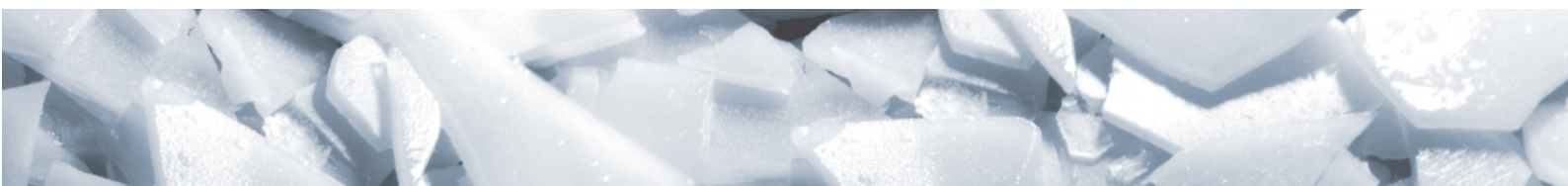




Technical data sheet G200 Generator(SBF-ABF)R744

EN_V1.00_2021-10-25



Physical limits of the G200 generator

Coolant type: • According to the configuration of the G200 machine : R744



For the other coolants: contact Geneglace

Pression Maximale de Service (PMS) :

"Permissible limits of pressure equipment" (bas)

Température Mini. évaporation

Ambient air temperature: + 10 to + 35 °C (dry bulb)

Water quality Fresh water for human consumption

Temperature of water to be frozen +5 to +25 °C

Water supply pressure 0,5 to 2 bars

Supply water hardness TH 15 to 20° French

Supply water acidity pH 7/8

Sodium chloride content 100 g/m³

Protection index: IP44

Electrical power supply: Read information on maker's plate and comply with applicable standards.

Value airborne noise >70 dB

Permissible limits of pressure equipment

Type	Volume	PS (Min/Max)	T° (Min/Max)
	(L)	(Bar)	(°C)
G200 ABF*	52	-1/+40	-30/+50
G200 SBF**	21	-1/+40	-30/+50

* Generator equipped with a flood bottle for direct expansion / ** Generator without flood bottle for pump recirculation.

Type	Coolant	D.E.S.P. Category	Coolant group	Load (kg)	T. eq CO2
G200ABF*	R744	III	2	22	0
G200SBF**	R744	III	2	11	0

* Generator equipped with a flood bottle for direct expansion / ** Generator without flood bottle for pump recirculation.

Supply limit G200 Generator(SBF-ABF)

Cylinder	<ul style="list-style-type: none">• Double-walled cylinder: Machined steel, Genecoat® coating.• Thermal insulation of the cylinder: Expanded polyurethane injection.• External cylinder coating: White lacquered aluminium sheet.• Oil purge
Base	<ul style="list-style-type: none">• Lower base: Stainless steel• Thermal insulation of the base: polyurethane panels and PVC coating.• Base covers: PVC foam.• Water supply float valve.• Submersible water pump• Water tube between water pump discharge and distribution bowl.
Rotating part	<ul style="list-style-type: none">• Central shaft: painted metallic steel• Lower central shaft bearing assembly: Stainless steel box.• Upper central shaft bearing assembly: Stainless steel box.• Lower water collection bowl: stainless steel.• Rear reamer deflector: stainless steel.• De-icing tube rotating part• Helical reamer: stainless steel.• Lower reamer bearing assembly: Stainless steel box.• Upper reamer bearing assembly: Stainless steel box• Reamer approach adjustment arrangement.• Scrapers for limiting the watering area: natural rubber.
Rotating part drive	<ul style="list-style-type: none">• Geared motor with pulley-belt transmission.
Safety	<ul style="list-style-type: none">• Motor and gearbox casing: stainless steel.• Safety by force limiter on electrical contact (manual reset)• Mushroom switch "Scraper stop" on electric contact (manual reset)
Refrigeration supply	<ul style="list-style-type: none">• (G200 GeneratorABF) Insulated "flood" supply bottle.• (G200 GeneratorABF) Liquid level control device of the "flood" supply bottle.• (G200 GeneratorABF) Liquid supply solenoid valve.• (G200 GeneratorABF) Liquid supply regulator.
Misc.	<ul style="list-style-type: none">• Refillable salt dosing tube + 25 kg of sodium chloride tablets

