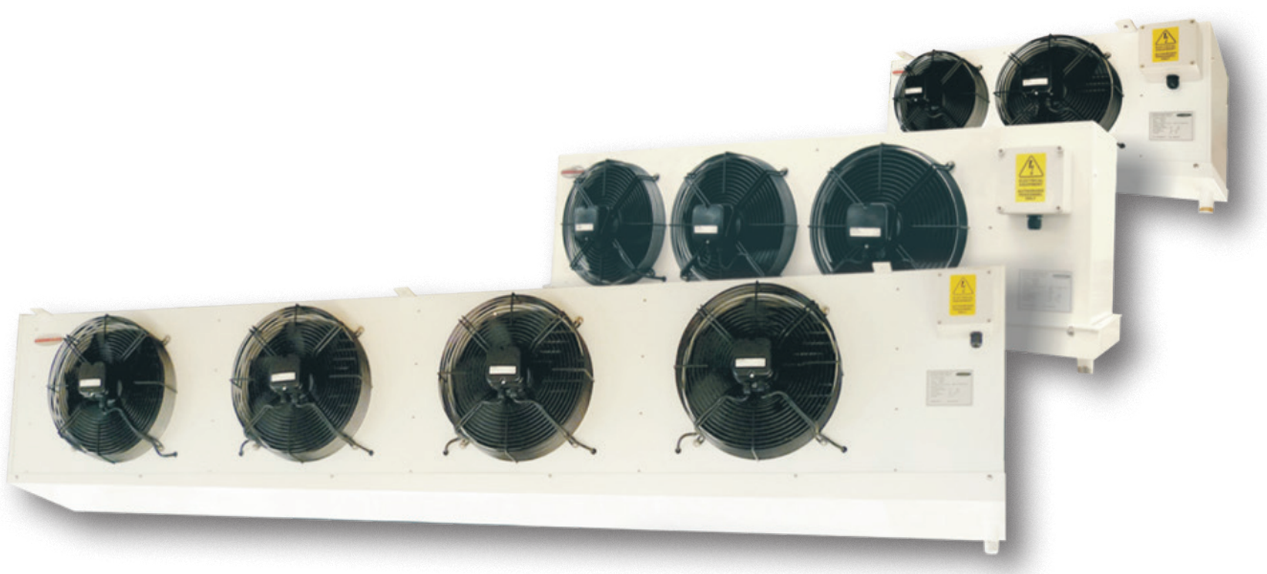
REFRIGERATION AGENCIES AUSTRALIA

Evaporator E2 Series



Medium & Low Temperature Models

GREENHALGH

Innovative Refrigeration Solutions

Issue: 05/14

APPLICATION BENEFITS / FEATURES

HIGH EFFICIENCY HEAT EXCHANGER COIL

- Capacity steps in the range are compatible with popular 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 3100 kPa pressure
- 4.2mm fin spacing for medium temperature applications above 0˚C
- 6.0mm fin spacing for low temperature applications below 0˚C

STATE OF THE ART DESIGN SOFTWARE

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

FANS

- Energy efficient 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
- Single phase fans as standard in this series: 240V/1/50Hz
- Wiring to AS/NZS standards

