

#### **TECHNICAL DESCRIPTION**

**GENERATEUR MEDIUM ABF** 

# **F600 ABF**

Selection N°1

#### **OPERATING CONDITIONS**

Refrigerant Freon

Refrigerant
Inlet water temperature
Ice production
Refrigerating duty

Reamer speed
Ice thickness
Evaporating temperature
Minimum condensing Temperature
Maximum condensing Temperature

R22
15
10,0
50,0
-
74
2,3
-21,00
30
55,00
417
5
30

Nominal use

Selection N°2	
Nominal use	
R22	Ì
15	
13,00	
132,0	
-	
132	
1,8	
-23,0	
30	
55,0	
541,7	
	٠,

\* Maximum for Oil re
\*\* Minimum for slug

Oil return slugging limit risk

#### **DESCRIPTION OF EQUIPMENT**

Minimun water temperature

Maximum water temperature

Water flow

Refrigerant cylinder feeding Liquid level control, solenoid valve, throttle valve

Double wall steel cylinder (machined, coating Genecoat® based on Ni-Cr plated)

#### **ELECTRICAL DATAS**

		Nom	ninal power	Power supply		Nominal installed amperage	
1	Reamer motor		250 W	400V-3	50 Hz	0,95 A	
2	Pump		70 W	230V -1	50 Hz	0,35 A	
1	Solenoid valve		10 W	230V -1	50 Hz	0,10 A	Option(s) / 115V -1
1	Emergency stop						
1	Torque limitor switch	&	1 Electri	cal liquid level contro	ol (regulation)		
1	Salt dosing pump	=	50 W	230V -1 / 115V -	1 <b>50 Hz</b>	0,40 A	

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## **ICE GENERATOR**

**F600 ABF** 

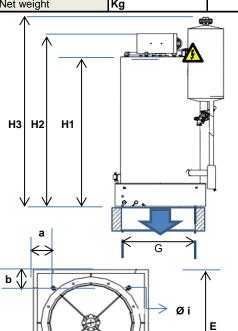
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#### Overall dimensions

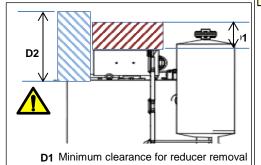
#### **DIMENSIONS AND CONNECTIONS**

Length	L mm	1550,00	D1 mm	300,00
Width	l mm	1200,00	D2 mm	1360,00
Height	H mm	2050,00	H1 mm	1550,00
Dimensions	a mm	147,00	H2 mm	1800,00
Dimensions	b mm	147,00	H3 mm	2050,00
Dimensions	c mm	147,00	E mm	1040,00
Volume	V m3	3,81	B mm	1040,00
Ice chute	G mm	780,00	Ø i mm	20,00
Net weight	Kg	979,00		

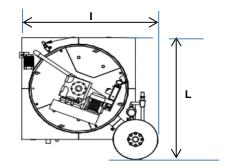


В

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D2 Minimum clearance for reamer removal



Geneglace F3 В Reamer motor F2 2 Pump F3 Torque limitor switch F4 Emergency stop F5 Salt dosing pump F6 Electrical liquid level control (regulation) F7 Solenoid valve **Hydraulic connections** Threated P.V.C 1/2" G Α Generator water supply mm В Overflow + Water drainage Plain ends tube Steel 1/2" mm Suction Plain ends tube Steel 2"1/2 Н G/K Liquid inlet O.D.F Copper 7/8" Oil return O.D.F Copper 3/8" O.D.M.-G Stainless steel Oil drain 3/8"

Water frame base dimensions are given without insulation JAN -A-2017 version Lay out E Document type TEC-GU-F 600 ABF-E- GB

