



EDEN UNIT COOLER

CAPACITY RANGE

Medium Temperature: 1.3kW – 54.2kW
Medium-Low Temperature: 1.0kW – 35.6kW
Low Temperature: 1.1kW – 43.8kW

www.edensolution.com

Eden accepts no responsibility for possible errors in catalogues, brochures and other printed materials. Eden reserves the right to alter its products without notice.
This also applies to products already on order provided that such alterations can be made without subsequent changes being necessary in specifications already agreed.



OUR EXPERTISE YOUR ADVANTAGE

30⁺ Over 30 years of experience in the field of heat exchangers	100⁺ Over 100 technological innovations	10000⁺ Over 10000 units of heat exchangers that have been installed worldwide in achieving stable and low energy consumption	 Eden Cool Solution	 Energy Saving	 Sustainable Development	 High Performance	 Trustworthiness	 Rich Experience
---	---	---	--	---	---	--	--	---

GREEN AND INNOVATION

For Eden, the "Green Programme" is a lasting commitment. Leveraging innovative green technologies, Eden supports customers worldwide in addressing today's most pressing environmental and regulatory challenges.

Our compact, energy-efficient designs deliver superior heat transfer performance, optimised for reliability and operational efficiency.

Backed by extensive application expertise, Eden offers customised refrigeration solutions engineered to maximise system efficiency and minimise operating costs.

Eden Cool Solution

Eden consistently adopts the user's perspective, actively providing green, comprehensive, and professional solutions, along with practical operational guidance.

Sustainable Development

Eden consistently strengthens its research and development efforts and the implementation of green technology. We meticulously oversee every step of product design, product evaluation, quality testing, and production process formulation. Our commitment to sustainable development is evident in all aspects of our operations.

Trustworthiness

Eden, as a trustworthy partner, is dedicated to meeting diversified market demands with expertise and comprehensive services.

Energy Saving

Eden's state-of-the-art technology delivers significant energy conservation.

High Performance

Eden continues to research and develop high-performance heat exchangers, exploring novel technologies and processes to enhance quality, and expanding our product lines horizontally.

Rich Experience

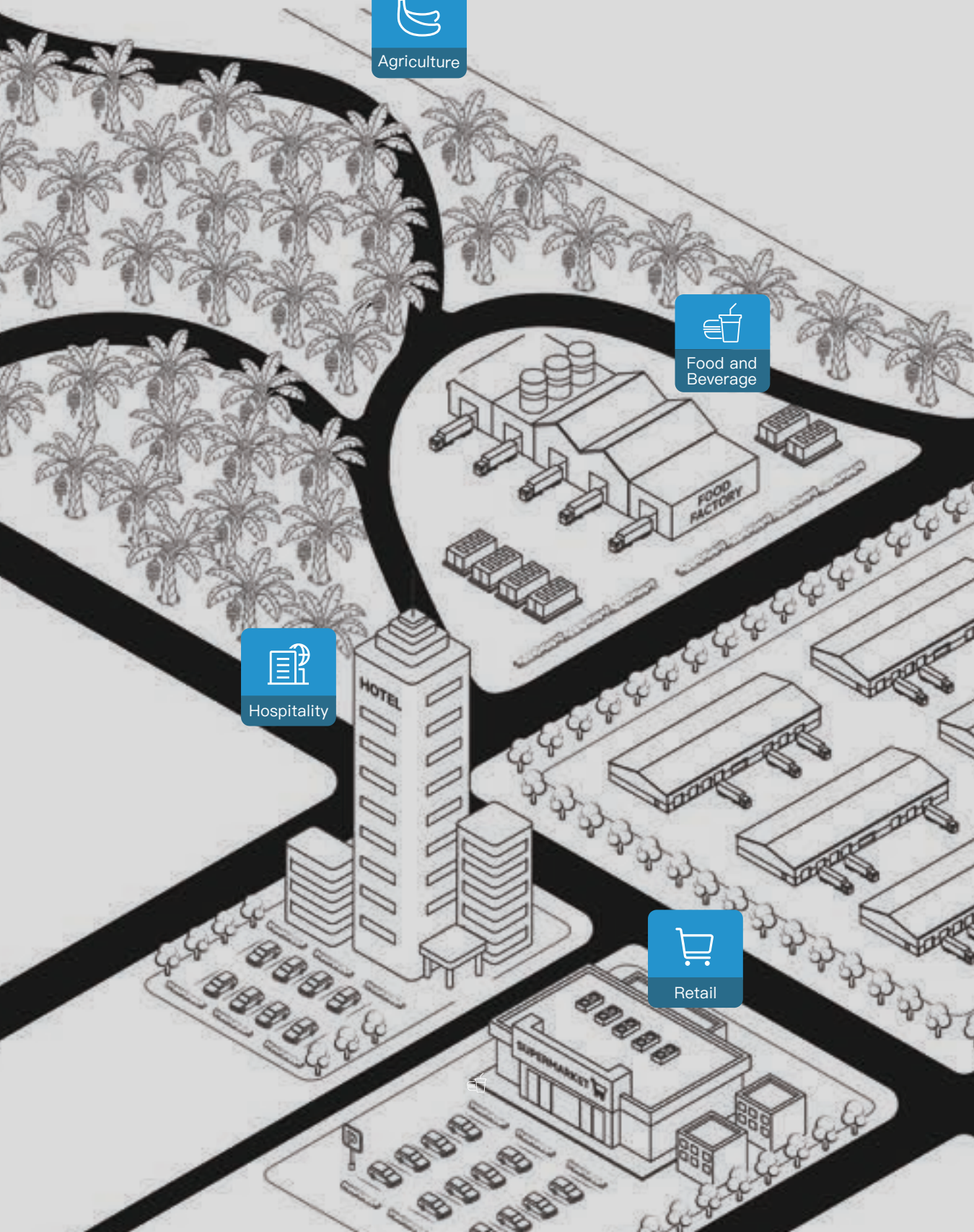
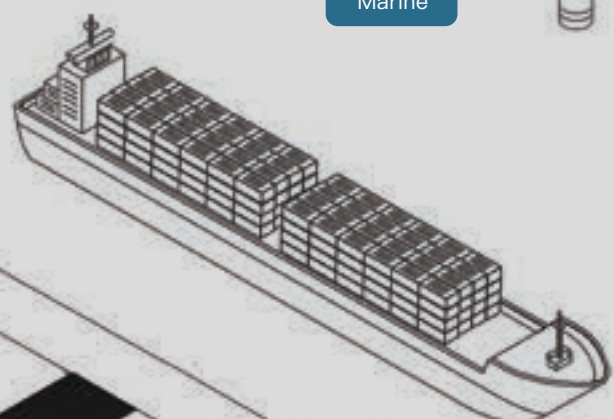
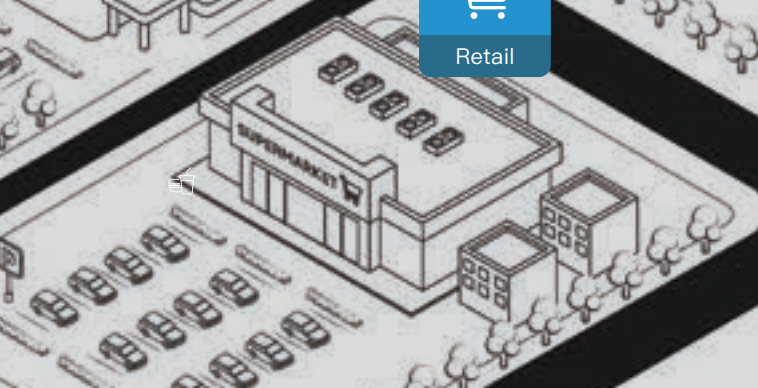
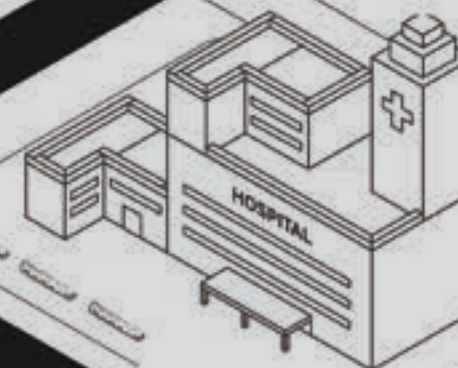
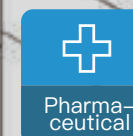
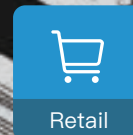
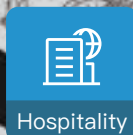
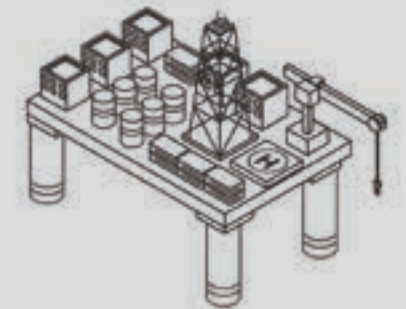
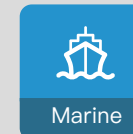
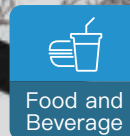
Eden brings extensive experience in product selection and support services for industrial and commercial refrigeration.

EDEN UNIT COOLERS

For Commercial and Light Industrial Applications

Eden Unit Cooler Series features a comprehensive range of adaptability and scalability, compatible with a wide variety of refrigeration systems to ensure optimal performance across different projects and application scenarios.

This series is specifically engineered for commercial and light industrial refrigeration applications. It is ideal for demanding sectors including food processing, cold chain logistics, pharmaceuticals, agriculture, retail, hospitality, marine, and food and beverage industries.





Cheese Processing Plant



SPECIFICATIONS

A variety of specifications that go into the production of Eden unit coolers, such as temperature range, fin spacing, defrosting method, and refrigerant.



TEMPERATURE RANGE

- M** - Medium (Above 0°C)
- P** - Medium-Low Temperature (-8°C to +2°C)
- L** - Low (-32°C to +10°C)



