

UL Power Ventilator for Smoke Control



The UL listing "Power Ventilator for Smoke Control Systems" is a test procedure and category which was initiated by Loren Cook Company and developed in a joint effort with UL in 1990. Several different sources were used in the definition of this test procedure. These sources include UL Standards 705, 762, 793, Southern Building Code Congress International (SBCCI) Standard Fire Prevention Code/1988, and Industrial Risk Insurers (IRI) Document E2. The requirements for the UL listing "Power Ventilator for Smoke Control Systems" are summarized as follows.

Roof Mounted Products

- The unit must withstand a specified elevated airstream temperature for a specified duration.
- The unit must be listed under UL 705.
- Fans with integral butterfly dampers shall meet the following requirements:
 - Fans shall be fitted with spring loaded damper actuator arms which will open the dampers automatically when the airstream temperature reaches 165°F.
 - The dampers must activate with or without electrical power connected to the fan.
 - The damper actuators must meet the requirements in UL 793 for Snow and Dust Load Testing of Butterfly Dampers (10 pounds per square foot).

Model	Sizes	Maximum Pressure	Duration at Specified Airstream Temp.			
			302°F	500°F	572°F	1000°F
ACSC ACSC-HP ACSC-XP	100 thru 365	5.0"		4 HOURS		15 MIN.
TUBSC	20 thru 72	1.0"		4 HOURS		15 MIN.
TUDSC ++	20 thru 72	1.0"	8 HOURS	5 HOURS	2 HOURS	15 MIN.
CPS * CPS-A *	60 thru 490	5.0"		4 HOURS		2 HOURS
QMXU ** QMXU-HP **	90 thru 600	8.0"		6 HOURS		1 HOUR
QMXDU + QMXHPDU +	150 thru 600	8.0"		6 HOURS	2 HOURS	30 MIN.
QMXDU + QMXHPDU + Bifurcated	150 thru 600	8.0"			10 HOURS	2 HOURS
CA / CF ***	120 thru 730	12.0"		4 HOURS		2 HOURS
LPB*	100 thru 490	3.0"		4 HOURS		15 MIN.

* Requires optional accessories. Consult factory for details.

** Arrangement 9 only. Requires optional accessories. See catalog for details.

*** SWSI Arrangements 1, 8, 9 & 10 only. Requires optional accessories. See catalog for details.

+ Requires motor with Class F insulation.

++ Requires TEFC motor with Class F insulation.

Inline Products

- The unit must withstand a specified elevated airstream temperature for a specified duration.
- The unit must be listed under UL 705.

Model	Sizes	Maximum Pressure	Duration at Specified Airstream Temp.			
			302°F	500°F	572°F	1000°F
QMX ** QMX-HP **	90 thru 600	8.0"		6 HOURS		1 HOUR
QMXD + QMXHPD +	150 thru 600	8.0"		6 HOURS	2 HOURS	30 MIN.
QMXD + QMXHPD + Bifurcated	150 thru 600	8.0"			10 HOURS	2 HOURS
AFB-H AFBV-H	12 thru 36	4.5" 5.5"		4 HOURS		15 MIN.
TIB *	20 thru 72	1.25"		4 HOURS		15 MIN.
TID ++	20 thru 72	1.0"	8 HOURS	5 HOURS	2 HOURS	15 MIN.

* Requires optional accessories. Consult factory for details.

**Arrangement 9 only. Requires optional accessories. See catalog for details.

+ Requires motor with Class F insulation.

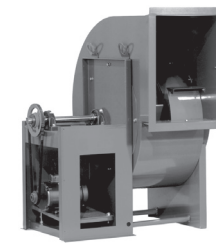
++ Requires TEFC motor with Class F insulation.



