

Vacuum and charging unit

iRockall HC

Charge

Vacuum

Vacuum and Flammable Refrigerant Charging Unit

iRockall HC is an evacuation and charging station for A2L, A2 A3 Class refrigerants and not flammable classes. It is easy to handle and has high charging accuracy. It is intended for medium and high throughput production lines of domestic and commercial refrigerators / freezers and other fields of application. It is designed and tested for making use of isobutane (R600a) and propane (R290). Assembly lines making use of most recent refrigerants such as R1234yf and R1234ze are also suggested for the iRockall HC.

Characteristics

- Microprocessor or smart OS (optional) controlled
- Charging speed: up to 25 g/s for HC/HFO refrigerants and up
- Charging capacity: according to local limitations
- High charging accuracy
- Built-in vacuum pump (20,5 m³/h)
- Available with integrated Refrigerant transfer Pump
- Interactive Colour Touchscreen

- Data Collection Application over TCP/IP protocol
- Up to 1000 programmable work cycles Microprocessor controlled
- Microprocessor controlled
- Built in according to the European Machinery Directive, Safety
- standards for Potential Dangerous Areas

The equipment is designed and assembled for the area of assembly of refrigeration units which are going to be charged with flammable gases according to the indications of the ATEX Directive 99/92/ EC. As the working areas are classified as hazardous, these equipment must be installed within a ventilated enclosure able to withhold any refrigerant leaks. The electric and hydraulic components of the vacuum and charging station have been chosen by FT to comply with ATEX for the classification of areas at high risk of explosion and thus make the whole system suitable for working with flammable liquids.

iRockall HC - Due



Touch screen machine Controller



Injectors



Main using applications

- Domestic refrigerators and deep freezers
- Professional Refrigeration
- Refrigerated show cases and cooling cabinets
- Deep Cooling for Medical Products
- Automatic food and beverage dispenser machines
- Ice-cream machines
- Dehumidifiers
- Domestic air conditioners



iRockall HC Technical Characteristics	
Injectors/Type	PLUVIO V3
Injector length	3,5 m
Refrigerant metering systems	1
Charging capacity	Max 10 kg for HC
Charging speed	up to 25 g/s (HC refrigerants) up to 40 g/s (HFC refrigerants)
Charging accuracy	±0,5 g (<100 g HC), ±0,5 % (>100 g HC) ±1,0 g (<200 g HFC), ±1%(>200 g HFC)
Injector connection	¼" Hansen F (ISO 7241B)
Refrigerant supply connection	¼" Hansen M (ISO 7241B)
Refrigerants	HFC/HC/HFO/A2L
compressed air supply	6÷7 bar not lubricated
On-board alarms	3 light alarms (green/white/red) on column
Programmable work cycles	Up to 1000
Nominal Vacuum pump rate	20,5 m ³ /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Requested Refrigerant supply	Pressurized, in liquid state
Power Consumption	0,6 kW, with 20,5 m ³ /h vacuum pump
Power Supply	400 V @ 50 Hz – 3ph + GND
Dimensions (L x W x H)	850 x 600 x 1430 mm
Weight	~170 kg

Optional features and devices	
HS version with extra charging speed up to 90 g/s	
Up to four different refrigerant dosing system (HC1/HC2/HC3/HC4)	
Additional light and Acoustic Alarm	
PLUVIO HF injector for High production lines	
Refrigerant dosing system with Massic Coriolis flowmeter	
30,2 m ³ /h Vacuum pump	
Automatic working cycle selection performed by barcode reader	
Remote Printer	

* FT software department develops customized software on request

Company Profile

Vacuum and Charging units

HC Refrigerants handling systems

Special Units

Vacuum and Charging Injectors

Refrigerant transfer pump

Pressure test units leak detectors

Preliminary evacuation

Electrical and functional test

Ultrasonic tube sealers

IPCS & IPCS PLUS

Vacuum and charging unit

iRockall HC-B

Charge

Vacuum

Vacuum and Flammable Refrigerant Charging Unit

iRockall HC-B is an evacuation and charging station for A2L, A2 A3 Class refrigerants and not flammable classes. It is easy to handle and has high charging accuracy. It is intended for medium throughput production lines of domestic and commercial refrigerators / freezers and other fields of application. It is designed and tested for making use of isobutane (R600a) and propane (R290). Assembly lines making use of most recent refrigerants such as R1234yf and R1234ze are also suggested for the iRockall HC-B.

