/16"	10"



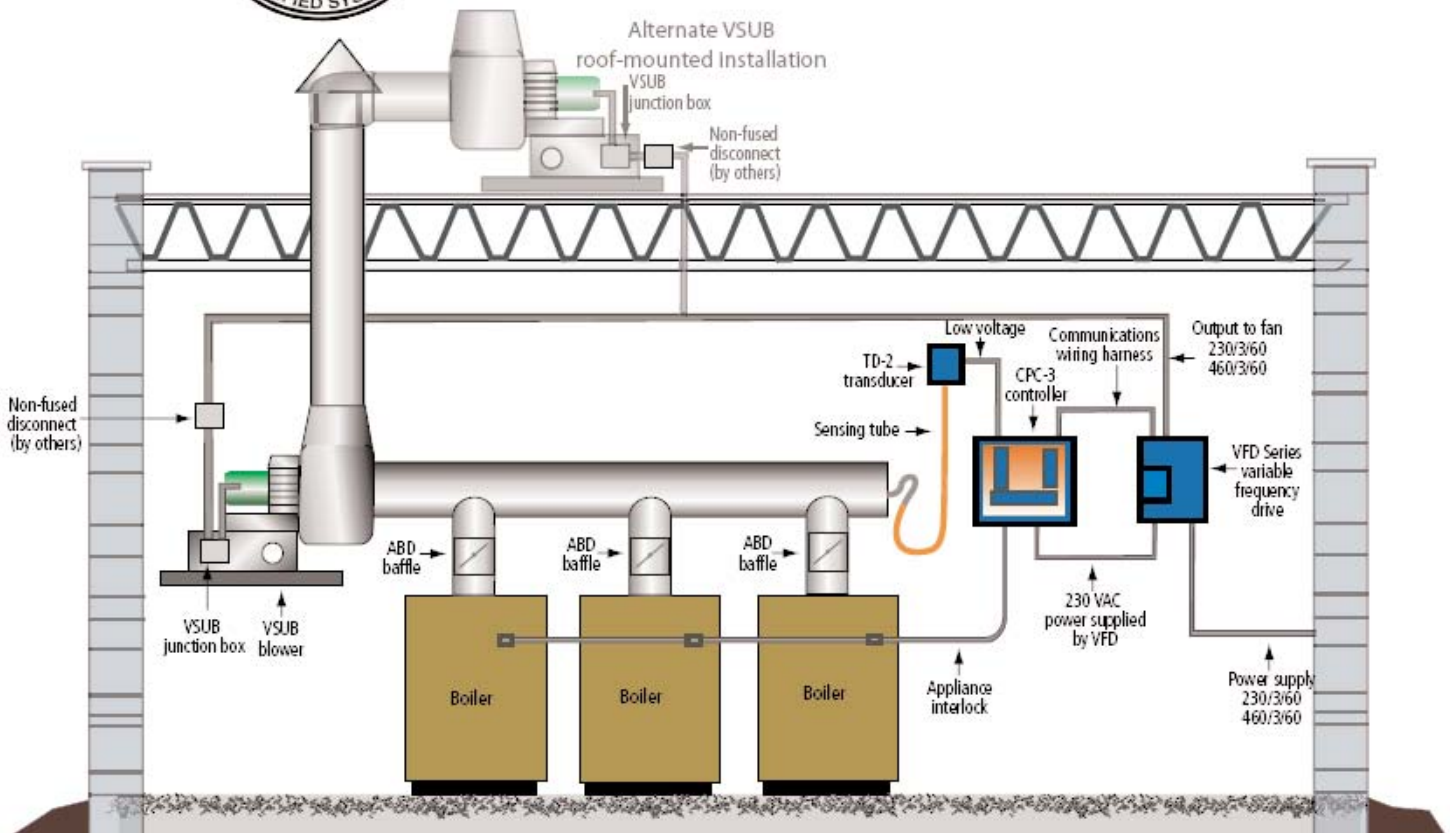
VSUBR-SERIES FAN CURVES



RECOMMENDED LAYOUT DIAGRAMS



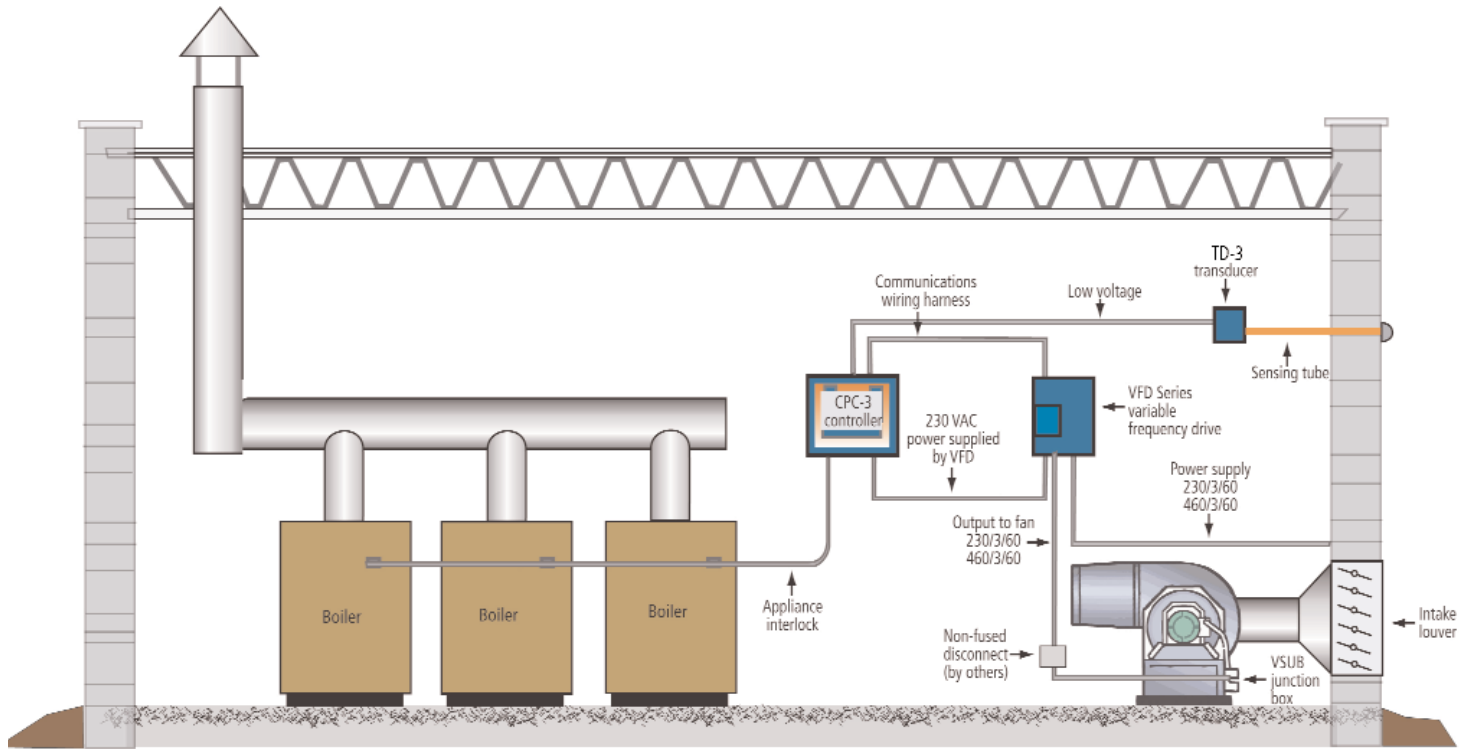
