GLIDER EVO FREE: Packaged air cooled liquid chillers with free-cooling system for outdoor installation, equipped with screw compressors and axial fans
Cooling Capacity: 314 ÷ 1343 kW
Free-Cooling Capacity: 308 ÷ 938 kW

GLYCOL FREE
RC Hi-Tech

FREE COOLING
RC Hi-Tech

GLIDER EVO FREE

rcgroupairconditioning

R134a SHELL A C FREE COOLING

MAIN FEATURES
- Air cooled liquid chiller with free-cooling system.
- 21 models available, for a wide selection opportunity.
- Average step of 50 kW.
- EER up to 2,74.
- ESEER up to 3,25.
- Twin-Screw compressors.
- R134a Refrigerant charge.
- Double refrigerant circuit.
- Shell and tube evaporator.
- AC Axial fans.
- Double air circuit.
- Electronic expansion valve.
- Suitable for outdoor installation.

MAIN BENEFITS
- Indirect free cooling system.
- Availability of Glycol Free system.
- Low footprint.
- Availability of kit for the reduction and the extreme reduction of the noise.
- Availability of pumping groups.
- Availability of partial heat recovery system.
- Availability of EC axial fans for a higher efficiency.
- Complete set of components dedicated to the safety of the unity.

INDIRECT FREE COOLING SYSTEM
Complete cooling of the chilled water of the existing cooling system with the outside air. The energy saving will be higher the longer the outside temperature remains below the required temperature for cooling.

WORKING LIMITS IN COOLING MODE
Chilled water outlet temperature: -10÷15°C
Ambient temperature: -20÷45°C

WORKING LIMITS IN FREE-COOLING MODE
Minimum chilled water outlet temperature: -15°C
Minimum ambient temperature: -20°C

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fifty**cool**years

GLIDER EVO FREE

MAIN COMPONENTS

FRAMEWORK
- Base, self supporting frame and panelling in steel plate with protective surfaces treatment in compliance with UNI ISO 9227/ASTMB117 and ISO 7253, and painted with epoxy powders.
- Colour: RAL 9002

COMPRESSORS
- Twin screw semi-hermetic compressors with highly efficient screw profile and high peripheral speed, optimized for R134a refrigerant.
- Integrated discharge check valve.
- Flanged-on oil separator.
- Integrated safety relief valve (overpressure inner valve).
- Replaceable cartridge type oil filter.
- Valves for oil filling and discharge.
- Oil sight glass.
- Electronic protection device that includes:
  - Electric motor thermal protection via internal winding temperature sensors.
  - Phase sequence electronic relay
  - Sensor on refrigerant discharge for temperature monitoring,
- 2-pole 3-phase electric motor with Part-Winding starting from model 290 V2 F06 to model 470 V2 F08 included.
- 2-pole 3-phase electric motor with Star / Delta starting from model 520 V2 F08 to model 1220 V2 F16 included.
- Stepless capacity control, 50÷100% for each compressor.
- Crankcase heater.
- Terminal box with IP54 enclosure class.
- Rubber supports.

EVAPORATOR
- Single pass type shell and tube evaporator optimized for R134a refrigerant.
- Tubes with a helical rifled internal surface.
- Intermediate baffles positioned to ensure optimum speed of the fluid and low pressure drops.
- Single circuit on water side and independent circuits, one for each compressor, on refrigerant side.
- Shell, header, tube sheets, made of carbon steel, tubes in Cu.
- Anticondensate insulation made of polyurethane.
- Temperature sensors on water inlet and outlet.
- Hydraulic connections with grooved end supplied as standard with flexible joint and adapter pipe to be welded.

CONDENSING AND FREE-COOLING COIL
- Heat exchangers contained in single coil with high efficiency aluminium fins, specifically developed to provide high heat transfer and lower pressure drops. The combination of two factors, special tubes and fins, allow to optimally combine the following aspects:
  - Maximum capacity relative to the size of the exchanger.
  - Minimum charge of refrigerant.
  - Reduction of the air flow required for the heat exchange.
- Frame in galvanized steel.
- Motorized valves for free-cooling water circuit control.
- Temperature sensor on ambient air.

FANS SECTION
- Axial fans with sickle-shaped blades, fan guard and optimized for low noise levels.
- External rotor AC type electric motor.
- Stepless variable speed with phase-cut electronic controller for condensing pressure control.
- Stepless variable speed with phase-cut electronic controller for free-cooling control.
- IP54 enclosure class.