Characteristics

- Microprocessor or smart OS (optional) controlled
- Charging speed: up to 15 g/s for HC/HFO refrigerants and up
- Charging capacity: according to local limitations
- High charging accuracy
- Built-in vacuum pump (20,5 m³/h)
- Integrated Refrigerant transfer Pump
- Interactive Colour Touchscreen

- Data Collection Application over TCP/IP protocol
- Up to 1000 programmable work cycles Microprocessor controlled
- Microprocessor controlled
- Built in according to the European Machinery Directive, Safety
- standards for Potential Dangerous Areas

The equipment is designed and assembled for the area of assembly of refrigeration units which are going to be charged with flammable gases according to the indications of the ATEX Directive 99/92/ EC. As the working areas are classified as hazardous, these equipment must be installed within a ventilated enclosure able to withhold any refrigerant leaks. The electric and hydraulic components of the vacuum and charging station have been chosen by FT to comply with ATEX for the classification of areas at high risk of explosion and thus make the whole system suitable for working with flammable liquids.

iRockall HC2 -B



Touch screen machine Controller



Injectors



Main using applications

- Domestic refrigerators and deep freezers
- Professional Refrigeration
- Deep Cooling for Medical Products
- Automatic food and beverage dispenser machines
- Ice-cream machines
- Dehumidifiers
- Domestic air conditioners



iRockall HC-B Technical Characteristics	
Injectors/Type	PLUVIO V3
Injector length	3,5 m
Refrigerant metering systems	1
Charging capacity	Max 10 kg for HC
Charging speed	up to 10 g/s (HC refrigerants) up to 15 g/s (HFC refrigerants)
Charging accuracy	±0,5 g (HC) ±1,0 g (HFC)
Injector connection	¼" Hansen F (ISO 7241B)
Refrigerant supply connection	¼" Hansen M (ISO 7241B)
Refrigerants	HFC/HC/HFO/A2L
compressed air supply	6÷7 bar not lubricated
On-board alarms	3 light alarms (green/white/red) on column
Programmable work cycles	Up to 1000
Nominal Vacuum pump rate	20,5 m ³ /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Requested Refrigerant supply	Tank or pressurized, in liquid state
Power Consumption	0,6 kW, with 20,5 m ³ /h vacuum pump
Power Supply	400 V @ 50 Hz – 3ph + GND
Dimensions (L x W x H)	850 x 600 x 1430 mm
Weight	~170 kg

Optional features and devices	
Up to four different refrigerant dosing system (HC1-B/HC2-B/HC3-B/HC4-B)	
Additional light and Acoustic Alarm	
PLUVIO HF injector for High production lines	
30,2 m ³ /h Vacuum pump	
Automatic working cycle selection performed by barcode reader	
Remote Printer	

* FT software department develops customized software on request

Company Profile

Vacuum and Charging units

HC Refrigerants handling systems

Special Units

Vacuum and Charging Injectors

Refrigerant transfer pump

Pressure test units leak detectors

Preliminary evacuation

Electrical and functional test

Ultrasonic tube sealers

IPCS & IPCS PLUS

Vacuum and charging unit

iRockall HC-M

Charge

Vacuum

Vacuum and Flammable Refrigerant Charging Unit

iRockall HC-M is an evacuation and charging station for A2L, A2 A3 Class refrigerants and not flammable classes. It is easy to handle and has high charging accuracy. It is intended for medium throughput production lines of domestic and commercial refrigerators / freezers and other fields of application. It is designed and tested for making use of isobutane (R600a) and propane (R290). Assembly lines making use of most recent refrigerants such as R1234yf and R1234ze are also suggested for the iRockall HC-M.