Generator G200 ABF with refrigerant R744 (CO₂)

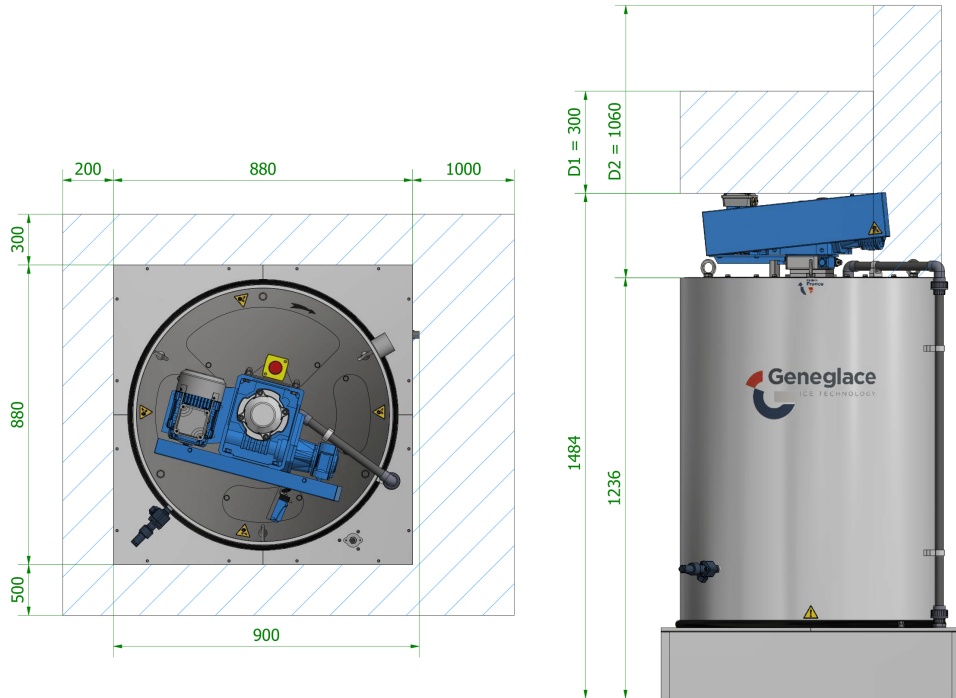
Characteristics	Units	
Water to be frozen	°C	15
	°F	59
Production	T /24h	6
	UST/24h	6.6
Cooling capacity	KW	30
	BTU/h	102420
Condensation temp. (ABF)		
Max.: (Liquid hammer)	°C	15
	°F	59
Frequency	Hz	50
Speed of rotation	tr/h	74
Thickness of ice flakes	mm	2,3
	inch	0.09
Evaporation temperature at the generator	°C	-22
	°F	-7.6
Frequency	Hz	60
Speed of rotation	tr/h	74
Thickness of ice flakes	mm	2,3
	inch	0.09
Evaporation temperature at the generator	°C	-22
	°F	-7.6

Generator G200 SBF with refrigerant R744 (CO₂)

