

KWF Series

Low Velocity Unit Cooler

Air Defrost



Model KWF low air velocity unit coolers are ideal for supermarket walk-in coolers, meat preparation and cutting rooms where room temperatures are maintained at 35°F and higher. They are particularly suited for coolers where products are stored requiring high relative humidity.

Whisper quiet, these units evenly distribute air in large areas with velocities not much greater than gravity circulation. Because the air velocity is low there are no uncomfortable drafts and personal comfort is maintained.

Their low-silhouette, compact design permits mounting flush to the ceiling or between rail beams. Their length assures even distribution of air throughout the refrigerated area.

Features:

- There are nine models available, ranging in capacity from 5,000 to 34,000 Btuh @ 10° TD
- Rust free heavy gauge embossed Aluminum housing is standard.
- White epoxy coated housing is available as an option
- Seamless enhanced Copper tubes are staggered and mechanically expanded into corrugated aluminum fins assuring maximum heat transfer.
- Optional Copper fins are available.
- Available in 115V, 208/230V and 460V single phase.
- Fan motors and blades can be easily accessed by lowering the hinged drain pan.
- Standard motors are permanently lubricated with thermal overload protection.
- High efficiency EC motors are standard, PSC or shaded pole motors are optionally available.
- Air defrost models are designed for use in room temperatures down to 35°F.



Nomenclature:

K	W	F	130	A	E	3	B	1	1	A	1	A
I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII

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| <p>I. Brand Name
K – Kramer</p> <p>II. Unit type
W – Walk In Unit Cooler</p> <p>III. Series
F – Low Air Velocity</p> <p>IV. Capacity or Degree of Capacity –
050, 075, 100, 130, 160, 190, 220, 270, 340</p> <p>V. Voltage Code
A – 115/1/60
D – 208-230/1/60
F – 460/1/60
L – 100/1/50
M – 200-220/1/50
P – 380/1/50
X – Other</p> <p>VI. Motor/Fan Type
E – (EC) Electronically Commutated
P – (PSC) Permanent Split Capacitor
S – (SP) Shaded Pole
X – Other</p> <p>VII. Length in Fans
1, 2, 3, 4, 5, 6</p> <p>VIII. Coil Density
B – 6 fpi
X – Other</p> | <p>IX. Coil Material and Coating Options
1 – Aluminum fins (Al)
2 – Copper fins (Cu)
3 – Al + AST coating
4 – Al + Blygold
5 – Al + Bronze Glow
6 – Al + Heresite
8 – Al + Russ-Proof
X – Other</p> <p>X. Housing Material Coatings
1 – Aluminum, Embossed
2 – Galvanized
3 – White Painted
6 – Stainless Steel 304
X – Other</p> <p>XI. Unit Design Configuration
A – Air Defrost
E – Electric Defrost
G – Hot Gas Reverse Cycle Defrost with drain pan loop
H – Hot Gas Re-Evaporative Defrost with drain pan loop
K – Hot Gas Reverse Cycle Defrost with 115V heater
L – Hot Gas Reverse Cycle Defrost with 208/230V heater
X – Other</p> <p>XII. Not Currently Used
1 – Standard</p> <p>XIII. Revision Code – Single Alphanumeric Character
A – Current Revision</p> |
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KWF Low Velocity Unit Cooler

Performance Data

60 Hz Capacity Data

Model	Fan Data			Capacity								Charge (Lbs) 404A	Suction Conn. OD (inches)	Unit Weight (lbs.)
	No	CFM	m ³ /hr	10°F TD	5.6°C TD	15°F TD	8.3°C TD	50-55°F DB 55% RH, 20° TD		10.0-12.8°C DB 55% RH, 11.1° TD				
								Total	Sensible	Total	Sensible			
				Btuh	Watts	Btuh	Watts	Btuh	Watts	Btuh	Watts			
KWF050	1	580	990	5,000	1,470	7,500	2,200	10,000	9,200	2,930	2,690	1.2	1 1/8	50
KWF075	2	850	1,440	7,500	2,200	11,250	3,300	15,000	13,800	4,390	4,040	2.3	1 1/8	75
KWF100	2	1,110	1,890	10,000	2,930	15,000	4,390	20,000	18,400	5,860	5,390	2.5	1 1/8	75
KWF130	3	1,750	2,970	13,000	3,810	19,500	5,710	26,000	23,920	7,610	7,000	3.4	1 1/8	100
KWF160	3	1,720	2,922	16,000	4,690	24,000	7,030	32,000	29,440	9,370	8,620	4.6	1 1/8	110
KWF190	4	2,330	3,960	19,000	5,560	28,500	8,350	38,000	34,960	11,130	10,240	4.6	1 1/8	120
KWF220	4	2,290	3,890	22,000	6,440	33,000	9,660	44,000	40,480	12,880	11,850	6.1	1 1/8	130
KWF270	5	2,840	4,830	27,000	7,910	40,500	11,860	54,000	49,680	15,810	15,810	7.0	1 1/8	150
KWF340	6	3,430	5,830	34,000	9,960	51,000	14,930	68,000	62,560	19,910	18,320	9.0	1 1/8	180

