

**GLIDER EVO FREE CLA:** Packaged air cooled liquid chillers with free-cooling system in "A" class energy efficiency, for outdoor installation, equipped with screw compressors and axial fans

Cooling Capacity: 319 ÷ 1583 kW

Free-Cooling Capacity: 323 ÷ 1369 kW



# glider evo free cla

## rcgroupairconditioning



### MAIN FEATURES

- Air cooled liquid chiller with free-cooling system in A class energy efficiency.
- 24 models available, for a wide selection opportunity.
- Average step of 50kW.
- EER up to 3,34.
- ESEER up to 3,83.
- 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.
- High EER and ESEER, A class energy efficiency.
- 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.

**GLYCOL FREE:** The accessory allows to use pure water instead of antifreeze solutions in the hydraulic circuit of the plant.

**A CLASS ENERGY EFFICIENCY:** The best and most accurate components applied to the chillers.

#### 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



## 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 590 V2 F10 included.
- 2-pole 3-phase electric motor with Star / Delta starting from model 630 V2 F12 to model 1450 V2 F24 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 arranged for flexible joint (the flexible joint and the adapter pipe are optional accessories).

### 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 590 V2 F10 included.
- Compressor Star / Delta starting system from model 630 V2 F12 to model 1450 V2 F24 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".

### HYDRAULIC CONNECTIONS OF HEAT EXCHANGERS

- Heat exchangers threaded hydraulic connections ISO 228/1 – G M, available up to a diameter of 3" included.
- Pipes threaded hydraulic connections ISO 7/1 – R, available up to a diameter of 3" included.
- The hydraulic connections with flange (FL) are not supplied with counter flange.
- The hydraulic connections with grooved end are not supplied with flexible joint (optional accessory).

## OPTIONAL ACCESSORIES

GLIDER EVO FREE CLA SIZE	290 V2 F06	310 V2 F06	330 V2 F08	360 V2 F08	380 V2 F08	420 V2 F08	460 V2 F10	490 V2 F10	540 V2 F10	590 V2 F10	630 V2 F12	680 V2 F14
739 - Pumping group (1 pump)	●	●	●	●	●	●	●	●	●	●	●	●
769 - Pumping group (1+1stby)	●	●	●	●	●	●	●	●	●	●	●	●
740 - Pumping group (2 pumps)	-	-	-	-	-	-	-	-	-	-	-	-
770 - Pumping group (2+1stby)	-	-	-	-	-	-	-	-	-	-	-	-
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●	●	●	●
118 - Kit brine A	●	●	●	●	●	●	●	●	●	●	●	●
119 - Kit brine B	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter pipe (solder type)	●	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter for flange connection	●	●	●	●	●	●	●	●	●	●	●	●
450 - Desuperheater	●	●	●	●	●	●	●	●	●	●	●	●
449 - Voltage free contact for partial heat recovery water pump activation	●	●	●	●	●	●	●	●	●	●	●	●
Condensing coil in special execution	●	●	●	●	●	●	●	●	●	●	●	●
250 - Coils protection nets (kit)	●	●	●	●	●	●	●	●	●	●	●	●
731 - Safety water flow switch	●	●	●	●	●	●	●	●	●	●	●	●
Analog flowmeter	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
1005 - Oil flow-switch	●	●	●	●	●	●	●	●	●	●	●	●
85 - Demand limit	●	●	●	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