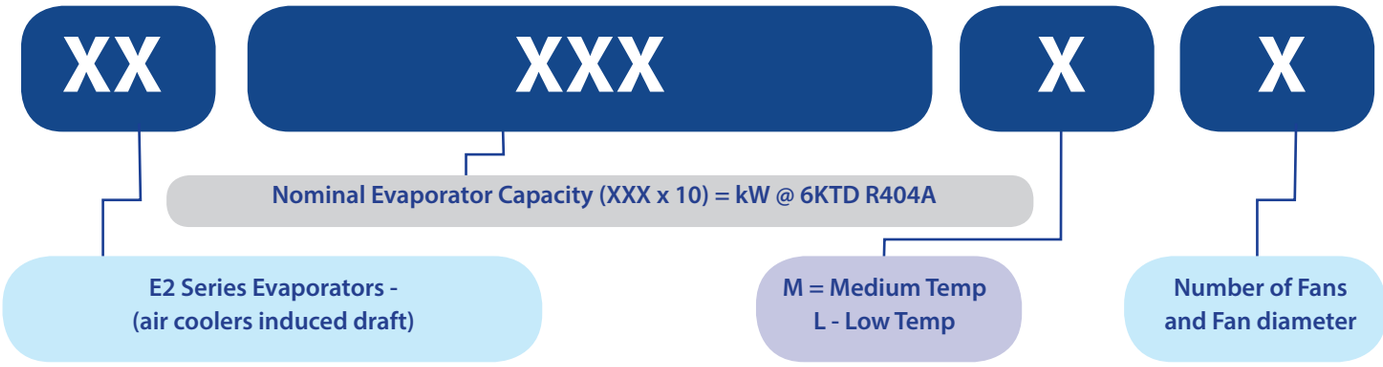
DEFROST

- Designed to provide fast ice removal even after an 12 hour humid refrigeration cycle
- The electrical defrost element wattage is designed to remove ice from the evaporator fins without causing steam to be generated
- The robust stainless steel electric defrost elements with high insulation cable connections meet UL-SA5102 and CSA-LR19489 standards
- Factory tested at full load
- The defrost elements are wired to a terminal box suitable for moist conditions (IP66) at low temperature (tested at -40˚C)

OPTIONS AVAILABLE

- Customised fin spacing
- Coils for glycol applications
- Overheat Klixon protection
- Customised thermostatic expansion valve can be factory fitted by prior arrangement
- CO_2 range for low temperature applications
- Customised EC fan motors and frequency options
- Customised solutions with fan selection

NOMENCLATURE GREENHALGH EVAPORATORS



Example: E2-104-M/1.30

Nomenclature

E2 = Series
104 = Capacity x 10 in Watts on R404A @ 6KTD
M = Medium temp
1 = Number of Fans
30 = Fan diameter x 10 in mm

PERFORMANCE CORRECTION FACTORS

TABLE F1- For capacity calculation at varying evaporator temperatures

(MEDIUM TEMPERATURE) COOLROOM EVAPORATOR TEMPERATURE CAPACITY CORRECTION FACTORS							
F.1	EVAPORATOR TEMPERATURE	-10°C	-8°C	-5°C	-4°C	0°C	+5°C
	MULTIPLICATION FACTOR	0.957	0.98	0.99	1.0	1.021	1.04

(LOW TEMPERATURE) FREEZER ROOM EVAPORATOR TEMPERATURE CAPACITY CORRECTION FACTORS								
F.1	EVAPORATOR TEMPERATURE	-35°C	-30°C	-28°C	-25°C	-24°C	-20°C	-15°C	-10°C
	MULTIPLICATION FACTOR	0.95	0.978	0.98	0.99	1.0	1.023	1.06	1.08

CORRECTED EVAPORATOR CAPACITY =

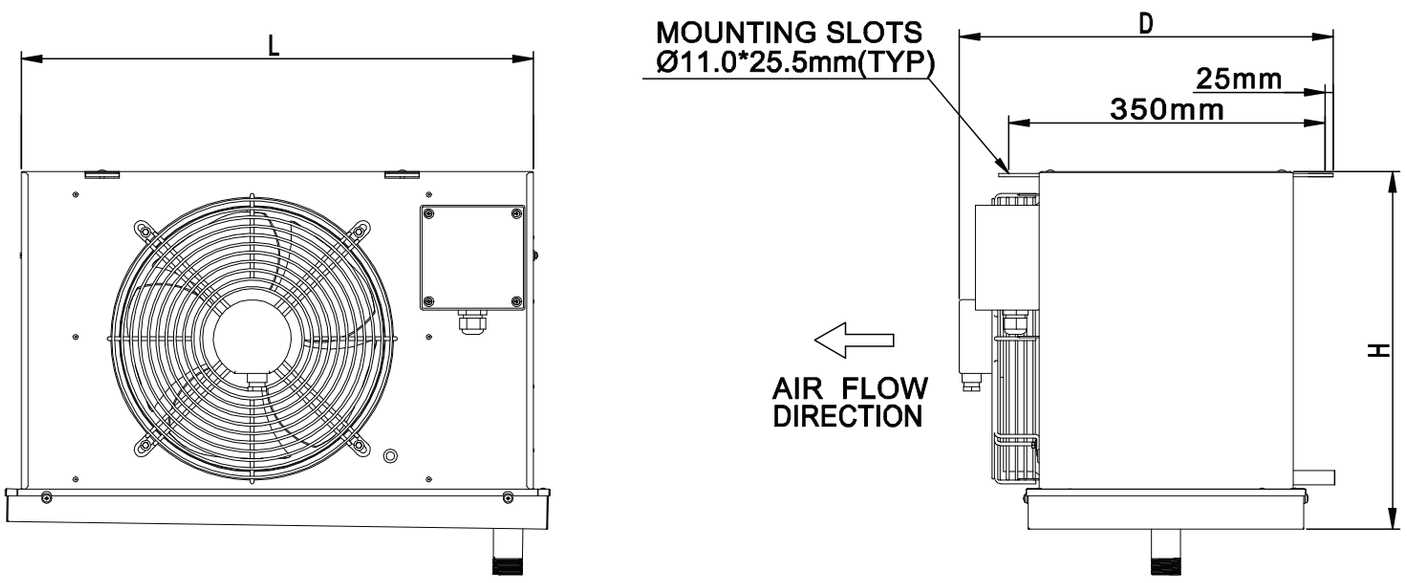
RATED EVAPORATOR CAPACITY in Watts X **F.1**