FIN SPACING

- 4 FPI** - 6.35mm
- 5 FPI** - 5mm
- 6 FPI** - 4.23mm



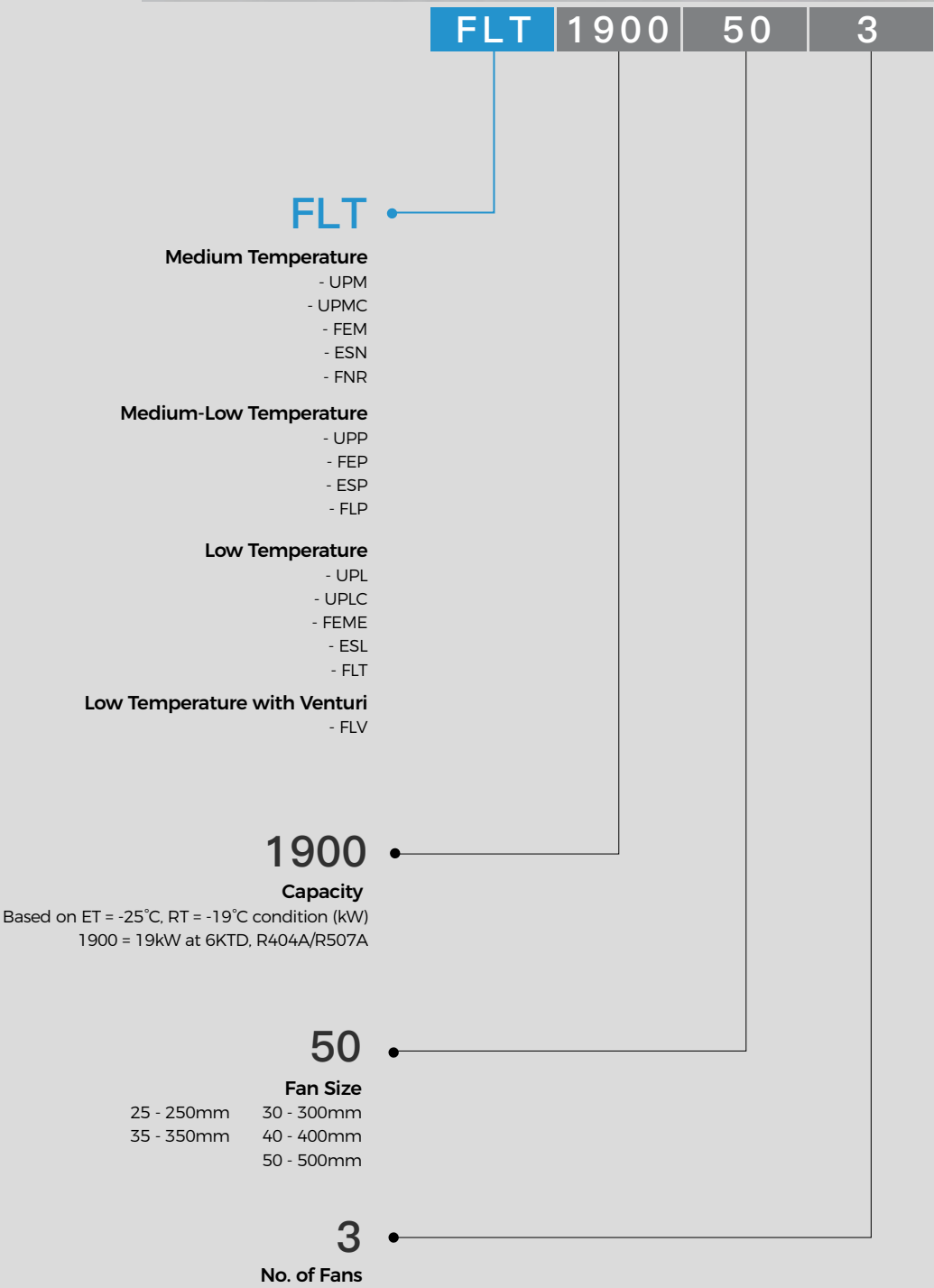
DEFROSTING METHOD

- A** - Air Defrost
- E** - Electric Defrost
- H** - Hot Gas



REFRIGERANTS

- H** - HFC (R404A, R507A, R134a)
- C** - CO₂ and NH₃ (on request basis)



ADVANTAGES

High-Efficiency & Energy-Saving

Save money on every cooling cycle

- Inner-Grooved Tubes improve heat transfer, so your system works less to achieve the same result.
- Modular fan design ensures even airflow – no wasted energy.
- Developed on a compact platform using the latest commercial software, the series ensures stable pressure drops and superior refrigerant distribution. This optimised design reduces uneven frosting and maintains excellent thermal efficiency, delivering consistent cooling performance and maximum heat transfer throughout the unit's lifespan.
- Double Sine Wave Aluminium Fins (AA 8011 Standard) maximise surface area and improve the heat transfer coefficient.
- Fast defrosting and variable fin spacing minimise energy use during defrosting while extending the time between defrost cycles.

Reliable

Performance you can trust, backed by real guarantees

- All capacity ratings in this document are thermally guaranteed by Eden.
- All Eden products are designed, manufactured, and tested under ISO 9001-certified processes.
- Each unit is backed by a One (1) Year Warranty against manufacturing defects, subject to terms and conditions.

Easy Operation and Maintenance

Built for easy servicing and extended service life

- Weather-resistant powder-coated aluminium casing (AA1100) – withstands humidity, washdowns, and thermal cycling.
- Both side panels are hinged, allowing easy access and service of components without removing the panels.

Safety

Designed to protect your people, products, and premises

- The electrical junction box is constructed from 3mm thick ABS, rated IP56 with a V-0 flame classification – ensuring enhanced safety, reliability, and compliance with industry standards.
- Equipped with premium German fan motors, the unit delivers reliable and durable performance in both low- and high-temperature applications.
- Motors feature internal thermistor protection and conform to IEC 60529 standards, underscoring their high quality and operational safety.
- L-type mounting bracket reduces hard-to-clean areas, improving hygiene and reducing maintenance effort.

Wide Range Applications

Solution for multiple refrigeration needs

- Refrigerant: R134a, R22, R404A, R507A, R407B, R407C, R407F, R448A, R449A (CO₂ & NH₃ on request basis)
- Storage Temperature Range: -32°C to +15°C
- Capacity Range: 1.0kW to 54.2kW



EDEN UNIT COOLER

For Commercial and Light Industrial Applications

Coil

Developed on a compact platform using the latest commercial software, the series ensures stable pressure drops and superior refrigerant distribution. This enhanced design reduces uneven frosting and maintains excellent thermal efficiency, ensuring consistent cooling performance and maximum heat transfer throughout the unit's lifespan.

Modular Design

Multi-fan models feature a modular design for balanced airflow distribution. Integrated fan bay centre plates prevent air bypass and reinforce structural integrity. This configuration ensures consistent volumetric airflow across the coil surface, maximising heat exchange efficiency and maintaining uniform temperatures within the cold room.

Distributor

Distributors are meticulously selected based on each unit's specific capacity and design parameters. This tailored approach optimises refrigerant feeding to every circuit, significantly improving system performance. Precision selection minimises uneven frosting, extending intervals between defrost cycles and enhancing overall energy efficiency.

Copper Tubes

The model's copper tubes adhere to JIS-C1220T standards, integrating a combination of plain and Inner-Grooved Tube (IGT) technology. This design boosts thermal efficiency, enhances tube-side turbulence, and promotes cost-effectiveness without compromising performance.

Fan Motors

Equipped with premium German fan motors, the model ensures reliability and durability in both low- and high-temperature applications. Motors feature internal thermistor protection and conform to IEC 60529 standards, underscoring their high quality and operational safety.

Casing

The casing is crafted from high-quality, powder-coated aluminium, compliant with AA1100 standards. The carboxyl polyester resin coating provides exceptional weather resistance, ensuring long-term durability.

Electrical Junction box(es)

Electrical junction box(es) are 3mm thick ABS, IP56 protection rating with flame class V-0 and are mounted internally.

Fins

Fins are manufactured from high-grade aluminium (AA 8011 Standard) and feature a Double Sine Wave Pattern with Rippled Fin Edges, maximising surface area utilization and improving the heat transfer coefficient.

Refrigerants

The series is compatible with most new-generation refrigerants, including CO₂ and NH₃, available upon request. All capacity ratings in this document are thermally guaranteed by Eden.

Hinged Side Panels

Both side panels are hinged, allowing easy access and service of components without removing the panels.

Quality Assurance

All Eden products are designed, manufactured, and tested under ISO 9001-certified processes. Each unit is backed by a One (1) Year Warranty against manufacturing defects, subject to terms and conditions.

GENERAL FEATURES

Eden Unit Cooler Series is specifically engineered for commercial and light industrial refrigeration, suitable for chiller and freezer cold room applications



Compact Design

Easier installations
Suitable for compact spaces



Inner-Grooved Tubes

Increases internal surface area whilst
having a low oil film coefficient
Higher efficiencies and capacities
JIO-C1220T



REFRIGERANTS

Refrigerant

Latest refrigerants
(CO₂ & NH₃ on request basis)



Refrigerant Distributor

Uniformly distributed refrigerant
Optimised the performance of the TXV
Maximised coil capacity



Centrally
positioned drain

Fins

High grade aluminium (AA 8011 Standard)
Double Sine Wave Pattern & Rippled Fin Edges
Maximum fin surface and higher heat transfer coefficient



Centrally
positioned

Defrosting

Electrical sheathed stainless-steel
Heating elements with vulcanised rubber connections
Centrally positioned drain outlet



Casing

High quality powder coated aluminium (AA1100 Standard)
Excellent weathering resistance



Junction Box

3mm thick ABS, IP56 protection
rating with flame class V-0
Easy access to
junction box(es) and service of components



With IP56 ratings

Hinged Side Panels

Easy access and service of components
without removing the panels



Fan Motor

High quality German fan motors
Thermistor motor protection
IEC 60529 safety standards
Long life and durability



German fan

Quality Assurance

ISO9001 certification
International Accreditation Forum
CE certification
One (1) Year Warranty (Terms and Conditions apply)



SELECTION DATA

MEDIUM TEMPERATURE UNIT COOLER

Air Defrost, Room Temperature +3°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=-5°C RT=+3°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (8KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)	(m²)	(litre)
UPM 0130.251	1.3	6	4.23	1 x 250	230/1/50	42	0.19	1400	254	915	4.6	61	3.62	0.8
UPM 0230.251	2.3			1 x 250		42	0.19		221	795	4.0	61	9.06	2.1
UPM 0340.252	3.4			2 x 250		84	0.38		484	1743	4.8	64	10.76	2.2
UPM 0490.252	4.9			2 x 250		84	0.38		422	1520	4.2	64	21.76	5.0
UPM 0620.253	6.2			3 x 250		126	0.57		694	2500	6.0	66	21.52	4.5
UPM 0740.253	7.4			3 x 250		126	0.57		633	2280	5.4	66	32.65	7.5
UPM 0850.254	8.5			4 x 250		168	0.76		926	3333	7.0	67	29.05	6.7
UPM 1140.255	11.4			5 x 250		210	0.95		1105	3976	8.2	68	45.28	10.3
UPM 1240.255	12.4			5 x 250		210	0.95		1056	3801	8.0	68	54.25	12.2
UPMC 0220.251	2.2			1 x 250		42	0.19		193	696	3.8	61	9.29	2.1
UPMC 0440.252	4.4			2 x 250		84	0.38		386	1391	4.2	64	18.69	4.4
UPMC 0670.253	6.7			3 x 250		126	0.57		580	2087	5.4	66	28.04	6.6
UPMC 0900.254	9.0			4 x 250		168	0.76		773	2783	6.7	67	37.15	8.2
FEM 0251.301	2.5	6	4.23	1 x 300	230/1/50	70	0.32	1350	404	1455	6.8	66	6.94	1.5
FEM 0370.301	3.7			1 x 300		70	0.32		345	1243	6.6	66	14.01	3.2
FEM 0510.302	5.1			2 x 300		140	0.64		807	2904	7.5	69	13.89	3.1
FEM 0620.302	6.2			2 x 300		140	0.64		764	2749	7.3	69	18.39	3.7
FEM 0770.302	7.7			2 x 300		140	0.64		690	2485	6.9	69	27.77	6.0
FEM 0930.303	9.3			3 x 300		210	0.96		1146	4124	8.2	71	27.77	6.0
FEM 1050.303	10.5			3 x 300		210	0.96		1086	3911	8.0	71	34.71	7.5
FEM 1130.303	11.3			3 x 300		210	0.96		1035	3727	7.8	71	41.84	9.4
FEM 1230.304	12.3			4 x 300		280	1.28		1527	5498	8.8	72	37.14	8.3
FEM 1380.304	13.8			4 x 300		280	1.28		1449	5215	8.6	72	46.52	10.5
FEM 1520.304	15.2			4 x 300		280	1.28		1381	4970	8.3	72	55.90	12.7