REFRIGERANT CIRCUIT

Component for each refrigerant circuit:
- Electronic expansion valve that allows high performance and system efficiency thanks to a timely and accurate response to changes in temperature and pressure.
- Energy reserve module for the electronic expansion valve to allow the closure of the valve in the event of lack of power supply.
- Sight glass.
- Filter dryer on liquid line.
- Service valves on liquid line.
- Service valves on compressor gas discharge.
- Double safety valve (only one in function) on high and low pressure side. The system include two safety valves with manual changeover system.
- Pressure transducers with indication, control and protection functions, on low and high refrigerant pressure and oil pressure.
- High pressure safety switch with manual reset.
- Pressure gauge on high and low pressure.
- Refrigerant circuit with copper tubing with anticondensate insulation of the suction line.
- Plastic capillary hoses for pressure sensors connection.
- R134a refrigerant charge.

ELECTRICAL PANEL

In accordance with EN60204-1 norms, suitable for outdoor installation, complete with:
- Main switch with door lock safety.
- Fuses for each compressor.
- Magnetothermic switches for fans.
- Fuses for water pumps (if scheduled).
- Contactors for each load.
- Compressor Part-Winding starting system from model 290 V2 F06 to model 470 V2 F08 included.
- Compressor Star / Delta starting system from model 520 V2 F08 to model 1220 V2 F16 included.
- Transformer for auxiliary circuit and microprocessor supply.
- Panel with machine controls.
- Power supply 400/3/50.

CONTROL SYSTEM
- MP.COM microprocessor system with graphic display for control and monitor of operating and alarms status. The system includes:
  - Voltage free contact for remote general alarm.
  - Main components hour-meter.
  - Nonvolatile “Flash” memory for data storage.
  - Menu with protection password.
  - LAN connection.
- Additional module “1” for ambient air temperature inlet.
- Driver for the additional module “1”.

OPTIONAL ACCESSORIES

GLIDER EVO FREE SIZE	F06	F08	F10	F12	F14	F16
739 - Pumping group (1 pump)	●	●	●	●*	-	-
769 - Pumping group (1+1stby)	●	●	●	●*	-	-
740 - Pumping group (2 pumps)	-	-	-	●**	●	●
770 - Pumping group (2+1stby)	-	-	-	●**	●	●
1004 - Antifreeazing heater for pumping group	●	●	●	●	●	●
118 - Kit brine A (for glycol solution production up to -6°C)	●	●	●	●	●	●
119 - Kit brine B (for glycol solution production up to -12°C)	●	●	●	●	●	●
786 - Pipes antifreezing kit	●	●	●	●	●	●
79 - Electrical panel heating system	●	●	●	●	●	●
150 - LNO kit (noise reduction)	●	●	●	●	●	●
151 - ELN kit (extremely noise reduction)	●	●	●	●	●	●
170 - Spring antivibration holders (kit)	●	●	●	●	●	●
171 - Rubber antivibration holders (kit)	●	●	●	●	●	●
101 - EC fan	●	●	●	●	●	●
Condensing pressure / free cooling control system	●	●	●	●	●	●
450 - Partial heat recovery	●	●	●	●	●	●
449 - Voltage free contact for partial heat recovery water pump activation	●	●	●	●	●	●
Condensing coil in special execution	●	●	●	●	●	●
251 - Coils protection nets	●	●	●	●	●	●
351 - Free Cooling Coils with pre-painted fins	●	●	●	●	●	●
731 - Safety water flow switch	●	●	●	●	●	●
1005- Safety oil flow switch	●	●	●	●	●	●
143 - Glycol free	●	●	●	●	●	●
650 - Compressor thermal relay	●	●	●	●	●	●
605 - Compr. power factor capacitor - 0,9	●	●	●	●	●	●
Supply network control relay	●	●	●	●	●	●
83 - Compressor operation indicator	●	●	●	●	●	●
550 - Stop valve on compressor suction line	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●
1003 - Analogic flowmeter	●	●	●	●	●	●
1005 - Power supply analyzer	●	●	●	●	●	●
1009 - Multimeter kit	●	●	●	●	●	●
919 - Clock card	●	●	●	●	●	●
923 - RC-Com MBUS/JBUS Serial board	●	●	●	●	●	●
926 - LON Serial board	●	●	●	●	●	●
931 - BACnet Ethernet - SNMP - TCP/IP Serial board	●	●	●	●	●	●
932 - BACnet MS/TP Serial board	●	●	●	●	●	●
934 - MP.COM expansion card	●	●	●	●	●	●
942 - Serial card for GSM Modem	●	●	●	●	●	●
943 - Data Logger	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●
RC CLOUD PLATFORM	●	●	●	●	●	●