E2 MEDIUM TEMPERATURE SERIES

Model	Capacity in Watts @ 6KTD			Air Flow		Fan Motors				Defrost Heater	Weight (kg)	Connections				Dimensions (mm)			
	R404A	R22	R134A	l/s	Air Throw (m)	Fan Qty x Ømm	Amps	Watts	Power Supply	Watts		Inlet (mm)	Outlet (mm)	Ext Equaliser	Drain	Length	Width	Height	Mounting Centres 'A'
E2 - MEDIUM TEMPERATURE SERIES (4.2mm FIN SPACING - 6FPI)																			
E2-104-M/1.30	1040	940	960	364	8	1 x 300	0.30	68	240/1/50	NO ELEMENTS AS STANDARD	14	12.7	15.88	6.35	NPT1	650	415	430	360
E2-142-M/1.30	1420	1340	1350	346	8	1 x 300	0.30	68			15	12.7	15.88	6.35		650	415	430	360
E2-174-M/1.30	1740	1620	1700	316	7	1 x 300	0.30	68			20	12.7	15.88	6.35		650	415	430	360
E2-236-M/2.30	2360	2240	2250	727	11	2 x 300	0.60	68			20	12.7	15.88	6.35		1080	415	435	760
E2-261-M/2.30	2610	2370	2500	691	11	2 x 300	0.60	136			24	12.7	15.88	6.35		1080	415	435	760
E2-355-M/2.30	3550	3400	3150	633	10	2 x 300	0.60	136			31	12.7	22.22	6.35		1080	415	435	760
E2-384-M/2.30	3840	2650	3510	633	10	2X300	0.60	136			31	12.7	22.22	6.35		1080	415	435	760----
E2-394-M/3.30	3940	3580	3690	1037	13	3 x 300	0.90	204			33	15.88	22.22	6.35		1515	465	440	1160
E2-510-M/3.30	5110	4820	4860	999	13	3 x 300	0.90	204			37	15.88	22.22	6.35		1515	465	440	1160
E2-528-M/3.30	5280	4910	5240	949	12	3 x 300	0.90	204			42	15.88	22.22	6.35		1515	465	440	1160
E2-207-M/1.35	2070	1940	2050	721	13	1 x 350	0.58	132			20	12.7	15.88	6.35		880	465	505	560
E2-253-M/1.35	2530	2350	2350	679	13	1 x 350	0.58	132			22	12.7	15.88	6.35		880	465	505	560
E2-320-M/1.35	3200	2910	3180	624	13	1 x 350	0.58	132			28	12.7	19.05	6.35		880	465	505	560
E2-492-M/2.35	4920	4470	4810	1359	15	2 x 350	1.16	264			36	15.88	22.22	6.35		1510	465	515	1160
E2-625-M/2.35	6250	5880	6060	1312	15	2 x 350	1.16	264			42	15.88	22.22	6.35		1510	465	515	1160
E2-739-M/2.35	7390	7040	6710	1248	14	2 x 350	1.16	264			48	15.88	28.60	6.35		1510	465	515	1160
E2-765-M/3.35	7650	7110	7170	2038	17	3 x 350	1.74	396			52	15.88	28.60	6.35		2135	465	525	600 x 3
E2-1018-M/3.35	10180	9760	9080	1966	17	3 x 350	1.74	396			60	15.88	28.58	6.35		2135	465	525	600 x 3
E2-1125-M/3.35	11250	10740	10130	1872	16	3 x 350	1.74	396			68	15.88	35.00	6.35		2135	465	525	600 x 3
E2-1353-M/4.35	13530	12940	12170	2599	19	4 x 350	2.32	528			77	15.88	35.00	6.35		2760	465	535	1200/1160
E2-1487-M/4.35	14870	14150	13570	2496	18	4 x 350	2.32	528			86	15.88	35.00	6.35		2760	465	535	1200/1160

