DOCUMENTATION

TECHNIQUE

ROLL IN BLAST CHILLER

BIOSTORE TURBO

Electronic – Stainless steel base

Types : SR 80 SG, GE and GI
SR 160 SG and GE

TECHNICAL MANUAL INCLUDING
- **USER MANUAL**
- **INSTRUCTIONS**

BONNET GRANDE CUISINE
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FORM050B1/1

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CONTENTS

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IMPORTANT RECOMMENDATIONS

* This unit is designed for use in Restaurants or Catering facilities. It is not intended for industrial use.

* Installation should be undertaken by a refrigeration engineer.

* Avoid installing the unit near major sources of heat or in direct sunlight.

* Note that too high an ambient temperature can reduce performance.

* The compressor condenser must be cleaned regularly (every 3 to 6 months) by a refrigeration engineer.

* Do not modify the electrical connection made during installation, particularly the earth continuity circuit.

* The supply cable that is fitted is a specific part and should only be replaced with an original part. Ensure that the plug is easily accessible.

* In the events of problems with the electrical circuit, only the installer or the manufacturer should intervene.

* Observe hygiene guidelines by regularly cleaning the following :
  . interior fittings
  . door seal
  . interior lining

  Do not use corrosive or acidic products.

* Water splashing can cause damage.
  . To avoid the risk of splash damage, do not clean with a hose or a high-pressure spray.
  . Do not locate the unit where it is exposed to the elements.

SPECIFICATION AND CHARACTERISTICS IN THIS DOCUMENT
MAY BE SUBJECT TO BE MODIFIED WITHOUT PRIOR NOTICE

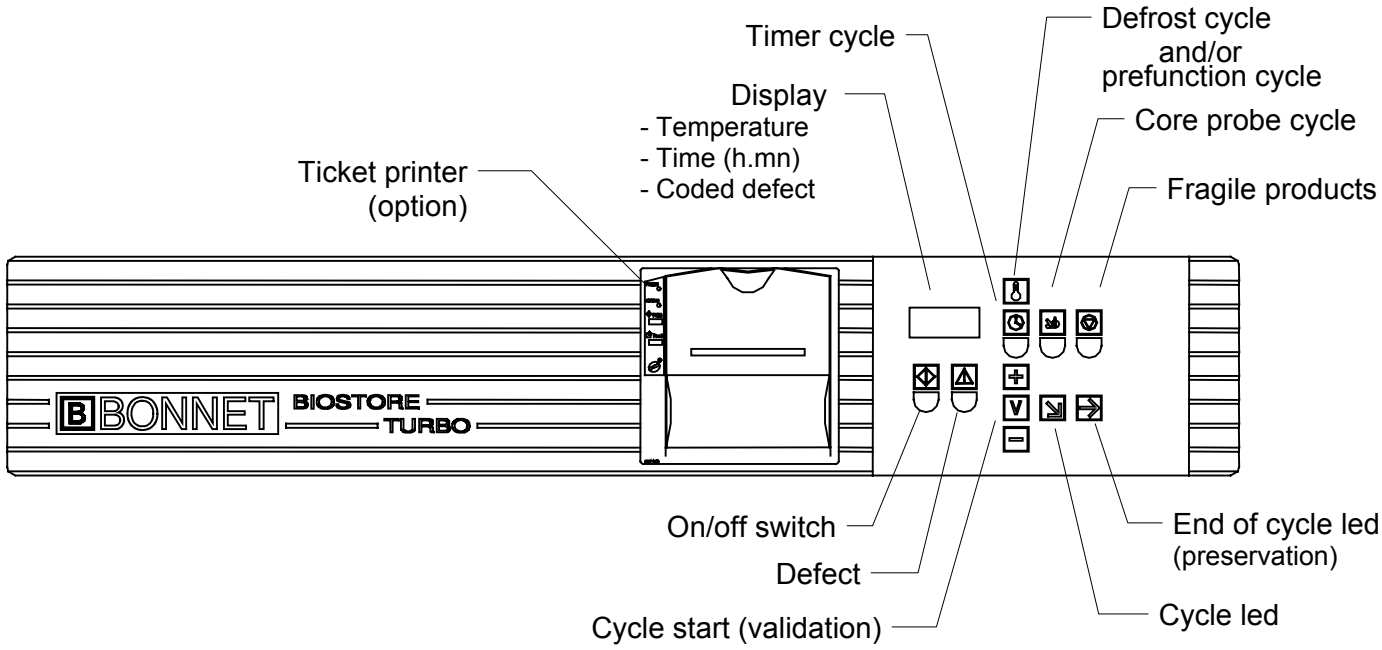
1. PRESENTATION OF THE CONTROL PANEL

1.1 IMPORTANT

Stop of the unit does not cut the power supply to the appliance.