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

MEDIUM TEMPERATURE UNIT COOLER

Air Defrost, Room Temperature +3°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=-5°C RT=+3°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (8KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)		(l/s)	(m³/hr)				
FEM 0360.351	3.6	5	5.08	1 x 350	230/1/50	130	0.58	1400	578	2080	8.1	68	8.01	2.1
FEM 0450.351	4.5			1 x 350		130	0.58		500	1800	7.7	68	12.09	3.2
FEM 0600.352	6.0			2 x 350		260	1.16		1250	4500	10.8	72	11.97	3.0
FEM 0720.352	7.2			2 x 350		260	1.16		1153	4150	10.4	72	15.84	3.7
FEM 0830.352	8.3			2 x 350		260	1.16		1069	3850	10.3	72	20.07	5.2
FEM 0910.352	9.1			2 x 350		260	1.16		1003	3610	10.2	72	24.06	6.2
FEM 1090.353	10.9			3 x 350		390	1.74		1764	6350	12.2	73	23.94	6.0
FEM 1240.353	12.4			3 x 350		390	1.74		1639	5900	12.0	73	29.92	7.5
FEM 1410.354	14.1			4 x 350		520	2.32		2375	8550	13.5	74	32.03	8.2
FEM 1670.354	16.7			4 x 350		520	2.32		2206	7940	13.2	74	40.13	10.5
FEM 1830.354	18.3			4 x 350		520	2.32		2067	7440	13.0	74	48.23	12.7
FEM 2070.355	20.7			5 x 350		650	2.90		2758	9930	16.6	75	50.17	13.1
FEM 2240.355	22.4			5 x 350		650	2.90		2581	9290	16.4	75	59.24	14.4
ESN 0530.401	5.3	6	4.23	1 x 400	400/3/50	135	0.44	1450	817	2940	19.6	74	12.70	2.8
ESN 0630.401	6.3			1 x 400		135	0.44		763	2747	19.4	74	15.88	3.5
ESN 0720.401	7.2			1 x 400		135	0.44		719	2590	19.1	74	19.10	4.2
ESN 0890.402	8.9			2 x 400		270	0.88		1747	6291	20.3	77	18.92	3.9
ESN 1090.402	10.9			2 x 400		270	0.88		1633	5880	20.1	77	25.40	5.6
ESN 1440.402	14.4			2 x 400		270	0.88		1439	5179	19.6	77	38.10	8.4
ESN 1690.403	16.9			3 x 400		405	1.32		2450	8819	20.8	79	38.00	8.2
ESN 1970.403	19.7			3 x 400		405	1.32		2289	8240	20.6	79	47.73	10.7
ESN 2210.403	22.1			3 x 400		405	1.32		2158	7769	20.3	79	57.16	12.6
ESN 2500.404	25.0			4 x 400		540	1.76		3181	11451	21.3	80	62.64	15.9
ESN 2770.404	27.7			4 x 400		540	1.76		2970	10692	21.1	80	78.12	19.4
ESN 3100.404	31.0			4 x 400		540	1.76		2792	10050	20.9	80	94.04	23.9
ESN 3500.405	35.0			5 x 400		675	2.20		3708	13349	21.9	82	97.65	24.2
ESN 3860.405	38.6	5 x 400	675	2.20	3490	12562	21.7	82	117.45	29.8				

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

MEDIUM TEMPERATURE UNIT COOLER

Air Defrost, Room Temperature +3°C

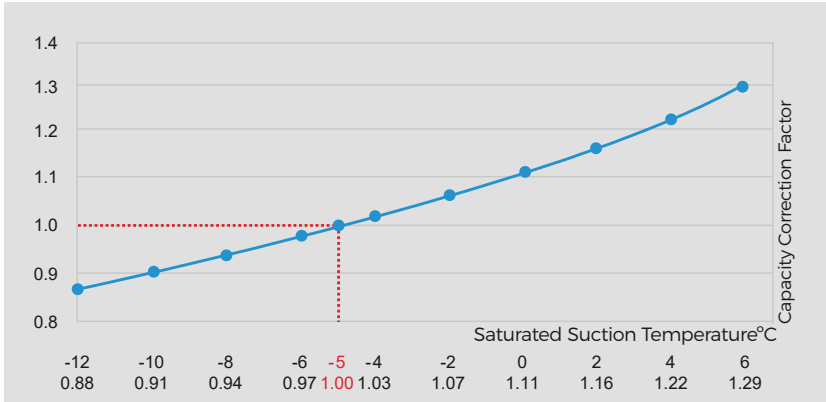
Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=-5°C RT=+3°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (8KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
FNR 1020.501	10.2	6	4.23	1 x 500	400/3/50	770	1.70	1300	1820	6550	26.0	76	25.17	6.4
FNR 1290.501	12.9			1 x 500		770	1.70		1742	6271	25.3	76	33.72	9.0
FNR 1610.501	16.1			1 x 500		770	1.70		1590	5723	24.1	76	50.34	12.8
FNR 1820.502	18.2			2 x 500		1540	3.40		3425	12329	28.3	81	39.71	10.1
FNR 2230.502	22.3			2 x 500		1540	3.40		3196	11506	27.0	81	53.21	14.2
FNR 2470.502	24.7			2 x 500		1540	3.40		2987	10755	26.0	81	66.00	17.0
FNR 2750.502	27.5			2 x 500		1540	3.40		2796	10064	24.9	81	79.65	20.8
FNR 3290.503	32.9			3 x 500		2310	5.10		4760	17138	29.7	83	78.52	20.5
FNR 3740.503	37.4			3 x 500		2310	5.10		4447	16010	28.7	83	98.23	26.1
FNR 4040.503	40.4			3 x 500		2310	5.10		4151	14944	27.6	83	118.12	31.7
FNR 4420.504	44.2			4 x 500		3080	6.80		6347	22850	30.9	84	104.92	27.9
FNR 5010.504	50.1			4 x 500		3080	6.80		5930	21347	29.7	84	131.32	35.2
FNR 5420.504	54.2			4 x 500		3080	6.80		5535	19925	28.5	84	157.72	42.8

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

Application & Correction Factor Guidelines

Capacity Correction Graph



Refrigerant / Capacity Multiplier Table

Refrigerant	Capacity Multiplier
R134a	0.986
R22	1.011
R404A/R507A	1.000
R407B	0.961
R407C	0.940
R407F	1.011
R448A	1.030
R449A	0.930

Selection Example

Application: Yam Storage Room	Required KTD: 12KTD (or 70%RH)
Required Room Temperature: +16 °C	Required Cooling Capacity (inclusive of the fan and heater load): 20kW
Ambient: +35 °C	Type of Refrigerant: R134a
Required Air Throw: ≥21m	

- 1 Determine the Correction Factors and Multiplier (refer to page 17)

a. Since 12 KTD is required; thus the ET is found to be:
ET = RT - KTD = 16°C - 12KTD = 4°C

b. Capacity Correction Factor is approximately 1.22 (ET -5°C → 4°C, refer to Correction Graph)

c. Refrigerant multiplier = 0.986 (R404A → R134a, refer to Table)
- 2 Calculation of required capacity at ET = 4°C (@12KTD)
20kW ÷ 1.22 ÷ 0.986 = 16.6kW (inclusive of the fan and heater load)

3 Calculate the unit cooler capacity needed at 8KTD
16.6kW ÷ 12 x 8 = 11.1kW

4 The FNR 1290.501 has an air throw of 25.3 metres, hence FNR 1290.501 is the selected unit cooler for the above application.

5 To check if selected model FNR 1290.501 will achieve at least 20kW for the above application:
Capacity = 12.9kW x 1.22 x 0.986 ÷ 8 x 12 = 23.3kW (for R134A, 12KTD, ET = 4°C)
Hence, FNR 1290.501 with cooling capacity of 23.3kW is adequate for this application.

SELECTION DATA
MEDIUM – LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature –4°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−10°C RT=−4°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)		(rpm)	(l/s)				
UPP 0100.251	1.0	6	4.23	1 x 250	230/1/50	42	0.19	1400	257	924	4.4	61	5.44	1.2
UPP 0140.251	1.4			1 x 250		42	0.19		235	847	4.0	61	9.06	2.1
UPP 0220.252	2.2			2 x 250		84	0.38		513	1849	4.8	64	10.76	2.2
UPP 0330.252	3.3			2 x 250		84	0.38		450	1621	4.2	64	21.76	5.0
UPP 0390.253	3.9			3 x 250		126	0.57		737	2653	5.8	66	21.52	4.5
UPP 0480.253	4.8			3 x 250		126	0.57		675	2431	5.2	66	32.64	7.5
UPP 0550.254	5.5			4 x 250		168	0.76		983	3537	6.8	67	28.69	6.0
UPP 0650.254	6.5			4 x 250		168	0.76		900	3242	6.5	67	43.52	9.9
UPP 0760.255	7.6			5 x 250		210	0.95		1177	4237	8.2	68	45.28	10.3
UPP 0840.255	8.4			5 x 250		210	0.95		1126	4052	8.0	68	54.25	12.2
FEP 0200.301	2.0	6	4.23	1 x 300	230/1/50	70	0.32	1350	407	1464	6.5	66	9.29	2.1
FEP 0240.301	2.4			1 x 300		70	0.32		368	1326	6.2	66	14.00	3.3
FEP 0330.302	3.3			2 x 300		140	0.64		856	3083	7.5	69	13.88	3.0
FEP 0400.302	4.0			2 x 300		140	0.64		813	2927	7.3	69	18.39	3.8
FEP 0500.302	5.0			2 x 300		140	0.64		736	2650	6.9	69	27.77	6.0
FEP 0600.303	6.0			3 x 300		210	0.96		1220	4391	8.2	71	27.77	6.0
FEP 0670.303	6.7			3 x 300		210	0.96		1158	4168	8	71	34.71	7.5
FEP 0740.303	7.4			3 x 300		210	0.96		1104	3975	7.8	71	41.66	9.0
FEP 0810.304	8.1			4 x 300		280	1.28		1626	5855	8.8	72	37.14	8.3
FEP 0910.304	9.1			4 x 300		280	1.28		1544	5557	8.6	72	46.52	10.5
FEP 1000.304	10.0			4 x 300		280	1.28		1476	5313	8.3	72	55.89	12.8

