

Evaporator E4 Series



Floor Mounted
Blast Chiller/Freezer
'F' - Series



Ceiling Mounted
Blast Chiller/Freezer
'C' - Series

Medium & Low Temperature Models

GREENHALGH

Innovative Refrigeration Solutions

APPLICATION BENEFITS / FEATURES

HIGH EFFICIENCY HEAT EXCHANGER COIL

- Capacity steps in the range are compatible with most compressor capacities
- Optimised with inner grooved tube and designed to maximise the sensible capacity and minimise latent heat and frost losses
- Hydrophilic blue aluminium fins
- Leak tested at 31 bar pressure
- 8.5mm fin spacing for medium and low temperature applications

STATE OF THE ART DESIGN SOFTWARE

- Greenhalgh thermodynamic & aerodynamic design software was developed, tested and proved in Germany and assures accurate designs

FANS

- High energy-efficiency fans
- Fan nozzle designed for maximum air flow and air throw with reduced power input
- Ziehl Abegg fan motors as standard
- Motor protection to IP54 and insulation to class F
- Three phase fans as standard in this series: 415V/1N/50Hz
- Wiring to AS/NZS standards



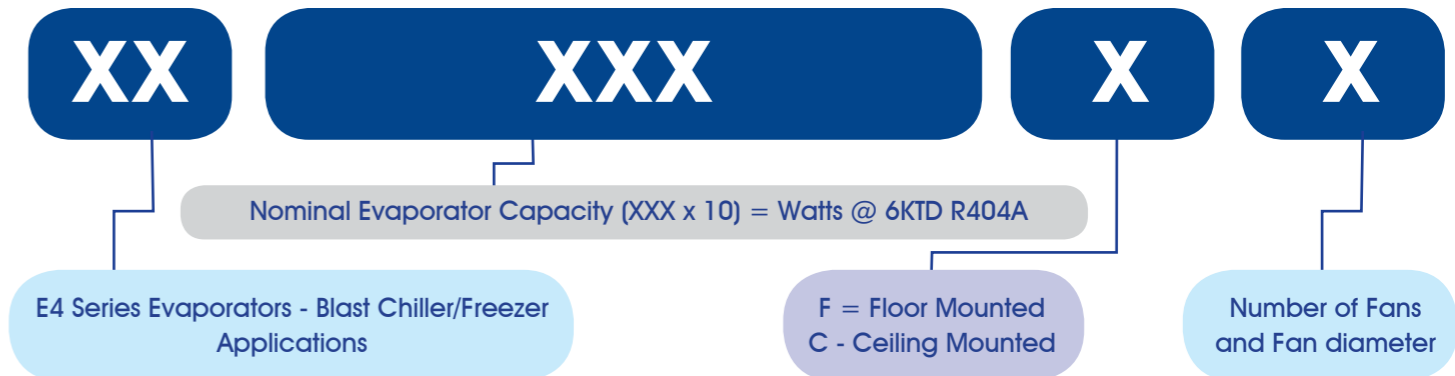
DEFROST

- Designed for efficient cooling capacity during an 8 hour cycle under humid conditions
- Electrical defrost elements designed to thermodynamic calculation of latent heat/ frost energy related to an 8 hour defrost cycle
- Robust stainless steel electric defrost elements with high insulation cable connections to meet UL-SA5102 and CSA-LR19489 standards
- Factory tested at full load
- Defrost elements wired to terminal box suitable for moist conditions (IP66) and low temperature (tested at -40C)

OPTIONS

- Customised fin spacing
- Coils for glycol applications
- Thermostatic expansion valve can be factory fitted by prior arrangement
- Overheat Klixon protection as standard
- EC fan motors

NOMENCLATURE GREENHALGH EVAPORATORS



Example: E4-4433F/3.63

Nomenclature

- E4 = Series
- 4433 = Capacity x 10 in Watts on R404A @ 6KTD
- F or C = Mounting type
- 3 = Number of Fans
- 63 = Fan diameter x 10 in mm (630mm)

Legend

- F = Floor Mounted
- C = Ceiling Mounted

PERFORMANCE CORRECTION FACTORS

F1 For Temperature

DUAL TEMPERATURE CAPACITY CORRECTION FACTORS											
F.1	EVAPORATOR TEMPERATURE	-35°C	-30°C	-28°C	-25°C	-24°C	-20°C	-15°C	-10°C	-5°C	0°C
	MULTIPLICATION FACTOR	0.95	0.978	0.98	0.99	1.0	1.023	1.06	1.08	1.1	1.12