If the appliance is not to be used for a period of time, power must be cut off with the insulation switch located on the control panel's side, the plug or the disconnector because of the risk of dammaging the refrigerating equipment.

1.2 KEYBOARD DESCRIPTION



For the use of the keyboard, see :

1.3 GENERAL RECOMMENDATIONS

1.3.1 DEFROST, PREFUNCTION CYCLE

Before loading products, a prefunction cycle should be launched in order to cool the interior of the appliance. It can be launched automatically when the appliance is powered up, by modifying the factory settings (see 'instructions').

Each prefunction cycle is automatically preceded by a defrost cycle. If needed, this function can be stopped (see paragraph 1.6 "Special settings").

During the prefunction cycle, the display indicates the ambient temperature of the appliance.

During the defrost cycle, the display indicates '*DEF*'.

After loading products into the appliance, choosing the chilling cycle at the closing of the door can be made compulsory by modifying the factory parameters (see 'instructions').

1.3.2 REFRIGERATION CYCLE WITH CORE PROBE

It is recommended to use the core probe whenever it is possible and in particular for a chilling cycle because it automatically controls the cycle.

The 5 points core probe allows to read the hotest point at the heart of the product. The cycle ends when the hotest sensor reaches the required temperature (factory setting = +10° which can be modified case by case). The display alternately indicates the temperature at the heart of the product and the remaining duration of the cycle.

With the factory settings, a core probe insertion test indicates that the core probe is not used for a hot product (sound alarm and the indication SP is displayed).

1.3.3 REFRIGERATION CYCLE WITH TIMER

When the use of the core probe is impossible, a cycle with timer is possible (factory setting = 120mn which can be modified case by case).

The cycle programming time depends on the type and the quantity of food to be cooled. During the cycle the display indicates the remaining duration.

1.3.4 VENTILATION

To avoid water spattering on the products, the ventilation power is automatically controlled by the temperature of the appliance, with a factory level pre set at 12°C.

1.3.5 'FRAGILE PRODUCTS' FUNCTION

In some cases, it is possible to refrigerate the products avoiding frost deposit. This function should only be used for reduced quantities of products.

After selecting the cycle with core probe or with timer, press 'Fragile Products' key. In this case, the cycle will operate following the factory settings, with an air temperature superior to –15°C with a strong ventilation. This can be modified case by case whenever it is needed, for example, a weak ventilation can be applied for light products (see paragraph 1.6 "Special settings").

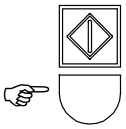
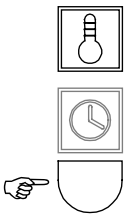
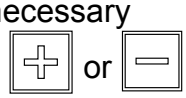
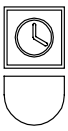
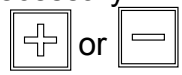
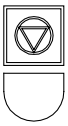
1.3.6 PRESERVATION AFTER THE CYCLE

At the end of each cycle, the appliance programs automatically the preservation to a temperature of +3°C with a weak ventilation, following the factory settings.

The display indicates the ambient temperature.

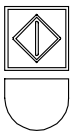
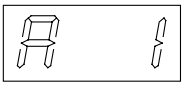
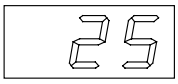
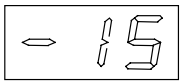
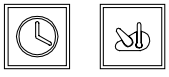
The storage duration inside the appliance can be unlimited thanks to an automatic control of the defrost during the preservation cycle.

