



A4007-301H, A7012-301A



A4012-302H, A7021-302A



A4018-303H, A7032-303A



**A4024-353H, A4034-353H
A7043-353A, A7060-353A**



A4039-452H, A7062-452A



A4058-453H, A7090-453A



A3088-562H



A3132-563H



CLS709-252A

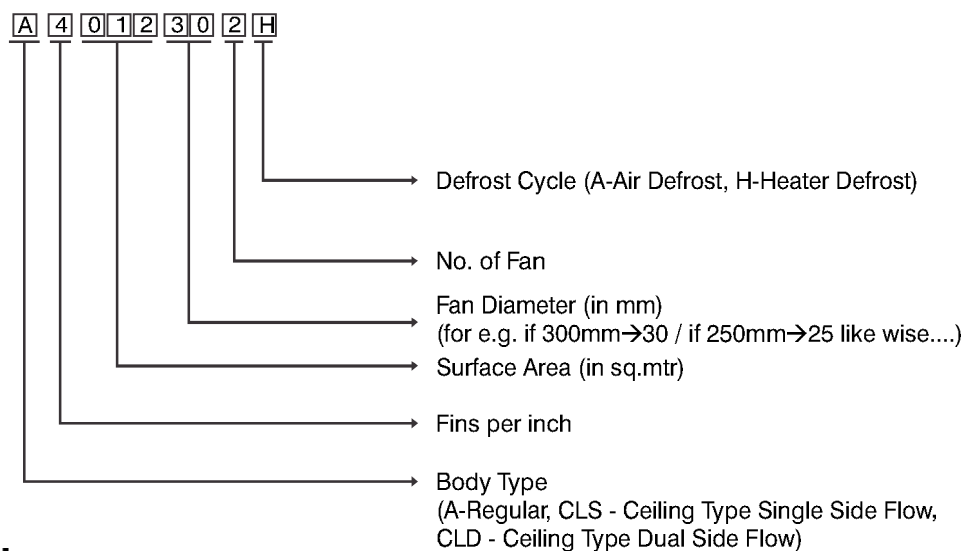


CLD713-252A, CLD719-252A

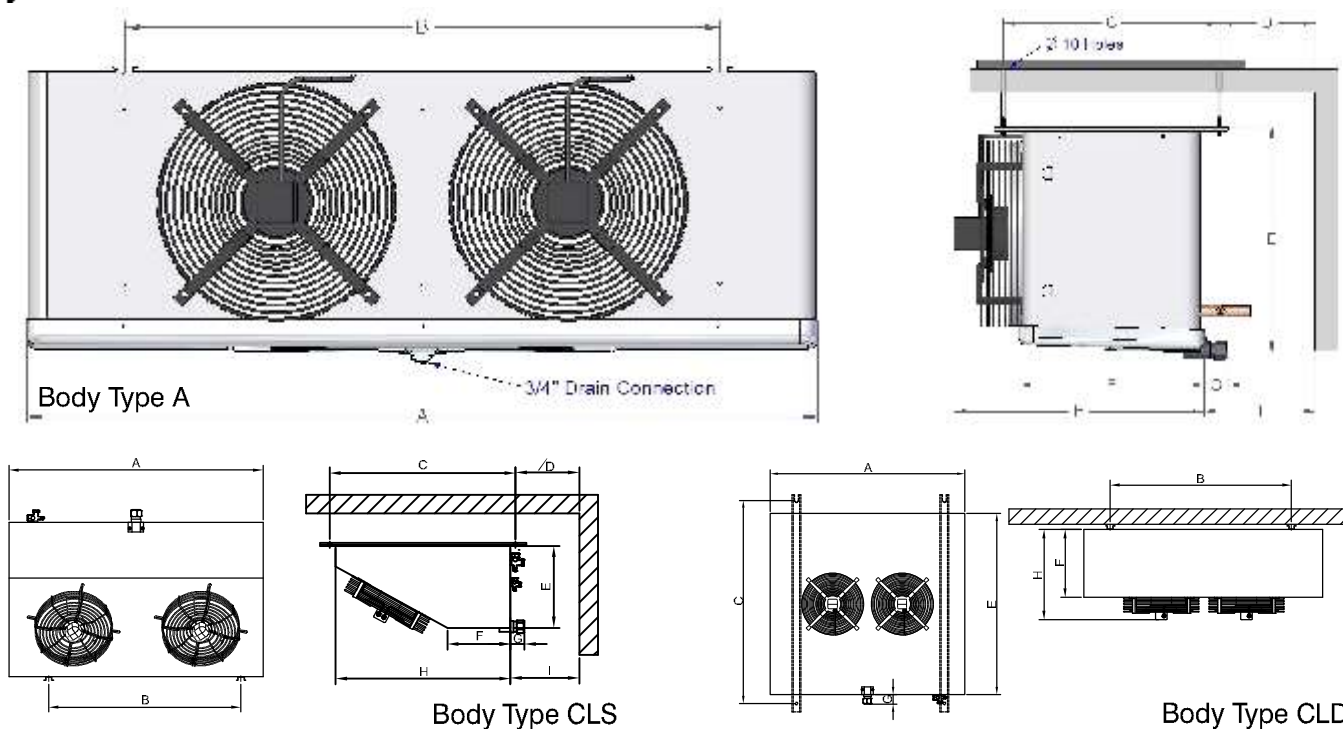


CLD724-253A, CLD729-253A

Model Code Logic



Physical Dimensions

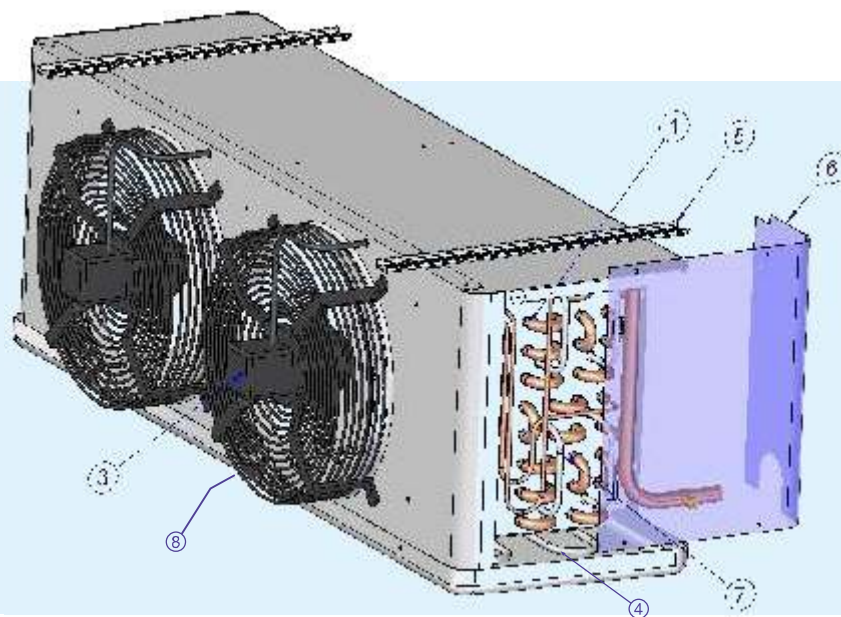


Physical Parameters	Dimensions (mm) for Model											
	A4007-301H	A4012-302H	A4018-303H	A4024-353H	A4034-353H	A4039-452H	A4058-453H	A3088-562H	A3132-563H	CLS709-252A	CLD713-252A	CLD724-253A
	A7012-301A	A7021-302A	A7032-303A	A7043-353A	A7060-353A	A7062-452A	A7090-453A				CLD719-252A	CLD729-253A
A	765	1095	1490	1575	1880	1880	2660	2424	3427	825	820	1150
B	485	815	1210	1300	1605	1595	2380	2034	3033	685	680	1010
B1	NA	NA	NA	430	535	800	800	1017	1012	NA	NA	NA
C	375	375	375	375	375	375	375	476	476	530	750	750
D	350	350	350	350	350	400	400	550	550	300	NA	NA
E	410	410	410	480	550	635	635	877	877	220	720	720
F	325	325	325	325	325	325	325	435	435	190	220	220
G	40	40	40	40	40	40	40	40	40	40	40	40
H	435	435	435	435	435	460	460	620	620	500	315	315
I	375	375	375	375	375	425	425	575	575	375	0	0
Unit Weight (kg)	17	26	35	46	57	75	115	250	325	15	24	36



Features