Characteristics

- Microprocessor or smart OS (optional) controlled
- Charging speed: up to 15 g/s for HC/HFO refrigerants and up
- Charging capacity: according to local limitations
- High charging accuracy
- Built-in vacuum pump (20,5 m³/h)
- Integrated Refrigerant transfer Pump
- Interactive Colour Touchscreen

- Data Collection Application over TCP/IP protocol
- Up to 1000 programmable work cycles Microprocessor controlled
- Microprocessor controlled
- Built in according to the European Machinery Directive, Safety
- standards for Potential Dangerous Areas

The equipment is designed and assembled for the area of assembly of refrigeration units which are going to be charged with flammable gases according to the indications of the ATEX Directive 99/92/ EC. As the working areas are classified as hazardous, these equipment must be installed within a ventilated enclosure able to withhold any refrigerant leaks. The electric and hydraulic components of the vacuum and charging station have been chosen by FT to comply with ATEX for the classification of areas at high risk of explosion and thus make the whole system suitable for working with flammable liquids.

iRockall HC2 - M



Touch screen machine Controller



Injectors



Main using applications

- Domestic refrigerators and deep freezers
- Professional Refrigeration
- Deep Cooling for Medical Products
- Automatic food and beverage dispenser machines
- Ice-cream machines
- Dehumidifiers
- Domestic air conditioners



iRockall HC-M Technical Characteristics	
Injectors/Type	PLUVIO V3
Injector length	3,5 m
Refrigerant metering systems	1
Charging capacity	Up to 100 kg for HC
Charging speed	up to 10 g/s (HC refrigerants) up to 15 g/s (HFC refrigerants)
Charging accuracy	±0,5 g (HC) ±1,0 g (HFC)
Injector connection	¼" Hansen F (ISO 7241B)
Refrigerant supply connection	¼" Hansen M (ISO 7241B)
Refrigerants	HFC/HC/HFO/A2L
compressed air supply	6÷7 bar not lubricated
On-board alarms	3 light alarms (green/white/red) on column
Programmable work cycles	Up to 1000
Nominal Vacuum pump rate	20,5 m ³ /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Requested Refrigerant supply	Tank or pressurized, in liquid state
Power Consumption	0,6 kW, with 20,5 m ³ /h vacuum pump
Power Supply	400 V @ 50 Hz – 3ph + GND
Dimensions (L x W x H)	850 x 600 x 1430 mm
Weight	~170 kg

Optional features and devices	
Up to four different refrigerant dosing system (HC1-M/HC2-M/HC3-M/HC4-M)	
Additional light and Acoustic Alarm	
PLUVIO HF injector for High production lines	
30,2 m ³ /h Vacuum pump	
Automatic working cycle selection performed by barcode reader	
Remote Printer	

* FT software department develops customized software on request

Company Profile
Vacuum and Charging units
HC Refrigerants handling systems
Special Units
Vacuum and Charging Injectors
Refrigerant transfer pump
Pressure test units leak detectors
Preliminary evacuation
Electrical and functional test
Ultrasonic tube sealers
IPCS & IPCS PLUS

真空和冷媒充注装置

iRockall HC

充注

真空

iRockall HC 是 A2L、A2 A3 类制冷剂和非易燃类制冷剂的真空和充注站。它操作方便，充注精度高。它适用于家用和商用冰箱/冰柜以及其他应用领域的高产量生产线。它经过了使用异丁烷 (R600a) 和丙烷 (R290) 的设计和测试。*iRockall HC* 还建议使用 R1234yf 和 R1234ze 等最新制冷剂的组装线。

特性

- 微处理器或智能操作系统 (可选) 控制
- 充注速度：对于 HC/HFO 制冷剂及以上，充注速度高达 25 g/s
- 充注容量：根据当地限制
- 高充注精度
- 内置真空泵 (20.5 m³/h)
- 提供集成式制冷剂输送泵
- 交互式彩色触摸屏
- 基于 TCP/IP 协议的数据收集应用程序
- 高达 1000 个由微处理器控制的可设置工作循环
- 受控微处理器

- 构造符合欧洲机械指令，
- 潜在危险区域的安全标准

该设备经过设计和组装，用于根据 ATEX 99/92/ EC 指令的指示充注易燃气体的制冷装置组装区域。由于工作区域被归类为危险区域，因此这些设备必须安装在能够阻止任何制冷剂泄漏的通风外壳内。FT 选择的真空和充注站的电气和液压组件符合 ATEX 对高爆炸风险区域的分类，从而使整个系统适合处理易燃液体。