1.4 SIMPLIFIED GUIDE with factory settings

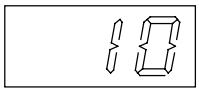
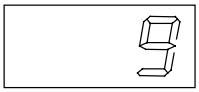
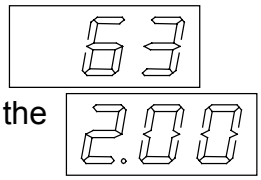
POWER UP	
Press 	Press for a few seconds.
PREFUNCTION CYCLE	
Press 	To select the cycle  Press  to launch the cycle. A defrost cycle is launched and automatically followed by a prefunction cycle.
LOADING	
At the end of the prefunction cycle, introduce the products into the appliance. For a core probe cycle, introduce the core probe deep inside the product.	
CYCLE WITH PROBE (with use of the core probe)	
Press  and if necessary 	To select the cycle Sound alarm and the indication 'SP' is displayed if the probe is not correctly used. To modify the temperature of the set-point at the end of the cycle.
CYCLE WITH TIMER (without using the core probe)	
Press  and if necessary 	To select the cycle To modify the cycle duration
FRAGILE PRODUCTS	
Press 	To limit air temperature, avoiding frost deposit. (Press for a few seconds during the cycle).
CYCLE START	
Press 	1) To start a cycle. 2) To stop a running cycle (Press for a few seconds).
CYCLE EXECUTION	
Led 	Running cycle.
Led 	Preservation cycle (between 0 and +3°C)
STOP OF THE APPLIANCE	
Press 	Press for a few seconds. It is recommended to let the door half-open when the appliance is not used.

1.5 DETAILED GUIDE

1.5.1 START (Prefunction cycle)

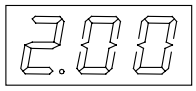
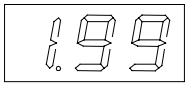
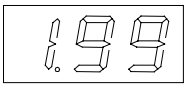
1	Power up  Press for a few ☞ seconds	1) All the leds as well as the display light up (Microprocessor test) 2) The machine number, pre programmed during installation is  displayed. 3) The ON led lights up  and  the temperature of the compartment is displayed
2	Selection and start *This stage can be launched automatically when the appliance is powered up, by modifying the factory setting (parameter 03).*   Manual selection Press ☞ Manual launch  Press ☞	The prefunction led lights  up. 1) Start of the defrost cycle with a pre set ventilation power (weak) until the temperature of the appliance is superior to the pre set temperature (5°C) without exceeding a maximum time (30mn). *This function can be disactivated with the d6 parameter (see paragraph 'Special condition')* 2) Start of the compressor with production of cold air until the pre set temperature is reached (-15°C) The led  indicates the running cycle and the temperature of the compartment is  displayed in real time.
3	Automatic end of cycle	The 'preservation after cycle' led lights up  The bell rings during a few seconds. The appliance moves to the preservation stage, waiting for the products to be loaded.
NOTA	During the cycle, press(a few sec.) ☞ 	Full and definitive stop of the running cycle.
	The door is open during the cycle	Temporary stop of the running cycle. When the door is closed, the cycle starts again.
	During the cycle, press ☞  or 	Voluntary stop of the running prefunction cycle to select a refrigeration cycle (see paragraph 1.5.2 or 1.5.3)
	Opening or closing the door during or after the cycle by modifying the factory setting (parameter 02)	Choosing a refrigeration cycle is automatically asked. The leds flash  The bell rings until a cycle is chosen.
	All operating parameters set in factory can be modified when needed(see 'instructions').	

1.5.2 START AND STOP OF A CYCLE WITH CORE PROBE

1	Open the door and introduce the products to be cooled. Introduce the core probe as deep as possible inside the product. Close the door.	
2	Selection : Press ☞ 	The 'Cycle with probe' led  lights up and the temperature of the set-point set in factory is displayed. 
3	Settings (eventual) : Press ☞  or 	To modify the end of cycle set-point. Display of the temperature in real time. 
3	Start : Press ☞ 	The 'Running cycle' led  lights up and the temperature at the heart of the product is diplayed in real time, alternately with the remaining duration of the cycle.  The cycle starts with a weak ventilation power (until the +12°C level set in factory is reached), and automatically moves to strong ventilation mode until the end of the cycle (at a temperature of +10°C at the heart).
4	Fragile products: Press ☞ (for a few seconds during the cycle)	Avoid frost deposit on the products by limiting the air temperature to –15°C (with strong ventilation). *This function can be set by modifying the factory settings, with a different air temperature (cc parameter) and/or a weak ventilation (F1 parameter)* Attention : This function must only be used with small loads.
5	Automatic end of cycle	The 'Preservation after cycle' led lights up.  The bell rings for a few seconds. The appliance moves to the preservation stage at the temperature of +3°C with a weak ventilation power. Unloading : Do not forget to take out and clean the core probe before unloading.