ACSC / ACSC-HP / ACSC-XP



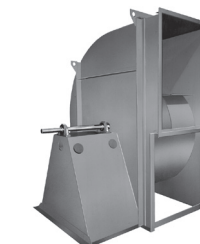
TUBSC / TUDSC



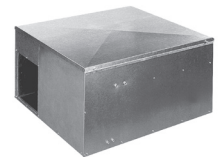
CPS / CPS-A



QMXU



CA / CF



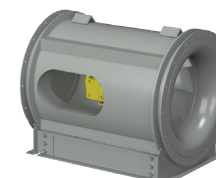
LPB



QMX / QMX-HP



QMXD / QMXD-HP



QMXD / QMXD-HP Bifurcated



AFB-H / AFBV-H



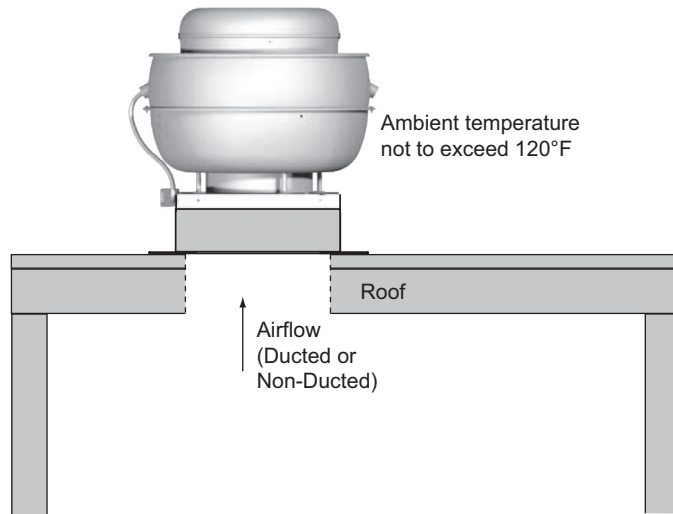
TIB



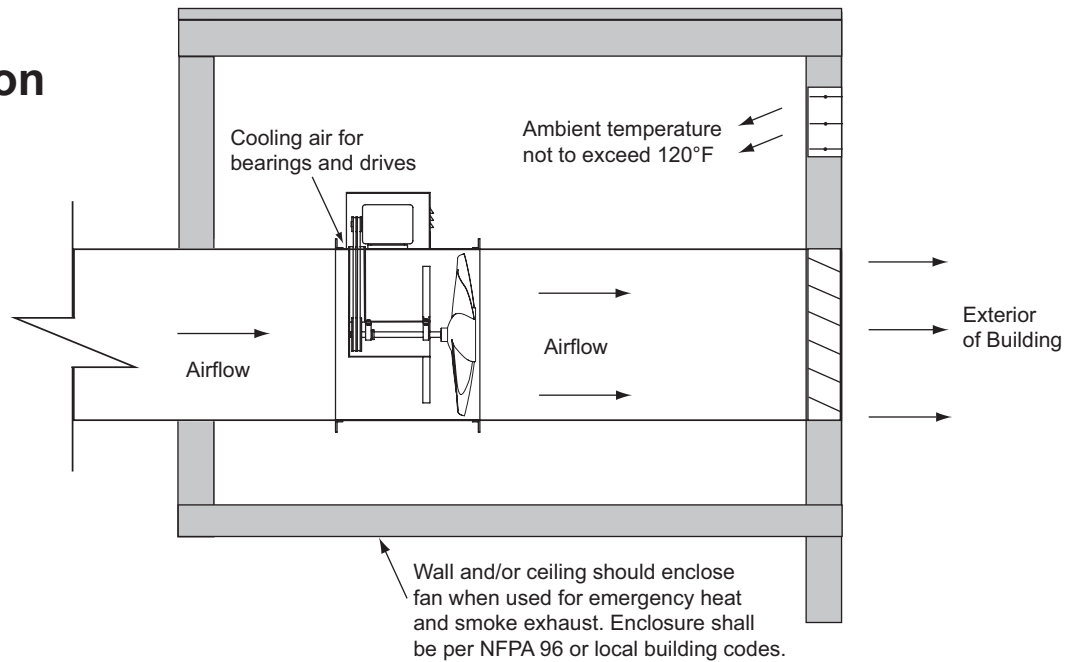
TID

Typical Application

Roof Mounted Installation



Inline Installation



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