

F200 ABF

OPERATING CONDITIONS

Refrigerant **Freon**

Refrigerant
 Inlet water temperature
 Ice production
 Refrigerating duty

Reamer speed
 Ice thickness
 Evaporating temperature
 Minimum condensing Temperature
 Maximum condensing Temperature
 Water flow
 Minimum water temperature
 Maximum water temperature

Nominal use **Selection N°1**

	R404A
°C	15
T / 24h	6,3
KW	31,5
-	-
Tr/h	93
mm	2,0
°C	-20,20
* °C	30
** °C	46,00
L/h	263
°C	5
°C	30

Selection N°2

Nominal use

	R404A
	15
	5,50
	27,5
	-
	74
	2,2
	-17,7
	30
	55,0
	229,2

* Maximum for Oil return
 ** Minimum for slugging limit risk

DESCRIPTION OF EQUIPMENT

Refrigerant cylinder feeding Liquid level control, solenoid valve, throttle valve
Double wall steel cylinder (machined, coating Genecoat® based on Ni-Cr plated)

ELECTRICAL DATAS

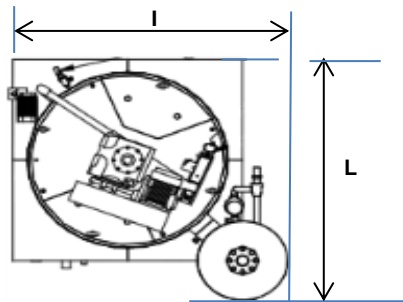
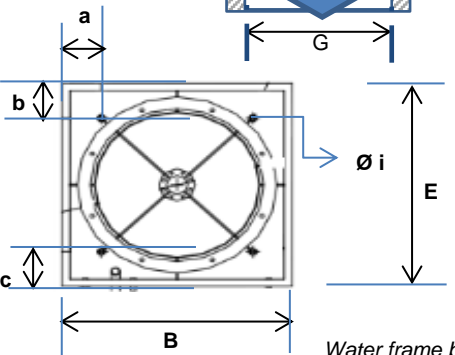
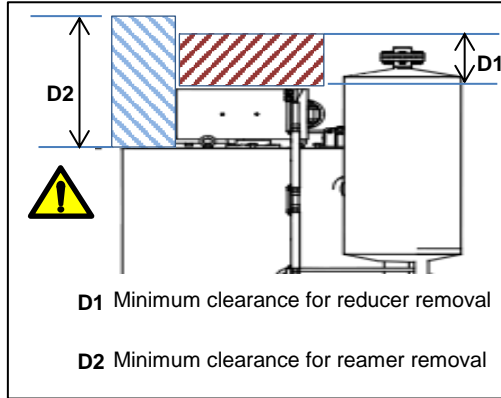
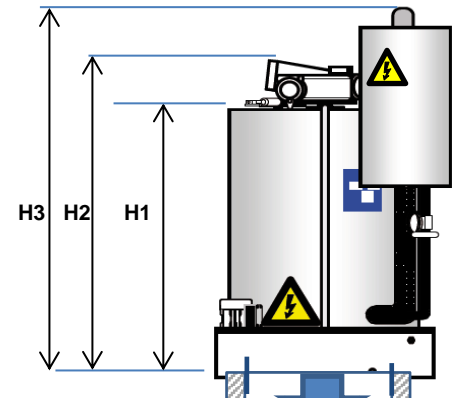
	Nominal power	Power supply	Nominal installed amperage	
1 Reamer motor	250 W	400V-3	50 Hz	0,95 A
1 Water pump	70 W	230V -1	50 Hz	0,35 A
1 Solenoid valve	10 W	230V -1	50 Hz	0,10 A
1 Torque limiter switch & 1 Emergency stop				Option(s) 230V -1 / 115V -1
1 Electrical liquid level control (regulation)		230V -1 50 Hz	0,10 A	Option(s) / 115V -1
Option(s) 1 Salt dosing pump	50 W	230V -1 / 115V -1	50 Hz	0,40 A