iRockall HC -



触摸屏机控制器



注射器



主要使用应用

- 家用冰箱和深冷柜
- 专业制冷
- 冷藏展示柜和冷藏柜
- 医疗产品深度冷却
- 自动食品和饮料销售机
- 冰淇淋机
- 除湿机
- 家用空调



iRockall Hc技术特性	
注射器/类型	PLUVIO V3
注射器长度	3.5米
制冷剂计量系统	1
充注容量	HC最大10 kg
充注速度	高达25 g/s (HC制冷剂) 高达40 g/s (HFC制冷剂)
充注精度	$\pm 0.5 \text{ g}$ (<100 g HC), $\pm 0.5 \%$ (>100 g HC) $\pm 1.0 \text{ g}$ (<200 g HFC), $\pm 1\%$ (>200 g HFC)
注射器连接	1/4" Hansen F (ISO 7241B)
制冷剂供应连接	1/4" Hansen M (ISO 7241B)
制冷剂	HFC/HC/HFO/A2L
压缩空气供应	6 - 7 bar未润滑
机载报警	柱子上有3个灯光报警 (绿色/白色/红色)
可设置工作循环数	高达1000个
额定真空泵速率	20.5 m ³ /h
控制装置	TS690
工作温度	5 °C.. 45 °C
所需制冷剂供应	加压液态
功率消耗	0.6 kW, 流速20,5 m ³ /h 真空泵
电源	50 Hz时400 V - 3ph + GND
尺寸 (长x宽x高)	850 x 600 x 1430 mm
重量	~170 kg

可选功能和设备	
HS版本, 额外充注速度高达90 g/s	
多达四种不同的制冷剂加药系统 (HC1/HC2/HC3/HC4)	
附加的灯光和声音报警	
适用于高生产线的PLUVIO HF注射器	
带Massic Coriolis流量计的制冷剂加药系统	
30.2 m ³ /h 真空泵	
由条形码读取器执行的自动工作循环选择	
远程打印机	

* FT软件部门根据要求开发定制软件

公司简介
真空和冷媒充注装置
HC制冷剂处理系统
特殊装置
真空和充注注射器
制冷剂输送泵
压力测试单元检漏仪
初步排空
电气和功能测试
超声波密封口机
IPCS和IPCS PLUS

真空和冷媒充注装置

iRockall HC-B

充注

真空

真空可燃制冷剂充注装置

iRockall HC-B是 A2L、A2 A3 类制冷剂和不可燃类制冷剂的真空和充注站。它操作方便，充注精度高。它适用于家用和商用冰箱/冰柜以及其他应用领域的中产量生产线。它经过了使用异丁烷 (R600a) 和丙烷 (R290) 的设计和测试。iRockall HC-B还建议使用R1234yf和R1234ze等最新制冷剂的组装线。

特性

- 微处理器或智能操作系统 (可选) 控制
- 充注速度：对于HC/HFO制冷剂及以上，充注速度高达15 g/s
- 充注容量：根据当地限制
- 高充注精度
- 内置真空泵 (20.5 m³/h)
- 集成制冷剂输送泵
- 交互式彩色触摸屏
- 基于TCP/IP协议的数据收集应用程序
- 高达1000个由微处理器控制的可设置工作循环
- 受控微处理器

- 构造符合欧洲机械指令，
- 潜在危险区域的安全标准

该设备经过设计和组装，用于根据ATEX 99/92/ EC指令的指示充注易燃气体的制冷装置组装区域。由于工作区域被归类为危险区域，因此这些设备必须安装在能够阻止任何制冷剂泄漏的通风外壳内。FT选择的真空和充注站的电气和液压组件符合ATEX对高爆炸风险区域的分类，从而使整个系统适合处理易燃液体。

iRockall HC2 -B



触摸屏机控制器



注射器



主要使用应用

- 家用冰箱和深冷柜
- 专业制冷
- 医疗产品深度冷却
- 自动食品和饮料销售机
- 冰淇淋机
- 除湿机
- 家用空调



iRockall HC-B技术特性	
注射器/类型	PLUVIO V3
注射器长度	3.5米
制冷剂计量系统	1
充注容量	HC最大10 kg
充注速度	高达10 g/s (HC制冷剂) 高达15 g/s (HFC制冷剂)
充注精度	±0.5 g (HC) ±1.0 g (HFC)
注射器连接	¼” Hansen F (ISO 7241B)
制冷剂供应连接	¼” Hansen M (ISO 7241B)
制冷剂	HFC/HC/HFO/A2L
压缩空气供应	6 - 7 bar未润滑
机载报警	柱子上有3个灯光报警 (绿色/白色/红色)
可设置工作循环数	高达1000个
额定真空泵速率	20.5 m³/h
控制装置	TS690
工作温度	5 °C..45 °C
所需制冷剂供应	储罐或加压, 液态
功率消耗	0.6 kW, 流速20,5 m³/h 真空泵
电源	50 Hz时400 V - 3ph + GND
尺寸 (长x宽x高)	850 x 600 x 1430 mm
重量	~170 kg