↑
RATING CONDITION

For Calculation of the Evaporator Capacity under different conditions

$$\text{RATED EVAPORATOR CAPACITY R404A in Watts} \times \text{F.1}$$

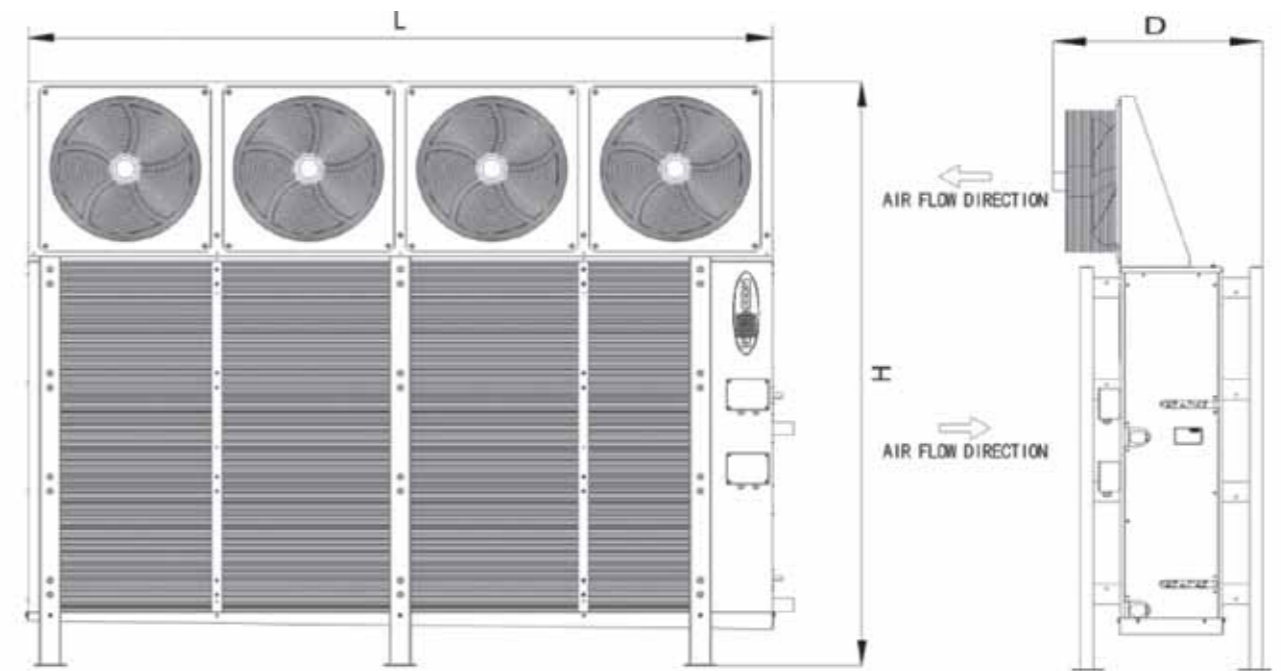


E4-F FLOOR MOUNTED SERIES

Model	Capacity in Watts @ 6KTD			Air Flow		Fan Motors				Defrost Heater Watts	Weight (kg)	Connections				Dimensions (mm)		
	R404A	R22	R134A	l/s	Air Throw (m)	Fan Qty x Ømm	Amps	Watts	Power Supply			Inlet (mm)	Outlet (mm)	Ext Equaliser	Drain	Length 'L'	Width 'W'	Height 'H'
E4 SERIES (8.5mm FIN SPACING - 3FPI) (BLAST FREEZER & BLAST CHILLER)																		
FLOOR MOUNTED SERIES - HIGH STATIC FANS FOR PLENUM APPLICATIONS																		
E4-2960-F/2.63	29600	28750	25100	7,431	30	2 x 630	9.60	5200		12000	280	22 x 2	42	6.35	2100	796	2465	
E4-3490-F/2.63	34900	33760	29700	7,210	30	2 x 630	9.60	5200		13000	310	22 x 2	54	6.35	2200	796	2465	
E4-4433-F/3.63	44330	42800	40000	11,229	31	3 x 630	14.40	7800		14000	410	22 x 4	54 x 2	6.35	2700	796	2655	
E4-5260-F/3.63	52600	50800	46400	10,829	31	3 x 630	14.40	7800		15000	455	22 x 4	54 x 2	6.35	2800	796	2655	
E4-6080-F/3.63	60800	59200	50100	15,104	32	3 x 630	19.20	10400		16000	680	22 x 4	64 x 2	6.35	3490	796	2845	
E4-7070-F/4.63	70700	69530	58900	14,528	32	4 x 630	19.20	10400		19800	740	22 x 4	64 x 2	6.35	3490	796	2845	
E4-7640-F/3.80	76400	73430	71100	20,278	28	3 x 800	12.00	6000		20400	820	22 x 3	54 x 3	6.35	3600	1050	3434	
E4-8670-F/3.80	86700	81000	80000	19,272	28	3 x 800	12.00	6000		25500	910	22 x 3	54 x 3	6.35	3600	1050	3434	
E4-10770-F/4.80	107700	104000	94300	23,873	29	4 x 800	16.00	8000		27000	1180	22 x 3	54 x 3	6.35	4200	1050	3434	

- Capacities based on 6KTD applications
- NOTE: All E4 Series are supplied with defrost elements fitted

Dimensions Diagram



Detailed drawings for each model with full specifications available on request.

