

G4

GLYCOL

UNIT COOLER

GLY.12.14.VER 1.0



EDEN®



## General Features

**Coils** are designed with the Latest Smart Circuitry. It allows maximum massflow rate of refrigerant to be evenly distributed throughout the evaporator, maximizing coil efficiency thus providing higher efficiency and capacity with a smaller physical unit cooler dimension.

**Copper Tubes** are accordance with JIS. C12T. Tubes (IGT) providing higher efficiency and capacity.

**Casing** comes in high quality powder coated Aluminum.

**Defrosting** reduce the frequency of defrost and will help improve product.to ensure effective defrosting

**Fins** are produced from high-grade aluminum (Aluminum Association - AA 1100 Standard)

**Fan Motors** used in all the models are high quality German brand motors, fitted with thermistor motor protection and conform to DIN 40050 safety standards. Fan motors are of the highest quality offered in the industry ensuring long life and durability for both high and low temperature application.

**Quality Assurance** for all Eden products are designed, manufactured and tested in our factories that are ISO9001 accredited.

**One Year Warranty** for all Eden Heat Exchanger products (Terms and conditions apply).

## Options

- a) Copper-Fins Coil
- b) Epoxy-Coated Aluminum Fin Coil
- c) Stainless Steel casing
- d) EC Motors



## Medium Temperature

Model	Capacity (kW)	Fluid Pressure Drop (kPa)	Fluid Outlet Temp.(°C)	Fluid Vol. Flow Rate (l/s)	Air Flow Rate (m³/hr)	Air Pressure Drop (Pa)
GM.0283.21	2.83	90	-4.79	4.50	1,534	19
GM.0371.21	3.71	90	-2.58	2.90	1,431	35
GM.0481.21	4.81	87	-4.29	2.20	1,206	40
GM.0746.22	7.46	87	-3.98	2.40	2,797	55
GM.0910.22	9.10	90	-3.43	1.89	2,698	78
GM.1067.23	10.67	90	-3.22	2.00	4,140	50
GM.1263.23	12.63	90	-2.32	1.50	3,908	69
GM.1770.51	17.70	89	-4.30	8.30	6,250	82
GM.2182.51	21.82	89	-3.90	6.50	6,070	118
GM.2982.52	29.82	89	-3.55	6.70	12,049	115
GM.3332.61	33.32	90	-4.23	14.20	9,483	91
GM.3546.52	35.46	89	-2.81	5.30	11,113	152
GM.3815.61	38.15	90	-3.89	11.20	8,777	119
GM.4135.53	41.35	89	-2.54	5.50	18,072	117
GM.4909.53	49.09	90	-1.36	4.40	17,082	161
GM.6059.62	60.59	85	-3.02	10.00	19,069	99
GM.7102.62	71.02	90	-2.17	8.20	18,164	137
GM.9398.63	93.98	88	-0.62	7.00	27,227	166
GM.9651.63	96.51	88	-0.80	7.50	26,831	145

## Brine Cooler Simulation Result

Simulation Parameter	Fluid Inlet Temperature (°C)	Max. Fluid Pressure Drop (bar)	Glycol Vol. Concentration (%)	Air Inlet Temperature (°C)	Air Inlet RH (%)
Medium Temperature Range	-5	0.9	25	8	85



## Low Temperature

Model	Capacity (kW)	Fluid Pressure Drop (kPa)	Fluid Outlet Temp. (°C)	Fluid Vol. Flow Rate (l/s)	Air Flow Rate (m³/hr)	Air Pressure Drop (Pa)
GL.0154.21	1.54	90	-24.79	2.20	1,529	27
GL.0194.21	1.94	90	-24.58	1.40	1,433	37
GL.0240.22	2.40	90	-24.55	1.60	2,939	41
GL.0302.22	3.02	90	-24.13	1.00	2,746	56
GL.0321.23	3.21	90	-24.14	1.10	4,314	37
GL.0592.51	5.92	90	-24.73	6.60	7,401	75
GL.0781.51	7.81	89	-24.54	5.10	7,069	106
GL.0896.52	8.96	89	-24.49	5.30	14,096	103
GL.0942.61	9.42	90	-24.78	12.80	10,456	47
GL.1156.52	11.56	89	-24.06	3.70	13,414	143
GL.1164.53	11.64	90	-24.15	4.10	21,143	105
GL.1184.61	11.84	90	-24.65	10.30	9,483	60
GL.1448.53	14.48	90	-23.39	2.70	19,958	144
GL.1544.62	15.44	89	-24.52	9.60	20,950	51
GL.1642.54	16.42	89	-22.65	2.10	26,653	144
GL.2020.62	20.20	89	-24.19	7.50	19,920	70
GL.2531.63	25.31	89	-23.75	6.10	30,070	86
GL.2651.63	26.51	89	-23.77	6.50	30,070	77

\*Reynold Number <2200, Coil is working in laminar flow.

