

# vacuum/pressurization/charge for A2L/A3 refrigerants

iFuji-HC

Charge

Vacuum

Pressurization

Step Pressurization

Charging Oil

Leak test<sup>+</sup>

Barcode<sup>+</sup>

All-In-One Evacuating Pressurization and Refrigerant Charging Unit

iFuji-HC is designed to fulfil the highest standards required in the processes of vacuum pressurizing and refrigerant charge.

iFuji-HC is equipped with an electronic control of the latest generation, high computing capacity and memory, and is managed by a smart operating system and offers easy interaction for the user.

iFuji-HC communicates with the User facility network and is an integral part of the production process. It has its own standard communications interfaces and software suitable to be connected to company networks to control and export the reports of the performed works directly to an external device. This also allows to integrate other digital devices ( such as a Leak detector ) directly to the machine thus speeding up and integrating Vacuum

formation, Leak detection and Charging process in a single cycle executed in complete safety.

Thanks to its smart connectivity, iFuji-HC is ready for tele-assistance from the mother company, FT srl, enabling significant cost and time savings in critical post-sale situations.

iFuji HC



Touch screen machine Controller



Injectors PLUVIO V3



## iFuji HC Characteristics

The smart electronic control of iFuji allows to integrate multiple processes in a single cycle program:

- Vacuum and relevant Test with vacuum decay
- Tracer Gas or Helium + Nitrogen automatic mixture pressurizing with Pressure Decay and Leak Detection point-to-point leak search ( data displayed on the unit controller )
- Refrigerant charging
- General report release IT coolers

<b>iFuji-HC</b>		Company Profile
Injectors/Type	PLUVIO V3 ¼" PLUVIO V1 ¼" ( only Pressurization and Vacuum)	Vacuum and Charging units
Injector length	3,5 m, Different length is available on request	
Refrigerant metering systems	1	HC Refrigerants handling systems
Charging capacity	310 g for HC* / 10 kg for HFC	
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), ±0,5 % (>200 g HFC)	Special Units
Mixture capacity	Helium and Nitrogen, with two independent pressurizing channels	
Injector connection	¼" Hansen F (ISO 7241B)	Vacuum and Charging Injectors
Refrigerant supply connection	¼" Hansen M (ISO 7241B)	
Programmable work cycles	Up to 1000	Refrigerant transfer pump
Nominal Vacuum pump rate	20,5 m <sup>3</sup> /h	
Control unit	TS690	Pressure test units leak detectors
Working temperature	5 °C .. 45 °C	
Compressed air supply	6 ÷ 7 bar not lubricated	Preliminary evacuation
Refrigerant delivery	Pressurized in liquid phase	
Power Supply	400 V @ 50 Hz – 3ph + GND	Electrical and functional test
Power Consumption	0,7 kW with 20,5 m <sup>3</sup> /h vacuum pump	
Dimensions (L x W x H)	850 x 600 x 1400mm	Ultrasonic tube sealers
Weight	~160 kg	IPCS & IPCS PLUS

\* The maximum quantity is settled according to the local limitations

Optional features and devices	
Light and Acoustic Alarm	
30,3 m <sup>3</sup> /h Vacuum Pump with Oil Mist filter	
PLUVIO Injector length on request	
Automatic working cycle selection performed by bar code reader	
Only vacuum head Injector 1/4" Hansen female or 1/4" Schrader female	
Inficon Family Leak detector function integrated	
Available Glycol/Oil dosing system	

\* FT software department develops customized software on request

# vacuum/pressurization/charge for A1 refrigerant

iFuji HC-B	
Injectors/Type	PLUVIO V3 ¼" PLUVIO V1 ¼" ( only Pressurization and Vacuum)
Injector length	3,5 m, Different length is available on request
Refrigerant metering systems	1
Charging capacity	310 g for HC* / 10 kg for HFC
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), ±0,5 % (>200 g HFC)
Mixture capacity	Helium and Nitrogen, with two independent pressurizing channels
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	20,5 m <sup>3</sup> /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Compressed air supply	6 ÷ 7 bar not lubricated
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Power Supply	400 V @ 50 Hz – 3ph + GND
Power Consumption	0,7 kW with 20,5 m <sup>3</sup> /h vacuum pump
Dimensions (L x W x H)	850 x 600 x 1400mm
Weight	~160 kg