● available accessory; - not available accessory
* up to model 930 V2, ** from model 980 V2

GLIDER EVO FREE

TECHNICAL DATA GLIDER EVO FREE

	GLIDER EVO FREE		290 V2	310 V2	330 V2	350 V2	370 V2	410 V2	440 V2	470 V2
	SIZE		F06	F06	F06	F06	F06	F08	F08	F08
STANDARD	Cooling capacity (1)	kW	314	340	365	387	409	452	481	510
	Unit power input	kW	115,0	124,5	135,2	144,9	154,3	169,9	181,5	195,4
	Free-Cooling capacity (2)	kW	308	315	321	326	330	439	446	452
	Total water flow rate	m³/h	56,3	61,0	65,5	69,3	73,3	81,1	86,3	91,6
	Total pressure drop	kPa	103	93	98	87	91	121	115	124
	Compressors		twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity control	%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%
	Axial fans	n.	6	6	6	6	6	8	8	8
	Total air flow	m³/h	119280	119280	119280	119280	119280	163168	163168	163168
	Air circuits	n.	2	2	2	2	2	2	2	2
	Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
	Total refrigerant charge (optional excluded)	kg	146	146	146	146	146	145	145	145
	Gas circuits	n.	2	2	2	2	2	2	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	285,0	306,0	327,0	345,9	364,8	358,3	386,6	415,0
	Unit starting current (LRA)	A	415,7	475,7	489,6	562,6	576,2	611,2	692,2	714,6
	EER (1)	kW/kW	2,73	2,73	2,70	2,67	2,65	2,66	2,65	2,61
	ESEER		3,04	3,09	3,08	3,10	3,10	3,07	3,08	3,08
	Sound power level [Lw] (3)	dB(A)	91,4	91,6	91,7	91,7	91,8	92,1	94,5	96,1
	Average sound pressure level [Lpm] (4)	dB(A)	71,7	71,8	71,9	72,0	72,0	71,9	74,3	75,9
	Net weight	kg	5751	5891	5906	5926	5931	7131	7158	7173
	Hydraulic connections									
	Evaporator IN/OUT - OD (5)	Ø mm	139,7	139,7	139,7	139,7	139,7	139,7	139,7	139,7
OPTIONAL	Glycol free system (2)									
	Free-Cooling capacity	kW	230	235	240	244	247	328	333	338
	Glycol free water pump power input	kW	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5
	Partial heat recovery (6)									
	Heating capacity	kW	61,9	67,0	71,9	76,2	80,5	89,1	94,8	101,0
	Pumping group									
	Power input	kW	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5
LNO KIT 100%	Cooling capacity (1)	kW	314	340	365	387	409	452	481	510
	Unit power input	kW	115,0	124,5	135,2	144,9	154,3	169,9	181,5	195,4
	Free-Cooling capacity (2)	kW	308	315	321	326	330	439	446	452
	Total air flow	m³/h	119280	119280	119280	119280	119280	163168	163168	163168
	EER (1)	kW/kW	2,73	2,73	2,70	2,67	2,65	2,66	2,65	2,61
	Sound power level [Lw] (3)	dB(A)	89,4	89,6	89,7	89,7	89,8	90,1	92,5	94,1
	Average sound pressure level [Lpm] (4)	dB(A)	69,7	69,8	69,9	70,0	70,0	69,9	72,3	73,9
LNO KIT 85%	Cooling capacity (1)	kW	308	333	357	377	398	443	470	497
	Unit power input	kW	115,8	125,7	136,8	147,8	157,9	171,7	185,0	198,8
	Free-Cooling capacity (2)	kW	306	313	320	324	328	437	443	450
	Total air flow	m³/h	101388	101388	101388	101388	101388	138693	138693	138693
	EER (1)	kW/kW	2,66	2,65	2,61	2,55	2,52	2,58	2,54	2,50
	Sound power level [Lw] (3)	dB(A)	88,4	88,6	88,7	88,7	88,8	89,1	91,5	93,1
	Average sound pressure level [Lpm] (4)	dB(A)	68,7	68,8	68,9	69,0	69,0	68,9	71,3	72,9
LNO KIT 70%	Cooling capacity (1)	kW	299	322	345	363	382	430	455	479
	Unit power input	kW	118,7	129,8	142,0	153,2	163,9	176,2	191,2	205,6
	Free-Cooling capacity (2)	kW	303	310	317	321	325	433	440	446
	Total air flow	m³/h	83496	83496	83496	83496	83496	114218	114218	114218
	EER (1)	kW/kW	2,52	2,48	2,43	2,37	2,33	2,44	2,38	2,33
	Sound power level [Lw] (3)	dB(A)	85,4	85,6	85,7	85,7	85,8	86,1	88,5	90,1
	Average sound pressure level [Lpm] (4)	dB(A)	65,7	65,8	65,9	66,0	66,0	65,9	68,3	69,9
ELN KIT	Cooling capacity (1)	kW	299	322	345	363	382	430	455	479
	Unit power input	kW	118,7	129,8	142,0	153,2	163,9	176,2	191,2	205,6
	Free-Cooling capacity (2)	kW	303	310	317	321	325	433	440	446
	Total air flow	m³/h	83496	83496	83496	83496	83496	114217	114217	114217
	EER (1)	kW/kW	2,52	2,48	2,43	2,37	2,33	2,44	2,38	2,33
	Sound power level [Lw] (3)	dB(A)	82,4	82,6	82,7	82,7	82,8	83,1	85,5	87,1
	Average sound pressure level [Lpm] (4)	dB(A)	62,7	62,8	62,9	63,0	63,0	62,9	65,3	66,9

1. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Referred to glycol solution inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C. Fouling factor of the exchangers 0,043 m²°K/kW.
3. Sound power level [Lw] according to ISO EN 9614 – 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
6. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

TECHNICAL DATA GLIDER EVO FREE

	GLIDER EVO FREE		520 V2	550 V2	610 V2	670 V2	720 V2	770 V2	810 V2	870 V2
	SIZE		F08	F08	F08	F10	F10	F10	F10	F12
STANDARD	Cooling capacity (1)	kW	572	600	674	736	796	845	887	952
	Unit power input	kW	221,7	235,3	255,3	271,6	290,5	309,5	334,7	366,2
	Free-Cooling capacity (2)	kW	456	460	469	574	583	583	589	693
	Total water flow rate	m³/h	103	108	121	132	143	152	159	171
	Total pressure drop	kPa	131	144	167	67	70	85	89	110
	Compressors		twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw	twin-screw
	Quantity	n.	2	2	2	2	2	2	2	2
	Capacity control	%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%	25...100%
	Axial fans	n.	8	8	8	10	10	10	10	12
	Total air flow	m³/h	159040	159040	159040	203960	203960	198800	198800	244752
	Air circuits	n.	2	2	2	2	2	2	2	2
	Refrigerant		R134a	R134a	R134a	R134a	R134a	R134a	R134a	R134a
	Total refrigerant charge (optional excluded)	kg	194	194	194	181	181	241	241	217
	Gas circuits	n.	2	2	2	2	2	2	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	444,4	463,3	482,2	559,7	629,0	660,5	692,0	710,6
	Unit starting current (LRA)	A	529,9	556,9	581,2	684,0	709,0	738,0	762,0	890,8
	EER (1)	kW/kW	2,58	2,55	2,64	2,71	2,74	2,73	2,65	2,60
	ESEER		3,05	3,05	3,19	3,18	3,25	3,21	3,22	3,17
	Sound power level [Lw] (3)	dB(A)	96,1	97,5	98,6	99,3	99,9	99,8	99,6	100,0
	Average sound pressure level [Lpm] (4)	dB(A)	75,9	77,3	78,4	78,7	79,2	79,1	79,0	79,0
	Net weight	kg	7637	7647	7657	8924	9344	9664	9674	10664
	Hydraulic connections									
	Evaporator IN/OUT - OD (5)	Ø mm	139,7	139,7	139,7	168,3	168,3	168,3	168,3	168,3
OPTIONAL	Glycol free system (2)									
	Free-Cooling capacity	kW	341	344	351	429	435	436	441	519
	Glycol free water pump power input	kW	7,5	7,5	15,0	15,0	15,0	15,0	15,0	15,0
	Partial heat recovery (6)									
	Heating capacity	kW	113	118	133	145	157	166	175	187
	Pumping group									
	Power input	kW	7,5	7,5	7,5	7,5	7,5	7,5	7,5	7,5