- 1) High efficiency heat exchanger with in – line tube system for minimum loss of air flow between fins and with large surface area for long cooling time.
- 2) Fan Motor and Heater wires are connected in terminal box mounted inside the unit.
- 3) Fan motors are from leading brand. Insulation Class F, thermally protected against overload and can be used on 230V/50 Hz supplies.
- 4) Provision given for install tray heater later.
- 5) Stainless steel mounting rail.
- 6) Compact, adjustable & easy openable side panels for easy installation.
- 7) Heater rods arranged for best heat distribution in coil. Electric heater rods are inserted into special aluminium sleeve tubes to avoid steam formation.
- 8) Drainage Connection



Unit Body :

- Aluminium 1.2mm thick, pu type white powder coated, corrosion resistant and nice appearance body.
- Round corner Drain tray and also provided intermediate sheet to avoid condensation.
- Aluminium Die cast, threaded, 3/4" diameter drainage connection.

Finned coil block:

- Aluminium fin, thickness 0.30 mm
- Shedder Valve provided for gas charging.
- Coils are degreased, cleaned and tested with air 25 bar over-pressure and leak test under water according to standard.

Fan Motor:

- Axial fans with external rotor motor, single phase motor 230V, 50/60 Hz with internally wired thermal contact, wired with internal terminal box.