可选功能和设备	
多达四种不同的制冷剂加药系统 (HC1-B/HC2-B/HC3-B/HC4-B)	
附加的灯光和声音报警	
适用于高生产线的PLUVIO HF注射器	
30.2 m³/h 真空泵	
由条形码读取器执行的自动工作循环选择	
远程打印机	

* FT软件部门根据要求开发定制软件

公司简介
真空和冷媒充注装置
HC制冷剂处理系统
特殊装置
真空和充注注射器
制冷剂输送泵
压力测试单元校准仪
初步排空
电气和功能测试
超声波密封口机
IPCS和IPCS PLUS

真空和冷媒充注装置

iRockall HC-M

充注

真空

真空可燃制冷剂充注装置

iRockall HC-M是 A2L、A2 A3 类制冷剂和不可燃类制冷剂的真空和充注站。它操作方便，充注精度高。它适用于家用和商用冰箱/冰柜以及其他应用领域的中产量生产线。它经过了使用异丁烷 (R600a) 和丙烷 (R290) 的设计和测试。iRockall HC-M还建议使用R1234yf和R1234ze等最新制冷剂的组装线。

特性

- 微处理器或智能操作系统 (可选) 控制
- 充注速度：对于HC/HFO制冷剂及以上，充注速度高达15 g/s
- 充注容量：根据当地限制
- 高充注精度
- 内置真空泵 (20.5 m³/h)
- 集成制冷剂输送泵
- 交互式彩色触摸屏
- 基于TCP/IP协议的数据收集应用程序
- 高达1000个由微处理器控制的可设置工作循环
- 受控微处理器

- 构造符合欧洲机械指令，
- 潜在危险区域的安全标准

该设备经过设计和组装，用于根据ATEX 99/92/ EC指令的指示充注易燃气体的制冷装置组装区域。由于工作区域被归类为危险区域，因此这些设备必须安装在能够阻止任何制冷剂泄漏的通风外壳内。FT选择的真空和充注站的电气和液压组件符合ATEX对高爆炸风险区域的分类，从而使整个系统适合处理易燃液体。



触摸屏机控制器



注射器



主要使用应用

- 家用冰箱和深冷柜
- 专业制冷
- 医疗产品深度冷却
- 自动食品和饮料销售机
- 冰淇淋机
- 除湿机
- 家用空调



iRockall HC-M技术特性	
注射器/类型	PLUVIO V3
注射器长度	3.5米
制冷剂计量系统	1
充注容量	HC高达100 kg
充注速度	高达10 g/s (HC制冷剂) 高达15 g/s (HFC制冷剂)
充注精度	±0.5 g (HC) ±1.0 g (HFC)
注射器连接	¼” Hansen F (ISO 7241B)
制冷剂供应连接	¼” Hansen M (ISO 7241B)
制冷剂	HFC/HC/HFO/A2L
压缩空气供应	6 - 7 bar未润滑
机载报警	柱子上有3个灯光报警 (绿色/白色/红色)
可设置工作循环数	高达1000个
额定真空泵速率	20.5 m³/h
控制装置	TS690
工作温度	5 °C..45 °C
所需制冷剂供应	储罐或加压, 液态
功率消耗	0.6 kW, 流速20,5 m³/h 真空泵
电源	50 Hz时400 V - 3ph + GND
尺寸 (长x宽x高)	850 x 600 x 1430 mm
重量	~170 kg

可选功能和设备	
多达四种不同的制冷剂加药系统 (HC1-M/HC2-M/HC3-M/HC4-M)	
附加的灯光和声音报警	
适用于高生产线的PLUVIO HF注射器	
30.2 m³/h 真空泵	
由条形码读取器执行的自动工作循环选择	
远程打印机	

* FT软件部门根据要求开发定制软件

公司简介
真空和冷媒充注装置
HC制冷剂处理系统
特殊装置
真空和充注注射器
制冷剂输送泵
压力测试单元校准仪
初步排空
电气和功能测试
超声波密封口机
IPCS和IPCS PLUS