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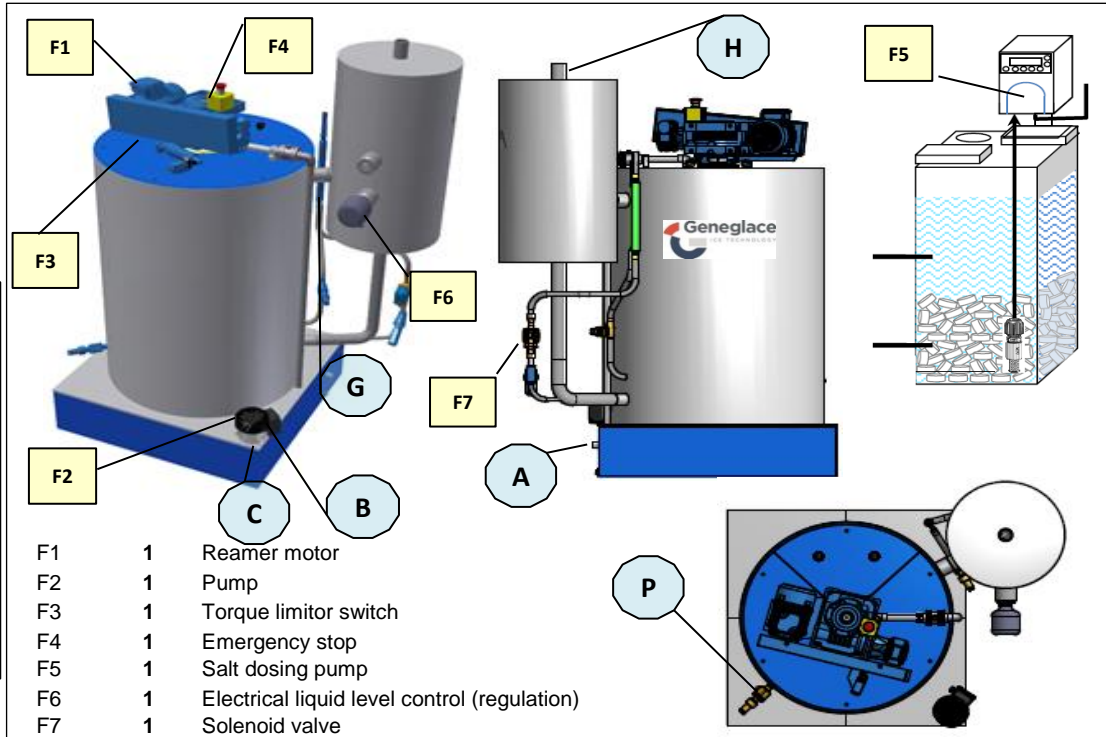
DIMENSIONS AND CONNECTIONS

Overall dimensions

Length	L mm	1200,00	D1 mm	300,00
Width	I mm	1000,00	D2 mm	1060,00
Height	H mm	1700,00	H1 mm	1250,00
Dimensions	a mm	87,00	H2 mm	1480,00
Dimensions	b mm	87,00	H3 mm	1750,00
Dimensions	c mm	87,00	E mm	880,00
Volume	V m3	2,04	B mm	880,00
Ice chute	G mm	680,00	Ø i mm	20,00
Net weight	Kg	527,00		



Water frame base dimensions are given without insulation



- F1 1 Reamer motor
- F2 1 Pump
- F3 1 Torque limiter switch
- F4 1 Emergency stop
- F5 1 Salt dosing pump
- F6 1 Electrical liquid level control (regulation)
- F7 1 Solenoid valve

Hydraulic connections

A	1	Generator water supply	Threated P.V.C	1/2" G	mm
B	1	Overflow	Plain ends tube	Stainless steel	22,00 mm
C	1	Water drainage	Plug P.V.C	1/2"	
H	1	Suction	Plain ends tube	Steel	1"1/2
G/K	1	Liquid inlet	O.D.F Copper	7/8"	
I	1	Oil return	O.D.F. Copper	3/8"	
P	1	Oil drain	O.D.M.-G	Stainless steel	3/8"