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

MEDIUM – LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature –4°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−10°C RT=−4°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
FEP 0230.351	2.3	5	5.08	1 x 350	230/1/50	130	0.58	1400	578	2110	8.1	68	8.01	2.1
FEP 0290.351	2.9			1 x 350		130	0.58		500	1840	7.7	68	12.09	3.2
FEP 0390.352	3.9			2 x 350		260	1.16		1250	4620	10.8	72	11.97	3.0
FEP 0470.352	4.7			2 x 350		260	1.16		1153	4270	10.4	72	15.84	3.7
FEP 0540.352	5.4			2 x 350		260	1.16		1069	3980	10.3	72	20.07	5.2
FEP 0610.352	6.1			2 x 350		260	1.16		1003	3730	10.2	72	24.06	6.2
FEP 0710.353	7.1			3 x 350		390	1.74		1764	6330	12.2	73	23.94	6.0
FEP 0810.353	8.1			3 x 350		390	1.74		1639	5900	12.0	73	29.92	7.5
FEP 0950.354	9.5			4 x 350		520	2.32		2375	8530	13.5	74	32.03	8.2
FEP 1090.354	10.9			4 x 350		520	2.32		2206	7950	13.2	74	40.13	10.5
FEP 1190.354	11.9			4 x 350		520	2.32		2067	7450	13.0	74	48.23	12.7
FEP 1330.355	13.3			5 x 350		650	2.9		2758	10140	16.6	75	50.17	13.1
FEP 1450.355	14.5			5 x 350		650	2.9		2581	9520	16.4	75	59.24	14.4
ESP 0320.401	3.2	6	4.23	1 x 400	400/3/50	135	0.44	1450	872	3141	19.6	74	12.70	2.80
ESP 0380.401	3.8			1 x 400		135	0.44		817	2942	19.4	74	15.88	3.50
ESP 0420.401	4.2			1 x 400		135	0.44		742	2671	19.1	74	19.05	4.20
ESP 0510.402	5.1			2 x 400		270	0.88		1857	6686	20.3	77	18.92	3.90
ESP 0640.402	6.4			2 x 400		270	0.88		1745	6281	20.1	77	25.40	5.60
ESP 0850.402	8.5			2 x 400		270	0.88		1542	5553	19.6	77	38.10	8.4
ESP 0990.403	9.9			3 x 400		405	1.32		2617	9422	20.8	79	38.00	8.2
ESP 1190.403	11.9			3 x 400		405	1.32		2451	8825	20.6	79	47.73	10.7
ESP 1320.403	13.2			3 x 400		405	1.32		2314	8329	20.3	79	57.16	12.6
ESP 1470.404	14.7			4 x 400		540	1.76		3400	12239	21.3	80	62.64	15.9
ESP 1700.404	17.0			4 x 400		540	1.76		3182	11456	21.1	80	78.12	19.4
ESP 1900.404	19.0			4 x 400		540	1.76		2995	10782	20.9	80	93.96	23.8
ESP 2150.405	21.5			5 x 400		675	2.20		3973	14304	21.9	82	97.65	24.2
ESP 2430.405	24.3	5 x 400	675	2.20	3744	13477	21.7	82	117.45	29.8				

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

MEDIUM – LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature –4°C

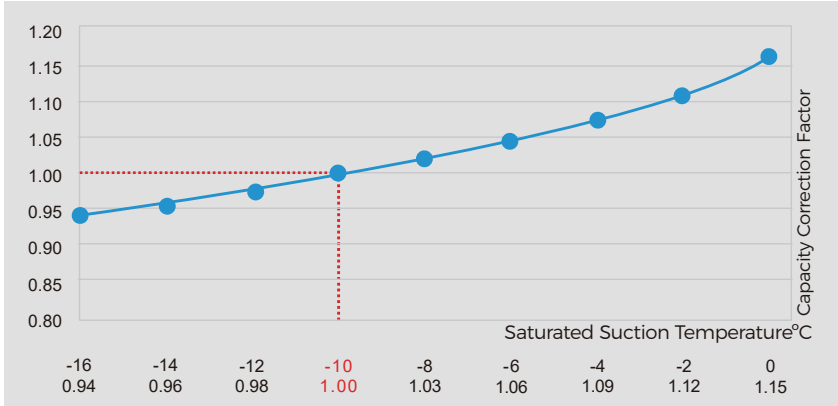
Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−10°C RT=−4°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
FLP 0650.501	6.5	6	4.23	1 x 500	400/3/50	770	1.70	1300	1925	6931	26.0	76	25.00	6.0
FLP 0840.501	8.4			770		1.70	1847		6649	25.3	76	33.72	9.0	
FLP 1040.501	10.4			770		1.70	1699		6115	24.1	76	50.34	12.8	
FLP 1160.502	11.6			2 x 500		1540	3.40		3640	13105	27.3	81	39.71	10.1
FLP 1440.502	14.4			2 x 500		1540	3.40		3415	12295	27.0	81	53.21	14.2
FLP 1660.502	16.6			2 x 500		1540	3.40		3199	11516	26.0	81	66.37	17.3
FLP 1860.502	18.6			2 x 500		1540	3.40		3012	10845	24.9	81	79.65	20.8
FLP 2150.503	21.5			3 x 500		2310	5.10		5087	18314	29.7	83	78.52	20.5
FLP 2440.503	24.4			3 x 500		2310	5.10		4763	17147	28.7	83	98.23	26.1
FLP 2660.503	26.6			3 x 500		2310	5.10		4479	16123	27.6	83	118.12	31.7
FLP 2930.504	29.3			4 x 500		3080	6.80		6783	24419	30.0	84	104.92	27.9
FLP 3270.504	32.7			4 x 500		3080	6.80		6351	22862	29.7	84	131.32	35.2
FLP 3560.504	35.6			4 x 500		3080	6.80		5971	21497	28.5	84	157.72	42.8

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

Application & Correction Factor Guidelines

Capacity Correction Graph



Refrigerant / Capacity Multiplier Table

Refrigerant	Capacity Multiplier
R134a	0.986
R22	1.011
R404A/R507A	1.000
R407B	0.961
R407C	0.940
R407F	1.011
R448A	1.030
R449A	0.930

Selection Example

Application: Beef, Fresh

Required Room Temperature: 0°C

Relative Humidity: 90%

Required Cooling Capacity (inclusive of the fan and heater load): 11.3kW

Type of Refrigerant: R407C

Required Air Throw: ≥22m

1 Determine the Correction Factors and Multiplier (refer to page 23)

a. Based on %RH vs KTD Table on page 57, to achieve 90% RH, 4KTD is required; thus the ET is found to be: ET = RT - KTD = 0°C - 4KTD = -4°C

b. Capacity Correction Factor is approximately 1.09 (ET -10°C → -4°C, refer to Correction Graph)

c. Refrigerant multiplier = 0.940 (R404A → R407C, refer to Table)

2 Calculation of required capacity at ET = -10°C (@4KTD)

11.3kW ÷ 1.09 ÷ 0.940 = 11.0kW (inclusive of the fan and heater load)

3 Calculate the unit cooler capacity needed at 6KTD

11.0kW ÷ 4 x 6 = 16.5kW

4 The FLP 1660.502 has an air throw of 26.0 meters, hence FLP 1660.502 is the selected unit cooler for the above application.

5 To check if selected model FLP 1660.502 will achieve at least 16.5kW for the above application:

Capacity = 16.6kW x 1.09 x 0.940 ÷ 6 x 4 = 11.3kW (for R407C, 4KTD, ET = -4°C, RH = 90%)

Hence, FLP 1660.502 with cooling capacity of 11.3kW is adequate for this application.

SELECTION DATA

LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature -19°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−25°C RT=−19°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
UPL 0110.251	1.1	4	6.35	1 x 250	230/1/50	42	0.19	1400	245	883	4.3	61	6.39	2.1
UPL 0160.252	1.6			2 x 250		84	0.38		525	1892	4.9	64	7.53	2.2
UPL 0220.252	2.2			2 x 250		84	0.38		490	1765	4.6	64	12.66	4.0
UPL 0290.253	2.9			3 x 250		126	0.57		761	2740	5.9	66	15.14	4.7
UPL 0370.253	3.7			3 x 250		126	0.57		711	2561	5.2	66	22.94	7.5
UPL 0440.254	4.4			4 x 250		168	0.76		979	3525	6.9	67	25.45	8.2
UPL 0490.254	4.9			4 x 250		168	0.76		948	3414	6.3	67	30.59	10.0
UPL 0560.255	5.6			5 x 250		210	0.95		1226	4414	8.1	68	31.81	10.3
UPL 0610.255	6.1			5 x 250		210	0.95		1185	4268	7.4	68	38.23	12.5
UPLC 0110.251	1.1			1 x 250		42	0.19		223	801	4.0	61	6.55	2.1
UPLC 0220.252	2.2			2 x 250		84	0.38		445	1602	4.2	64	13.15	4.4
UPLC 0340.253	3.4			3 x 250		126	0.57		668	2404	5.3	66	19.73	6.6
UPLC 0450.254	4.5			4 x 250		168	0.76		890	3205	6.3	67	25.94	8.0
FEME 0120.301	1.2	4	6.35	1 x 300	230/1/50	70	0.32	1350	441	1589	6.2	66	4.86	1.5
FEME 0160.301	1.6			1 x 300		70	0.32		405	1457	6.0	66	8.17	2.6
FEME 0240.302	2.4			2 x 300		140	0.64		883	3178	7.0	69	9.73	3.0
FEME 0300.302	3.0			2 x 300		140	0.64		843	3036	6.7	69	12.85	3.8
FEME 0370.302	3.7			2 x 300		140	0.64		777	2799	6.5	69	19.52	6.1
FEME 0440.303	4.4			3 x 300		210	0.96		1265	4553	7.7	71	19.64	6.0
FEME 0510.303	5.1			3 x 300		210	0.96		1214	4371	7.6	71	24.32	7.5
FEME 0590.303	5.9			3 x 300		210	0.96		1166	4198	7.4	71	29.37	9.4
FEME 0690.304	6.9			4 x 300		280	1.28		1619	5828	8.1	72	32.67	10.5
FEME 0760.304	7.6			4 x 300		280	1.28		1555	5597	7.8	72	39.27	12.7

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature -19°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−25°C RT=−19°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
FEME 0180.351	1.8	4	6.35	1 x 350	230/1/50	130	0.58	1400	603	2170	7.7	68	6.52	2.1
FEME 0230.351	2.3			1 x 350		130	0.58		533	1920	7.5	68	9.79	3.1
FEME 0300.352	3.0			2 x 350		260	1.16		1311	4720	10.1	72	9.73	3.0
FEME 0370.352	3.7			2 x 350		260	1.16		1219	4390	9.8	72	12.85	3.7
FEME 0430.352	4.3			2 x 350		260	1.16		1144	4120	9.6	72	16.33	5.2
FEME 0470.352	4.7			2 x 350		260	1.16		1078	3880	9.5	72	19.58	6.2
FEME 0560.353	5.6			3 x 350		390	1.74		1847	6650	11.5	73	19.46	6.0
FEME 0640.353	6.4			3 x 350		390	1.74		1731	6230	11.3	73	24.32	7.5
FEME 0720.353	7.2			3 x 350		390	1.74		1631	5870	10.9	73	29.55	9.7
FEME 0870.354	8.7			4 x 350		520	2.32		2333	8400	12.7	74	32.67	10.5
FEME 0960.354	9.6			4 x 350		520	2.32		2197	7910	12.3	74	39.27	12.7
FEME 1080.355	10.8			5 x 350		650	2.90		2914	10490	15.6	75	40.54	12.5
FEME 1180.355	11.8			5 x 350		650	2.90		2747	9890	15.3	75	48.94	15.6
ESL 0250.401	2.5	4	6.35	1 x 400	400/3/50	135	0.44	1450	867	3120	19.6	74	8.91	2.8
ESL 0290.401	2.9			1 x 400		135	0.44		825	2969	19.4	74	11.14	3.5
ESL 0330.401	3.3			1 x 400		135	0.44		783	2818	19.1	74	13.36	4.2
ESL 0400.402	4.0			2 x 400		270	0.88		1826	6574	20.3	77	13.23	3.9
ESL 0510.402	5.1			2 x 400		270	0.88		1733	6239	20.1	77	17.82	5.6
ESL 0650.402	6.5			2 x 400		270	0.88		1565	5635	19.6	77	26.73	8.4
ESL 0760.403	7.6			3 x 400		405	1.32		2600	9359	20.8	79	26.62	8.2
ESL 0870.403	8.7			3 x 400		405	1.32		2474	8906	20.6	79	33.51	10.7
ESL 0980.403	9.8			3 x 400		405	1.32		2348	8453	20.3	79	40.09	12.6
ESL 1120.404	11.2			4 x 400		540	1.76		3431	12350	21.3	80	43.32	14.9
ESL 1300.404	13.0			4 x 400		540	1.76		3252	11708	21.1	80	54.59	19.9
ESL 1420.404	14.2			4 x 400		540	1.76		3084	11104	20.9	80	65.51	23.9
ESL 1640.405	16.4			5 x 400		675	2.20		4065	14635	21.9	82	67.96	24.2
ESL 1810.405	18.1			5 x 400		675	2.20		3851	13863	21.7	82	81.82	29.8

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.