## OPTIONAL ACCESSORIES

GLIDER EVO FREE CLA SIZE	720 V2 F14	790 V2 F16	860 V2 F16	910 V2 F16	960 V2 F16	1050 V2 F16	1110 V2 F18	1170 V2 F20	1240 V2 F20	1310 V2 F20	1380 V2 F22	1450 V2 F24
739 - Pumping group (1 pump)	●	-	-	-	-	-	-	-	-	-	-	-
769 - Pumping group (1+1stby)	●	-	-	-	-	-	-	-	-	-	-	-
740 - Pumping group (2 pumps)	-	●	●	●	●	●	●	●	●	●	●	●
770 - Pumping group (2+1stby)	-	●	●	●	●	●	●	●	●	●	●	●
1004 - Antifreezing heater for pumping group	●	●	●	●	●	●	●	●	●	●	●	●
118 - Kit brine A	●	●	●	●	●	●	●	●	●	●	●	●
119 - Kit brine B	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter pipe (solder type)	●	●	●	●	●	●	●	●	●	●	●	●
Evaporator flexible joint with adapter for flange connection	●	●	●	●	●	●	●	●	●	●	●	●
450 - Desuperheater	●	●	●	●	●	●	●	●	●	●	●	●
449 - Voltage free contact for partial heat recovery water pump activation	●	●	●	●	●	●	●	●	●	●	●	●
Condensing coil in special execution	●	●	●	●	●	●	●	●	●	●	●	●
250 - Coils protection nets (kit)	●	●	●	●	●	●	●	●	●	●	●	●
731 - Safety water flow switch	●	●	●	●	●	●	●	●	●	●	●	●
Analog flowmeter	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
1005 - Oil flow-switch												
85 - Demand limit	●	●	●	●	●	●	●	●	●	●	●	●
88 - Analog set point compensation	●	●	●	●	●	●	●	●	●	●	●	●
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	●	●	●	●	●	●	●	●	●	●	●	●
889 - Master plant SEQUENCER	●	●	●	●	●	●	●	●	●	●	●	●
962 - Kit modem GSM	●	●	●	●	●	●	●	●	●	●	●	●
957 - Plantwatch without modem	●	●	●	●	●	●	●	●	●	●	●	●
930 - Remote graphic terminal kit	●	●	●	●	●	●	●	●	●	●	●	●

