

# FLUSHING UNITS



A

## FLUSH&DRY - FLUSH1-PLUS

### Flushing and fluxing station

FLUSH-1-PLUS and FLUSH&DRY allow the flushing of any refrigeration circuit, even of large dimensions (10 l integrated container with possible extra tank connection).

- Indispensable for repairs and retrofit of refrigeration circuits in complete safety.
- Removal of all solid residues caused by compressor or filter breakage.
- Complete removal of oil residues from HVAC systems.

To be used with non-flammable SUPER-FLUSH flushing fluid.

Units equipped with:

- Pump, specially designed for flushing, with PTFE mechanical seal and gaskets.
- 10 l integrated tank and connection for extra container
- Mechanical suction filter.
- Flexible hoses with interchangeable connections from 1/4"SAE, 3/8"SAE and 1/2"SAE..
- Connection for external nitrogen bottle.

FLUSH&DRY allows the fluxing of the system thanks to the nitrogen regulator and the 950cc cartridge included in the kit (only FLUSH & DRY version).

HIGHER FLOW RATE AND PUMP HEAD FOR BETTER WASHING EFFECTIVENESS



B



B

Ref	Code	Model
A	13005037001	FLUSH1-PLUS-HVAC
B	13005037002	FLUSH&DRY-HVAC

Ref	Code	Dimensions	Weight
A	13005037001	300 x 220 x 550 mm	13 kg
B	13005037002	300 x 220 x 550 mm	14 kg



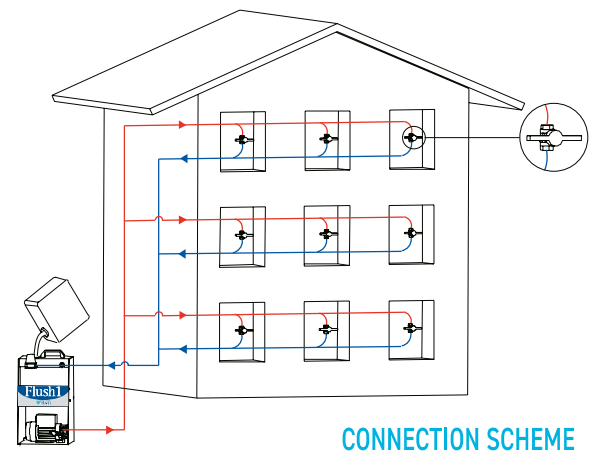
### Technical features

	FLUSH&DRY	FLUSH1-PLUS
Pump flow rate	26 l/min	26 l/min
Pump max. pressure	0,45 MPa	0,45 MPa
Nitrogen regulator output pressure	0,50 MPa	-
Pump motor power	0,6 kW	0,6 kW
Power supply	230-240/1/50-60 Hz	230-240/1/50-60 Hz



### Spare parts and accessories

Code	Model	Description	Min. Qty
11001060	BN2/1-TPED	Nitrogen bottle 950 cc	12
14015027	F1-CART	Mechanical filter	-
14015026	F1-FILT	Complete filter for FLUSH1	-



CONNECTION SCHEME

## FLUSH-HP

Flushing station for large volume circuits

- Ideal for large-capacity HVAC systems and refrigeration units (30 l integrated tank)
- Indispensable for repairs and retrofit of refrigeration circuits in complete safety.
- Removal of all solid residues caused by compressor or filter breakage and oil residues.

To be used with non-flammable SUPER-FLUSH flushing fluid.

Unit equipped with:

- Specially designed pump with PTFE mechanical seal and fittings.
- 30 liters capacity tank.
- Inspectionable mechanical filter.
- 2 flexible hoses 5m with connections 1/2" G F.
- Connection for external nitrogen bottle.
- Valves with PTFE seals.