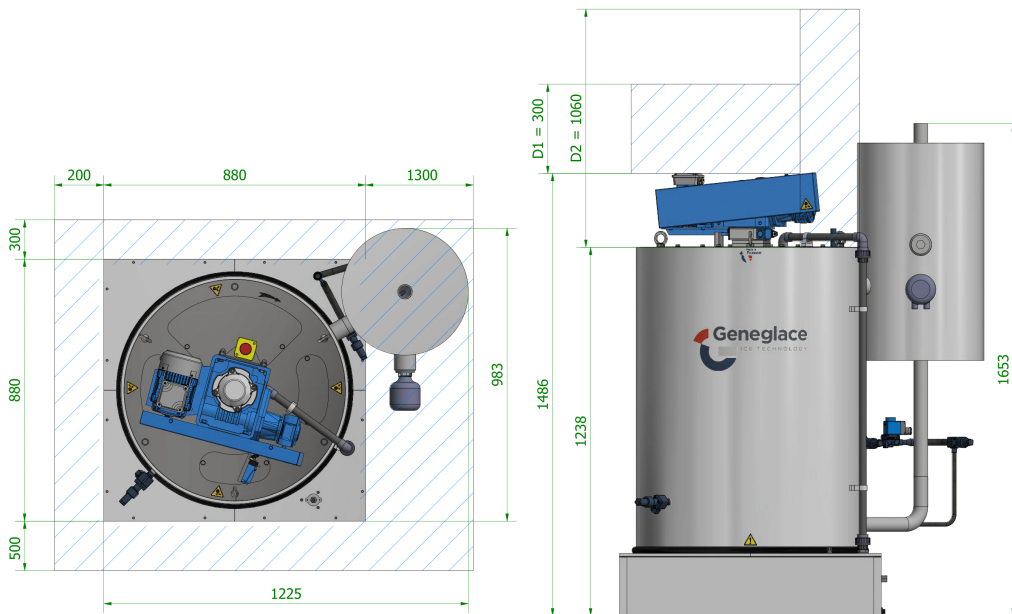
Characteristics	Units	
Water to be frozen	°C	15
	°F	59
Production	T /24h	6
	UST/24h	6.6
Cooling capacity	KW	30
	BTU/h	102420
Frequency	Hz	50
Speed of rotation	tr/h	74
Thickness of ice flakes	mm	2,3
	inch	0.09
Evaporation temperature at the generator	°C	-22
	°F	-7.6
Frequency	Hz	60
Speed of rotation	tr/h	74
Thickness of ice flakes	mm	2,3
	inch	0.09
Evaporation temperature at the generator	°C	-22
	°F	-7.6

Dimensions

Generators SBF



Generators ABF

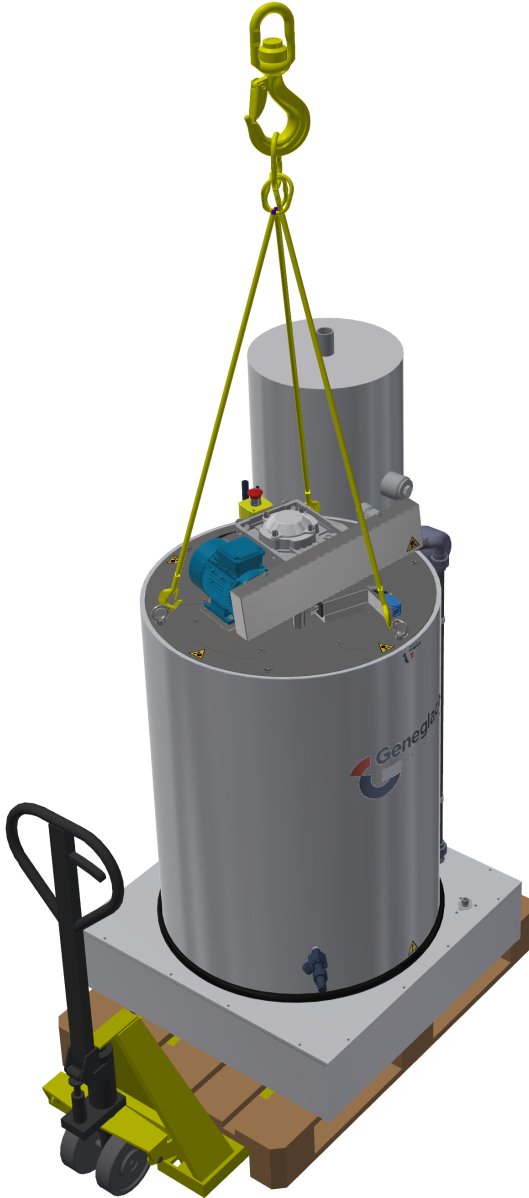


*Values in millimetres

D1 = Minimum space required to dismantle the gear reducer.

D2 = Minimum space for dismantling the reamer.