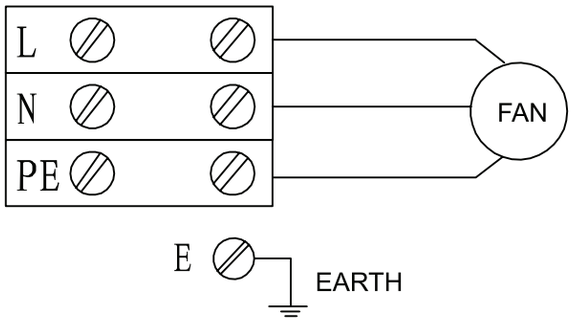
- **Capacities based on -4°C SST/ 6KTD for medium temperature models**
- **NOTE: Medium Temperature models are not fitted with defrost heater elements**

Dimensions Diagram



Wiring Diagram

Suitable for E2 with no heater product



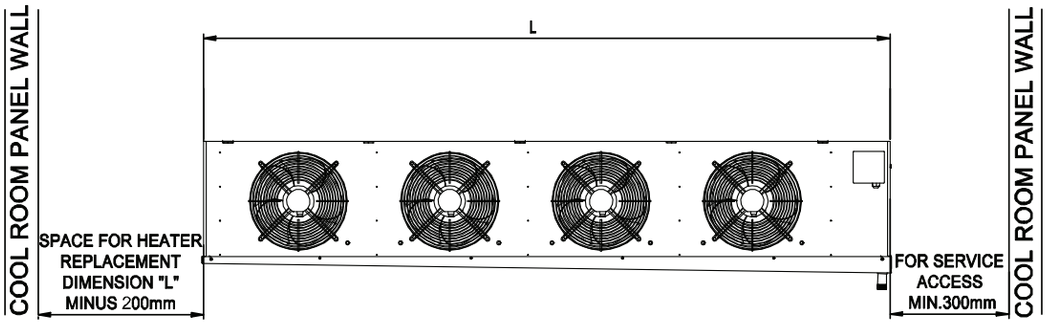
- Dimension diagrams are for guidance only.
- Detailed drawings for each model with full specifications available on request.

