

# Galaxy Chillers

## GALAXY TWIN



\* The photos in this brochure are for illustrative purposes only. The appearance of the final product may vary depending on your selections, additional options and other order details.

# R290 Chillers

Natural refrigerants available!  
#R290

Choose propane or propylene and  
contribute to the environment!

## GALAXY TWIN

### DESCRIPTION

Galaxy Twin air-cooled chiller has the cooling capacity of 77 kW to 232 kW and is designed for industrial or commercial buildings with small to medium power demand. Such systems are widely used in various factories, supermarkets and warehouses. **Galaxy Twin chiller is made with two circuits to ensure continuous system operation in case of emergency – if one circuit is damaged, the other can still use the remaining unit capacity to service the end user.**

Special modular assembly system provides the ability to integrate Galaxy Twin with useful additional options, such as a built-in hydraulic module and heat recovery system. With extensive power selection options and many possible extra features, Galaxy chillers stand out as one of the most versatile products that Refra can offer.

Refra manufactures modern devices using plug-and-play ideology, making the installation and use of the devices as easy as possible. In this case, the customer can start using the device quickly and easily after installment.

Comprehensive modular frame construction is assembled with high-quality EC fan motor technology, microchannel heat exchangers, reciprocating compressors. The galvanized steel and powder coated frame with a reliable 20 mm non-flammable acoustical PU foam insulation material ensures proper unit protection as well as noise reduction. An additional 30 mm rock wool material can be supplemented for a super silent unit operation.

### PARTS INCLUDED:

- Bitzer reciprocating compressors (Ex II-3G) with oil charge and oil level monitoring/differential pressure switch;
- Polymer powder painted RAL7035 frame;
- HP/LP pressure switch per circuit;
- HP/LP pressure gauges per circuit;
- Necessary pressure and temperature probes;
- Air cooled microchannel condenser;
- Double safety valves per circuit;
- Filter drier on liquid line per circuit;
- Sight glass on liquid line per circuit;
- Magnetic expansion valve per circuit;
- Control board with Siemens Climatix controller;
- Vibration absorbers;
- BPHE evaporator;
- R290 leak detector;
- Emergency EX fan;
- EC Fans.



# Technical Parameters | Galaxy Twin

CALCULATIONS ARE MADE FOR BASIC UNITS WITHOUT ADDITIONAL OPTIONS

Model		GAL210	GAL212	GAL215	GAL217
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## Standard version

Refrigeration capacity <sup>1</sup>	kW	81,20	94,80	123,20	144,20
Power consumption	kW	25,80	28,80	36,60	41,70
EER		3,1	3,3	3,4	3,5
SEPR		7,16	7,22	6,85	6,80
SEER		5,47	5,27	5,20	5,18

## System data

Refrigerant	Type	R290			
Number of compressors	n	2	2	2	2
Refrigerant quantity <sup>2</sup>	kg	3,5	3,7	3,7	4,6
Inlet/Outlet connections	DN	65	65	80	80
Sound pressure level in 10m <sup>3</sup>	dB	53	54	54	56

## Fan

Type	EC				
Number of fans	n	4	4	4	4
Air flow	m <sup>3</sup> /h	83196	83196	83196	83196

## Plate heat exchanger

Number of plate heat exchangers	n	1	1	1	1
Flow rate cooling <sup>1</sup>	m <sup>3</sup> /h	15,6	18,2	23,6	27,6
Pressure drop cooling	kPa	18,5	16,9	26,5	22,3

## Power supply

Voltage	400V 3Ph/N/PE				
Max. power consumption	A	66,0	73,0	95,8	110,4

## Dimensions and weight

Length	mm	2877	2877	2877	2877
Width	mm	2321	2321	2321	2321
Height	mm	2355	2355	2355	2355
Operating weight	kg	1860	1860	1860	1930

## Dimensions and weight with additional buffer tank

Length	mm	4082	4082	4082	4082
Width	mm	2321	2321	2321	2321
Height	mm	2355	2355	2355	2355
Net weight	kg	+290 kg (500 L) or +430 kg (800 L)			

<sup>1</sup> Outside air temperature 35°C, medium temperature 12/7°C, medium EG 35%.

<sup>2</sup> Theoretical values refer to the basic unit. The actual amount of gas charge in the unit may differ.

<sup>3</sup> Sound pressure level at a distance of 10m in the free field and at the extended point, tolerance +/-2dB(A).

# Technical Parameters | Galaxy Twin

CALCULATIONS ARE MADE FOR BASIC UNITS WITHOUT ADDITIONAL OPTIONS

Model		GAL219	GAL222	GAL224	GAL227
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## Standard version

Refrigeration capacity <sup>1</sup>	kW	165,80	182,60	206,60	241,60
Power consumption	kW	49,70	54,90	63,10	75,30
EER		3,3	3,3	3,3	3,2
SEPR		6,42	6,83	6,51	6,36
SEER		4,81	5,25	5,02	4,80

## System data

Refrigerant	Type	R290			
Number of compressors	n	2	2	2	2
Refrigerant quantity <sup>2</sup>	kg	4,6	7,4	7,4	8,4
Inlet/Outlet connections	DN	80	100	100	100
Sound pressure level in 10m <sup>3</sup>	dB	56	57	58	58

## Fan

Type	EC				
Number of fans	n	4	6	6	6
Air flow	m <sup>3</sup> /h	83196	124794	124794	124794

## Plate heat exchanger

Number of plate heat exchangers	n	1	1	1	1
Flow rate cooling <sup>1</sup>	m <sup>3</sup> /h	31,7	35,0	39,5	46,1
Pressure drop cooling	kPa	28,5	21,6	27,0	23,0

## Power supply

Voltage	400V 3Ph/N/PE				
Max. power consumption	A	130,4	144,6	168,0	208,6

## Dimensions and weight

Length	mm	2877	4082	4082	4082
Width	mm	2321	2321	2321	2321
Height	mm	2355	2355	2355	2355
Operating weight	kg	1930	2420	2420	2490

## Dimensions and weight with additional buffer tank

Length	mm	4082	5286	5286	5286
Width	mm	2321	2321	2321	2321
Height	mm	2355	2355	2355	2355
Net weight	kg	+290 kg (500 L) or +430 kg (800 L)			

<sup>1</sup> Outside air temperature 35°C, medium temperature 12/7°C, medium EG 35%.

<sup>2</sup> Theoretical values refer to the basic unit. The actual amount of gas charge in the unit may differ.

<sup>3</sup> Sound pressure level at a distance of 10m in the free field and at the extended point, tolerance +/-2dB(A).