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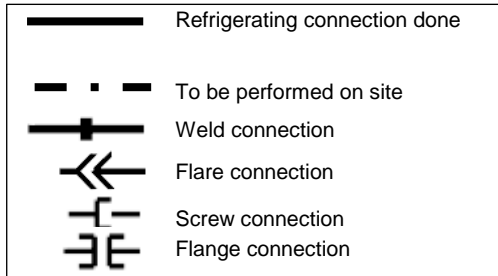
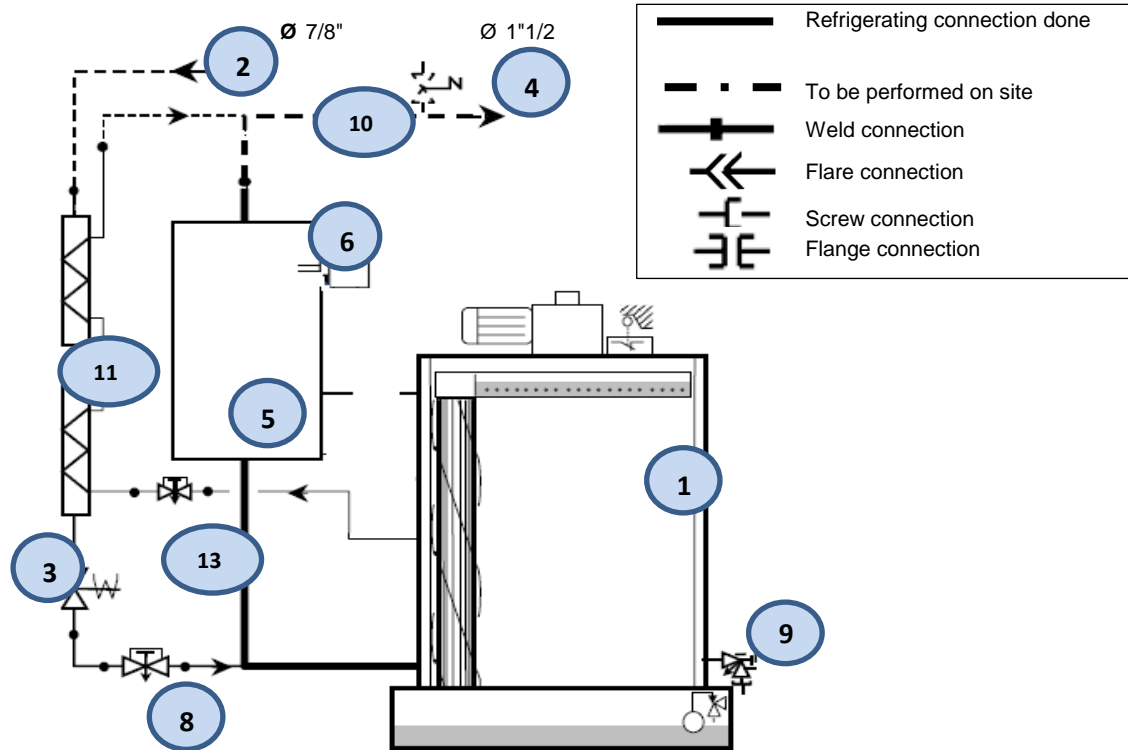
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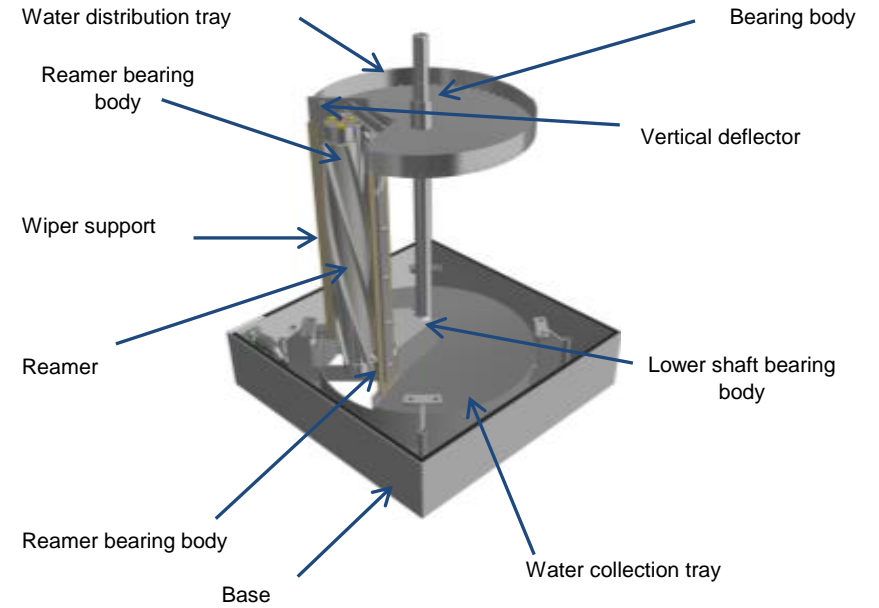
R404A