● available accessory; - not available accessory

## TECHNICAL DATA GLIDER EVO FREE CLA

	GLIDER EVO FREE CLA SIZE	290 V2 F06	310 V2 F06	330 V2 F08	360 V2 F08	380 V2 F08	420 V2 F08	460 V2 F10	490 V2 F10
STANDARD	Cooling capacity (1) Unit power input	kW kW	319 95,5	335 100,9	361 109,1	386 117,7	409 124,7	451 138,3	501 154,6
	Free-Cooling capacity (2) Evaporator water flow rate	kW m³/h	323 57,2	325 60	397 64,6	435 69,2	438 73,2	452 80,8	558 89,8
	Evaporator pressure drop	kPa	54	53	67	74	76	89	125
	Compressors		twin-screw						
	Quantity	n.	2	2	2	2	2	2	2
	Capacity control	%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%
	Axial fans	n.	6	6	7	8	8	8	10
	Total air flow	m³/h	122336	119280	142772	163168	159040	159040	198800
	Air circuits	n.	2	2	2	2	2	2	2
	Refrigerant		R134a						
OPTIONAL	Total refrigerant charge (optional excluded)	kg	110	146	145	145	194	194	241
	Gas circuits	n.	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
	Max unit operating current (FLA)	A	186,8	202,6	217,8	233,0	236,2	266,8	308,6
	Unit starting current (LRA)	A	374,1	380,0	419,9	435,1	413,7	500,0	668,8
	EER (1)	kW/kW	3,34	3,32	3,31	3,28	3,28	3,26	3,24
	ESEER		3,78	3,77	3,78	3,74	3,76	3,77	3,74
	Sound power level [Lw] (3)	dB(A)	92,1	92,5	92,7	92,9	91,5	91,9	92,1
	Average sound pressure level [Lpm] (4)	dB(A)	72,4	72,8	72,5	72,7	71,3	71,7	71,4
	Net weight	kg	5330	5923	6633	6638	6857	6895	8018
LNO KIT 100%	Hydraulic connections								
	Evaporator IN/OUT - OD (5)	Ø mm	168,3	168,3	168,3	168,3	168,3	219,1	219,1
	Glycol free system (2)								
	Cooling capacity	kW	241	243	297	325	327	338	418
	Glycol free water pump power input	kW	5,5	5,5	5,5	5,5	5,5	5,5	5,5
	Partial heat recovery (6)								
	Heating capacity	kW	62,8	65,9	71,0	76,0	80,5	88,8	98,6
	Pumping group								
	Power input	kW	7,5	7,5	7,5	7,5	7,5	7,5	7,5
	Cooling capacity (1)	kW	319	335	361	386	409	451	501
LNO KIT 85%	Unit power input	kW	95,5	100,9	109,1	117,7	124,7	138,3	154,6
	Free-Cooling capacity (2)	kW	323	325	397	435	438	452	559
	Total air flow	m³/h	122376	119280	142772	163168	159040	159040	198800
	EER (1)	kW/kW	3,34	3,32	3,31	3,28	3,28	3,26	3,24
	Sound power level [Lw] (3)	dB(A)	90,1	90,5	90,7	90,9	89,5	89,9	90,1
	Average sound pressure level [Lpm] (4)	dB(A)	70,4	70,8	70,5	70,7	69,3	69,7	73,6
	Cooling capacity (1)	kW	313	330	356	382	404	445	496
	Unit power input	kW	95,4	102,5	110,2	117,9	125,1	140,8	155,0
	Free-Cooling capacity (2)	kW	321	323	395	433	436	451	557
	Total air flow	m³/h	104019	101388	121356	138692	135184	135184	168980
LNO KIT 70%	EER (1)	kW/kW	3,28	3,22	3,23	3,24	3,23	3,16	3,2
	Sound power level [Lw] (3)	dB(A)	89,1	89,5	89,7	89,9	88,5	88,9	89,1
	Average sound pressure level [Lpm] (4)	dB(A)	69,4	69,8	69,5	69,7	68,3	68,7	72,6
	Cooling capacity (1)	kW	305	322	349	375	397	436	487
	Unit power input	kW	96,5	106,3	112,2	120,2	128,5	144,4	158,6
	Free-Cooling capacity (2)	kW	318	321	393	431	434	448	554
	Total air flow	m³/h	85663	83496	99940	114218	111328	111328	139160
	EER (1)	kW/kW	3,16	3,03	3,11	3,12	3,09	3,02	3,07
	Sound power level [Lw] (3)	dB(A)	86,1	86,5	86,7	86,9	85,5	85,9	86,1
	Average sound pressure level [Lpm] (4)	dB(A)	66,4	66,8	66,5	66,7	65,3	65,7	69,6
ELN KIT	Cooling capacity (1)	kW	305	322	349	375	397	436	487
	Unit power input	kW	96,5	106,3	112,2	120,2	128,5	144,4	158,6
	Free-Cooling capacity (2)	kW	318	321	393	431	434	448	554
	Total air flow	m³/h	85663	83496	99940	114218	111328	111328	139160
	EER (1)	kW/kW	3,16	3,03	3,11	3,12	3,09	3,02	3,07
	Sound power level [Lw] (3)	dB(A)	83,1	83,5	83,7	83,9	82,5	82,9	83,1
	Average sound pressure level [Lpm] (4)	dB(A)	63,4	63,8	63,5	63,7	62,3	62,7	66,6

1. Referred to chiller water temperature 15/10°C; 20% Ethylene glycol solution; ambient temperature 35°C.

2. Referred to chiller water inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C.

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. The flexible joint is an optional accessory.

