

# GENERAL

## GENERAL CATALOGUE

AIR CONDITIONERS

ROOF TOP

FAN COILS

LIQUID CHILLERS

MULTIFUNCTION CHILLERS

CONDENSERLESS CHILLERS

AIR COOLED CONDENSERS

DRY COOLERS

ABSORPTION CHILLERS

THERMAL STORAGE SYSTEMS



air cooled liquid chillers with free-cooling system

# MAXIMO



- |                              |                                  |
|------------------------------|----------------------------------|
| <i>cooling capacity</i>      | • 20,7 ÷ 1675,6 kW               |
| <i>free-cooling capacity</i> | • 16,6 ÷ 1241,9 kW               |
| <i>compressors</i>           | • scroll / reciprocating / screw |
| <i>fan type</i>              | • axial / centrifugal            |
| <i>refrigerant</i>           | • R407C / R134a                  |
| <i>microprocessor</i>        | • MP.99                          |
| <i>models</i>                | • 141                            |



# MAXIMO

air cooled liquid chillers with free-cooling system

## MULTIPLICITY OF VERSIONS AND COMPONENTS

The wide range of cooling capacity, from 20 to 1675 kW and the available versions, make possible the use and the combination of diverse components on the refrigeration and hydraulic circuits in the **MAXIMO** Free-Cooling chillers range.

Indeed, they can be equipped with scroll, reciprocating and screw type compressors; plate and shell and tube type evaporators; axial and centrifugal type fans.

### VERSIONS:

#### MAXIMO.A

Cooling capacity 21,2 ÷ 267,3 kW (R407C)

Free-cooling capacity 18 ÷ 209 kW

Free-cooling liquid chiller equipped with scroll / reciprocating compressors and axial fans.

#### MAXIMO.A.ELN

Cooling capacity 22,1 ÷ 273,4 kW (R407C)

Free-cooling capacity 22 ÷ 208,6 kW

Extremely low noise free-cooling liquid chiller equipped with scroll / reciprocating compressors and axial fans.

#### MAXIMO.C

Cooling capacity 20,7 ÷ 265,8 kW (R407C)

Free-cooling capacity 16,6 ÷ 175,9 kW

Free-cooling liquid chiller equipped with scroll / reciprocating compressors and centrifugal fans.

#### MAXIMO.C.ELN

Cooling capacity 21,6 ÷ 187,4 kW (R407C)

Free-cooling capacity 20,1 ÷ 144 kW

Extremely low noise free-cooling liquid chiller equipped with scroll / reciprocating compressors and centrifugal fans.

#### MAXIMO.A.HD

Cooling capacity 476,6 ÷ 1489,2 kW (407C)

Free-cooling capacity 355,9 ÷ 1235,2 kW

Free-cooling liquid chiller equipped with reciprocating compressors and axial fans.



MAXIMO.A "U"

#### MAXIMO.A.HD.ELN

Cooling capacity 491,3 ÷ 569,2 kW (R407C)

Free-cooling capacity 409,9 ÷ 420 kW

Extremely low noise free-cooling liquid chiller equipped with reciprocating compressors and axial fans.

#### MAXIMO.SCREW.A

Cooling capacity 227,4 ÷ 1675,6 kW (R407C)

Free-cooling capacity 189,7 ÷ 1241,9 kW

Free-cooling liquid chiller equipped with screw compressors and axial fans.

#### MAXIMO.SCREW.A.ELN

Cooling capacity 234,8 ÷ 722 kW (R407C)

Free-cooling capacity 200,7 ÷ 562,9 kW

Extremely low noise free-cooling liquid chiller equipped with screw compressors and axial fans.

#### MAXIMO.SCREW.A.FLX

Cooling capacity 444,5 ÷ 1162,6 kW (R134a)

Free-cooling capacity 310,8 ÷ 771,8 kW

Free-cooling liquid chiller equipped with screw compressors and axial fans.

#### MAXIMO.SCREW.A.XTR

Cooling capacity 468,8 ÷ 1102,7 kW (R134a)

Free-cooling capacity 358,5 ÷ 660,4 kW

Extremely low noise free-cooling liquid chiller equipped with screw compressors and axial fans.