REFRIGERATING SKETCH



MATERIAL DESCRIPTION

Stainless steel



Global water path*

F 200, F250

Stainless steel

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

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

- 1 Flake ice generator
- 2 HP liquid inlet
- 3 Solenoid valve
- 4 Suction

- 5 Flood bottle
- 6 Level controller
- 8 Liquid inlet throttle valve
- 9 Oil drain

- 10 Safety pressure relief valve (out of supply)
- 11 Oil return exchanger
- 13 Oil return valve

This sketch describes the Geneglance 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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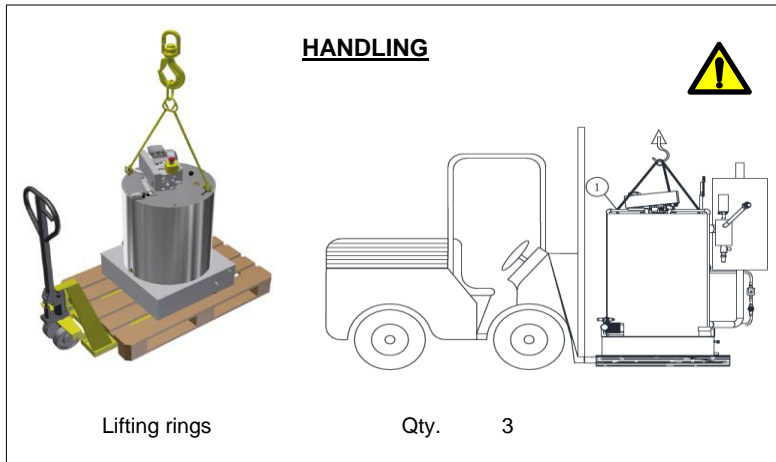
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INSTALLATION AND HANDLING



General information

Power supply	400V-3
Frequency	50 Hz
Refrigerant charge	30 Kg
Water pressure	2-4 bar
Max working pressure :	1,85 Mpa (2014/68/UE)
Net weight	527 Kg
Max. water flow	300 L/h

Dimensions	
A mm	500,00
B mm	880,00
C mm	300,00
D mm	1300,00
E mm	880,00
L mm	1230,00
I mm	940,00
k mm	170,00