6. Referred to chiller water temperature 12/7°C; 35°C ambient temperature and hot water temperature 40/45°C.

## TECHNICAL DATA GLIDER EVO FREE CLA

	GLIDER EVO FREE CLA SIZE	540 V2 F10	590 V2 F10	630 V2 F12	680 V2 F14	720 V2 F14	790 V2 F16	860 V2 F16	910 V2 F16
STANDARD	Cooling capacity (1) Unit power input	kW kW	584 183,1	638 200,6	691 210,7	735 227,6	781 244,1	863 266,4	943 291,0
	Free-Cooling capacity (2) Evaporator water flow rate	kW m³/h	584 105	597 114	655 124	734 132	773 140	867 155	917 169
	Evaporator pressure drop	kPa	163	181	92	105	113	110	125
	Compressors	twin-screw							
	Quantity	n.	2	2	2	2	2	2	2
	Capacity control	%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%
	Axial fans	n.	10	10	12	13	14	15	16
	Total air flow	m³/h	198800	198800	238560	261794	278320	302070	318080
	Air circuits	n.	2	2	2	2	2	2	2
	Refrigerant	R134a							
OPTIONAL	Total refrigerant charge (optional excluded)	kg	241	241	289	294,5	337	339,5	389
	Gas circuits	n.	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
	Max unit operating current (FLA)	A	348,3	369,4	413,6	441,1	468,6	502,6	536,6
	Unit starting current (LRA)	A	829,1	850,2	591,2	595,1	622,6	639,5	673,5
	EER (1)	kW/kW	3,23	3,24	3,24	3,20	3,18	3,24	3,24
	ESEER		3,75	3,75	3,71	3,72	3,77	3,74	3,71
	Sound power level [Lw] (3)	dB(A)	96,5	96,7	97,7	99,3	100,4	101,1	101,7
	Average sound pressure level [Lpm] (4)	dB(A)	75,8	76	76,7	77,9	79	79,3	79,8
	Net weight	kg	8182	8304	9086	9669	9872	11754	12233
LNO KIT 100%	Hydraulic connections								
	Evaporator IN/OUT - OD (5)	Ø mm	219,1	219,1	219,1	219,1	219,1	219,1	273
	Glycol free system (2)								
	Cooling capacity	kW	437	447	490	549	578	649	686
	Glycol free water pump power input	kW	5,5	7,5	7,5	7,5	7,5	15,0	15,0
	Partial heat recovery (6)								
	Heating capacity	kW	115,0	125,0	136,0	144,0	153,0	170,0	186,0
	Pumping group								
	Power input	kW	7,5	7,5	7,5	7,5	7,5	15,0	15,0
	Cooling capacity (1)	kW	583	637	689	733	779	861	943
LNO KIT 85%	Unit power input	kW	176,9	192,9	208,0	224,0	239,2	261,1	291,0
	Free-Cooling capacity (2)	kW	584	597	655	734	773	867	917
	Total air flow	m³/h	198800	198800	238560	261794	278320	302070	318080
	EER (1)	kW/kW	3,23	3,24	3,24	3,20	3,18	3,24	3,24
	Sound power level [Lw] (3)	dB(A)	94,5	94,7	95,7	97,3	98,4	99,1	99,7
	Average sound pressure level [Lpm] (4)	dB(A)	73,8	74,0	74,7	75,9	77,0	77,3	77,8
	Cooling capacity (1)	kW	573	626	679	721	765	848	929
	Unit power input	kW	179,7	195,7	210,3	226,9	242,8	264,4	294,9
	Free-Cooling capacity (2)	kW	582	594	652	731	769	864	913
	Total air flow	m³/h	168980	168980	202776	222524	236572	256759	270368
LNO KIT 70%	EER (1)	kW/kW	3,13	3,14	3,16	3,11	3,08	3,15	3,15
	Sound power level [Lw] (3)	dB(A)	93,5	93,7	94,7	96,3	97,4	98,1	98,7
	Average sound pressure level [Lpm] (4)	dB(A)	72,8	73,0	73,7	74,9	76,0	76,3	76,8
	Cooling capacity (1)	kW	558	609	663	703	746	828	907
	Unit power input	kW	185,6	202,6	216,5	232,9	248,5	270,8	293,5
	Free-Cooling capacity (2)	kW	578	591	648	726	764	859	908
	Total air flow	m³/h	139160	139160	166992	183256	194824	211449	222656
	EER (1)	kW/kW	2,96	2,96	3,00	2,96	2,94	3,01	3,09
	Sound power level [Lw] (3)	dB(A)	90,5	90,7	91,7	93,3	94,4	95,1	95,7
	Average sound pressure level [Lpm] (4)	dB(A)	69,8	70,0	70,7	71,9	73,0	73,3	73,8
ELN KIT	Cooling capacity (1)	kW	558	609	663	703	746	828	907
	Unit power input	kW	185,6	202,6	216,5	232,9	248,5	270,8	293,5
	Free-Cooling capacity (2)	kW	578	591	648	726	764	859	908
	Total air flow	m³/h	139160	139160	166992	183256	194824	211449	222656
	EER (1)	kW/kW	2,96	2,96	3,00	2,96	2,94	3,01	3,09
	Sound power level [Lw] (3)	dB(A)	87,5	87,7	88,7	90,3	91,4	92,1	92,7
	Average sound pressure level [Lpm] (4)	dB(A)	66,8	67,0	67,7	68,9	70,0	70,3	70,8