## Brine Cooler Simulation Result

Simulation Parameter	Fluid Inlet Temperature (°C)	Max. Fluid Pressure Drop (bar)	Glycol Vol. Concentration (%)	Air Inlet Temperature (°C)	Air Inlet RH (%)
Low Temperature Range	-25	0.9	50	18	85

## Dimension

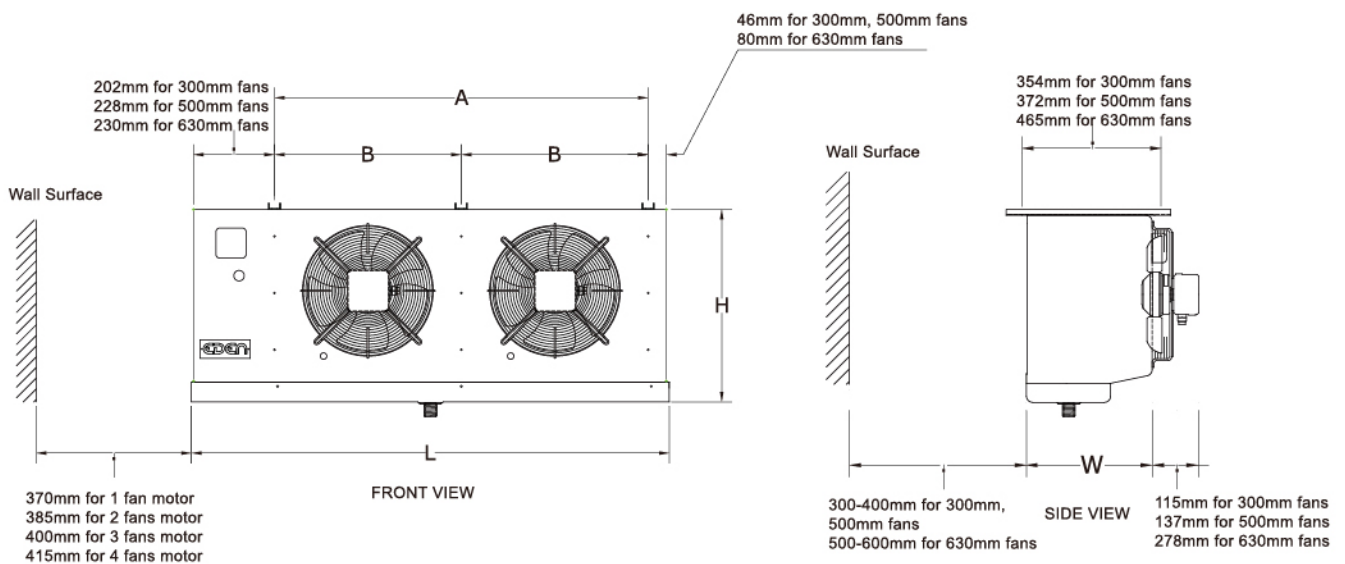
Model	Dimensions								Weight (kg)	Inlet Connection (mm)	Outlet Connection (mm)	Drain Pipe (mm)
	A	B	H	W	L	H*	W*	L*				
GM.0283.21	628	-	478	321	884	650	595	1,020	28	28.6	28.6	25.4
GM.0371.21	628	-	478	321	884	650	595	1,020	31	28.6	28.6	25.4
GM.0481.21	628	-	478	321	884	650	595	1,020	34	28.6	28.6	25.4
GM.0746.22	928	-	478	321	1,184	650	595	1,325	40	34.9	34.9	25.4
GM.0910.22	928	-	478	321	1,184	650	595	1,325	45	34.9	34.9	25.4
GM.1067.23	1,428	-	478	321	1,684	650	595	1,825	52	34.9	34.9	25.4
GM.1263.23	1,428	-	478	321	1,684	650	595	1,825	60	34.9	34.9	25.4
GM.1770.51	930	-	797	331	1,212	1,095	700	1,445	79	34.9	34.9	25.4
GM.2182.51	930	-	797	331	1,212	1,095	700	1,985	101	34.9	34.9	25.4
GM.2982.52	1,450	-	797	331	1,730	1,095	700	1,985	107	41.3	41.3	25.4
GM.3332.61	1,125	-	1,140	425	1,438	1,315	850	1,700	140	41.3	41.3	25.4
GM.3546.52	1,450	-	797	331	1,730	1,095	700	1,985	120	41.3	41.3	25.4
GM.3815.61	1,125	-	1,140	425	1,438	1,315	850	1,700	161	41.3	41.3	25.4
GM.4135.53	2,130	715	797	331	2,412	1,095	700	2,665	135	54.0	54.0	25.4
GM.4909.53	2,130	715	797	331	2,412	1,095	700	2,665	154	54.0	54.0	25.4
GM.6059.62	2,125	1,063	1,140	425	2,438	1,315	850	2,700	246	54.0	54.0	25.4
GM.7102.62	2,125	1,063	1,140	425	2,438	1,315	850	2,700	286	54.0	54.0	25.4
GM.9398.63	2,825	942	1,140	425	3,138	1,315	850	3,400	391	66.7	66.7	25.4
GM.9651.63	2,825	942	1,206	425	3,138	1,415	850	3,400	403	66.7	66.7	25.4
GL.0154.21	628	-	478	321	884	650	595	1,020	31	28.6	28.6	25.4
GL.0194.21	628	-	478	321	884	650	595	1,020	34	28.6	28.6	25.4
GL.0240.22	928	-	478	321	1,184	650	595	1,325	40	34.9	34.9	25.4
GL.0302.22	928	-	478	321	1,184	650	595	1,325	45	34.9	34.9	25.4
GL.0321.23	1,428	-	478	321	1,684	650	595	1,825	53	34.9	34.9	25.4
GL.0592.51	930	-	797	333	1,210	1,100	700	1,360	97	34.9	34.9	25.4
GL.0781.51	930	-	797	333	1,210	1,100	700	1,360	110	34.9	34.9	25.4