Shipment



(Photo colisage)

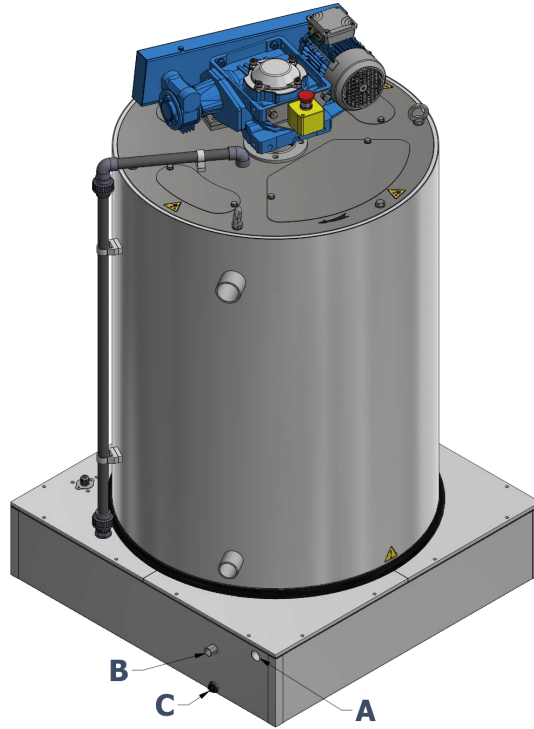
The packaging is hydrophobic and moisture resistant,
 The packaging is used for air, sea and road shipments.

G200 Generator	SBF	ABF
Volume	m ³	m ³
Length		
Width		
Height		
Net weight		
Gross weights		

Geneglace SAS

G200 Generator(SBF-ABF) Hydraulic characteristics

G200 Generator

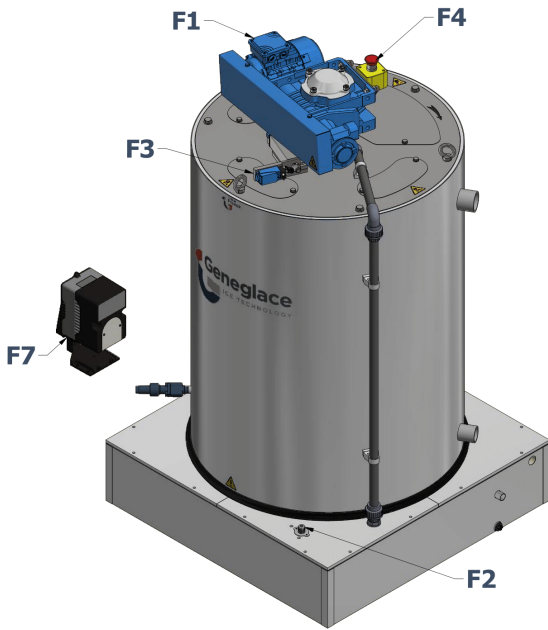


Hydraulic connections

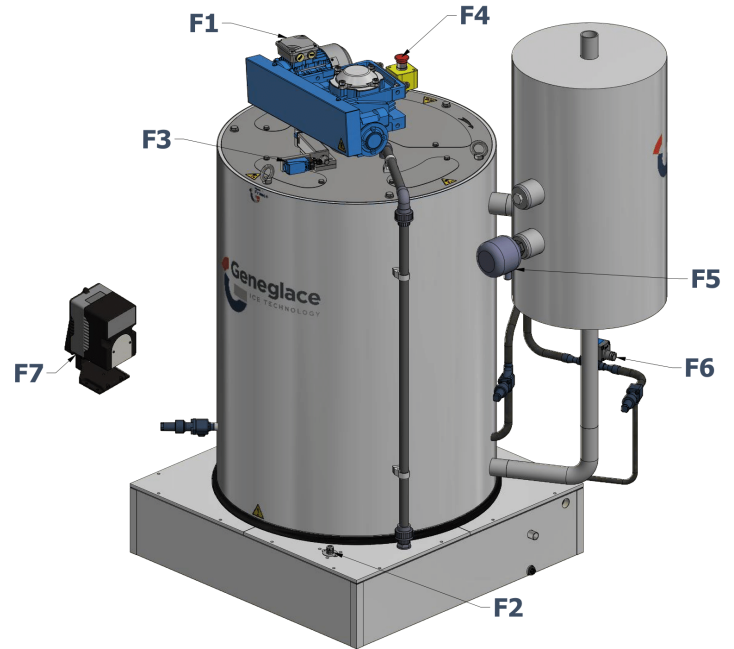
Ref.	Designation	Qty.	Connections		
			Dimensions	Type	Material
A	Water supply	1	1/2 " gaz	Threaded	
B	Overflow	1	22x1 mm	Smooth tube	Stainless steel
C	Draining	1	1/2 " gaz	Tapped	Stainless steel