1. Referred to chiller water temperature 15/10°C; 20% Ethylene glycol solution; ambient temperature 35°C.
2. Referred to chiller water inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C.
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. The flexible joint is an optional accessory.
6. Referred to chiller water temperature 12/7°C; 35°C ambient temperature and hot water temperature 40/45°C.

## TECHNICAL DATA GLIDER EVO FREE CLA

	GLIDER EVO FREE CLA SIZE	960 V2 F16	1050 V2 F16	1110 V2 F18	1170 V2 F20	1240 V2 F20	1310 V2 F20	1380 V2 F22	1450 V2 F24
STANDARD	Cooling capacity (1) Unit power input	kW kW	1043 324,9	1146 358,1	1215 379,7	1285 404,1	1361 429,3	1438 455,1	1508 480,3
	Free-Cooling capacity (2) Evaporator water flow rate	kW m³/h	943 187	965 205	1055 218	1198 230	1213 244	1228 258	1315 270
	Evaporator pressure drop	kPa	147	133	148	189	206	203	223
	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
	Capacity control	%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%	25... 100%
	Axial fans	n.	16	16	18	20	20	20	22
	Total air flow	m³/h	318080	318080	357840	397600	397600	397600	437360
	Air circuits	n.	2	2	2	2	2	2	2
	Refrigerant		R134a						
OPTIONAL	Total refrigerant charge (optional excluded)	kg	389	389	436	482	482	530	578
	Gas circuits	n.	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
	Max unit operating current (FLA)	A	598,2	677,8	732,7	787,6	831,6	875,6	932,6
	Unit starting current (LRA)	A	783,3	889,1	1080,9	1135,8	1215,8	1259,8	1360,6
	EER (1)	kW/kW	3,21	3,20	3,20	3,18	3,17	3,16	3,14
	ESEER		3,72	3,83	3,79	3,77	3,78	3,83	3,81
	Sound power level [Lw] (3)	dB(A)	101,4	99,9	101,7	103,9	103,9	103,9	104,1
	Average sound pressure level [Lpm] (4)	dB(A)	79,6	78,1	79,5	81,5	81,5	81,4	81,3
	Net weight	kg	12277	12376	13934	15142	15402	15422	16101
INO KIT 100%	Hydraulic connections								
	Evaporator IN/OUT - OD (5)	Ø mm	273	273	273	273	323,9	323,9	323,9
	Glycol free system (2)								
	Cooling capacity	kW	705	722	790	897	909	920	985
	Glycol free water pump power input	kW	15,0	15,0	15,0	15,0	15,0	15,0	15,0
	Partial heat recovery (6)								
	Heating capacity	kW	206,0	225,0	239,0	253,0	267,0	283,0	296,0
	Pumping group								
	Power input	kW	15,0	15,0	15,0	15,0	15,0	15,0	15,0
	Cooling capacity (1)	kW	1043	1146	1215	1285	1361	1438	1508
INO KIT 85%	Unit power input	kW	324,9	358,1	379,7	404,1	429,3	455,1	480,3