## Dimension

Model	Dimensions								Weight (kg)	Inlet Connection (mm)	Outlet Connection (mm)	Drain Pipe (mm)
	A	B	H	W	L	H*	W*	L*				
GL.0896.52	1,450	-	797	333	1,730	1,100	700	1,880	142	41.3	41.3	25.4
GL.0942.61	1,125	-	1,140	425	1,438	1,315	850	1,700	139	41.3	41.3	25.4
GL.1156.52	1,450	-	797	333	1,730	1,100	700	1,880	162	41.3	41.3	25.4
GL.1164.53	2,130	710	797	333	2,410	1,100	700	2,560	195	41.3	41.3	25.4
GL.1184.61	1,125	-	1,140	425	1,438	1,315	850	1,700	160	41.3	41.3	25.4
GL.1448.53	2,130	710	797	333	2,410	1,100	700	2,560	224	54.0	54.0	25.4
GL.1544.62	2,125	1,063	1,140	425	2,438	1,315	850	2,700	244	54.0	54.0	25.4
GL.1642.54	2,830	708	797	333	3,120	1,100	700	3,270	288	54.0	54.0	25.4
GL.2020.62	2,125	1,063	1,140	425	2,438	1,315	850	2,700	283	54.0	54.0	25.4
GL.2531.63	2,825	942	1,140	425	3,138	1,315	850	3,400	386	66.7	66.7	25.4
GL.2651.63	2,825	942	1,216	425	3,138	1,415	850	3,400	399	66.7	66.7	25.4



The following information will be needed for selection of Glycol Unit Cooler. Please be specific as any wrong technical data may affect the performance of the Unit Cooler.

(The form can be downloaded from Eden website or obtain from our Eden representatives)

Company: \_\_\_\_\_

Name: \_\_\_\_\_ Email: \_\_\_\_\_

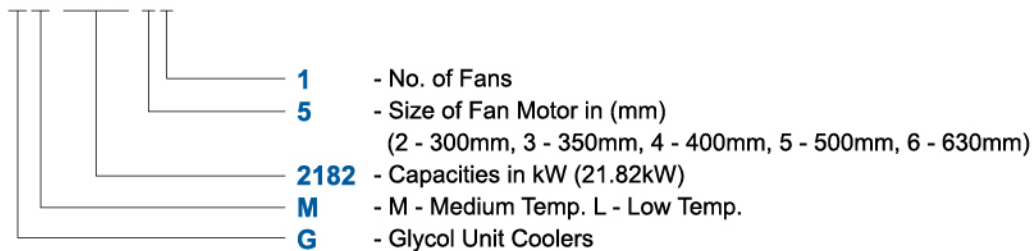
Tel: \_\_\_\_\_ Fax: \_\_\_\_\_

## Selection of Glycol Unit Cooler

Serial No.	Description	Requirement	Remarks
1	Cold Room Temperature (°C)		
2	Cooling Media		
3	Capacity per Unit (Kw)		
4	Glycol	Inlet Temperature (°C)	
5		Outlet Temperature (°C)	
6		Concentration (%)	
7		Flow (m³/h)	
8		Pressure Drop (ΔP) KPa	
9	Model for Eden Unit Cooler		

## Nomenclature

**GM.2182.51**



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