G200 Generator(SBF-ABF) Electrical characteristics

G200 Generator SBF



G200 Generator ABF

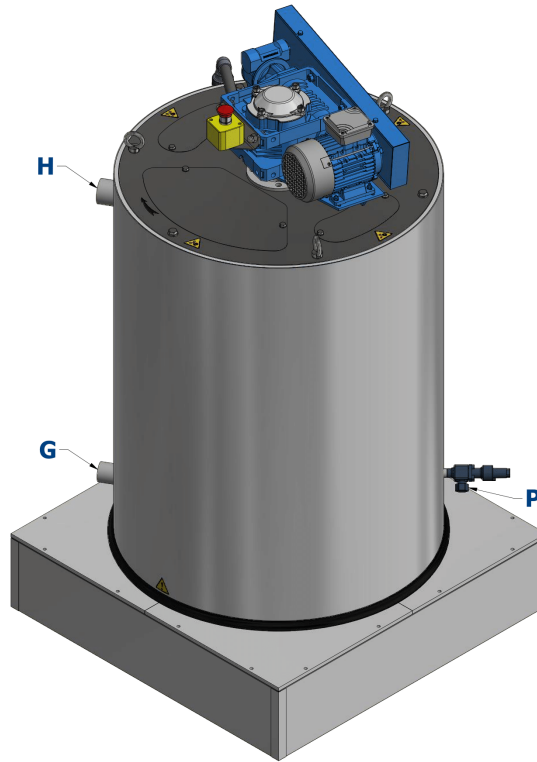


Ref.	Designation	Qty.	Electrical power supply	Nominal power	Nominal current	Contact
F1	Scraper motor	1	400V-3-50Hz	1 x 250 W	1 x 0,95 A	-
F2	Water pump	1	230V-1-50Hz	1 x 105 W	1 x 0,6 A	-
F3	Torque limiter	1	-	-	-	1 NC/1 NO
F4	Emergency stop for torque limiter	1	-	-	-	1 NC/1 NO
F5	Solenoid valve*	1	220-230V-1-50Hz 220-230V-1-60Hz	1 x 17 W 1 x 14 W	1 x 0,1 A	-
F6	Liquid level controller*	1	(dc) U= 20 - 60V	-	I < 6 mA	1 NC/1 NO
F7	Salt Dosing Pump (Option)	1	230V-1-50Hz	1 x 50 W	1 x 0,4 A	-

*Delivered only in ABF version

G200 Generator (SBF-ABF) Cooling characteristics

G200 Generator SBF

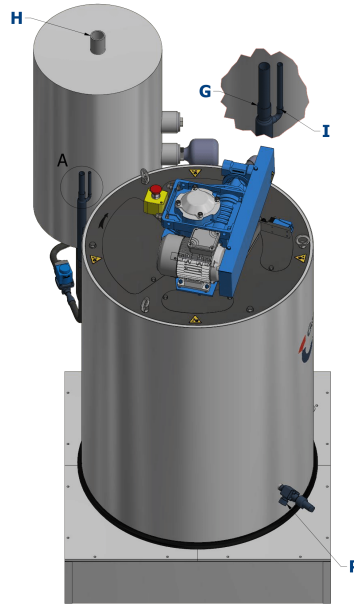


Cooling connections

Ref.	Designation	Qty.	Connections	
G	Liquid supply	1	Dimensions (mm)	42,4x3,2 mm
			Type	O.D.F
			Material	Steel
H	Suction	1	Dimensions (mm)	42,4x3,2 mm
			Type	Smooth tube
			Material	Steel
P	Oil purge	1	Dimensions (mm)	3/8"
			Type	O.D.M.-G
			Material	Steel

