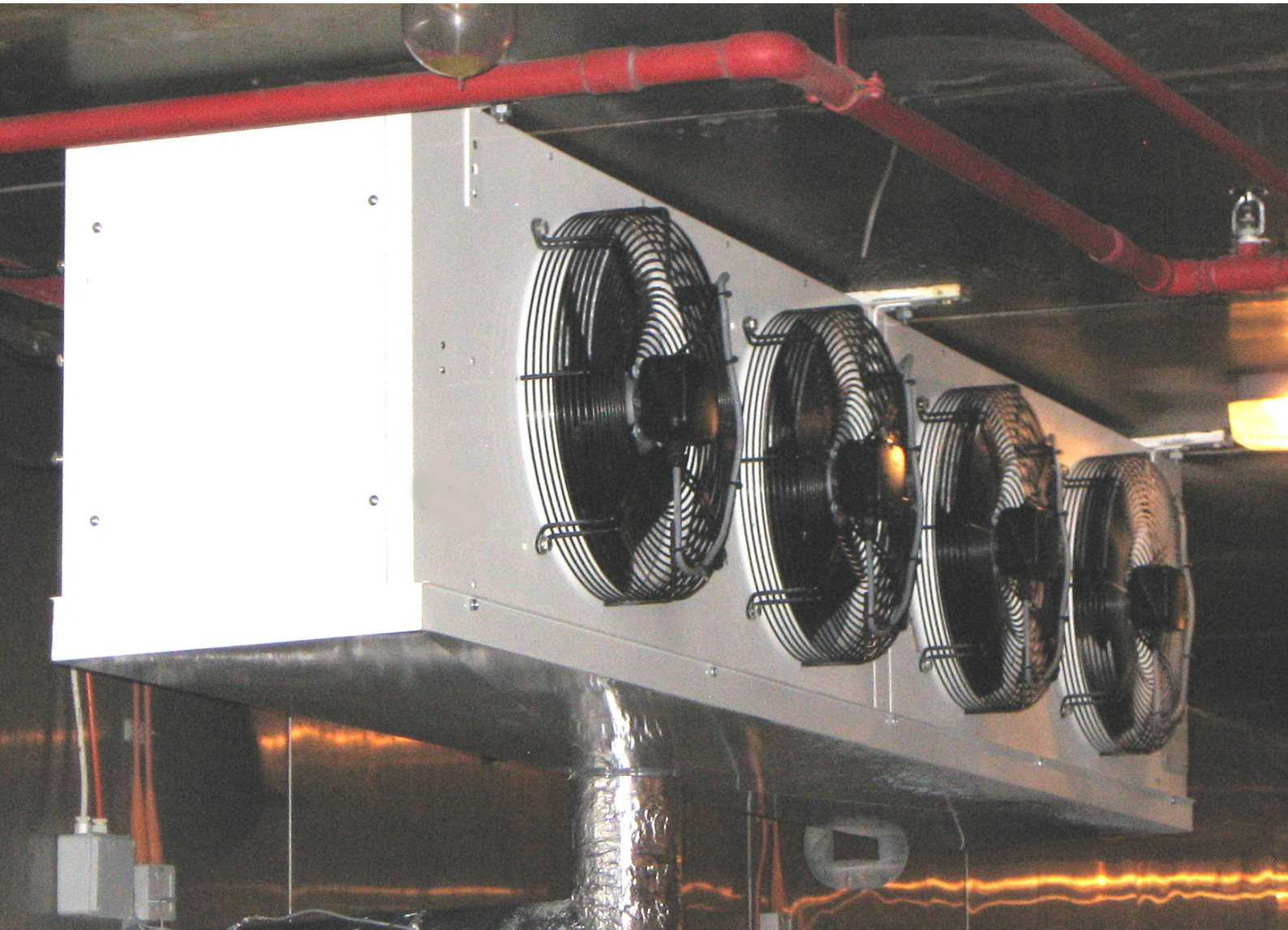


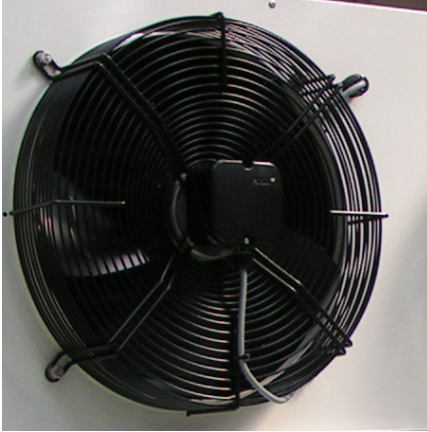
# KMe Air Cooler

## AFC Compact Systems



**KMe 140 - 6 L - Al - 3PH - EC**

Range	KMe
Model	50, 60, 80, 95, 115, 140, 175
Fin spacing	4mm, 6mm, 8mm
Defrost	Blank = No Defrost, L = Standard Electric, L2 = Heavy Duty Electric HG = Hot Gas, D = Coil & Tray / E = Electric Tray, A / B / C / D = type
Fin Material	Al = Aluminium
Electrical Supply	Blank = 1PH, 3PH = 3PH
Fanset Options	Blank = Standard 400mm fanset, Ax = Axial, EC = EC Fanset



### KMe Unit Cooler

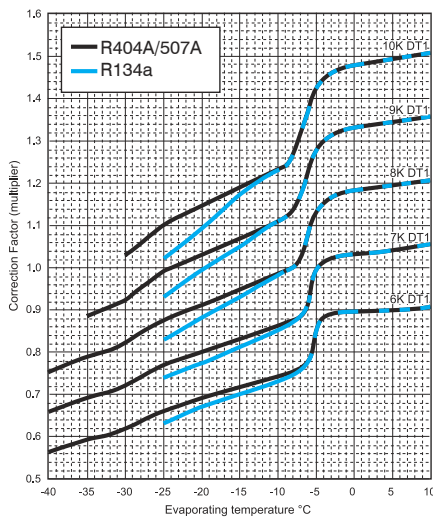
The KMe range of coolers is ideally suited to large cold rooms and small warehouses where an efficient solution is required. The KMe can also be used for industrial food processing and agricultural applications.

To find the optimum model from the range it is recommended to use the Searle Selection Software. The KMe utilises the unique GEA Searle 'D' fin which has been specifically developed for refrigeration applications. The 'D' fin utilises 1/2" outside diameter tube with extended inner surface – 'rifle bore' – to maximise performance. It balances the requirements of high efficiency heat transfer with the need to have secondary surface on which to deposit frost and maximise the periods between defrosts. All coils are tested to 35.8 bar and have a maximum operating pressure of 20.7 bar unless otherwise stated.

### KMe Options

- EC Fansets
- Air streamer – to extend the air throw of the standard 400mm fanset
- Forkguard – a guard system to prevent accidental damage from forklift trucks or similar when siting the cooler at low level.
- Axial fans – for significantly increased air throw or for external pressure of 120Pa.
- Peripheral Heaters – available in conjunction with axial fans, recommended for applications below 0°C.
- Fan plate Heaters
- Heavy Electric Defrost – comprises of additional coil block heaters to increase the total defrost load by approximately 40%
- Fan Plate Heaters – to prevent fan blade contact with frost build up at low temperatures.

KMe Cooler DT1 - WET



Refrigeration	R404A	R134a	R507A	R407A/F	R407C
Capacity factor (dew point, DT1)	1.00	0.91	0.97	1.18*	1.35*
Refrigerant charge density (kg/dm <sup>3</sup> )	0.312	0.338	0.313	0.332	0.332

\* Capacity factors for refrigerants with high glide apply only at the nominal rating condition. Refrigerant charge densities are based on 25% of the internal volume being liquid.

### Correction factors

(Multiply capacity by appropriate correction factor to give performance at chosen conditions)