Mechanical Draft with VSUBR-Series Blower



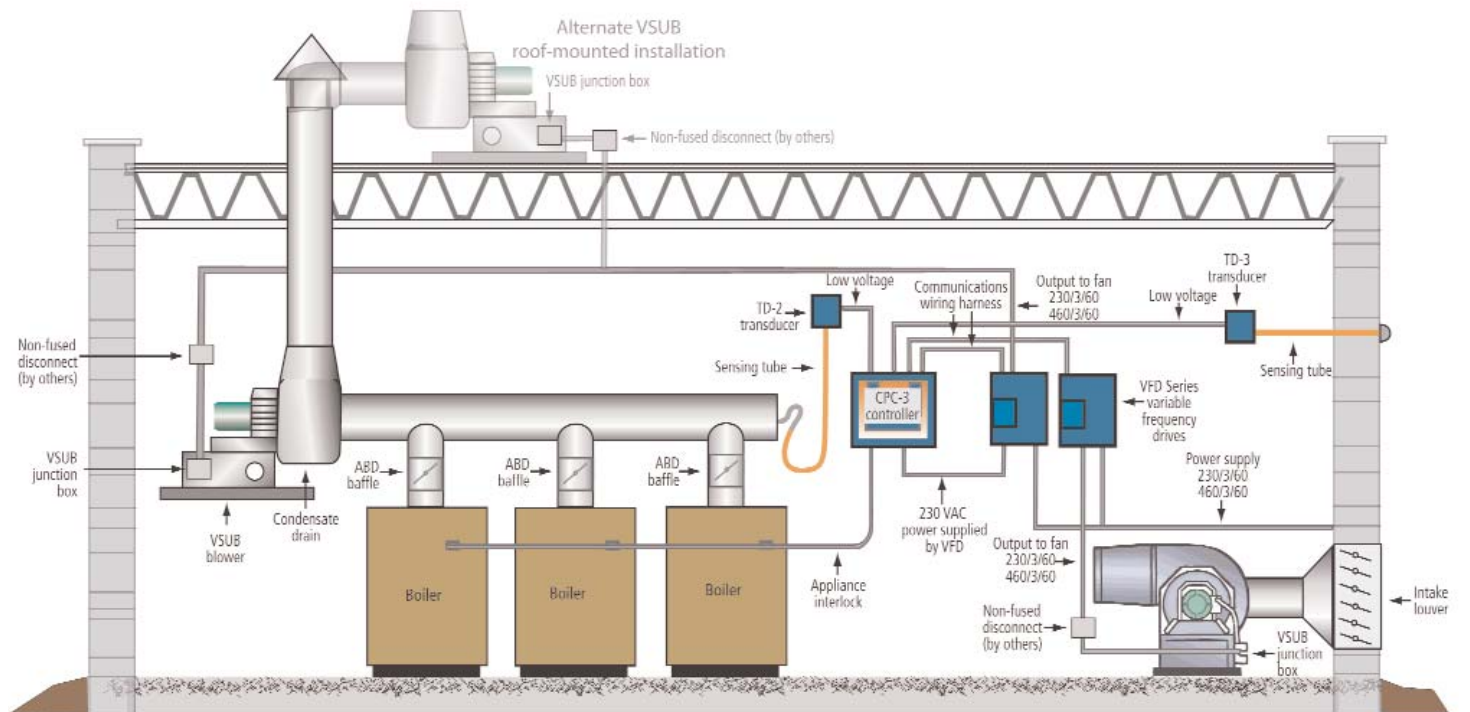
RECOMMENDED LAYOUT DIAGRAMS (Continued)