## Optional features and devices

Up to four different refrigerant dosing system (HC1-B/HC2-B/HC3-B/HC4-B)

Light and Acoustic Alarm

30,3 m<sup>3</sup>/h Vacuum Pump with Oil Mist filter

PLUVIO Injector length on request

Automatic working cycle selection performed by bar code reader

Only vacuum head Injector 1/4" Hansen female or 1/4" Schrader female

Inficon Family Leak detector functions integrated

Available Glycol/Oil dosing system

<b>iFuji HC-M</b>	
Injectors/Type	PLUVIO V3 ¼" PLUVIO V1 ¼" ( only Pressurization and Vacuum)
Injector length	3,5 m, Different length is available on request
Refrigerant metering systems	1
Charging capacity	310 g for HC* / 10 kg for HFC
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), ±0,5 % (>200 g HFC)
Mixture capacity	Helium and Nitrogen, with two independent pressurizing channels
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	20,5 m <sup>3</sup> /h
Control unit	TS690
Working temperature	5 °C .. 45 °C
Compressed air supply	6 ÷ 7 bar not lubricated
Refrigerant delivery	Pressurized in liquid phase
Power Supply	400 V @ 50 Hz – 3ph + GND
Power Consumption	0,7 kW with 20,5 m <sup>3</sup> /h vacuum pump
Dimensions (L x W x H)	850 x 600 x 1400mm
Weight	~160 kg

Optional features and devices	
Up to four different refrigerant dosing system (HC1-M/HC2-M/HC3-M/HC4-M)	
Light and Acoustic Alarm	
30,3 m <sup>3</sup> /h Vacuum Pump with Oil Mist filter	
PLUVIO Injector length on request	
Automatic working cycle selection performed by bar code reader	
Only vacuum head Injector 1/4" Hansen female or 1/4" Schrader female	
Inficon Family Leak detector functions integrated	
Available Glycol/Oil dosing system	

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

# A2L/A3制冷剂真空/加压/充注

iFuji-HC

充注

真空

增压

步骤增压

充注油

泄漏测 +

条形码 +

多合一排空、加压和制冷剂充注装置

iFuji-HC旨在满足真空加压和制冷剂充注过程中所需的最高标准。

iFuji-HC配备了最新一代的电子控制、高计算能力和内存，并由智能操作系统管理，为用户提供轻松的交互。

iFuji-HC与用户设施网络进行通信，是生产过程中不可或缺的一部分。它拥有自己的标准通信接口和软件，适合连接到公司网络，以控制并将所执行工作的报告直接导出到外部设备。它还允许将其他数字设备（例如检漏仪）直接集成到机器中，从而在彻底安全的单个循环中加速和集成真空形成、泄漏检测和充注过程。

凭借其智能连接，iFuji-HC已准备好接受母公司FT srl的远程协助，从而在关键的售后情况下节省大量成本和时间。

iFuji HC



触摸屏机控制器



PLUVIO V3注射器



iFuji的智能电子控制允许将多个过程集成在一个循环程序中：

- 真空及相关真空衰减测试
- 利用压力衰减的示踪气体或氦气 + 氮气自动混合物加压和泄漏检测点对点泄漏搜索（数据显示在装置控制器上）
- 制冷剂充注
- IT冷却器综合报告发布