# KMe Selection data, Drawings and Dimensions

Model	Capacity kW 8K DT1 (SC2)*		Air volume	Coil data					
	R404A	m <sup>2</sup> /s		Total surface area	Internal volume	Ref charge	Connections		Dry weight
			m <sup>2</sup>	dm <sup>3</sup>	kg	Inlet	Outlet	kg	
4mm	KMe50-4	7.36	0.89	38.0	6.7	2.1	1/2"	1 1/8"	85
	KMe60-4	8.71	0.96	56.0	9.5	2.9	5/8"	1 1/8"	112
	KMe80-4	12.10	1.89	50.0	8.4	2.6	5/8"	1 1/8"	129
	KMe95-4	14.84	1.78	76.0	12.5	3.9	5/8"	1 1/8"	139
	KMe115-4	18.40	2.83	75.0	12.2	3.8	7/8"	1 3/8"	170
	KMe140-4	22.31	2.68	113.0	18.4	5.6	7/8"	1 3/8"	195
	KMe175-4	27.95	3.45	134.0	21.6	6.6	7/8"	1 3/8"	217
6mm	KMe50-6	6.20	0.98	26.0	6.7	2.1	1/2"	1 1/8"	83
	KMe60-6	7.45	1.01	38.0	9.5	2.9	5/8"	1 1/8"	109
	KMe80-6	9.74	2.00	35.0	8.4	2.6	5/8"	1 1/8"	127
	KMe95-6	12.51	1.95	52.0	12.5	3.9	5/8"	1 1/8"	135
	KMe115-6	14.61	3.00	52.0	12.2	3.8	7/8"	1 3/8"	167
	KMe140-6	18.75	2.93	78.0	18.4	5.6	7/8"	1 3/8"	191
	KMe175-6	23.92	3.86	92.0	21.6	6.6	7/8"	1 3/8"	214
8mm	KMe50-8	5.70	1.02	20.0	6.7	2.1	1/2"	1 1/8"	84
	KMe60-8	6.81	1.03	30.0	9.5	2.9	5/8"	1 1/8"	110
	KMe80-8	8.58	2.05	27.0	8.4	2.6	5/8"	1 1/8"	127
	KMe95-8	11.47	2.04	40.0	12.5	3.9	5/8"	1 1/8"	136
	KMe115-8	13.0	3.07	40.0	12.2	3.8	7/8"	1 3/8"	167
	KMe140-8	17.4	3.06	60.0	18.4	5.6	7/8"	1 3/8"	190
	KMe175-8	22.0	4.06	71.0	21.6	6.6	7/8"	1 3/8"	212

Model	Fan and Motor specification												Electric defrost				
	No of fans	Diameter	Speed	Air throw std/thrower ***		Noise level **	230V - 1ph-50Hz			400V - 3ph-50Hz			40V - 3ph				
				4mm m	8mm m		Total power †	F.L.C Amps per fan	SC Amps per fan	Total power †	F.L.C Amps per fan	SC Amps per fan	Standard			Heavy duty	
													Coil	Pan	Total	Coil	Total
mm	rpm	4mm m	8mm m	dB(A)	W	A	A	W	A	A	W	W	W	W	W		
KMe50	1	400	1410	17/26	19/29	60	200	1.05	3.3	200	0.65	2.6	1590	795	2385	2650	795
KMe60	1	400	1410	19/29	22/34	60	200	1.05	3.3	200	0.65	2.6	2400	1200	3600	4000	1200
KMe80	2	400	1410	19/29	22/34	63	400	1.05	3.3	400	0.65	2.6	3240	1590	4830	5400	1590
KMe95	2	400	1410	17/26	19/29	63	400	1.05	3.3	400	0.65	2.6	3240	1590	4830	5400	1590
KMe115	3	400	1410	19/29	22/34	65	600	1.05	3.3	600	0.65	2.6	4800	2400	7200	8000	2400
KMe140	3	400	1410	17/26	19/29	65	600	1.05	3.3	600	0.65	2.6	4800	2400	7200	8000	2400
KMe175	4	400	1410	17/26	19/29	66	800	1.05	3.3	800	0.65	2.6	5640	2820	8460	9400	2820

## Notes:

### Rating conditions:

The duties shown in this catalogue are at EN 328 Standard Condition 2 (-8°C saturated suction temperature, 0°C air entering). For data on refrigerants not shown, please contact your supplier.

\* DT1 is the difference between the entering air temperature and the saturated suction temperature at the outlet of the cooler.

\*\* Noise levels are based on free field conditions at a distance of 3m. Actual noise levels will depend upon cold store construction, store loading and the number of coolers installed.

\*\*\* Terminal air velocity 0.25m/s, free air conditions at 10°C. Air throw cannot be considered on absolute value because many factors have a substantial effect on the distance achieved.

† Total Power Input at Standard Condition 2 (-8°C saturated suction temperature, 0°C air entering).