	Free-Cooling capacity (2)	kW	943	965	1056	1198	1214	1229	1316
	Total air flow	m³/h	318080	318080	357840	397600	397600	397600	437360
	EER (1)	kW/kW	3,21	3,2	3,2	3,18	3,17	3,16	3,14
	Sound power level [Lw] (3)	dB(A)	99,4	97,9	99,7	101,9	101,9	101,9	102,1
	Average sound pressure level [Lpm] (4)	dB(A)	77,6	76,1	77,5	79,5	79,5	79,4	79,3
	Cooling capacity (1)	kW	1025	1124	1193	1262	1334	1407	1477
	Unit power input	kW	330,6	367,3	386,1	409,7	435,9	465,9	489,1
	Free-Cooling capacity (2)	kW	939	961	1052	1194	1209	1224	1311
	Total air flow	m³/h	270368	270368	304164	337960	337960	337960	371756
INO KIT 70%	EER (1)	kW/kW	3,1	3,06	3,09	3,08	3,06	3,02	3,12
	Sound power level [Lw] (3)	dB(A)	98,4	96,9	98,7	100,9	100,9	100,9	101,1
	Average sound pressure level [Lpm] (4)	dB(A)	76,6	75,1	76,5	78,5	78,5	78,4	78,3
	Cooling capacity (1)	kW	997	1091	1159	1227	1294	1362	1432
	Unit power input	kW	329,0	382,8	399,7	421,6	450,9	483,0	506,0
	Free-Cooling capacity (2)	kW	933	956	1046	1187	1202	1217	1303
	Total air flow	m³/h	222656	222656	250488	278320	278320	278320	306152
	EER (1)	kW/kW	3,03	2,85	2,9	2,91	2,87	2,82	2,83
	Sound power level [Lw] (3)	dB(A)	95,4	93,9	95,7	97,9	97,9	97,9	98,1
	Average sound pressure level [Lpm] (4)	dB(A)	73,6	72,1	73,5	75,5	75,5	75,4	75,3
ELN KIT	Cooling capacity (1)	kW	997	1091	1159	1227	1294	1362	1432
	Unit power input	kW	329,0	382,8	399,7	421,6	450,9	483,0	506,0
	Free-Cooling capacity (2)	kW	933	956	1046	1187	1202	1217	1303
	Total air flow	m³/h	222656	222656	250488	278320	278320	278320	306152
	EER (1)	kW/kW	3,03	2,85	2,9	2,91	2,87	2,82	2,93
	Sound power level [Lw] (3)	dB(A)	92,4	90,9	92,7	94,9	94,9	94,9	95,1
	Average sound pressure level [Lpm] (4)	dB(A)	70,6	69,1	70,5	72,5	72,5	72,4	72,3

1. Referred to chiller water temperature 15/10°C; 20% Ethylene glycol solution; ambient temperature 35°C.
2. Referred to chiller water inlet temperature 15°C; 20% Ethylene glycol solution; ambient temperature 3°C.
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. The flexible joint is an optional accessory.
6. Referred to chiller water temperature 12/7°C; 35°C ambient temperature and hot water temperature 40/45°C.

## DIMENSIONS (mm)

## SIZE F

	a	b	c
F06	3520	2260	2550
F08	4490	2260	2550
F10	5460	2260	2550
F12	6430	2260	2550
F14	7400	2260	2550
F16	8720	2260	2550
F18	9690	2260	2550
F20	10660	2260	2550
F22	11630	2260	2550
F24	12600	2260	2550