LNO KIT 100%	Cooling capacity (1)	kW	572	600	674	736	796	845	887	952
	Unit power input	kW	221,7	235,3	255,3	271,6	290,5	309,5	334,7	366,2
	Free-Cooling capacity (2)	kW	456	460	469	574	583	583	589	693
	Total air flow	m³/h	159040	159040	159040	203960	203960	198800	198800	244752
	EER (1)	kW/kW	2,58	2,55	2,64	2,71	2,74	2,73	2,65	2,60
	Sound power level [Lw] (3)	dB(A)	94,1	95,5	96,6	97,3	97,9	97,8	97,6	98,0
	Average sound pressure level [Lpm] (4)	dB(A)	73,9	75,3	76,4	76,7	77,2	77,1	77,0	77,0
LNO KIT 85%	Cooling capacity (1)	kW	556	583	653	715	770	817	856	923
	Unit power input	kW	227,9	241,9	263,3	279,3	298,4	319,1	345,2	375,2
	Free-Cooling capacity (2)	kW	453	457	467	570	578	580	586	690
	Total air flow	m³/h	135184	135184	135184	173366	173366	168980	168980	208039
	EER (1)	kW/kW	2,44	2,41	2,48	2,56	2,58	2,56	2,48	2,46
	Sound power level [Lw] (3)	dB(A)	93,1	94,5	95,6	96,3	96,9	96,8	96,6	97,0
	Average sound pressure level [Lpm] (4)	dB(A)	72,9	74,3	75,4	75,7	76,2	76,1	76,0	76,0
LNO KIT 70%	Cooling capacity (1)	kW	534	558	623	685	735	779	813	883
	Unit power input	kW	237,3	253,6	276,9	290,3	311,4	332,9	361,3	392,4
	Free-Cooling capacity (2)	kW	450	454	463	564	572	574	580	684
	Total air flow	m³/h	111328	111328	111328	142772	142772	139160	139160	171326
	EER (1)	kW/kW	2,25	2,20	2,25	2,36	2,36	2,34	2,25	2,25
	Sound power level [Lw] (3)	dB(A)	90,1	91,5	92,6	93,3	93,9	93,8	93,6	94,0
	Average sound pressure level [Lpm] (4)	dB(A)	69,9	71,3	72,4	72,7	73,2	73,1	73,0	73,0
ELN KIT	Cooling capacity (1)	kW	534	558	623	685	735	779	813	883
	Unit power input	kW	237,3	253,6	276,9	290,3	311,4	332,9	361,3	392,4
	Free-Cooling capacity (2)	kW	450	454	463	564	572	574	580	684
	Total air flow	m³/h	111328	111328	111328	142772	142772	139160	139160	171326
	EER (1)	kW/kW	2,25	2,20	2,25	2,36	2,36	2,34	2,25	2,25
	Sound power level [Lw] (3)	dB(A)	87,1	88,5	89,6	90,3	90,9	90,8	90,6	91,0
	Average sound pressure level [Lpm] (4)	dB(A)	66,9	68,3	69,4	69,7	70,2	70,1	70,0	70,0

1. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Referred to glycol solution inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C. Fouling factor of the exchangers 0,043 m²°K/kW.
3. Sound power level [Lw] according to ISO EN 9614 – 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
6. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