**ICE GENERATOR** 

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**R22** 

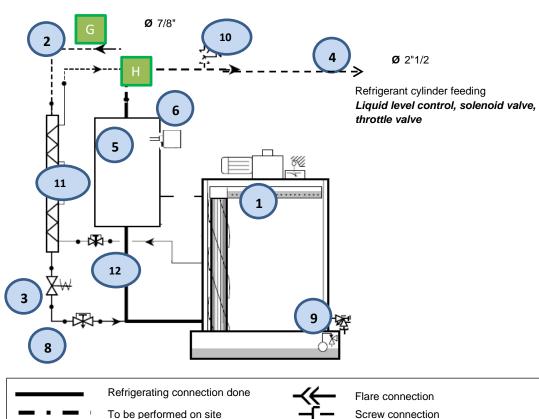
F5

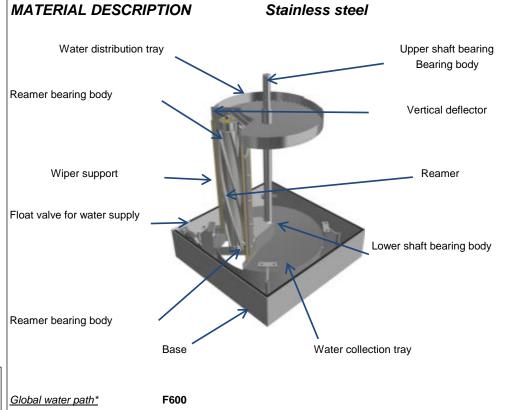
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### REFRIGERATING SKETCH

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1 Flake ice generator

Weld connection

2 HP liquid inlet

3 Solenoid valve

4 Suction

5 Flood bottle

Flange connection

6 Level controler

8 Liquid inlet throttle valve

9 Oil drain

\*(All parts in contact with water or ice)

12 Oil return valve

**10** Safety pressure relief valve (out of supply)

11 Oil return exchanger

This sketch describes the Geneglace global supply from a refrigerating point of view, it only gives working principle and the real supply can vary according to the models and the application.

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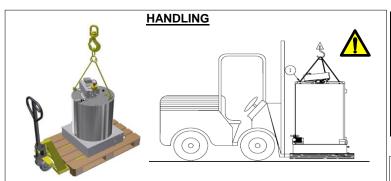
**ICE GENERATOR** 

**F600 ABF** 

**R22** 



## **INSTALLATION AND HANDLING**



Lifting rings Qty. 3

### **TRANSPORT**

Carton box			Volun
Length	mm 1	680,0	
Width	mm 1	330,0	
Height	mm 2	220,0	
Net weight	Kg 9	79,0	
Gross weight	Kg 1	120,0	

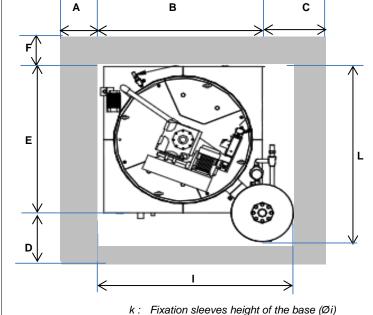
This type of packing is generally used when goods are sent by air freight, by road or by sea freight. The sleeve box is hydrophobic and will resist to humidity.



	General information	Dimensions	
	Nominal use	A mm	500,00
Power supply	400V-3	B mm	1040,00
Frequency	50 Hz	C mm	500,00
Refrigerant charge	<b>100</b> Kg	D mm	1700,00
Water pressure	2-4 bar	E mm	1040,00
Max working pressure :	1,85 Mpa (2014/68/UE )	L mm	1560,00
Net weight	<b>979</b> Kg	l mm	1200,00
Max. water flow	<b>590</b> L/h	k mm	170,00

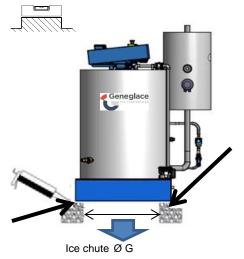
#### MINIMUM CLEARANCE FOR SERVICE

## Dismantling and service area



#### **INSTALLATION**

Reserve enough clearance around the machine for maintenance (refer to Installation and Maintenance Guide)



- (a) Tightness seal around the boring
- (b) Raising of the floor to avoid accidental water leaks in the storage

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### **SCOPE OF SUPPLY**

# **ICE GENERATOR**

1,85 Mpa (2014/68/UE) Cylinder

Double wall steel cylinder (machined, coating Genecoat® based on Ni-Cr plated)