- Electrical design according to standard.
- Protection class: IP-54, Insulation Class F
- Application range : -35°C to +40°C

Defrost Heating:

- Electric heater rods 230 V sleeve tube dia – 7-8mm

Technical Specifications

EVAPORATOR UNIT (Evap. Temp. -8°C to -35°C)										
Sr.	PARAMETERS/MODEL	A4007-301H	A4012-302H	A4018-303H	A4024-353H	A4034-353H	A4039-452H	A4058-453H	A3088-652H	A3132-653H
1	Capacity (KW) (at -25°C, DT1 = 7 K)	1.25	2.5	3.8	5.0	6.8	8.27	11.7	17	27
2	Heat Transfer Area (Sq. Mtr)	6.9	12.15	18.23	24.3	34	39.12	58.12	88	132
3	Tube Volume (In Ltr)	2.5	3.4	5	7	10.21	10.5	15.5	24	36
4	Fin Spacing-mm/FPI(Fin Per Inch)	4/6	4/6	4/6	4/6	4/6	4/6	4/6	3.6/7	3.6/7
5	Fan Diameter & No. of Fans / Ph	300/1/1ph	300/2/1ph	300/3/1ph	350/3/1ph	350/3/1ph	450/2/3ph	450/3/3ph	560/2/3ph	560/3/3ph
6	Air Flow (m3/h) / Throw(Mtr)	1560/9	3120/9	4680/10	8200/12	8200/12	8600/14	12900/14	19600/18	29400/18
7	Motor - Input Value (watts)	87 x 1	87 x 2	87 x 3	150 x 3	150 x 3	320 x 2	320 x 3	570 x 2	570 x 3
8	Motor - Current (Amp.)	0.42 x 1	0.42 x 2	0.42 x 3	0.65 x 3	0.65 x 3	0.74 x 2	0.74 x 3	1.10 x 2	1.10 x 3
9	Coil & Tray Heater Total (watts)	2750	4000	4600	5500	5500	6550	9450	12600	19800
10	Pipe Inlet & Outlet	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.3/8	5/8 & 1.5/8	7/8 & 2.1/8

