

# UL POWER VENTILATOR FOR SMOKE CONTROL



Cook has one of the broadest product offerings in the industry UL listed 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.

## INTRODUCTION

► Several different sources were used in the development 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” follow.



TUB



LXULMO, LXUMMO  
& LTUMO



ACSC, ACSC-HP &  
ACSC-XP



TUD



QMXD  
& QMXD-HP



QMXD & QMXD-HP  
Bifurcated Housing



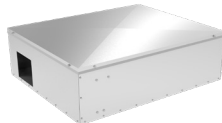
QMX, QMX-HP  
& QMX-XP



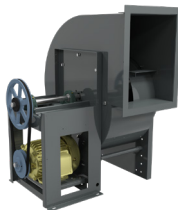
CA / CF



QMXU, QMXU-HP  
& QMXU-XP



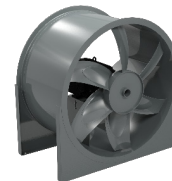
LPB



CPS / CPS-A



AI



TID



TIB



AFB-H & AFBV-H

# PRODUCT REQUIREMENTS



COOK had the first product in the industry UL listed for Smoke Control.

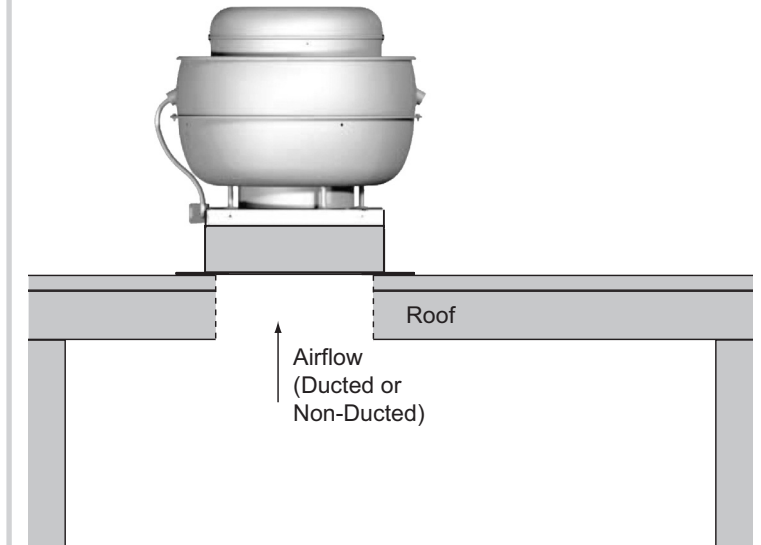
## ROOF MOUNTED PRODUCTS

- ▶ The unit must withstand a specified elevated airstream temperature for a specified duration. (See table below)
- ▶ The unit must be listed under UL 705.
- ▶ Fans with integral butterfly dampers shall meet the following requirements:
  1. Fans shall be fitted with spring loaded damper arms which will open the dampers automatically when the airstream temperature reaches 165°F.
  2. The dampers must activate with or without electrical power connected to the fan.
  3. The spring loaded damper arms 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	100-490	5.0"	-	4 hrs	-	15 min
LXULMO, LXUMMO, LTUMO	20-60	1.0"	-	4 hrs	-	15 min
TUB	20-72	1.0"	-	4 hrs	-	15 min
TUD++	20-72	1.0"	8 hrs	5 hrs	2 hrs	15 min
CPS*, CPS-A*	60-490	5.0"	-	4 hrs	-	2 hrs
QMXU**, QMXU-HP**	90-600	8.0"	-	6 hrs	-	1 hr
QMXU-XP**	150-600	15.0"	-	6 hrs	-	1 hr
QMXDU+, QMXHPDU+	150-600	8.0"	-	6 hrs	2 hrs	30 min
QMXDU+, QMXHPDU+	150-600 (bifurcated)	8.0"	-	-	10 hrs	2 hrs
CA/CF***	120-730	12.0"	-	4 hrs	-	2 hrs
LPB*	100-540	3.0"	-	4 hrs	-	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.

## TYPICAL INSTALLATION



# PRODUCT REQUIREMENTS



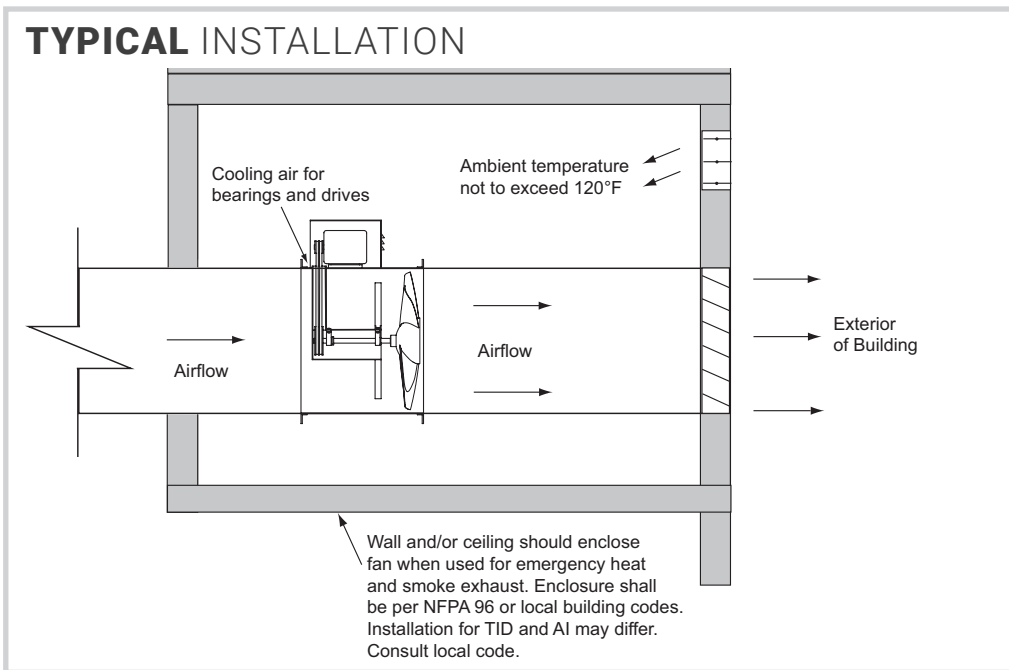
The UL listing “Power Ventilator for Smoke Control Systems” is a test procedure and category which was initiated by Loren Cook Company and developed in a joint effort with UL in 1990.

## INLINE PRODUCTS

- ▶ The unit must withstand a specified elevated airstream temperature for a specified duration. (See table below)
- ▶ 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**	90–600	8.0"	-	6 hrs	-	1 hr
QMX-XP**	150–600	15"	-	6 hrs	-	1 hr
QMXD+ QMXHPD+	150–600	8.0"	-	6 hrs	2 hrs	30 min
QMXD+ QMXHPD+	150–600 Bifurcated	8.0"	-	-	10 hrs	2 hrs
AFB-H AFBV-H	12–36	4.5"	-	4 hrs	-	15 min
		5.5"	-	4 hrs	-	15 min
TIB*	20–72	1.25"	-	4 hrs	-	15 min
TID++	20–72	1.0"	8 hrs	5 hrs	2 hrs	15 min
AI++	31–160	5.5"	8 hrs	5 hrs	2 hrs	-

- ▶ \* 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.



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