Mechanical Combustion Air with VSUBR-Series Blower



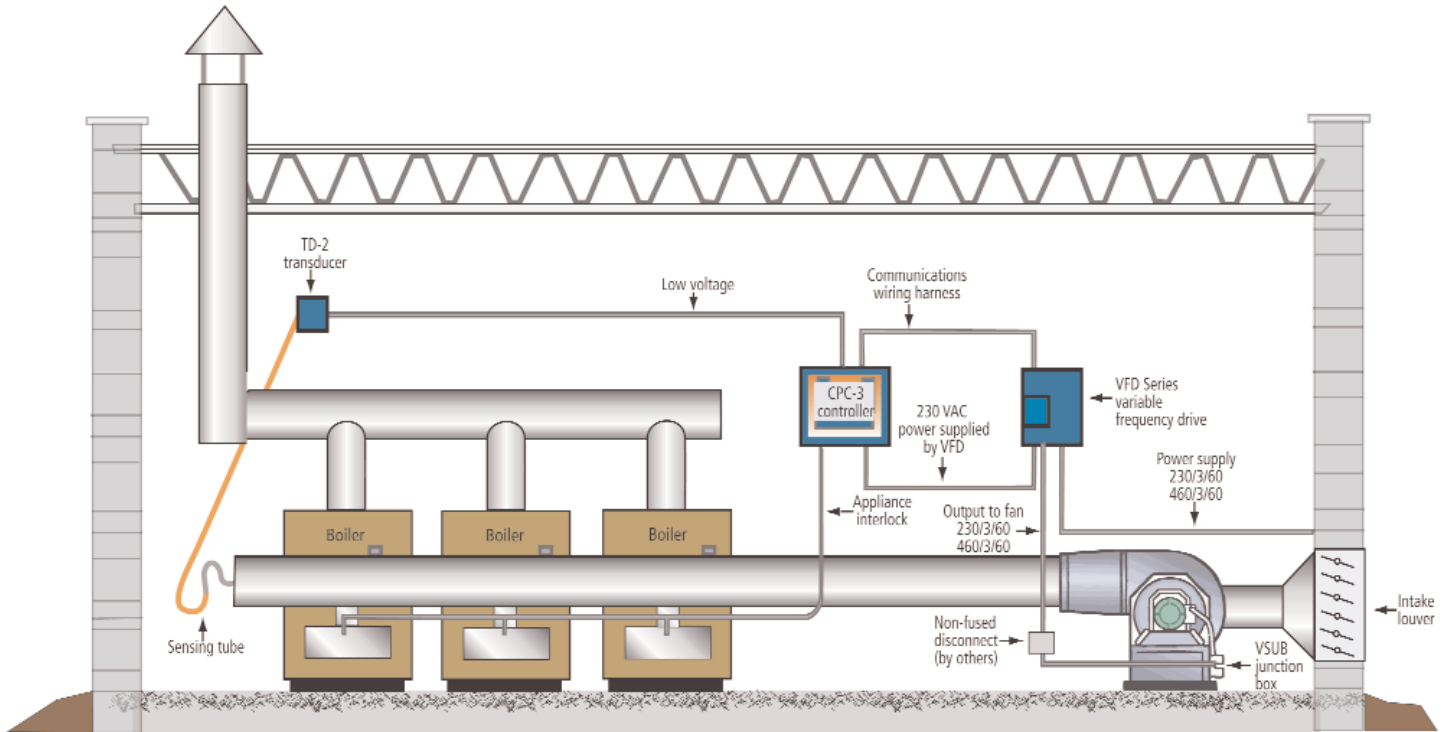
Mechanical Draft and Combustion Air with VSUBR-Series Blower



RECOMMENDED LAYOUT DIAGRAMS (Continued)



Sealed Mechanical Combustion Air with VSUBR-Series Blower



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