EVAPORATOR UNIT (Evap. Temp. 10°C to -8°C)								
Sr. NO	Parameters/Model	A7012-301A	A7021-302A	A7032-303A	A7043-353A	A7060-353A	A7062-452A	A7090-453A
1	Capacity (KW) (at -8°C, DT1 = 8 K)	1.75	3.5	5.25	7	9.5	13.5	19
2	Heat Transfer Area (Sq. Mtr)	12.3	21.3	32.1	42.6	59.5	62.45	90.75
3	Tube Volume (In Ltr)	2.5	3.4	5	7	10.21	10.5	15.5
4	Fin Spacing-mm/FPI(Fin Per Inch)	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7	3.6 / 7	3.6 / 7
5	Fan Diameter & No. of Fans / Ph	300/1/1ph	300/2/1ph	300/3/1ph	350/3/1ph	350/3/1ph	450/2/3ph	450/3/3ph
6	Air Flow (m3 /h) / Throw(Mtr)	1560/9	3120/9	4680/10	8200/12	8200/12	8600/14	12900/14
7	Motor - Input Value (watts)	87 x 1	87 x 2	87 x 3	150 x 3	150 x 3	320 x 2	320 x 3
8	Motor - Current (Amp.)	0.42 x 1	0.42 x 2	0.42 x 3	0.65 x 3	0.65 x 3	0.74 x 2	0.74 x 3
9	Pipe Inlet & Outlet	1/2 & 7/8	1/2 & 7/8	1/2 & 7/8	5/8 & 1.7/8	5/8 & 1.1/8	5/8 & 1.1/8	5/8 & 1.3/8

EVAPORATOR UNIT (Evap. Temp. 10 °C to -4 °C)						
Sr. NO	Parameters/Model	CLS709-252A	CLD713-252A	CLD719-252A	CLD724-253A	CLD729-253A
1	Capacity (KW) (at -2°C, DT1 = 8 K)	1.45	2.35	3.2	5.2	6.1
2	Heat Transfer Area (Sq. Mtr)	9.76	13.02	19.52	24.4	29.3
3	Tube Volume (In Ltr)	1.92	2.56	3.84	4.7	5.64
4	Fin Spacing-mm/FPI(Fin Per Inch)	3.6/7	3.6/7	3.6/7	3.6/7	3.6/7
5	Fan Diameter & No. of Fans	250/2	250/2	250/2	250/3	250/3
6	Air Flow (m3/h) / Throw(Mtr)	2000/4	2000/4	2000/4	3000/4	3000/4
7	Motor - Input Value (watts)	50 x 2	50 x 2	50 x 2	50 x 3	50 x 3
8	Motor - Current (Amp.)	0.25 x 2	0.25 x 2	0.25 x 2	0.25 x 3	0.25 x 3
9	Pipe Inlet & Outlet	3/8 & 1/2	3/8 & 1/2	3/8 & 5/8	3/8 & 3/4	3/8 & 3/4

Air flow (m³/h) :- The air flow is determined on a suction side chamber testing stand according to ISO 5801 with dry cooler surface.

Air throw(m) :- The air throw gives the distance from the outlet area of the air cooler at which the average of the air velocity taken at 0.5 m, 0.75 m and 1 m from the ceiling at 20°C equals 0.5 m/s.

Capacity (kw) :- The capacity data are based upon measurement according to standard at the following conditions :

- Refrigerant R404A,
- Liquid temperature 30°C resp. 20°C (for evaporating temperatures below -20°C)
- Superheat of refrigerant at the outlet approx. 65% of the air inlet temperature difference.

The selection diagram and the capacity table are already considering the influence of the air humidity and specify the actual capacity of the cooler under operating conditions (wet or frosty cooler surface).