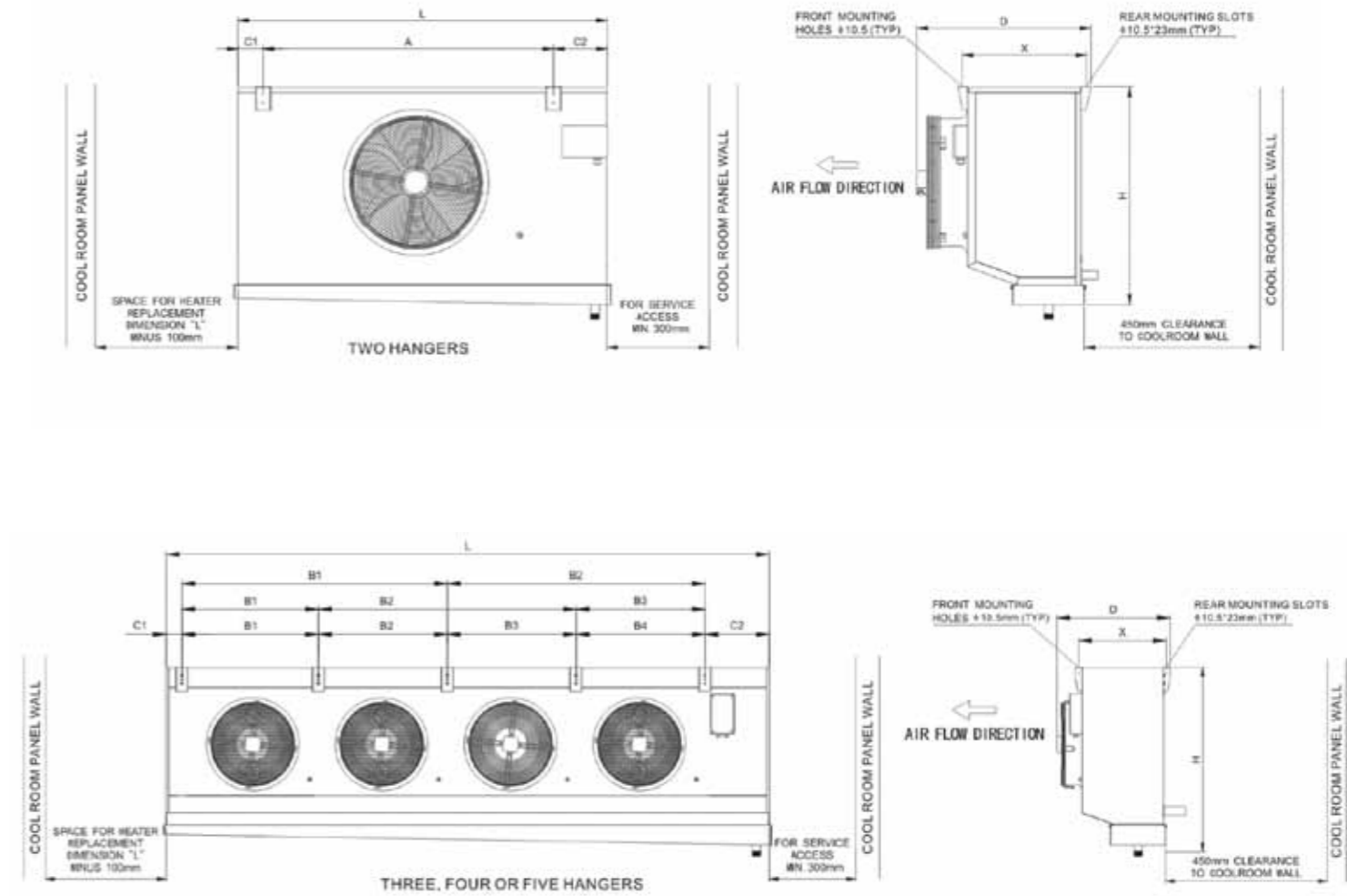


E4-C CEILING MOUNTED SERIES

Model	Capacity in Watts @ 6KTD			Air Flow		Fan Motors				Defrost Heater Watts	Weight (kg)	Connections				Dimensions (mm)			
	R404A	R22	R134A	l/s	Air Throw (m)	Fan Qty x Ømm	Amps	Watts	Power Supply			Inlet (mm)	Outlet (mm)	Ext Equaliser	Drain	Length 'L'	Width 'W'	Height 'H'	
E4 SERIES (8.5mm FIN SPACING - 3FPI) (BLAST FREEZER & BLAST CHILLER)																			
ROOF MOUNTED SERIES																			
E4-760-C/2.45	7600	7420	6500	2,918	16	2 x 450	2.10	1080		6000	108	16	35	6.35	NPT 1 1/2	1540	485	951	
E4-1190-C/1.63	11900	11600	10300	4,422	30	1 x 630	4.80	2600		6000	150	22	42	6.35		1540	700	1268	
E4-1660-C/1.63	16600	16200	13200	4,184	30	1 x 630	4.80	2600		8400	187	22	54	6.35		1540	700	1268	
E4-2270-C/2.63	22700	22000	20000	8,688	32	2 x 630	9.60	5200		8000	257	22	54	6.35		2630	783	1268	
E4-2600-C/2.63	26000	25250	23000	8,506	32	2 x 630	9.60	5200		8000	276	22	54	6.35		2630	783	1268	
E4-3130-C/2.63	31300	30240	28600	8,143	31	2 x 630	9.60	5200		11200	310	22 x 2	64	6.35		2630	783	1268	