50 Hz Capacity Data*

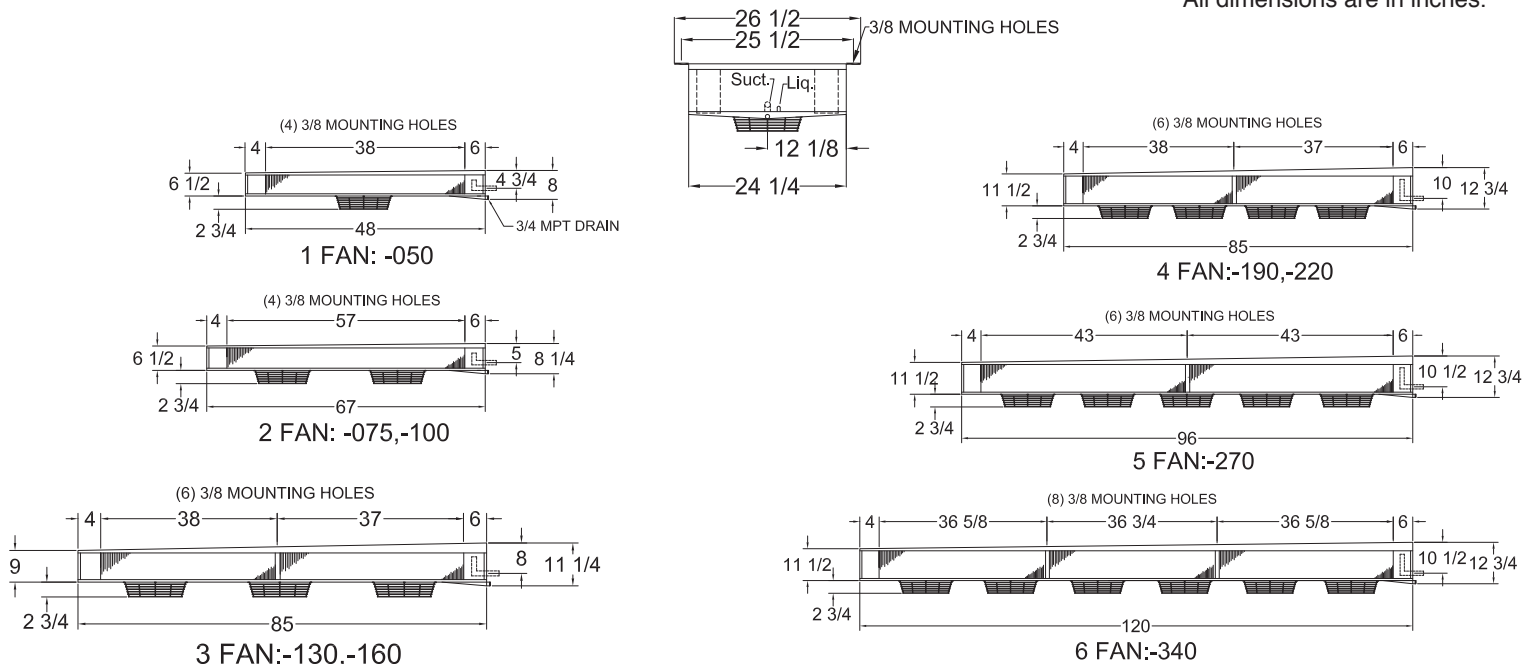
Model	Fan Data			Capacity								Charge (Lbs) 404A	Suction Conn. OD (inches)	Unit Weight (lbs.)
	No	CFM	m ³ /hr	10°F TD	5.6°C TD	15°F TD	8.3°C TD	50-55°F DB 55% RH, 20° TD		10.0-12.8°C DB 55% RH, 11.1° TD				
								Total	Sensible	Total	Sensible			
				Btuh	Watts	Btuh	Watts	Btuh	Watts	Btuh	Watts			
KWF050	1	480	820	4,600	1,350	6,900	2,000	9,200	8,460	2,700	2,480	1.2	1 1/8	50
KWF075	2	710	1,200	6,900	2,020	10,350	3,040	13,800	12,700	4,040	3,720	2.3	1 1/8	75
KWF100	2	920	1,570	9,200	2,700	13,800	4,040	18,400	16,930	5,390	4,960	2.5	1 1/8	75
KWF130	3	1,460	2,470	12,000	3,510	17,900	5,250	23,900	22,010	7,000	6,440	3.4	1 1/8	100
KWF160	3	1,430	2,430	14,700	4,320	22,100	6,470	29,400	27,090	8,620	7,930	4.6	1 1/8	110
KWF190	4	1,930	3,290	17,000	5,120	26,200	7,680	35,000	32,160	10,240	9,420	4.6	1 1/8	120
KWF220	4	1,900	3,230	20,000	5,930	30,400	8,890	40,500	37,240	11,850	10,900	6.1	1 1/8	130
KWF270	5	2,360	4,010	25,000	7,280	37,300	10,910	49,700	45,710	14,550	14,550	7.0	1 1/8	150
KWF340	6	2,850	4,840	31,000	9,160	46,900	13,740	62,600	57,560	18,320	16,850	9.0	1 1/8	180