**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature -19°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

CAPACITY R404A/R507A		FIN DATA		FAN DATA									Heat Exchange Area	Coil Volume
Model	ET=−25°C RT=−19°C	FPI	Fin Spacing	No. of Fans ϕ (mm)	Fan Motor			Fan Speed	Air Flow		Air Throw*	Sound Power Level		
	kW (6KTD)		(mm)		(V/Ph/Hz)	(W)	(Amps)	(rpm)	(l/s)	(m³/hr)	(m)	dB(A)		
FLT 0721.501	7.2	4	6.35	1 x 500	400/3/50	770	1.70	1300	1762	6342	25.3	76	29.00	11.0
FLT 0820.501	8.2			1 x 500		770	1.70		1707	6144	24.9	76	35.07	13.0
FLT 1130.502	11.3			2 x 500		1540	3.40		3416	12298	27.4	81	37.15	14.0
FLT 1300.502	13.0			2 x 500		1540	3.40		3256	11720	27.0	81	46.29	17.0
FLT 1420.502	14.2			2 x 500		1540	3.40		3095	11141	26.6	81	55.44	21.0
FLT 1670.503	16.7			3 x 500		2310	5.10		5103	18372	30.1	83	54.94	21.0
FLT 1900.503	19.0			3 x 500		2310	5.10		4854	17473	29.7	83	68.29	25.0
FLT 2150.503	21.5			3 x 500		2310	5.10		4612	16604	28.7	83	82.49	32.0
FLT 2590.504	25.9			4 x 500		3080	6.80		6471	23297	30.6	84	91.73	35.0
FLT 2870.504	28.7			4 x 500		3080	6.80		6150	22139	29.9	84	110.21	43.0
FLT 3240.505	32.4			5 x 500		3850	8.50		8089	29121	31.0	85	114.38	44.0
FLT 3550.505	35.5			5 x 500		3850	8.50		7687	27674	30.1	85	136.92	51.0
FLV 0710.501	7.1	4	6.35	1 x 500	400/3/50	770	1.70	1300	2154	7754	26.1	76	23.33	8.0
FLV 0920.501	9.2			1 x 500		770	1.70		1979	7124	25.8	76	35.07	13.0
FLV 1250.502	12.5			2 x 500		1540	3.40		3964	14269	28.8	79	37.15	14.0
FLV 1590.502	15.9			2 x 500		1540	3.40		3535	12725	28.4	79	55.44	21.0
FLV 1800.502	18.0			2 x 500		1540	3.40		4336	15609	27.9	79	68.29	25.0
FLV 2350.503	23.5			3 x 500		2310	5.10		5966	21479	31.6	81	79.84	30.0
FLV 2630.503	26.3			3 x 500		2310	5.10		5683	20459	31.2	81	96.35	37.0
FLV 3160.504	31.6			4 x 500		3080	6.80		7955	28639	32.1	82	106.91	41.0
FLV 3500.504	35.0			4 x 500		3080	6.80		7577	27278	31.4	82	128.02	48.0
FLV 3980.505	39.8			5 x 500		3850	8.50		9944	35799	32.6	83	133.07	50.0
FLV 4380.505	43.8			5 x 500		3850	8.50		9472	34098	31.6	83	160.58	62.0

*Air Throw indicated is the distance from the unit to the furthest point, where an air velocity of 0.5m/s can still be measured.
**Kindly approach our Technical Team to assist in ET values below -36°C or other specific requirements.

SELECTION DATA

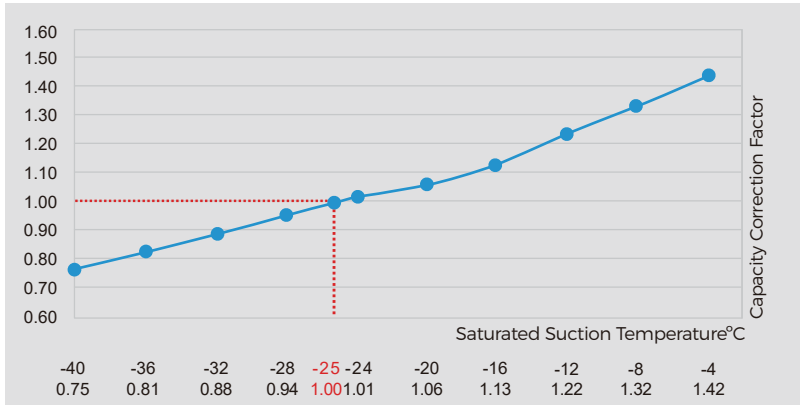
LOW TEMPERATURE UNIT COOLER

Electric Defrost, Room Temperature -19°C

Hz		Defrost			Refrigerant	
50	60	A	E	H	CO2	HFC

Application & Correction Factor Guidelines

Capacity Correction Graph



Refrigerant / Capacity Multiplier Table

Refrigerant	Capacity Multiplier
R134a	0.986
R22	1.011
R404A/R507A	1.000
R407B	0.961
R407C	0.940
R407F	1.011
R448A	1.030
R449A	0.930

Selection Example

Application: Ice Cream Freezer

Required Room Temperature: -25°C

Required KTD: 7KTD (or 87.5% RH)

Required Cooling Capacity (inclusive of the fan and heater load): 12kW

Type of Refrigerant: R407F

Required Air Throw: ≥23m

1

Determine the Correction Factors and Multiplier (refer to page 31)

a.

Since 7 KTD is required; thus the ET is found to be:
ET = RT - KTD = -25°C - 7KTD = -32°C

b.

Capacity Correction Factor is approximately 0.88 (ET -25°C → -32°C, refer to Correction Graph)

c.

Refrigerant multiplier = 1.011 (R404A → R407F, refer to Table)

2

Calculation of required capacity at ET = -32°C (@7KTD)
12.0kW ÷ 0.88 ÷ 1.011 = 13.5kW (inclusive of the fan and heater load)

3

Calculate the unit cooler capacity needed at 7KTD
13.5kW ÷ 7 x 6 = 11.6kW

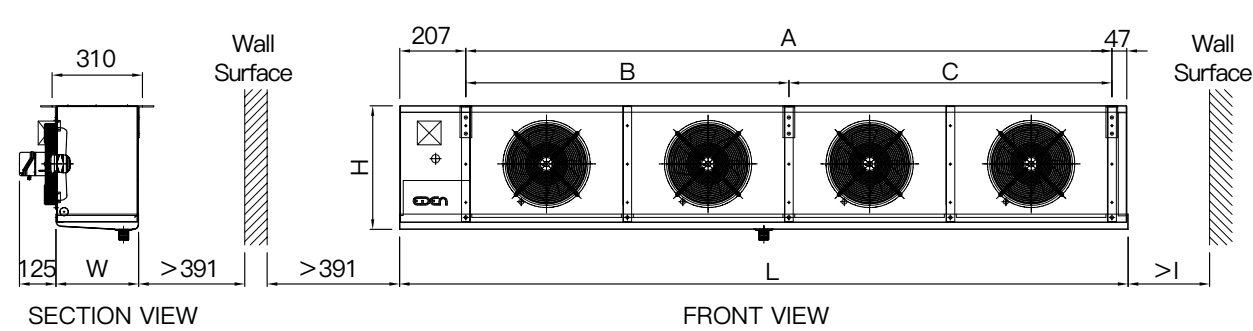
4

The FLT 1300.502 has an air throw of 27 meters, hence FLT 1300.502 is the selected unit cooler for the above application.

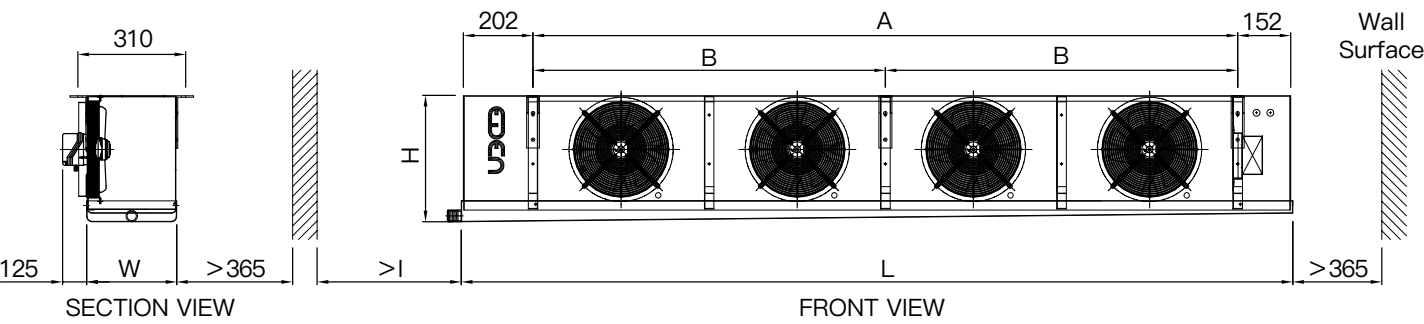
5

To check if selected model FLT 1300.502 will achieve at least 11.6kW for the above application:
Capacity: 13kW x 0.88 x 1.011 ÷ 6 x 7 = 13.5kW (for R407F, 7KTD, ET = -32°C)
Hence, FLT 1300.502 with cooling capacity of 13.5kW is adequate for this application.

TECHNICAL DATA



UPM, UPP, UPL Series with $\phi 250$ mm fan motors



UPMC, UPLC Series with $\phi 250$ mm fan motors

I: Minimum distance required for heater replacement (not applicable to UPM/UPMC model)