<b>iFuji-HC</b>	
注射器/类型	PLUVIO V3 ¼” PLUVIO V1 ¼” (仅限加压和真空)
注射器长度	3.5 m, 可根据要求提供不同长度
制冷剂计量系统	1
充注容量	HC* 310 g/HFC 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	±0.5 g (<100 g HC), ±0.5 % (>100 g HC) ±1.0 g (<200 g HFC), ±0.5 % (>200 g HFC)
混合容量	氨气和氮气, 有两个独立的 加压通道
注射器连接	¼” Hansen F (ISO 7241B)
制冷剂供应连接	¼” Hansen M (ISO 7241B)
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
压缩空气供应	6 - 7 bar未润滑
制冷剂输送	加压液相
电源	50 Hz时400 V - 3ph + GND
功率消耗	0.7 kW, 流速20, 5 m³/h 真空泵
尺寸 (长x宽x高)	850 x 600 x 1400 mm
重量	~160 kg

\* 最大数量根据当地限制确定

## 可选功能和设备

灯光和声音报警
30.3 m³/h 带油雾过滤器的真空泵
PLUVI注射器长度可按要求提供
由条形码读取器执行的自动工作循环选择
仅真空头注射器 1/4” Hansen内螺纹或1/4” Schrader内螺纹
Inficon系列集成检漏仪功能
可用的乙二醇/油加药系统

\* 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

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

超声波管封口机

IPCS和IPCS PLUS

# A1制冷剂真空/加压/充注

<b>iFuji HC-B</b>	
注射器/类型	PLUVIO V3 1/4" PLUVIO V1 1/4" (仅限加压和真空)
注射器长度	3.5 m, 可根据要求提供不同长度
制冷剂计量系统	1
充注容量	HC* 310 g/HFC 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	±0.5 g (<100 g HC), ±0.5 % (>100 g HC) ±1.0 g (<200 g HFC), ±0.5 % (>200 g HFC)
混合容量	氨气和氮气, 有两个独立的 加压通道
注射器连接	1/4" Hansen F (ISO 7241B)
制冷剂供应连接	1/4" Hansen M (ISO 7241B)
可设置工作循环数	高达1000个
额定真空泵速率	20.5 m <sup>3</sup> /h
控制装置	TS690
工作温度	5 °C..45 °C
压缩空气供应	6 - 7 bar未润滑
制冷剂输送	加压液相
电源	50 Hz时400 V - 3ph + GND
功率消耗	0.7 kW, 流速20, 5 m <sup>3</sup> /h 真空泵
尺寸 (长x宽x高)	850 x 600 x 1400 mm
重量	~160 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)

灯光和声音报警

30.3 m<sup>3</sup>/h 带油雾过滤器的真空泵

PLUVI注射器长度可按要求提供

由条形码读取器执行的自动工作循环选择

仅真空头注射器 1/4" Hansen内螺纹或1/4" Schrader内螺纹

Inficon系列集成检漏仪功能

可用的乙二醇/油加药系统



<b>iFuji HC-M</b>	
注射器/类型	PLUVIO V3 ¼” PLUVIO V1 ¼” (仅限加压和真空)
注射器长度	3.5 m, 可根据要求提供不同长度
制冷剂计量系统	1
充注容量	HC* 310 g/HFC 10 kg
充注速度	高达25 g/s (HC制冷剂) 高达40 g/s (HFC制冷剂)
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混合容量	氨气和氮气, 有两个独立的 加压通道
注射器连接	¼” Hansen F (ISO 7241B)
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可设置工作循环数	高达1000个
额定真空泵速率	20.5 m <sup>3</sup> /h
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工作温度	5 °C..45 °C
压缩空气供应	6 - 7 bar未润滑
制冷剂输送	加压液相
电源	50 Hz时400 V - 3ph + GND
功率消耗	0.7 kW, 流速20,5 m <sup>3</sup> /h 真空泵
尺寸 (长x宽x高)	850 x 600 x 1400 mm
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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

IPFS和IPFS PLUS

## 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)

灯光和声音报警

 30.3 m<sup>3</sup>/h 带油雾过滤器的真空泵

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仅真空头注射器 1/4” Hansen内螺纹或1/4” Schrader内螺纹

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可用的乙二醇/油加药系统