Sound power level 1 m clear field

65 Dba

TRANSPORT

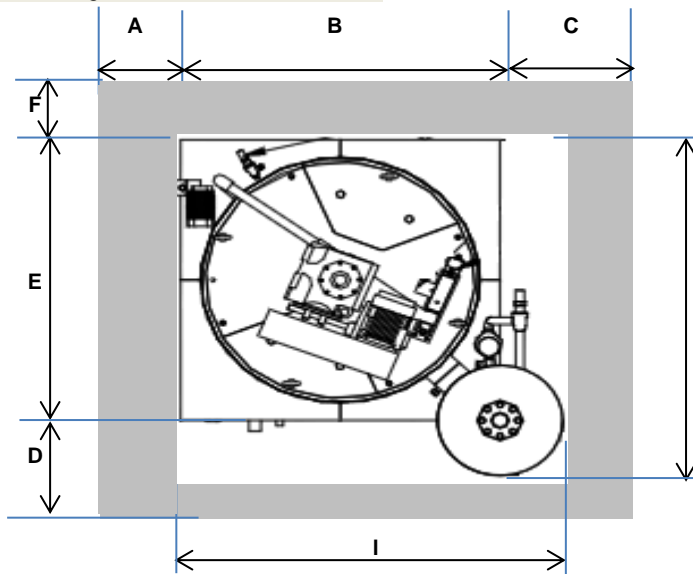
Carton box Volume 3,24 m3

Length	mm	1430,00
Width	mm	1180,00
Height	mm	1920,00
Net weight	Kg	527,00
Gross weight	Kg	620,00

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.

MINIMUM CLEARANCE FOR SERVICE

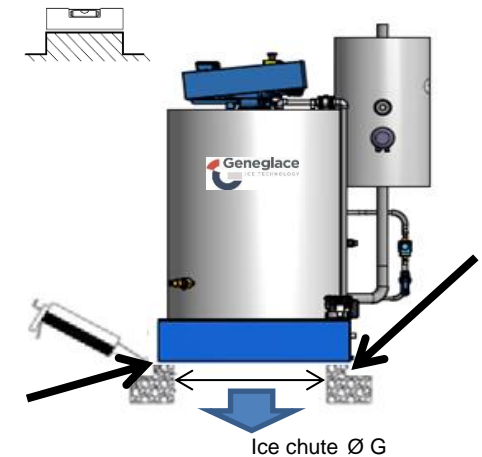
Dismantling and service area



k : Fixation sleeves height of the base (Ø1)

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

Option(s)

ICE GENERATOR

Cylinder 1,85 Mpa (2014/68/UE)
 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 connection
 Draining connection
 Float valve for water supply
 PVC coated and insulated stainless steel base
 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 limiter device with manual reset
 Gear reducer with motor and belt

Refrigeration feeding

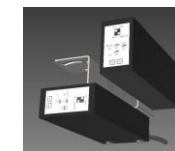
Flood bottle 1,85 Mpa (2014/68/UE)
 Vertical bottle external insulation
 Liquid level control, solenoid valve, throttle valve
 Oil return device (halogen refrigerant only)
 Oil return valve

Miscellaneous

Vertical salt dosing pipe requiring sodium chloride tablets (25 kg supplied)



Electrical control panel	PGS2	Dimensions	500*300*200
Protection	IP 55	Remote control	Protection IP 65
Salt dosing pump		Protection IP 65	1,6A/20W
Infrared high ice level detector			
<i>Ice level detection will be installed in the ice storage</i>			
<i>Electrical liquid level control (safety)</i>			
<i>The Level controller will be installed on the flood bottle</i>			
External insulation liner (Stainless steel sheet)			
Power supply	400V-3	50 Hz	
	460V-3	60 Hz	
Salt dosing pump	Protection IP 65	1,6A/20W	

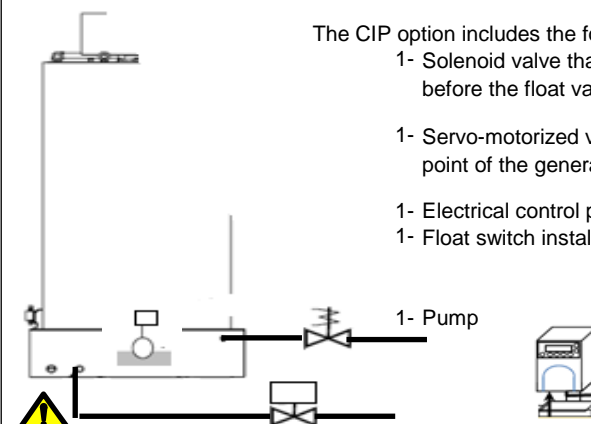


Infrared high ice level detector

CLEANING IN PLACE (CIP)

The CIP option includes the following components :

- 1- Solenoid valve that is fitted on the water supply line before the float valve (water supply control).
- 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 aggressive for the following materials :
 Stainless steel, chrome, natural rubber).