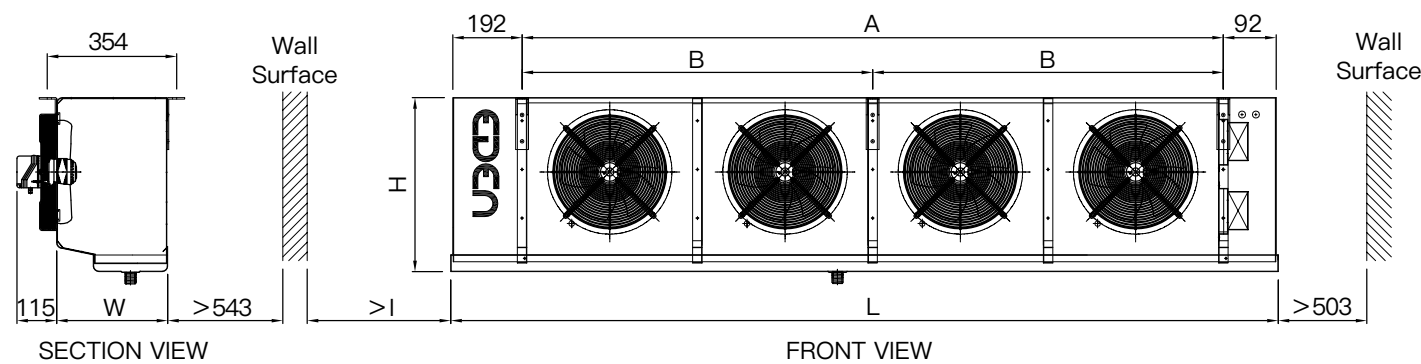
MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)									WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	C	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe													
	UPM 0130.251	12.7	22.2	25.4	–	–	528	–	–	786	255	391	890	480	575	15	29
	UPM 0230.251	12.7	22.2	25.4	–	–	528	–	–	786	255	391	890	480	575	17	31
	UPM 0340.252	12.7	22.2	25.4	–	–	1028	–	–	1286	255	391	1390	480	575	20	35
	UPM 0490.252	12.7	28.6	25.4	–	–	1028	–	–	1286	255	391	1390	480	575	28	42
	UPM 0620.253	12.7	28.6	25.4	–	–	1528	–	–	1786	255	391	1890	480	575	32	49
	UPM 0740.253	12.7	28.6	25.4	–	–	1528	–	–	1786	255	391	1890	480	575	39	56
	UPM 0850.254	12.7	28.6	25.4	–	–	2027	1014	1014	2286	255	391	2390	480	575	46	66
	UPM 1140.255	15.9	28.6	25.4	–	–	2527	1011	1516	2786	255	391	2890	480	575	59	82
	UPM 1240.255	15.9	28.6	25.4	–	–	2527	1011	1516	2786	255	391	2890	480	575	63	86
	UPMC 0220.251	12.7	22.2	25.4	–	–	528	–	–	932	256	365	1072	556	540	19	26
	UPMC 0440.252	12.7	28.6	25.4	–	–	1028	–	–	1432	256	365	1572	556	540	28	37
	UPMC 0670.253	12.7	28.6	25.4	–	–	1528	–	–	1932	256	365	2072	556	540	39	52
	UPMC 0900.254	15.9	28.6	25.4	–	–	2028	1014	1014	2432	256	365	2572	556	540	50	68

TECHNICAL DATA

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)									WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	C	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe													
	UPP 0100.251	12.7	22.2	25.4	1 x 780	1 x 550	528	–	–	786	255	391	890	480	575	16	30
	UPP 0140.251	12.7	22.2	25.4	1 x 780	1 x 550	528	–	–	786	255	391	890	480	575	19	33
	UPP 0220.252	12.7	22.2	25.4	1 x 1353	1 x 833	1028	–	–	1286	255	391	1390	480	575	20	35
	UPP 0330.252	12.7	28.6	25.4	1 x 1353	1 x 833	1028	–	–	1286	255	391	1390	480	575	28	42
	UPP 0390.253	12.7	28.6	25.4	1 x 1900	1 x 833	1528	–	–	1786	255	391	1890	480	575	32	49
	UPP 0480.253	12.7	28.6	25.4	1 x 1900	1 x 833	1528	–	–	1786	255	391	1890	480	575	40	56
	UPP 0550.254	12.7	28.6	25.4	1 x 2506	1 x 833	2027	1014	1014	2286	255	391	2390	480	575	46	62
	UPP 0650.254	15.9	28.6	25.4	1 x 2506	1 x 833	2027	1014	1014	2286	255	391	2390	480	575	51	71
	UPP 0760.255	15.9	28.6	25.4	1 x 3111	1 x 1022	2527	1011	1516	2786	255	391	2890	480	575	59	82
	UPP 0840.255	15.9	28.6	25.4	1 x 3111	1 x 1022	2527	1011	1516	2786	255	391	2890	480	575	63	86
	UPL 0110.251	12.7	22.2	25.4	1 x 780	1 x 550	528	–	–	786	255	391	890	480	575	18	32
	UPL 0160.252	12.7	22.2	25.4	1 x 1353	1 x 833	1028	–	–	1286	255	391	1390	480	575	20	35
	UPL 0220.252	12.7	22.2	25.4	1 x 1353	1 x 833	1028	–	–	1286	255	391	1390	480	575	25	40
	UPL 0290.253	12.7	28.6	25.4	1 x 1900	1 x 833	1528	–	–	1786	255	391	1890	480	575	32	49
	UPL 0370.253	12.7	28.6	25.4	1 x 1900	1 x 833	1528	–	–	1786	255	391	1890	480	575	39	56
	UPL 0440.254	12.7	28.6	25.4	1 x 2506	1 x 833	2027	1014	1014	2286	255	391	2390	480	575	46	66
	UPL 0490.254	15.9	28.6	25.4	1 x 2506	1 x 833	2027	1014	1014	2286	255	391	2390	480	575	51	70
	UPLC 0110.251	12.7	22.2	25.4	1 x 700	1 x 300	528	–	–	932	256	365	1072	556	540	20	26
	UPLC 0220.252	12.7	28.6	25.4	1 x 1370	1 x 840	1028	–	–	1432	256	365	1572	556	540	28	38
	UPLC 0340.253	12.7	28.6	25.4	1 x 1910	1 x 840	1528	–	–	1932	256	365	2072	556	540	39	53
	UPLC 0450.254	15.9	28.6	25.4	1 x 2520	1 x 930	2028	1014	1014	2432	256	365	2572	556	540	51	69

[Packed Dimensions / Weight]

TECHNICAL DATA



FEME, FEP, FEM Series with $\phi 300$ mm fan motors

l: Minimum distance required for heater replacement (not applicable to FEM model)

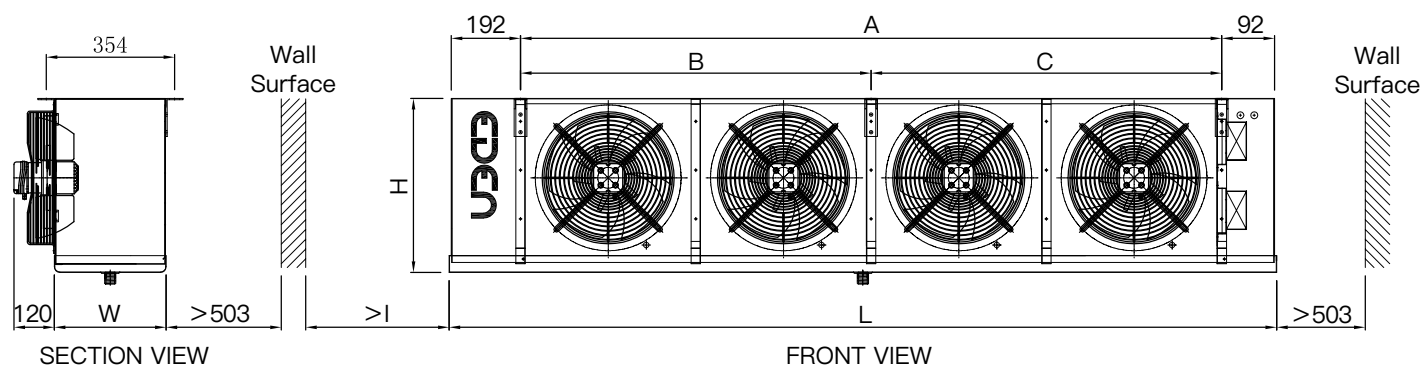
MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	FEM 0251.301	12.7	22.2	25.4	–	–	528	–	890	321	503	1026	595	675	20	26
	FEM 0370.301	12.7	22.2	25.4	–	–	528	–	890	321	503	1026	595	675	25	31
	FEM 0510.302	12.7	28.6	25.4	–	–	1028	–	1390	321	503	1531	595	675	32	42
	FEM 0620.302	12.7	28.6	25.4	–	–	1028	–	1390	321	503	1531	595	675	33	44
	FEM 0770.302	12.7	28.6	25.4	–	–	1028	–	1390	321	503	1531	595	675	37	49
	FEM 0930.303	12.7	28.6	25.4	–	–	1528	–	1890	321	503	2031	595	675	42	56
	FEM 1050.303	15.88	28.6	25.4	–	–	1528	–	1890	321	503	2031	595	675	45	60
	FEM 1130.303	15.88	28.6	25.4	–	–	1528	–	1890	321	503	2031	595	675	48	64
	FEM 1230.304	15.88	28.6	25.4	–	–	2028	1014	2390	321	503	2536	595	675	50	70
	FEM 1380.304	15.88	28.6	25.4	–	–	2028	1014	2390	321	503	2536	595	675	56	76
	FEM 1520.304	15.88	28.6	25.4	–	–	2028	1014	2390	321	503	2536	595	675	62	82

TECHNICAL DATA

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	FEP 0200.301	12.7	22.2	25.4	2 x 700	1 x 300	528	–	890	321	503	1026	595	675	18	26
	FEP 0240.301	12.7	22.2	25.4	2 x 700	1 x 300	528	–	890	321	503	1026	595	675	20	29
	FEP 0330.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	30	43
	FEP 0400.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	32	45
	FEP 0500.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	34	49
	FEP 0600.303	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	41	58
	FEP 0670.303	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	43	62
	FEP 0740.303	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	46	66
	FEP 0810.304	15.9	28.6	25.4	2 x 2520	1 x 930	2028	1014	2390	321	503	2536	595	675	47	69
	FEP 0910.304	15.9	28.6	25.4	2 x 2520	1 x 930	2028	1014	2390	321	503	2536	595	675	53	75
	FEP 1000.304	15.9	28.6	25.4	2 x 2520	1 x 930	2028	1014	2390	321	503	2536	595	675	58	83
	FEME 0120.301	12.7	22.2	25.4	2 x 700	1 x 300	528	–	890	321	503	1026	595	675	20	25
	FEME 0160.301	12.7	22.2	25.4	2 x 700	1 x 300	528	–	890	321	503	1026	595	675	22	28
	FEME 0240.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	34	42
	FEME 0300.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	37	45
	FEME 0370.302	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	1390	321	503	1531	595	675	41	51
	FEME 0440.303	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	46	58
	FEME 0510.303	15.9	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	49	61
	FEME 0590.303	15.9	28.6	25.4	2 x 1910	1 x 840	1528	–	1890	321	503	2031	595	675	51	64
	FEME 0690.304	15.9	28.6	25.4	2 x 2520	1 x 930	2028	–	2390	321	503	2536	595	675	61	76
	FEME 0760.304	15.9	28.6	25.4	2 x 2520	1 x 930	2028	–	2390	321	503	2536	595	675	67	84

[Packed Dimensions / Weight]

TECHNICAL DATA



FEM, FEP, FEME Series with $\phi 350$ mm fan motors

l: Minimum distance required for heater replacement (not applicable to FEM model)

