

TEC Air Cooler

AFC Compact Systems



		TEC	4	-	5	60
Range	TEC					
Model	1,2,3,3.5,4,5,6,7,8					
Fin Spacing	5 FPI (5.1mm), 7 FPI (3.6mm)					
Supply frequency	Blank = 50Hz, 60 = 60Hz					
Fin Material	Al = Aluminium					



TEC Unit Cooler

TEC is a range of nine small 'blow through' unit coolers using high efficiency EC fans as standard, providing a significant reduction in energy consumption and therefore running costs. With a wide operating range + 10 °C to -40 °C, the coolers are suitable for both high, medium and low temperature applications in areas such as reach-in and walk-in cold cabinets, small cold rooms and similar situations. Nominal capacities are from 0.52kW to 3.4kW (Standard Condition 2) when used with low ozone depletion refrigerants such as R134a, R404A and R507A.

The TEC range, with 1, 2 or 3 fan configurations, can be either ceiling mounted or wall mounted (by using the optional wall mounting kit). The pleasing aesthetic design of the coolers, manufactured in galvanised steel and finished with oven cured white epoxy powder paint, complements the working environment as well as providing rigidity and excellent corrosion resistance. The fansets are secured to the hinged fan plate, which can be lowered to provide access to all refrigeration piping and electrical connections and components.



The EC fans are high efficiency, having a power input of only 20W, a 67% saving on the TG shaded pole motor. Motors are suitable for 230V, single phase, 50 / 60 Hz supply, and have internal thermal protection. Fans are pre-wired to an internal junction box with cable entry to the cooler being provided via one of several knock-outs.

Coils are manufactured from 3/8" OD copper tube (internally grooved to provide an extended inner surface) and aluminium fins of type 'E'. The copper tube is mechanically extended to provide a tight interference fit between the aluminium fin collar and the copper tube, thus giving excellent heat transfer characteristics. The units are available in two fin spacing's 3.6mm (7 fpi) and 5.1mm (5 fpi). Models TEC1, TEC2 and TEC3 have a single circuit and are suitable for use with an internally equalised expansion valve. Models TEC3.5 to TEC8 are multi-circuited and require an externally equalised expansion valve. All coils are pressure tested to 35.8 bar.



TEC Selection data, Drawings and Dimensions

Model	Capacity kW SC2	Fanset and Motor				Total surface area	Internal Volume	Optional electric defrost	
	R404A	Air volume	Air throw/ (***)	Power Input †	Noise level(**)			Ceiling mount	Wall mount

7 FPI (3.6mm)	TEC1-7	0.57	0.15	4.5	20	51	1.5	0.39	1 x 275	2 x 250
	TEC2-7	0.89	0.14	4.5	20	50	2.9	0.79	1 x 550	2 x 250
	TEC3-7	1.04	0.15	5.0	20	50	4.1	1.06	1 x 700	2 x 325
	TEC3.5-7	1.25	0.16	5.0	20	50	5.4	1.35	1 x 900	2 x 425
	TEC4-7	1.72	0.26	5.0	40	53	5.4	1.35	1 x 900	2 x 425
	TEC5-7	2.04	0.3	5.5	40	52	7.3	1.76	1 x 1000	2 x 575
	TEC6-7	2.29	0.32	5.5	40	51	9.7	2.34	1 x 1000	2 x 675
	TEC7-7	3.02	0.45	6.0	60	54	10.3	2.42	1 x 1400	2 x 1030
5 FPI (5.1mm)	TEC8-7	3.4	0.48	6.0	60	53	13.8	3.23	1 x 1400	2 x 1030
	TEC1-5	0.52	0.16	4.5	20	51	1.1	0.39	1 x 275	2 x 250
	TEC2-5	0.84	0.15	4.5	20	50	2.2	0.79	1 x 550	2 x 250
	TEC3-5	1.00	0.16	5.0	20	50	3.1	1.06	1 x 700	2 x 325
	TEC3.5-5	1.15	0.17	5.0	20	50	4.1	1.35	1 x 900	2 x 425
	TEC4-5	1.61	0.28	5.0	40	53	4.1	1.35	1 x 900	2 x 425
	TEC5-5	1.89	0.31	5.5	40	52	5.4	1.76	1 x 1000	2 x 575
	TEC6-5	2.14	0.34	5.5	40	51	7.3	2.34	1 x 1000	2 x 675
TEC7-5	2.76	0.47	6.0	60	54	7.7	2.42	1 x 1400	2 x 1030	
TEC8-5	3.18	0.5	6.0	60	53	10.3	3.23	1 x 1400	2 x 1030	

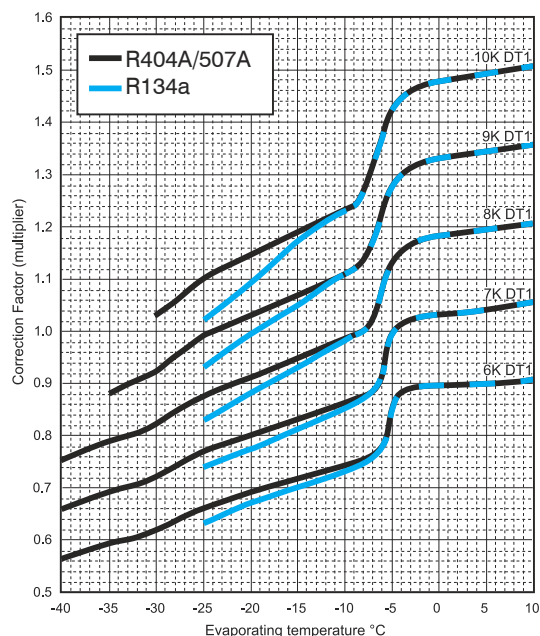
Notes:

* Capacity quoted at Standard Condition 2 (-8°C saturated suction temperature, 0°C air entering).

† Total Power Input at Standard Condition 2

For further information please contact your sale representative or refer to the selection software online at www.searle.co.uk

TEC Cooler DT1 - WET



Correction Factors

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

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.