G200 Generator (SBF-ABF) Cooling characteristics

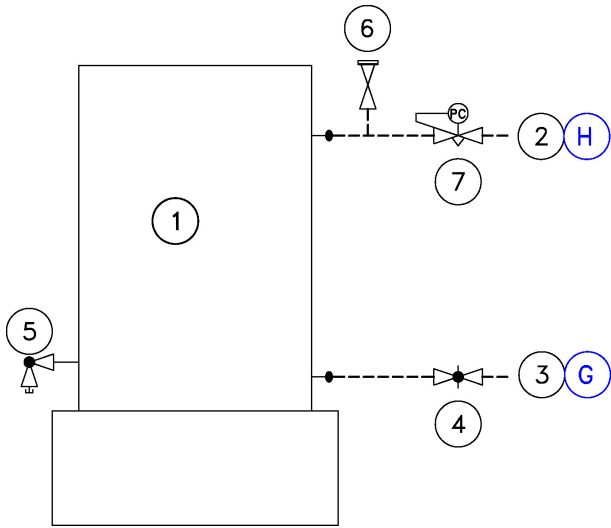
G200 Generator ABF



Ref.	Designation	Qty.	Connections	
G	Liquid supply	1	Dimensions (mm)	1/2"
			Type	O.D.F
			Material	Copper
H	Suction	1	Dimensions (mm)	42,3x3,6 mm
			Type	Smooth tube
			Material	Steel
I	Oil return	1	Dimensions (mm)	3/8"
			Type	O.D.F
			Material	Copper
P	Oil purge	1	Dimensions (mm)	3/8"
			Type	O.D.M.-G
			Material	Steel

Cooling diagram G200 Generator SBF

is intended to be connected to a refrigeration system supplying the generator with HP liquid by pump recirculation.

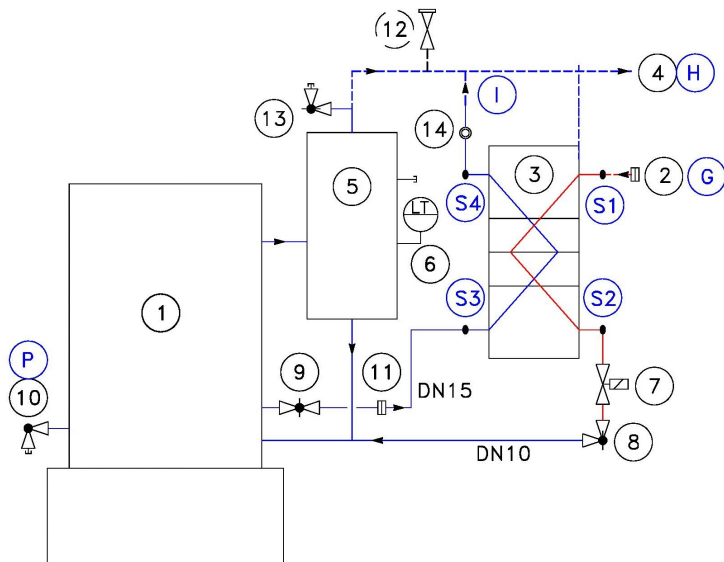


1. Generator
2. Suction
3. HP liquid supply
4. Adjuster (not supplied)
5. Oil purge
6. LP valve (not supplied)
7. Constant pressure valve (not supplied)

--- Connections (not supplied)

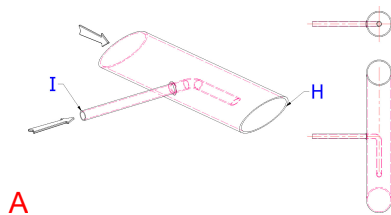
Cooling diagram G200 Generator ABF

The G200 GeneratorABF is intended to be connected to a refrigeration system supplying the generator with HP liquid.



1. Generator
2. HP liquid supply
3. Oil return exchangers + filters
4. Suction
5. Flood bottle
6. Liquid level controller
7. Solenoid valve
8. HP Liquid Manual Regulator
9. Manual oil return regulator
10. Oil drain
11. Filters
12. Safety valve (not supplied)
13. Pressure test
14. Indicator light

--- Connections (not supplied)



Options G200 Generator (SBF-ABF)

Salt dosing pump

- Power supply 100÷240 Vac - 50/60 Hz - 15 W
- Flow rate range: (0.1 % to 100%)x 2 L/h.
- IP65
- Fuse 1.6 A (20 W).
- 50 L reserve
- 25 Kg salt tablets