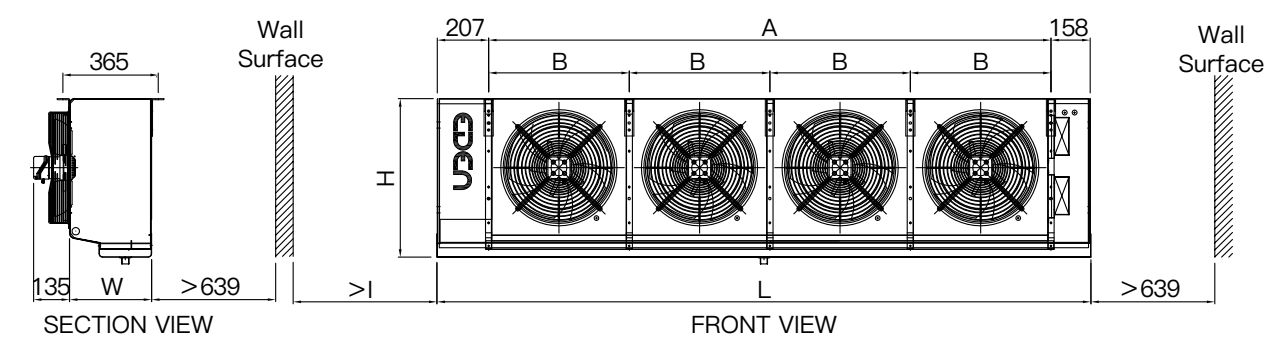
MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)									WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	C	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe													
	FEM 0360.351	12.7	22.2	25.4	–	–	528	–	–	890	321	503	1026	595	675	25	28
	FEM 0450.351	12.7	22.2	25.4	–	–	528	–	–	890	321	503	1026	595	675	27	30
	FEM 0600.352	12.7	28.6	25.4	–	–	1028	–	–	1390	321	503	1531	595	675	42	47
	FEM 0720.352	12.7	28.6	25.4	–	–	1028	–	–	1390	321	503	1531	595	675	43	48
	FEM 0830.352	12.7	28.6	25.4	–	–	1028	–	–	1390	321	503	1531	595	675	44	49
	FEM 0910.352	12.7	28.6	25.4	–	–	1028	–	–	1390	321	503	1531	595	675	45	50
	FEM 1090.353	12.7	28.6	25.4	–	–	1528	–	–	1890	321	503	2031	595	675	55	62
	FEM 1240.353	12.7	28.6	25.4	–	–	1528	–	–	1890	321	503	2031	595	675	57	64
	FEM 1410.354	15.88	28.6	25.4	–	–	2028	1014	–	2390	321	503	2536	595	675	76	84
	FEM 1670.354	15.88	28.6	25.4	–	–	2028	1014	–	2390	321	503	2536	595	675	79	87
	FEM 1830.354	15.88	28.6	25.4	–	–	2028	1014	–	2390	321	503	2536	595	675	82	90
	FEM 2070.355	15.88	28.6	25.4	–	–	2528	1011	1517	2890	321	503	3041	595	675	99	109
	FEM 2240.355	15.88	28.6	25.4	–	–	2528	1011	1517	2890	321	503	3041	595	675	102	112

TECHNICAL DATA

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)									WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	C	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe													
	FEP 0230.351	12.7	22.2	25.4	2 x 700	1 x 300	528	–	–	890	321	503	1026	595	675	25	28
	FEP 0290.351	12.7	22.2	25.4	2 x 700	1 x 300	528	–	–	890	321	503	1026	595	675	27	30
	FEP 0390.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	42	47
	FEP 0470.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	43	48
	FEP 0540.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	44	49
	FEP 0610.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	45	50
	FEP 0710.353	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	–	1890	321	503	2031	595	675	55	62
	FEP 0810.353	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	–	1890	321	503	2031	595	675	57	64
	FEP 0950.354	15.88	28.6	25.4	2 x 2520	1 x 930	2028	1014	–	2390	321	503	2536	595	675	76	84
	FEP 1090.354	15.88	28.6	25.4	2 x 2520	1 x 930	2028	1014	–	2390	321	503	2536	595	675	79	87
	FEP 1190.354	15.88	28.6	25.4	2 x 2520	1 x 930	2028	1014	–	2390	321	503	2536	595	675	82	90
	FEP 1330.355	15.88	28.6	25.4	2 x 3150	1 x 1165	2528	1011	1517	2890	321	503	3041	595	675	99	109
	FEP 1450.355	15.88	28.6	25.4	2 x 3150	1 x 1165	2528	1011	1517	2890	321	503	3041	595	675	102	112
	FEME 0180.351	12.7	22.2	25.4	2 x 700	1 x 300	528	–	–	890	321	503	1026	595	675	25	28
	FEME 0230.351	12.7	22.2	25.4	2 x 700	1 x 300	528	–	–	890	321	503	1026	595	675	27	30
	FEME 0300.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	42	47
	FEME 0370.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	43	48
	FEME 0430.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	44	49
	FEME 0470.352	12.7	28.6	25.4	2 x 1370	1 x 840	1028	–	–	1390	321	503	1531	595	675	45	50
	FEME 0560.353	12.7	28.6	25.4	2 x 1910	1 x 840	1528	–	–	1890	321	503	2031	595	675	55	62
	FEME 0640.353	15.88	28.6	25.4	2 x 1910	1 x 840	1528	–	–	1890	321	503	2031	595	675	57	64
	FEME 0720.353	15.88	28.6	25.4	2 x 1910	1 x 840	1528	–	–	1890	321	503	2031	595	675	59	66
	FEME 0870.354	15.88	28.6	25.4	2 x 2520	1 x 930	2028	1014	–	2390	321	503	2536	595	675	79	87
	FEME 0960.354	15.88	28.6	25.4	2 x 2520	1 x 930	2028	1014	–	2390	321	503	2536	595	675	82	90
	FEME 1080.355	15.88	28.6	25.4	2 x 3150	1 x 1165	2528	1011	1517	2890	321	503	3041	595	675	99	109
	FEME 1180.355	15.88	28.6	25.4	2 x 3150	1 x 1165	2528	1011	1517	2890	321	503	3041	595	675	102	112

[Packed Dimensions / Weight]

TECHNICAL DATA



ESN, ESP, ESL Series with φ400mm fan motors

I: Minimum distance required for heater replacement (not applicable to ESN model)

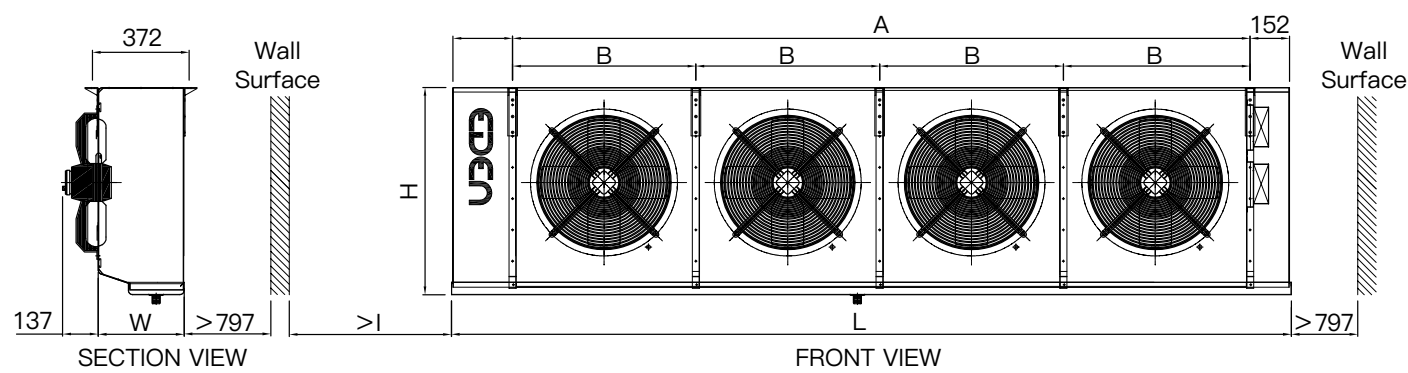
MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	ESN 0530.401	12.7	28.6	25.4	–	–	588	–	957	330	639	1100	620	820	27	39
	ESN 0630.401	12.7	28.6	25.4	–	–	588	–	957	330	639	1100	620	820	29	41
	ESN 0720.401	12.7	28.6	25.4	–	–	588	–	957	330	639	1100	620	820	30	43
	ESN 0890.402	12.7	28.6	25.4	–	–	1148	574	1517	330	639	1660	620	820	42	60
	ESN 1090.402	12.7	28.6	25.4	–	–	1148	574	1517	330	639	1660	620	820	45	64
	ESN 1440.402	15.8	28.6	25.4	–	–	1148	574	1517	330	639	1660	620	820	51	73
	ESN 1690.403	15.8	28.6	25.4	–	–	1707	569	2077	330	639	2220	620	820	65	93
	ESN 1970.403	19.0	34.9	25.4	–	–	1707	569	2077	330	639	2220	620	820	69	99
	ESN 2210.403	19.0	34.9	25.4	–	–	1707	569	2077	330	639	2220	620	820	74	105
	ESN 2500.404	19.0	34.9	25.4	–	–	2268	567	2637	330	639	2790	620	820	95	135
	ESN 2770.404	22.2	34.9	25.4	–	–	2268	567	2637	330	639	2790	620	820	102	146
	ESN 3100.404	22.2	34.9	25.4	–	–	2268	567	2637	330	639	2790	620	820	111	158
	ESN 3500.405	22.2	41.3	25.4	–	–	2830	566	3198	330	639	3350	620	820	125	179
	ESN 3860.405	22.2	41.3	25.4	–	–	2830	566	3198	330	639	3350	620	820	135	193

TECHNICAL DATA

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	ESP 0320.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	27	39
	ESP 0380.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	29	41
	ESP 0420.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	30	43
	ESP 0510.402	12.7	22.2	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	42	60
	ESP 0640.402	12.7	28.6	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	45	64
	ESP 0850.402	15.8	28.6	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	51	73
	ESP 0990.403	15.8	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	65	93
	ESP 1190.403	19.0	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	69	99
	ESP 1320.403	19.0	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	74	105
	ESP 1470.404	19.0	28.6	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	95	135
	ESP 1700.404	22.2	34.9	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	102	146
	ESP 1900.404	22.2	34.9	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	111	158
	ESP 2150.405	22.2	34.9	25.4	4 x 2950	1 x 1770	2830	566	3198	330	639	3350	620	820	125	179
	ESP 2430.405	22.2	34.9	25.4	4 x 2950	1 x 1770	2830	566	3198	330	639	3350	620	820	135	193
	ESL 0250.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	31	39
	ESL 0290.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	33	41
	ESL 0330.401	12.7	22.2	25.4	4 x 600	1 x 450	588	–	957	330	639	1100	620	820	34	43
	ESL 0400.402	12.7	22.2	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	48	60
	ESL 0510.402	12.7	28.6	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	51	64
	ESL 0650.402	15.8	28.6	25.4	4 x 1150	1 x 700	1148	574	1517	330	639	1660	620	820	58	72
	ESL 0760.403	15.8	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	74	92
	ESL 0870.403	19.0	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	78	98
	ESL 0980.403	19.0	28.6	25.4	4 x 1700	1 x 1070	1707	569	2077	330	639	2220	620	820	83	104
	ESL 1120.404	19.0	28.6	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	107	134
	ESL 1300.404	22.2	34.9	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	116	145
	ESL 1420.404	22.2	34.9	25.4	4 x 2300	1 x 1400	2268	567	2637	330	639	2790	620	820	125	156
	ESL 1640.405	22.2	34.9	25.4	4 x 2950	1 x 1770	2830	566	3198	330	639	3350	620	820	142	177
	ESL 1810.405	22.2	34.9	25.4	4 x 2950	1 x 1770	2830	566	3198	330	639	3350	620	820	153	191

[Packed Dimensions / Weight]

TECHNICAL DATA



FNR, FLP, FLT Series with $\phi 500\text{mm}$ fan motors

I: Minimum distance required for heater replacement (not applicable to FNR model)