E4-3600-C/2.63	36000	34600	33000	8,017	31	2 x 630	9.60	5200		11200	348	22 x 2	64	6.35		2630	783	1268	
E4-4380-C/3.63	43800	42800	35500	13,283	34	3 x 630	14.40	7800		12600	419	22 x 2	54 x 2	6.35		NPT 2 1/2	3430	783	1649
E4-5370-C/3.63	53700	52250	44500	12,871	34	3 x 630	14.40	7800		12600	482	22 x 4	64 x 2	6.35			3430	783	1649
E4-6190-C/3.63	61900	60120	51100	12,499	33	3 x 630	14.40	7800		18000	534	22 x 2	64 x 2	6.35			3430	783	1649
E4-7090-C/4.63	70900	68800	58400	17,210	34	4 x 630	19.20	10400		24000	724	22 x 2	64 x 2	6.35	4830		855	1580	
E4-8100-C/4.63	81000	78300	60150	16,728	34	4 x 630	19.20	10400		24000	701	22 x 3	64 x 3	6.35	4830		855	1580	
E4-8417-C/3.80	84170	80400	78000	21,850	30	3 x 800	12.00	6000		26000	833	22 x 3	64 x 3	6.35	5230	940	1725		
E4-9970-C/3.80	99700	94950	90000	21,449	30	3 x 800	12.00	6000		35100	1008	22 x 3	64 x 3	6.35	5230	940	1725		

- Capacities based on -24C SST/ 6KTD for low temperature models
- NOTE: All E4 Series are supplied with defrost elements fitted

Dimensions Diagram



Detailed drawings for each model with full specifications available on request.



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