

Vacuum and charging unit

iRockall CO₂

Vacuum and Charging of High pressure Refrigerant Unit

iRockall CO₂ is the most recent FT srl solution for a vacuum and high pressurized refrigerant charging Station.

iRockall CO₂ is dedicated to the most recent production lines for commercial and domestic refrigerators/freezers, conditioners, heating pumps, liquid cooler where the production requires the use of vapour Carbon Dioxide.

Characteristics

- Compact and lightweight design
- Charging capacity: up to 10 kg
- Charging speed: up to 10 g/s with CO₂ in vapour state
- Charging accuracy: ±1% of set dose

- Refrigerant Metering system by massic (Coriolis) flowmeter
- Built-in vacuum pump (17,0 m³/h @ 50Hz, customizable on request)
- Interactive Colour Touchscreen
- Data Collection Application via TCP/IP protocol
- Up to 1000 programmable work cycles
- Microprocessor controlled
- Built according to the European Machinery Directive, Safety standards for Potential Dangerous Areas



* For this kind of products FT can deliver an ATEX Execution of the machine to be integrated with the related monitoring system and gas detection sensors. The most commonly used fluids to create refrigerant mixtures are Ethane and Ethylene.

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Touch screen machine Controller



Injectors



Vacuum and Charging High pressure Refrigerant Unit *iRockall CO₂*

- Domestic refrigerators and deep freezers
- Professional Refrigeration
- Refrigerated show cases and cooling cabinet
- Domestic air conditioners
- Heat pumps
- IT coolers
- compressed air driers
- Condensing units
- Deep Cooling for Medical application*

iRockall CO₂ Technical Characteristics

Injectors/Type	1/PLUVIO V3
Injector length	3,5 m, Different length is available on request
Refrigerant metering systems	1
Charging capacity	Up to 10 kg
Charging speed	Up to 10g/s (CO ₂ Charging in vapour phase)
Charging accuracy	< 300 g: ±1 g
Injector connection	¼" Hansen F (ISO 7241B)
Refrigerant supply connection	¼" Hansen M (ISO 7241B)
Programmable work cycles	Up to 1000
Nominal Vacuum pump rate	17 m ³ /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Refrigerant delivery	Pressurized in vapour state
Power Supply	400 V @ 50 Hz – 3ph + GND
Power Consumption	0,7 kW with 17,0 m ³ /h vacuum pump
Dimensions (L x W x H)	850 x 600 x 1400mm
Weight	~140 kg

Optional features and devices

Light and Acoustic Alarm
20,3 m ³ /h Vacuum Pump with Oil Mist filter TMF36
PLUVIO Injector length on request
Automatic working cycle selection performed by bar code reader
Vacuum only head Injector 1/4" Hansen
Injector with 1/4" SAE Auto connector
Available the ATEX Execution for gas treatment as Ethylene and Ethane

* FT software department develops customized software on request