*MAXIMO.A "G"**MAXIMO.C "G"*

The **MAXIMO** series is a type of liquid chillers equipped with a built-in additional coil making Free Cooling using the outdoor air as cooling media.

The free-cooling system installed on these chillers has been designed and applied by RC GROUP for the first time in the early 70's and the today's series is the result of more than 30 years experience. These chillers allow to achieve remarkable energy savings when installed in cold and temperate climate zones.

The components completeness together with the wide range of available optional accessories allow very quick and easy installation operations; the units simply need electrical and hydraulic connections.

## MAIN COMPONENTS

- Housing in anodised aluminium profile frame. Panels in galvanized steel sheet externally coated with PVC film
- Scroll / reciprocating / screw compressors
- Axial / centrifugal fans
- Welded plate / shell and tube evaporator
- Pump-Down stop system
- Proportional free-cooling system
- Technical compartment separate from the air flow (Size W excluded)
- MP.99 microprocessor control system
- Electrical box in separate compartment
- Main switch with door lock safety

## MAIN OPTIONAL ACCESSORIES

- Pumping group
- Water tank
- LNO kit for noise reduction
- Heat reclaim
- Water flow safety switch
- Optimizer system
- Glycol-free system
- Serial port

*MAXIMO.A "W"*

## TECHNICAL DATA AND NOMINAL PERFORMANCES

### **MAXIMO.A.ELN** axial fans - extra low noise

MODEL		21	25	32	37	50	61	36	42	50
		Z1	Z1	Z1	Z1	Z1	Z1	Z2	Z2	Z2
Size		G2	G2	G4	G4	G5	G5	G4	G4	G5
Cooling capacity (1)	kW	22,1	24,6	32,4	38,6	53,2	62,6	36,3	43,3	50,8
Free-cooling capacity (2)	kW	22	22,5	28,7	35,3	50,5	51,9	34,9	39,5	50,1
Compressors	n.	1	1	1	1	1	1	2	2	2
Power input (1)	kW	7,3	8,7	11,7	13,2	17,4	22,4	12,3	15,1	16,6
Gas circuits	n.	1	1	1	1	1	1	2	2	2
Weight	kg	545	545	750	800	1090	1095	890	910	1080
Sound pressure (3)	dB(A)	51	51	55	52	55	55	52	55	55

MODEL		64	74	87	100	124	170	220	260	300
		Z2	Z2	Z2	Z2	Z2	Z2	F2	F2	F2
Size		G7	G7	G7	G7	G8	G8	G8	G9	G9
Cooling capacity (1)	kW	64,9	76,1	90,2	99,9	128	164,1	185,8	234,4	273,4
Free-cooling capacity (2)	kW	60,2	74,9	84,1	85,6	116,6	138,3	159,2	186,3	208,6
Compressors	n.	2	2	2	2	2	2	2	2	2
Power input (1)	kW	23,1	25,7	31	37	44,7	52,7	64,6	76,5	92,3
Gas circuits	n.	2	2	2	2	2	2	2	2	2
Weight	kg	1430	1550	1650	1710	2070	2170	2465	4378	4554
Sound pressure (3)	dB(A)	51	55	51	51	53	53	56	58	61

(1) Referred to chilled water temperature 12/7°C / 20% glycol and air to the condenser at 35°C

(2) Referred to water inlet temperature at 15°C / 20% glycol and outdoor temperature at 3°C

(3) Sound pressure 1m far in free field conditions according to ISO3744 norms

POWER SUPPLY: 400.3.50+N

### **MAXIMO.A.HD.ELN** axial fans - extra low noise

MODEL		550	600	660
		S2	S2	S2
Size		U12	U12	U12
Cooling capacity (1)	kW	491,3	536,3	569,2
Free-cooling capacity (2)	kW	409,9	416,1	420
Compressors	n.	2	2	2
Power input (1)	kW	153,8	172,1	188,7
Gas circuits	n.	2	2	2
Weight	kg	7480	7660	7660
Sound pressure (3)	dB(A)	62	62	62

(1) Referred to chilled water temperature 12/7°C / 20% glycol and air to the condenser at 35°C

(2) Referred to water inlet temperature at 15°C / 20% glycol and outdoor temperature at 3°C

(3) Sound pressure 1m far in free field conditions according to ISO3744 norms

POWER SUPPLY: 400.3.50