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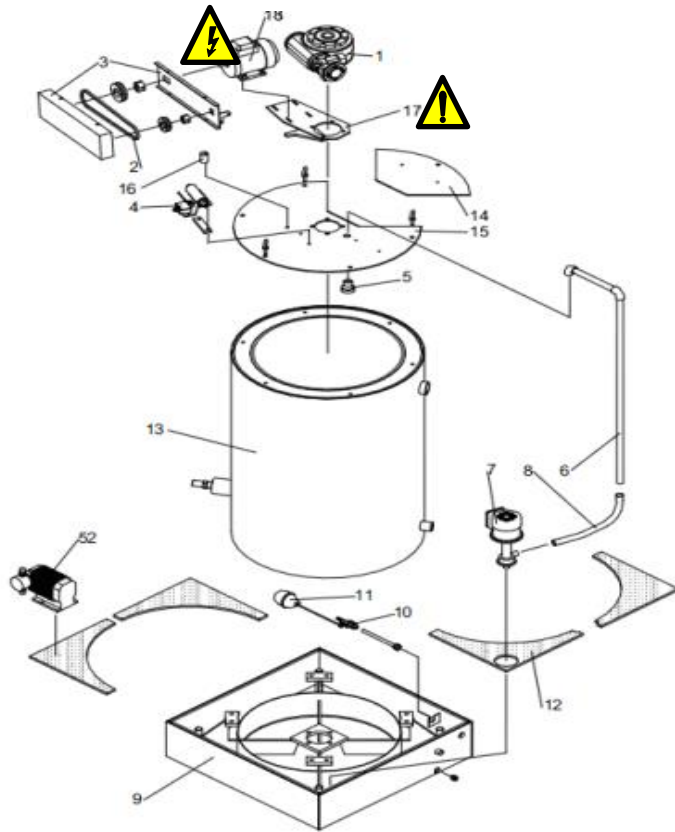
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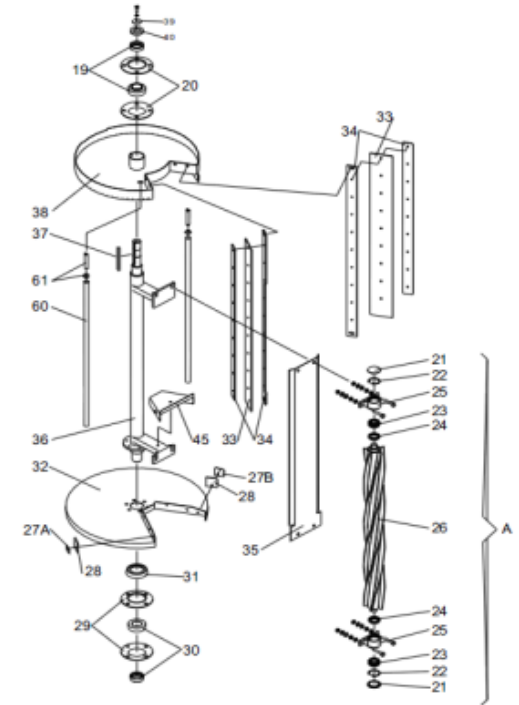
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DETAILED VIEW



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



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

Specify the voltage and the frequency
Specify the machine serial number

This document is a project phase document, drawings notably are a dimensional approach of the product, it will be validated by our technical department before any definitive setting-up.

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