Code	Model	Dimensions	Weight
13005044	FLUSH-HP	580 x 450 x 1060 mm	22 kg



### Spare parts and accessories

Code	Model	Description
02041006	B1-PUMP	Pump for FLUSH-HP
14015034	B1-FILT	Mechanical filter

## SUPER-FLUSH

Flushing fluid

Non-flammable flushing fluid in 20kg or 6kg cans.

Compatible with metals usually used HVAC systems and with most plastic material. Does not leave any residue.

For flushing stations (FLUSH&DRY, FLUSH1-PLUS and FLUSH-HP), for pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP) and pressurized flushing sets (A/CF-P-H).

Ref	Code	Model	Description	Min. Qty
<b>A</b>	13005048	SUPER-FLUSH/20	Flushing fluid 20 kg	-
<b>B</b>	13005030	SUPER-FLUSH/6	Flushing fluid 6 kg	4

HIGH CAPACITY  
30 L TANK



### Technical features

Pump flow rate	51 l/min
Pump max. pressure	0,83 MPa
Pump motor power	1,20 kW
Tank	30 l
Power supply	230-240/1/50-60 Hz



# FLUSHING REFRIGERATION CIRCUITS

**NEW**

- ATEX PUMP
- PULSATING EFFECTIVENESS
- SIMPLE USE
- FLUSH & DRY



## FF1 CLIMA-FLUSH

### Pneumatic flushing station

FF1-CLIMA-FLUSH-HVAC is the new pneumatic FLUSHING and FLUXING station for HVAC systems, that can operate with FF1 flammable fluid and with SUPER-FLUSH.

The efficiency given by the circulation of the fluid in the system is enhanced by the pulsing action, while the dry mode allows to perform the final flushing of the circuit.

The station allows a clean work in a simple way by switching from flushing to fluxing via a single diverter valve.

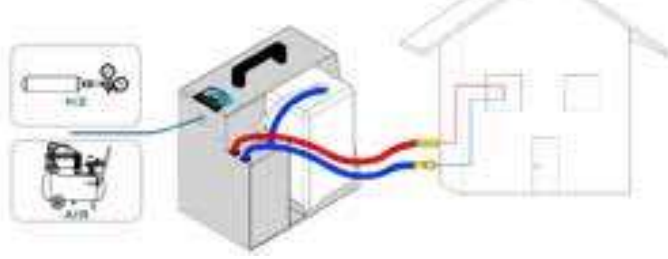
The pneumatic station can be supplied in a flexible way, either via the compressed air line or via a nitrogen kit.

The flushing fluid can be introduced into the removable tank or sucked directly from the fluid container, thanks to the self-priming pump.

#### Main functions:

- Compatible with FF1 flammable fluid.
- Pulsating flow rate which, combined with the degreasing/detergent action of the washing fluid, offers a higher working efficiency.
- Very easy to use thanks to a single diverter valve: flushing or fluxing can be selected with a single action.
- Built-in removable tank (5 l).
- Easy to maintain filter included.
- Possibility to suck the fluid directly from the container.
- The fluid is not overheated by the pump, thus maintains its characteristics.
- Can be used without power supply.
- Can be used either with nitrogen kit or compressed air.
- Flexible hoses of 1500mm.
- Compact, light and easily transportable

### EXAMPLE DIAGRAM



### Technical features

Rate	7 l/min
Supply	Nitrogen kit * or compressed air (max 8 bar)
Suggested flushing fluids	FF1, SUPER-FLUSH and FORMULA
Hoses	2 x 1,5 mt
Pneumatic connection	Quick coupler - Italy (for compressed air) / 1/4"SAE M (for nitrogen kit)
HVAC connections kit included	1/4"SAE, 3/8"SAE e 1/2"SAE

\* With the BN2/1-TPED 1 lt nitrogen cartridge several single-split can be flushed

Code	Model	Description
13005077001	FF1-CLIMA-FLUSH-HVAC	HVAC pneumatic station

Code	Dimensions	Weight
13005077001	310 x 295 x 300 mm	3,5 kg



### Spare parts and accessories

Codice	Modello	Descrizione
14015040	FF1-FILT	Replacement filter for FF1-CLIMA



## FF1

### Flushing fluid

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans. Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).

Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg

## CLIMA-FLUSH-HP

### Pneumatic flushing station for large-volume refrigeration systems

CLIMA-FLUSH-HP is a pneumatic flushing unit for large-volume refrigeration systems, thanks to its built-in 30 l tank and to the important performances of the pump.

Using only the pneumatic propulsion provided by the compressed air line, it is possible to easily manage the flushing and subsequent fluxing (which can also be managed via the nitrogen port).

The efficiency given by the circulation of the fluid in the system is enhanced by the pulsing action.

CLIMA-FLUSH-HP is equipped with a pneumatic ATEX pump, compatible with FF1 flammable fluid and with SUPER-FLUSH.

Using the same self-priming pump, it is possible to conveniently manage both the charge and discharge of the flushing fluid directly from the respective tank.

Main functions:

- Compatible also with flammable fluids (such as FF1).
- Easy to maintain filter included.
- Possibility to suck the fluid directly from the container.
- The fluid is not overheated by the pump.
- 2 x flexible hoses of 5 m with ½ G F connection.
- Compact and handy frame.

Code	Model	Description
13005079	CLIMA-FLUSH-HP	HP pneumatic flushing station



### Technical features

Rate	51 l/min
Max. pressure	8 bar (0,8 MPa)
Built-in tank	30 l
Supply	pneumatic

## FF1

### Flushing fluid

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans.

Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).

Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg



## SUPER-FLUSH

### Flushing fluid

Non-flammable flushing fluid in 20kg or 6kg cans.

Compatible with metals usually used HVAC systems and with most plastic material. Does not leave any residue.

For flushing stations (FLUSH&DRY, FLUSH1-PLUS and FLUSH-HP), for pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP) and pressurized flushing sets (A/CF-P-H).

Ref	Code	Model	Description	Min. Qty
A	13005048	SUPER-FLUSH/20	Flushing fluid 20 kg	-
B	13005030	SUPER-FLUSH/6	Flushing fluid 6 kg	4



**NEW**



**FLUSHING SET**



**A/CF-P-H**

**Flushing set**

It allows to remove totally impurities and oils by injecting the flushing fluid inside the system in both directions alternatively. It must be used combined with a cylinder and a nitrogen professional regulator with pressure between 0,5 - 0,7 MPa.

Properties:

- Total removal of metal fragments, impurities and oils.
- Does not leave any residue.
- Very easy to use.
- Economic.
- Practical and fast to use.

To be used with FF1 or SUPER-FLUSH flushing fluids.

Complete set in solid box containing:

- Fluid injection system (1 liter), with pressure gauge, hook and valve for nitrogen connection.
- 5 litres tank for collection of used fluid.
- Flexible hose for connecting the injection system to the HVAC system.
- Flexible hose for connecting the HVAC system to the waste fluid collection tank.
- Kit of fittings for connection 1/4 "SAE, 3/8" SAE, 1/2 "SAE.

Code	Model	Dimensions	Weight
13005007001	A/CF-P-H	550 x 330 x 360 mm	4,3 kg



**FF1**

**Flushing fluid**

Easy evaporation flushing fluids, for HVAC-R systems, in 1 liter cans. Does not leave any residue.

Usable only with pressure systems (A/CF-P-H) and pneumatic units (FF1-CLIMA-FLUSH and CLIMA-FLUSH-HP).

Code	Model	Min. Qty	Pack dimensions	Pack weight
13005006	FF1	12	350 x 270 x 250 mm	10,5 kg



**F1-PASS**

**Kit of adapters for flushing systems**

The kit is meant for the bridge connection of two refrigerant hoses, allowing to perform the cooling system flushing.