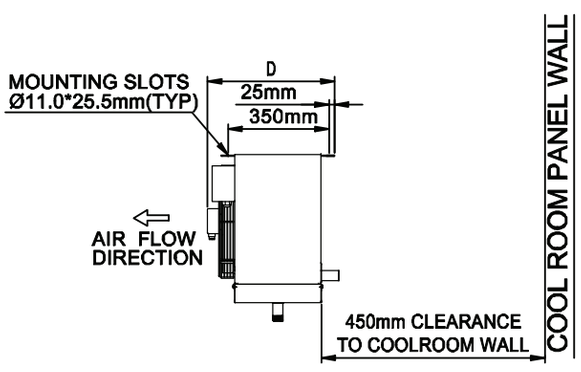
E2 LOW TEMPERATURE SERIES

Model	Capacity in Watts @ 6KTD			Air Flow		Fan Motors				Defrost Heater	Weight (kg)	Connections				Dimensions (mm)			
	R404A	R22	R134A	l/s	Air Throw (m)	Fan Qty x Ømm	Amps	Watts	Power Supply	Watts		Inlet (mm)	Outlet (mm)	Ext Equaliser	Drain	Length	Width	Height	Mounting Centres 'A'
E2 - LOW TEMPERATURE SERIES (6.0mm FIN SPACING - 4FPI)																			
E2-073-L/1.30	730	670	720	351	8	1 x 300	0.30	68	240/1/50	440	14	12.7	15.88	6.35	NPT1	650	415	430	360
E2-101-L/1.30	1010	980	890	336	8	1 x 300	0.30	68		440	15	12.7	15.88	6.35		650	415	430	360
E2-128-L/1.30	1280	1230	1040	367	7	1 x 300	0.30	68		660	20	12.7	15.88	6.35		650	415	430	360
E2-154-L/2.30	1540	1410	1590	702	11	2 x 300	0.60	136		880	20	12.7	15.88	6.35		1080	415	435	760
E2-220-L/2.30	2200	2130	1930	672	11	2 x 300	0.60	136		880	24	12.7	19.05	6.35		1080	415	435	760
E2-258-L/2.30	2580	2510	2270	646	10	2 x 300	0.60	136		1320	27	12.7	19.05	6.35		1080	414	435	760
E2-280-L/2.30	2800	2690	2560	623	10	2 x 300	0.60	136		1320	31	12.7	22.22	6.35		1080	415	435	760
E2-310-L/3.30	3100	2970	3020	1008	13	3 x 300	0.90	204		1600	33	15.88	22.22	6.35		1515	465	440	1160
E2-389-L/3.30	3890	3760	3370	969	12	3 x 300	0.90	204		2400	37	15.88	22.22	6.35		1515	465	440	1160
E2-436-L/3.30	4360	4220	3770	934	12	3 x 300	0.90	204		2400	42	15.88	28.60	6.35		1515	465	440	1160
E2-158-L/1.35	1580	1530	1420	685	13	1 x 350	0.58	132		1200	22	12.7	19.05	6.35		880	465	440	1160
E2-188-L/1.35	1880	1810	1780	658	13	1 x 350	0.58	132		1200	22	12.7	19.05	6.35		880	465	505	560
E2-270-L/1.35	2700	2620	2310	613	13	1 x 350	0.58	132		1200	28	12.7	22.22	6.35		880	465	505	560
E2-406-L/2.35	4060	3910	3780	1317	15	2 x 350	1.16	264		1600	36	15.88	28.60	6.35		1510	465	515	1160
E2-482-L/2.35	4820	4660	4240	1269	14	2 x 350	1.16	264		2400	42	15.88	28.58	6.35		1510	465	515	1160
E2-548-L/2.35	5480	5300	4750	1226	14	2 x 350	1.16	264		2400	48	15.88	28.60	6.35		1510	465	515	1160
E2-629-L/3.35	6290	6090	5560	1976	17	3 x 350	1.74	396		2400	52	15.88	28.60	6.35		2135	465	525	600 x 3
E2-722-L/3.35	7230	6970	6570	1903	16	3 x 350	1.74	396		3600	60	15.88	34.92	6.35		2135	465	525	600 x 3
E2-795-L/3.35	7950	7630	7410	1838	16	3 x 350	1.74	396		3600	68	15.88	35.00	6.35		2135	465	525	600 x 3
E2-907-L/4.35	9070	8680	8920	2538	19	4 x 350	2.32	528		4800	77	15.88	35.00	6.35		2760	465	535	1200/1160
E2-1033-L/4.35	10330	9870	10060	2451	18	4 x 350	2.32	528		4800	86	22.22	41.28	6.35		2760	465	535	1200/1160

- **Capacities based on -24˚C SST/ 6KTD for low temperature models**
- **NOTE: Low Temperature evaporators are supplied with defrost elements fitted**

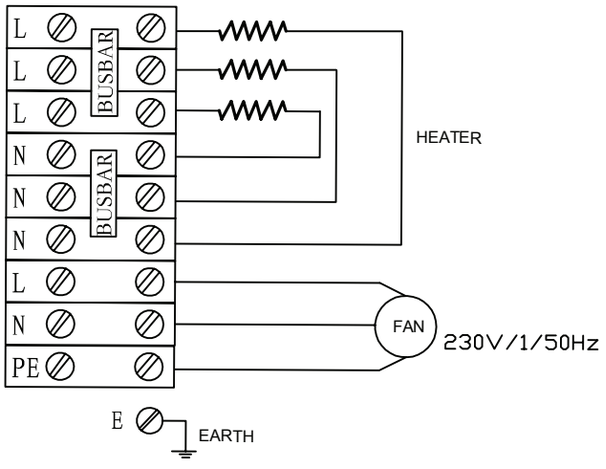
Dimensions Diagram





Wiring Diagram

Suitable for E2 with heater product



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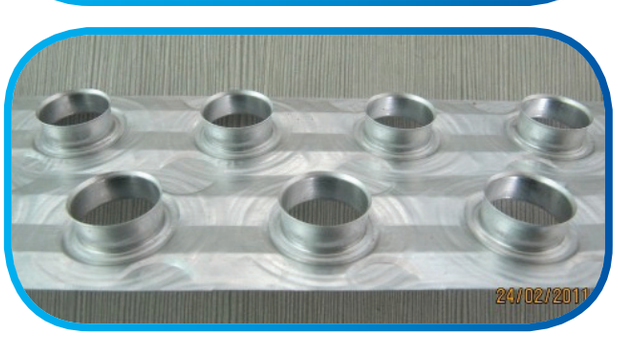

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