*Use 60 Hz capacity and airflow values for units with EC motors

Dimensional Data

End View

*All dimensions are in inches.



Other Connections

Liquid - 1/2" OD

Hot Gas 1/2" OD

Drain 3/4" MPT

Ext. Equalizer 1/4" OD

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Electrical Data

Models 60HZ	Number of Fans	EC Motors				PSC Motors						SP Motors			
		115/1/60		208-230/1/60		115/1/60		208-230/1/60		460/1/60		115/1/60		208-230/1/60	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
KWF050	1	0.6	35	0.3	35	0.4	50	0.3	50	0.2	50	1.2	75	0.5	75
KWF075	2	1.2	70	0.6	70	0.8	100	0.6	100	0.3	100	2.4	150	1.0	150
KWF100	2	1.2	70	0.6	70	0.8	100	0.6	100	0.3	100	2.4	150	1.0	150
KWF130	3	1.8	105	0.9	105	1.2	150	0.9	150	0.5	150	3.6	225	1.5	225
KWF160	3	1.8	105	0.9	105	1.2	150	0.9	150	0.5	150	3.6	225	1.5	225
KWF190	4	2.4	140	1.2	140	1.6	200	1.2	200	0.6	200	4.8	300	2.0	300
KWF220	4	2.4	140	1.2	140	1.6	200	1.2	200	0.6	200	4.8	300	2.0	300
KWF270	5	3.0	175	1.5	175	2.0	250	1.5	250	0.8	250	6.0	375	2.5	375
KWF340	6	3.6	210	1.8	210	2.4	300	1.8	300	0.9	300	7.2	375	3.0	375

Models 50HZ	Number of Fans	EC Motors				PSC Motors						SP Motors			
		100/1/50		200-220/1/50		100/1/50		200-220/1/50		380/1/50		100/1/50		200-220/1/50	
		Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts	Amps	Watts
KWF050	1	0.6	35	0.3	35	0.4	45	0.3	45	0.2	45	1.1	70	0.5	70
KWF075	2	1.2	70	0.6	70	0.7	90	0.5	90	0.3	90	2.2	135	0.9	135
KWF100	2	1.2	70	0.6	70	0.7	90	0.5	90	0.3	90	2.2	135	0.9	135
KWF130	3	1.8	105	0.9	105	1.1	135	0.8	135	0.5	135	3.2	205	1.4	205
KWF160	3	1.8	105	0.9	105	1.1	135	0.8	135	0.5	135	3.2	205	1.4	205
KWF190	4	2.4	140	1.2	140	1.4	180	1.1	180	0.5	180	4.3	270	1.8	270
KWF220	4	2.4	140	1.2	140	1.4	180	1.1	180	0.5	180	4.3	270	1.8	270
KWF270	5	3.0	175	1.5	175	1.8	225	1.4	225	0.7	225	5.4	340	2.3	340
KWF340	6	3.6	210	1.8	210	2.2	270	1.6	270	0.8	270	6.5	340	2.7	340

Due to ongoing product development, specifications are subject to change without notice.