Cylinder external insulation (injected polyurethane)

External insulation liner (White aluminium sheet)

Oil drain

Base

Generator base covers

Water flow reducer device

Water pump

Over flow + draining connection

Float valve for water supply

Stainless steel base without insulation

Connection pipe for water distribution

Revolving part

Central shaft (zinc plated,painted steel) revolving between two ball bearings

Lower water collection tray (stainless steel)

Upper water distribution tray (stainless steel)

Vertical deflector Stainless steel Reamer adjuster with bolts and nuts

Helical reamer (stainless steel) between two ball bearings

Rubber wiper to limit the sprinkling area

Water distribution tray overflow also used for deglacing

Drive for revolving part

Torque limitor device with manual reset

Gear reducer with motor and belt

Refrigeration feeding

Flood bottle 1,85 Mpa (2014/68/UE)

Vertical bottle external insulation

Liquid level control, solenoid valve, throttle valve

Oil return device (halogen refrigerant only)

Liquid filter

Miscellaneous

1 Salt dosing pump

# Option(s)

Electrical control panel

Protection IP 55 Protection IP 65

Remote control Electrical liquid level control (safety)

The Level controller will be installed on the flood bottle

High ice level detector

Ice level detection will be installed in the ice storage

Power supply

Salt dosing pump

400V-3 50 Hz 460V-3

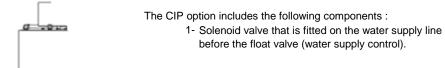
60 Hz

High ice level detector

Protection IP 65

1,6A/20W

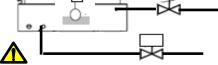




- 1- Servo-motorized valve that is installed on the draining point of the generator base (water drainage control).
- 1- Electrical control panel

PVC

1- Float switch installed in generator base.





#### **IMPORTANT:**

The disinfectant used for cleaning should not form an emulsion and generate foam when pumped into the generator as well as not be corrosive or agressive for the following materials: Stainless steel, chrome, natural rubber).

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Scope of supply L

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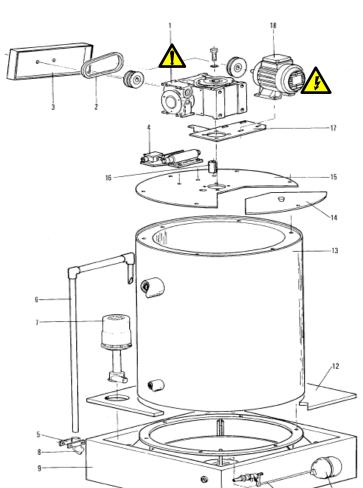
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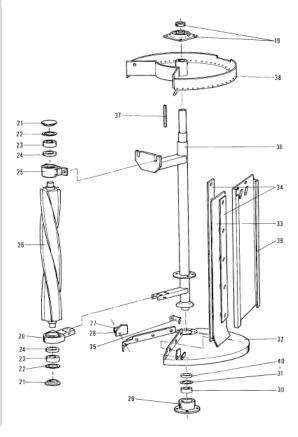
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## **DETAILED VIEW**

	Stainless steel
	304L
1 Gear reducer	
2 Belt	
3 Belt protection	X
4 Torque limitor	X
5 Water throttle valve	
7 Pump	
9 Base	X
10 Float valve for water supply	
12 Generator base covers	
13 Cylinder Ni-Cr plated based -	Genecoat® coating
14 Inspection hatch	X
15 Upper inspection cover	X
18 Reducer motor	
19 Upper shaft bearing	
20 Reamer bearing body	X
21 Reamer bearing cover	
23 Reamer bearing	
25 Reamer bearing body	X
26 Reamer	Х
27 Complementary wiper fixation	
28 Complementary rubber wiper	
30 Lower shaft bearing	
32 Water collection tray	х
33 Rubber wiper	
34 Wiper support	
36 Main shaft	
38 Water distribution tray	x



Note(s) Pulley and belt according to reamer speeds: Specify machine serial number

Specify the voltage and the frequency Specify the machine serial number

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