Electrical panel PGS_2 CO2

- IP: 55
- CE or UL standards
- Available power supply voltages:
 - 400 V-3+Neutral / 50 Hz
 - 400 V-3 / 50 Hz
 - 575 V-3 / 60 Hz
 - 460 V-3 / 60 Hz



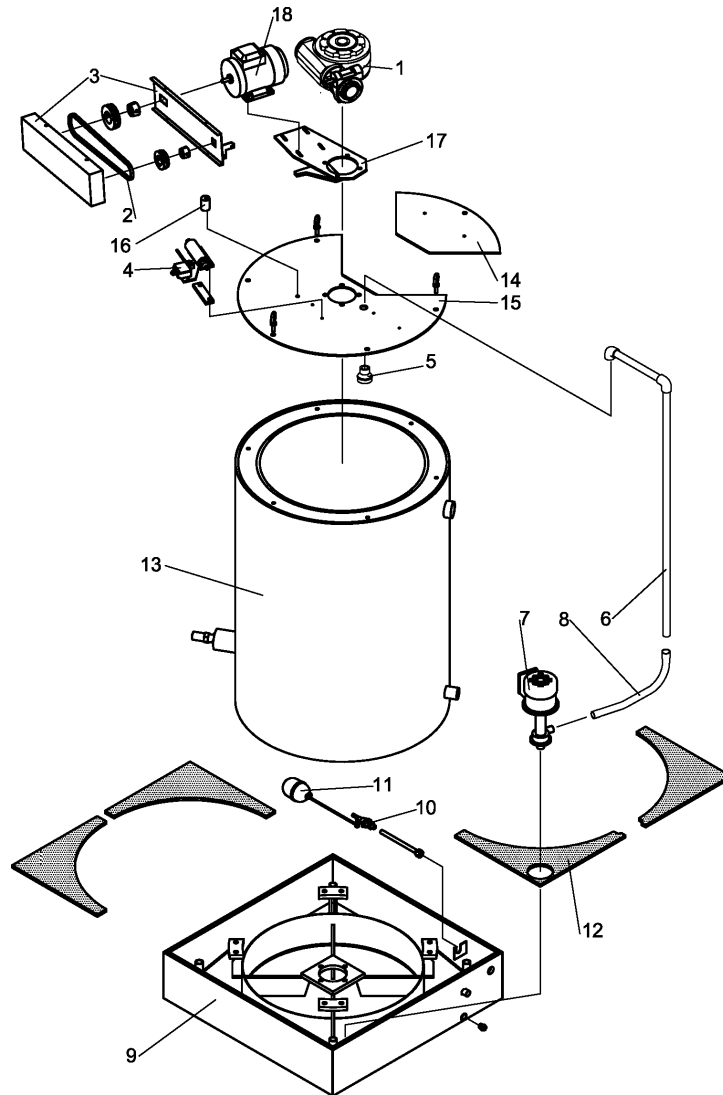
Remote control for PGS_2 Electrical panel

- An On button
- An Off button
- A green On indicator light
- A red fault indicator light
- A weekly programmable clock
- An emergency stop button