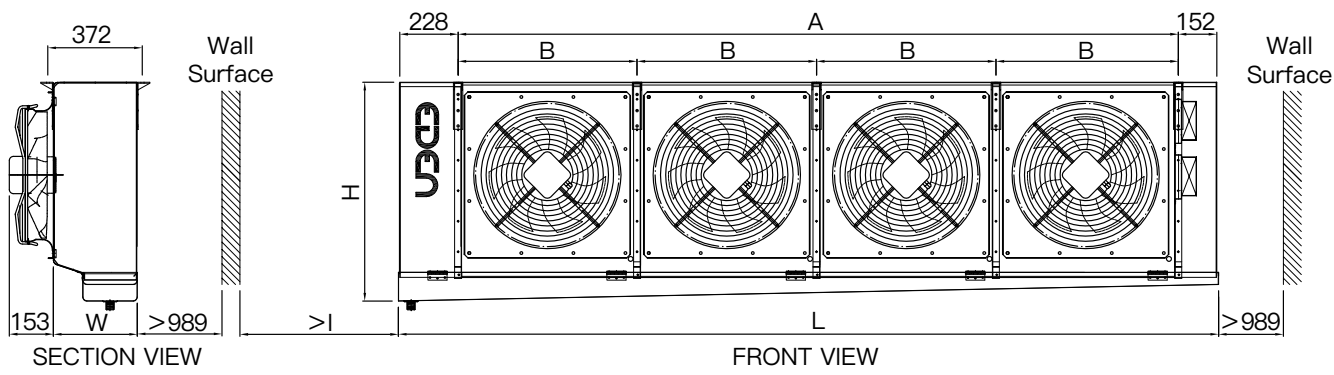
MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	FNR 1020.501	12.7	22.2	25.4	–	–	930	–	–	333	797	1316	700	1100	82	92
	FNR 1290.501	12.7	22.2	25.4	–	–	930	–	–	333	797	1316	700	1100	89	99
	FNR 1610.501	22.2	28.6	25.4	–	–	930	–	–	333	797	1316	700	1100	102	112
	FNR 1820.502	22.2	28.6	25.4	–	–	1450	–	–	333	797	1836	700	1100	119	134
	FNR 2230.502	22.2	28.6	25.4	–	–	1450	–	–	333	797	1836	700	1100	129	144
	FNR 2470.502	28.6	34.9	25.4	–	–	1450	–	–	333	797	1836	700	1100	139	154
	FNR 2750.502	28.6	34.9	25.4	–	–	1450	–	–	333	797	1836	700	1100	149	164
	FNR 3290.503	28.6	34.9	25.4	–	–	2130	710	–	333	797	2516	700	1100	152	197
	FNR 3740.503	28.6	41.3	25.4	–	–	2130	710	–	333	797	2516	700	1100	167	212
	FNR 4040.503	28.6	41.3	25.4	–	–	2130	710	–	333	797	2516	700	1100	182	227
	FNR 4420.504	28.6	41.3	25.4	–	–	2830	708	–	333	797	3226	700	1100	192	252
	FNR 5010.504	28.6	41.3	25.4	–	–	2830	708	–	333	797	3226	700	1100	212	272
	FNR 5420.504	28.6	41.3	25.4	–	–	2830	708	–	333	797	3226	700	1100	232	292

TECHNICAL DATA

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	FLP 0650.501	12.7	22.2	25.4	3 x 1230	1 x 750	930	–	1316	333	797	1466	700	1100	82	92
	FLP 0840.501	12.7	22.2	25.4	3 x 1230	1 x 750	930	–	1316	333	797	1466	700	1100	89	99
	FLP 1040.501	22.2	28.6	25.4	3 x 1230	1 x 750	930	–	1316	333	797	1466	700	1100	102	112
	FLP 1160.502	22.2	28.6	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	109	124
	FLP 1440.502	22.2	28.6	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	129	144
	FLP 1660.502	22.2	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	139	154
	FLP 1860.502	28.6	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	149	164
	FLP 2150.503	28.6	34.9	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	152	197
	FLP 2440.503	28.6	41.3	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	167	212
	FLP 2660.503	28.6	41.3	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	182	227
	FLP 2930.504	28.6	41.3	25.4	3 x 3450	1 x 1000	2830	708	3226	333	797	3376	700	1100	192	252
	FLP 3270.504	28.6	41.3	25.4	3 x 3450	1 x 1000	2830	708	3226	333	797	3376	700	1100	212	272
	FLP 3560.504	28.6	41.3	25.4	3 x 3450	1 x 1000	2830	708	3226	333	797	3376	700	1100	232	292
	FLT 0721.501	22.2	28.6	25.4	3 x 1230	1 x 750	930	–	1316	333	797	1466	700	1100	95	105
	FLT 0820.501	22.2	28.6	25.4	3 x 1230	1 x 750	930	–	1316	333	797	1466	700	1100	101	111
	FLT 1130.502	22.2	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	128	143
	FLT 1300.502	28.6	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	138	153
	FLT 1420.502	28.6	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	797	1986	700	1100	148	163
	FLT 1670.503	28.6	41.3	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	151	196
	FLT 1900.503	28.6	41.3	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	166	211
	FLT 2150.503	28.6	41.3	25.4	3 x 2630	1 x 750	2130	710	2516	333	797	2666	700	1100	180	225
	FLT 2590.504	28.6	41.3	25.4	3 x 3450	1 x 1000	2830	708	3226	333	797	3376	700	1100	209	269
	FLT 2870.504	28.6	41.3	25.4	3 x 3450	1 x 1000	2830	708	3226	333	797	3376	700	1100	229	289
	FLT 3240.505	28.6	41.3	25.4	3 x 4300	1 x 1325	3530	706	3926	333	797	4076	700	1100	266	341
	FLT 3550.505	28.6	41.3	25.4	3 x 4300	1 x 1325	3530	706	3926	333	797	4076	700	1100	285	360

[Packed Dimensions / Weight]

TECHNICAL DATA



FLV Series with $\phi 500\text{mm}$ fan motors

I: Minimum distance required for heater replacement

MODEL		CONNECTION DETAILS			HEATER DETAILS		DIMENSIONAL DETAILS (mm)								WEIGHT (kg)	
		Connection (mm)			Coil Heater (Watts)	Drain Pan Heater (Watts)	A	B	L	W	H	[L]	[W]	[H]	Net Weight	[Packed Weight]
		Liquid	Suction	Drain Pipe												
	FLV 0710.501	12.7	22.2	25.4	3 x 1230	1 x 750	930	–	1316	333	842	1466	700	1145	89	99
	FLV 0920.501	22.2	28.6	25.4	3 x 1230	1 x 750	930	–	1316	333	842	1466	700	1145	102	112
	FLV 1250.502	22.2	28.6	25.4	3 x 1780	1 x 750	1450	–	1836	333	842	1986	700	1145	129	144
	FLV 1590.502	28.6	34.9	25.4	3 x 1780	1 x 750	1450	–	1836	333	842	1986	700	1145	149	164
	FLV 1800.502	28.6	41.3	25.4	3 x 1780	1 x 750	1450	–	1836	333	842	1986	700	1145	167	212
	FLV 2350.503	28.6	41.3	25.4	4 x 2630	1 x 750	2130	710	2516	333	989	2666	700	1292	178	223
	FLV 2630.503	28.6	41.3	25.4	4 x 2630	1 x 750	2130	710	2516	333	989	2666	700	1292	195	240
	FLV 3160.504	28.6	41.3	25.4	4 x 3450	1 x 1000	2830	708	3226	333	989	3376	700	1292	224	284
	FLV 3500.504	28.6	41.3	25.4	4 x 3450	1 x 1000	2830	708	3226	333	989	3376	700	1292	247	307
	FLV 3980.505	28.6	41.3	25.4	4 x 4300	1 x 1325	3530	706	3926	333	989	4076	700	1292	284	359
	FLV 4380.505	28.6	41.3	25.4	4 x 4300	1 x 1325	3530	706	3926	333	989	4076	700	1292	307	382

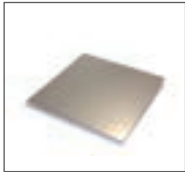
[Packed Dimensions / Weight]

OPTIONS

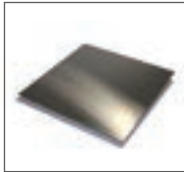
Casing



Support Legs
Support legs are offered to facilitate the installation of unit coolers



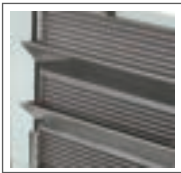
SS304 Casing
This is a popular and commercial grade stainless steel sheet metal that is ideal for kitchen appliances



SS316 Casing
Marine grade stainless steel 316 sheet metal is used primarily for its high corrosion resistance

Defrosting

Eden provides a variety of defrosting methods, such as hot gas, water, air and electric, all of which may be used individually or in various combinations.



Water Defrost

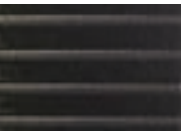


Hot Gas Defrost

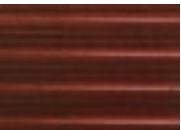


Combination Hot Gas Coil / Heater at Drain Pan

Fins



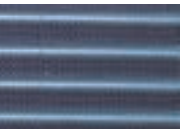
Coil-Dipped Epoxy Fins
Coil-Dipped Epoxy Fins are epoxy-based. It helps to increase coil durability, minimise cleaning, service maintenance costs and maximise the operating life of fin and tube surface.



Copper Fins
Copper Fins possess higher thermal conductivity, corrosion resistance and strength than aluminum fins. It is ideal for harsh environments.



Epoxy Fins
Epoxy Fins protect against corrosive agents and severe environments.



Blue Fins
Blue Fins prevent corrosion from the accumulation of salt, acid deposit and water droplets.

Fan



EC Fan
Improved motor efficiency and variable fan speed control when required



Single Phase Fan
High performance single phase fan motor



Full Venturi
Optimum coil side performance



Explosion Proof
Ideal for explosive environments



SS304 Fan Grill
Easy cleaning and longer functional life

Coil

Eden's coil selection program allows coils to be customized to meet the needs of most applications.



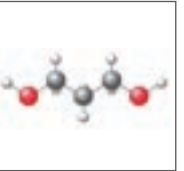
Chilled Water Coil



External re-heat coil



Internal Re-heat Coil



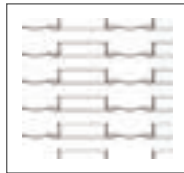
Brine/Glycol



Distributor Connection on Right

Fin Spacing

Fin spacing depends strongly on boundary conditions of the storage system.



Fin Spacing 8, 9, 10mm (custom-made)

Components

The following components are available for installation on Eden unit coolers.



Fitted with EVD



Fitted with TXV



Fitted with Thermostat Sensor

ACCESSORIES

Eden's accessories are designed, tested and approved for use with Eden unit coolers.



Insulated Drain Pan



Collar Heater



Welded Drain Plug



Streamer / Guide Vane

RELATIVE HUMIDITY %RH VS KTD

The Relative Humidity %RH vs KTD of a concrete substrate can be a determining factor in the success or failure of product selection. Tables applicable to all selection examples, but will be adjusted according to practical situation.

Products	Storage Temperature	Recommended RH%
Mandarins	4	90-95
Avocados	7 to 13	85-90
Banana, Green	13 to 14	90-95
Yams	16	70-80
Bean Sprouts	0	95-100
Pears	-1.5 to 0.5	90-95
Cherries, Sweet	-1 to 0.5	90-95
Coconuts	0 to 1.5	80-85
Dates, Frozen	-18	75
Ice Cream	-25	85
Poultry, Frozen	-18	85
Seafood, Frozen	-18	75

Recommended Storage temperature and RH% (USDA,1987)

Relative Humidity %	Temperature Difference (KTD)
60	16
65	14
70	12
75	10
80	8
85	6
90	4
100	2

RH vs KTD Selection Table

Eden Select APP

Your reliable assistant

Eden Select is your smart companion for HVAC system planning. Access the latest product models and perform essential calculations with a professional tool designed for quick and reliable selection based on your project parameters.

Find the latest product details

Perform accurate calculations

Generate shareable PDF summary files

iOS

Android