GLIDER EVO FREE

TECHNICAL DATA GLIDER EVO FREE

	GLIDER EVO FREE		930 V2	980 V2	1030 V2	1130 V2	1220 V2
	SIZE		F12	F12	F12	F14	F16
STANDARD	Cooling capacity (1)	kW	1017	1071	1128	1238	1343
	Unit power input	kW	394,2	416,7	438,9	470,7	512,6
	Free-Cooling capacity (2)	kW	702	709	703	819	938
	Total water flow rate	m³/h	183	193	203	220	241
	Total pressure drop	kPa	114	127	139	130	172
	Compressors		twin-screw	twin-screw	twin-screw	twin-screw	twin-screw
	Quantity	n.	2	2	2	2	2
	Capacity control	%	25...100%	25...100%	25...100%	25...100%	25...100%
	Axial fans	n.	12	12	12	14	16
	Total air flow	m³/h	244752	244752	238560	278320	318080
	Air circuits	n.	2	2	2	2	2
	Refrigerant		R134a	R134a	R134a	R134a	R134a
	Total refrigerant charge (optional excluded)	kg	217	217	289	337	389
	Gas circuits	n.	2	2	2	2	2
	Power supply	V/Ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
	Max unit operating current (FLA)	A	721,1	763,1	805,1	924,6	1004,2
	Unit starting current (LRA)	A	938,8	1002,8	1041,8	1247,6	1402,4
	EER (1)	kW/kW	2,58	2,57	2,57	2,63	2,62
	ESEER		3,19	3,21	3,16	3,24	3,13
	Sound power level [Lw] (3)	dB(A)	99,2	100,9	102,1	102,1	102,4
	Average sound pressure level [Lpm] (4)	dB(A)	78,2	79,8	81,0	80,7	80,6
	Net weight	kg	10734	10774	11146	12126	13636
	Hydraulic connections						
	Evaporator IN/OUT - OD (5)	Ø mm	168,3	168,3	168,3	168,3	168,3
OPTIONAL	Glycol free system (2)						
	Free-Cooling capacity	kW	525	531	526	613	702
	Glycol free water pump power input	kW	15,0	15,0	15,0	15,0	15,0
	Partial heat recovery (6)						
	Heating capacity	kW	200	211	222	244	265
	Pumping group						
	Power input	kW	7,5	15,0	15,0	15,0	15,0
LNO KIT 100%	Cooling capacity (1)	kW	1017	1071	1128	1238	1343
	Unit power input	kW	394,2	416,7	438,9	470,7	512,6
	Free-Cooling capacity (2)	kW	702	709	703	819	938
	Total air flow	m³/h	244752	244752	238560	278320	318080
	EER (1)	kW/kW	2,58	2,57	2,57	2,63	2,62
	Sound power level [Lw] (3)	dB(A)	97,2	98,9	100,1	100,1	100,4
	Average sound pressure level [Lpm] (4)	dB(A)	76,2	77,8	79,0	78,7	78,6
LNO KIT 85%	Cooling capacity (1)	kW	984	1034	1089	1197	1303
	Unit power input	kW	404,9	430,8	453,8	486,6	527,5
	Free-Cooling capacity (2)	kW	698	705	699	816	933
	Total air flow	m³/h	208039	208039	202776	236572	270368
	EER (1)	kW/kW	2,43	2,40	2,40	2,46	2,47
	Sound power level [Lw] (3)	dB(A)	96,2	97,9	99,1	99,1	99,4
	Average sound pressure level [Lpm] (4)	dB(A)	75,2	76,8	78,0	77,7	77,6
LNO KIT 70%	Cooling capacity (1)	kW	938	982	1033	1138	1246
	Unit power input	kW	424,4	452,5	480,5	510,3	551,3
	Free-Cooling capacity (2)	kW	692	699	694	810	927
	Total air flow	m³/h	171326	171326	166992	194824	222656
	EER (1)	kW/kW	2,21	2,17	2,15	2,23	2,26
	Sound power level [Lw] (3)	dB(A)	93,2	94,9	96,1	96,1	96,4
	Average sound pressure level [Lpm] (4)	dB(A)	72,2	73,8	75,0	74,7	74,6
ELN KIT	Cooling capacity (1)	kW	938	982	1033	1138	1246
	Unit power input	kW	424,4	452,5	480,5	510,3	551,3
	Free-Cooling capacity (2)	kW	692	699	694	810	927
	Total air flow	m³/h	171326	171326	166992	194824	222656
	EER (1)	kW/kW	2,21	2,17	2,15	2,23	2,26
	Sound power level [Lw] (3)	dB(A)	90,2	91,9	93,1	93,1	93,4
	Average sound pressure level [Lpm] (4)	dB(A)	69,2	70,8	72,0	71,7	71,6

1. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Fouling factor of the exchangers 0,043 m²°K/kW.
2. Referred to glycol solution inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C. Fouling factor of the exchangers 0,043 m²°K/kW.
3. Sound power level [Lw] according to ISO EN 9614 – 2.
4. Average sound pressure level [Lpm] 1m far according to ISO EN 3744.
5. Hydraulic connection with grooved end complete with flexible joint and adapter pipe for solder connection.
6. Referred to glycol solution temperature 15/10°C; 20% Ethylene glycol solution; air temperature to the condenser 35°C. Water temperature heat recovery 40/45°C – 0% glycol solution; Fouling factor of the exchangers 0,043 m²°K/kW.

DIMENSIONS (mm)

SIZE F	a	b	c
F06	3640	2260	2550
F08	4610	2260	2550
F10	5580	2260	2550
F12	6550	2260	2550
F14	7520	2260	2550
F16	8720	2260	2250