External Parts G200 Generator

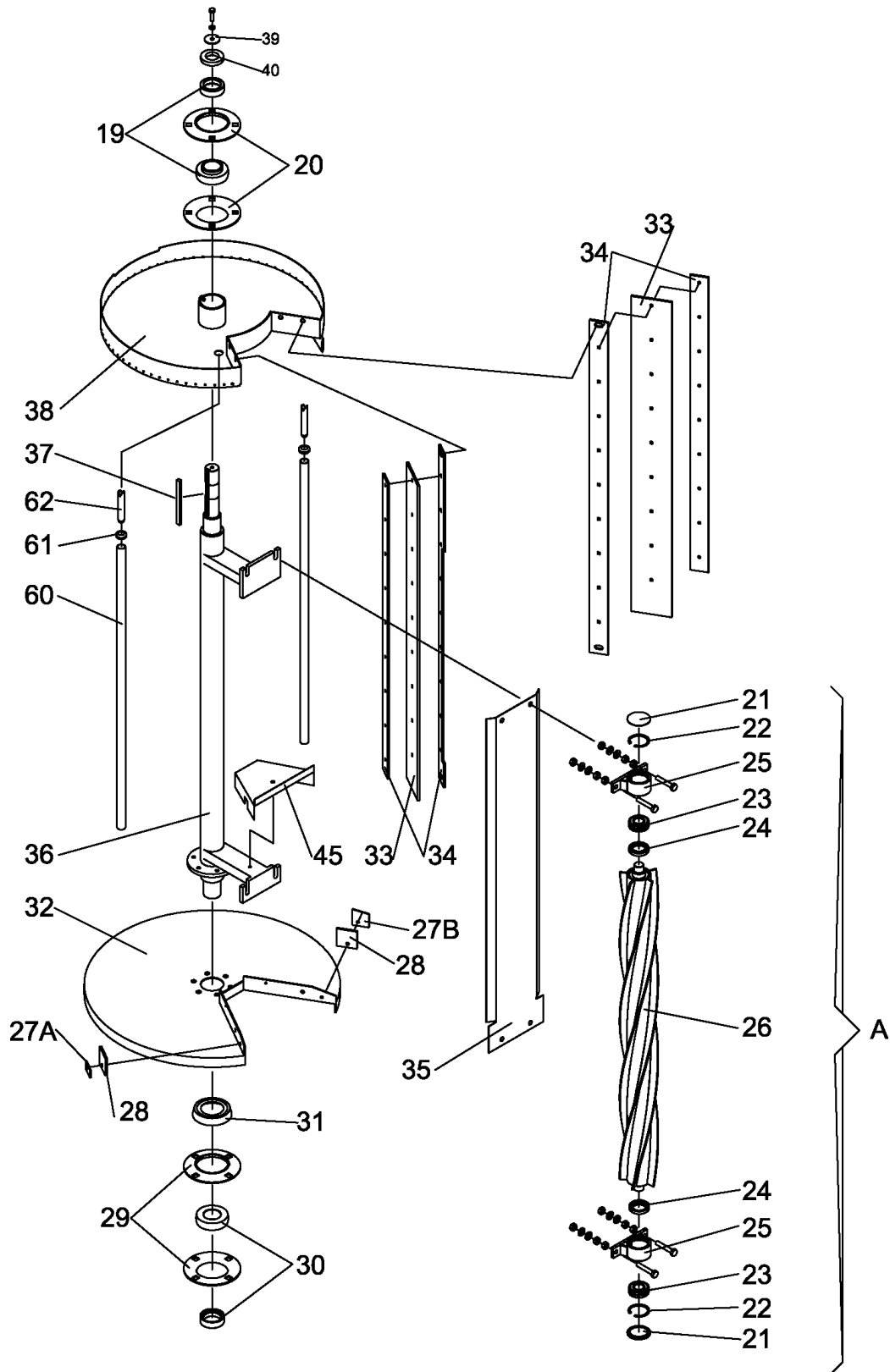
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Ref.	Designation	Code	Qty.
1	Gear reducer		1
2	Belt		1
3	Belt guard		1
4	Torque limiter		1
5	Water spray of the Water pipe		1
6	Water supply pipe		1
7	Water pump		1
8	Hose		1
9	Base		1
10	Valve		1
11	Valve float		1
12	Base cover (4 elements)		1
13	Cylinder		1
14	Inspection hatch		1
15	Upper part		1
16	Emergency stop for torque limiter		1
17	Stainless steel gear reducer support		1
18	Motor		1

Internal Parts G200 Generator

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Ref.	Designation	Code	Qty.
19	Central shaft bearing		1
20	Lower reamer bearing		1
21	reamer bearing cover		2
22	Circlips reamer bearing		2
23	reamer bearing		2
24	reamer bearing seal		2
25	Upper reamer bearing		2
26	reamer		1
27A	Additional front scrapper plate		1
27B	Additional back scrapper plate		1
28	Additional scrapper		2
29	Central shaft bearing flange		1
30	Central shaft bearing		1
31	Central shaft bearing cover		1
32	Recovery bowl		1
33	Scrapper		2
34	Scrapper support		2
35	Vertical deflector		1
36	Central shaft		1
37	Key		1
38	Distribution bowl		1
39	Washer		1
40	Seal		1
45	Central deflector		1
60	Lower de-icing tube		1
61	De-icing tube seal		1
62	De-icing tube		1