The kit includes:

- 1 flexible hose 300 mm 1/4" SAE M x 1/4" SAE M.
- 4 adapters 1/4" SAE F x 3/8" SAE M.
- 4 adapters 1/4" SAE F x 1/2" SAE M.
- 4 adapters 1/4" SAE F x 5/8" SAE M.
- 100 copper gaskets 1/4" SAE mod. B2-4.
- 100 copper gaskets 1/2" SAE mod. B2-8.

Code	Model	Dimensions	Weight
05108042	F1-PASS	440 x 170 x 50 mm	1,5 kg

## FLASH-FLUSH-FORMULA

### Pressurized flushing fluid

Ready for use flushing fluid pressurized with nitrogen at 40bar. FLASH-FLUSH/FORMULA enables to perform circuit flushing and fluxing in 4 easy operations.

FLASH-FLUSH/FORMULA must be completed with a connecting kit, KIT-FLASH-HVAC.

### KIT-FLASH-HVAC

The kit, allowing the simple connection of FLASH-FLUSH-FORMULA to the circuit, includes:

- 1 flexible hose 900 mm mod. V/GYSS/4-4/36.
- 1 adapter 1/4" SAE x 1/4" SAE.
- 1 adapter 1/4" SAE x 3/8" SAE.
- 1 adapter 1/4" SAE x 1/2" SAE.

Ref	Code	Model	Description	Min. Qty
<b>A</b>	13005050	FLASH-FLUSH-FORMULA	Pressurized flushing fluid	6
<b>B</b>	13005043002	KIT-FLASH-HVAC	Connecting kit for HVAC system	-

Ref	Code	Dimensions	Weight
<b>A</b>	13005050	280 x 200 x 300 mm	9,6 kg
<b>B</b>	13005043002	240 x 145 x 40 mm	0,4 kg



## Formula

**DOES NOT CONTAIN FLAMMABLE PRODUCTS!**  
**DOES NOT CONTAIN TOXIC SUBSTANCES!**  
**DOES NOT CONTAIN HARMFUL PRODUCTS!**  
**POSSIBLE RESIDUES ARE COMPATIBLE WITH THE FLUIDS INSIDE THE SYSTEM**

### SAFE CONNECTION? CHOOSE THE WIGAM SOLUTION



Connecting



Fastening



Turning upside down



Flushing and fluxing

**FLUSHING UNITS**



**ETO-4**

**Electric oil transfer and flushing pump**

- Suitable for all the common refrigeration oils.
- Suitable for the charge of the oil in HVAC systems.
- Suitable for the removal of the oils from the HVAC systems.
- Complete with suction hose and a pressure hose with adapters.
- Suitable for the flushing of the systems using FORMULA fluid and the connecting kit KIT-ETO-HVAC.

**KIT-ETO-HVAC**

The KIT-ETO-HVAC is the completion and connection kit that transforms the ETO unit into a flushing system in combination with the FORMULA fluid.

The kit includes:

- 1 piping of 4 m with filter.
- 1 RG180/6-4 swivel 3/8 SAE F x 1/4 SAE M.
- Tank capacity 5 l.
- Adapters kit for HVAC system.

Ref	Code	Model	Description
<b>A</b>	02041028	ETO-4	Electric pump
<b>B</b>	13006067	KIT-ETO-HVAC	Connection kit
<b>C</b>	13005054	FORMULA/5	Flushing fluid 5 l
<b>D</b>	14029016	BP	Plastic case

Ref	Description	Dimensions	Weight
<b>A</b>	02041028	290 x 200 x 275 mm	7 kg
<b>B</b>	13006067	267 x 150 x 250 mm	2 kg
<b>C</b>	13005054	260 x 165 x 145 mm	5,5 kg
<b>D</b>	14029016	520 x 290 x 340 mm	1,85 kg



**Technical features**

Rate	4 l/min
Power	180W with thermal-protector
Max pressure	20 bar
Voltage	230 V-50/60 Hz
Self priming	Yes
Connection	1/4 SAE



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