N O T A	Opening of the door during the cycle	Temporary stop of the running cycle. When the door is closed, the cycle starts again.
	During the cycle, press(a few sec.) ☞ 	Full and definitive stop of the running cycle.
	All operating parameters set in factory can be modified when needed(see 'instructions')	

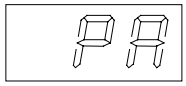
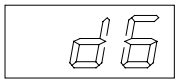
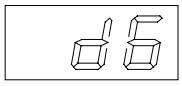
1.5.3 START AND STOP OF A CYCLE WITH TIMER

1	Open the door and introduce the products to be cooled. Check the core probe is well installed on its support. Close the door	
2	Selection :   Press ☞ 	The 'Cycle with timer' led  lights up and the cycle duration set in factory is displayed. 
3	Settings (eventual) : Press ☞  or 	To modify the cycle duration. Display of the cycle duration in real time. 
3	Start : Press ☞ 	The 'Running cycle' led  lights up and the remaining duration of the cycle is displayed.  The cycle starts with a weak ventilation power (until the 12°C level set in factory is reached), and automatically moves to strong ventilation mode until the end of the cycle (at a temperature of +10°C at the heart).
4	Fragile products :  Press ☞  (for a few seconds during the cycle)	Avoid frost deposit on the products by limiting the air temperature to –15°C (with strong ventilation). *This function can be set by modifying the factory settings, with a different air temperature (cc parameter) and/or a weak ventilation (F1 parameter)* Attention : This function must only be used with small loads.
5	Automatic end of cycle	The 'Conservation after cycle' led lights up  The bell rings for a few seconds. The appliance moves to the conservation stage at the temperature of +3°C with a weak ventilation power. Unloading : Do not forget to take out and clean the core probe before unloading.

N O T A	Opening of the door during the cycle	Temporary stop of the running cycle. When the door is closed, the cycle starts again.
	During the cycle, Press(a few sec.) ☞ 	Full and definitive stop of the running cycle.
	All operating parameters set in factory can be modified when needed (see instructions).	

1.6 SPECIAL SETTINGS

1.6.1 PROGRAMMATION (The regulation is ON)

1	Access to programmation : Press simultaneously And for a few sec. ☞ + and −	Beginning of the programmation mode. Display of the indication 
2	Selection of parameters : Press successively ☞ + or −	Display of the parameters one after another. Display of the parameter's codes 
3	Access to the selected parameter : Press ☞ V	Presetting display of the parameter 
4	Modification of the parameter setting Press successively ☞ + or −	Display of the parameter's values one after another Display of the parameter's values 
5	Validation of the parameter's setting : Press ☞ V	Display of the modified parameter's code 

Start again stage 2 to 5 for the other parameters.

6	To exit programmation : Press simultaneously And for a few sec. ☞ + and −	Restart of the system. During or after programmation, the system restarts automatically if no key is pressed in less than 15 seconds.

The parameter's modifications are definitively taken into account.

1.6.2 TABLE OF PARAMETERS

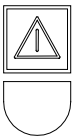
Code	Parameters		Min	Max	Fact.
PA	Password to access level 2	(reserved to installer)	-99	99	--
Temperature parameters					
cA	Core probe temperature reading	(read only) °C	--	--	--
cc	Fragile products interior probe set-point	°C	-55	99	-15
Defrost parameters					
d6	Defrost at the beginning of the prefunction cycle	0 = No, 1 = Yes	0	1	1
Ventilation parameters					
F1	Ventilation with Fragile Products ON	0 =Weak, 1 = Strong	0	1	1
Printing parameters (with optional printer)					
i1	Printing frequency in chilling cycle	mn	0	60	5
i2	Printing frequency in preservation cycle	mn	0	60	30
i3	Printing at the beginning of the cycle	1 = No, 0 = Yes	0	1	0
i4	Date setting	Day	1	31	(1)
i5		Month	1	12	(1)
i6		Year	990	050	(1)
i7	Time setting	Hour	0	23	(1)
i8		Minute	0	59	(1)

(1) The configuration must be set during installation.

1.7 ALARMS AND DEFECTS

Indicated by the red light  and the sound alarm

The display indicates the type of defects.



The buzzer can be stopped by pressing the key ☞

1.7.1 USE SECURITIES

SP	The core probe is not, or not well introduced in the product.
Por	The door is open.
H-L	The normal time is over.
SEC	Supply breakdown.
DEF	Indicates a running defrost cycle.

1.7.2 OPERATION DEFECTS (call for the repairer)

SA	Regulation probe defect.
SC	Core probe defect.
AL	Refrigerating defect.

2. USE

2.1 GENERAL REQUIREMENTS

Do not load products in a way that obstructs the air circulation, this is important to ensure even distribution of cold air within the cavity.

When the probe is not used, it must be located absolutely on its support.

When the appliance is not used, it is recommended to let the door half open.

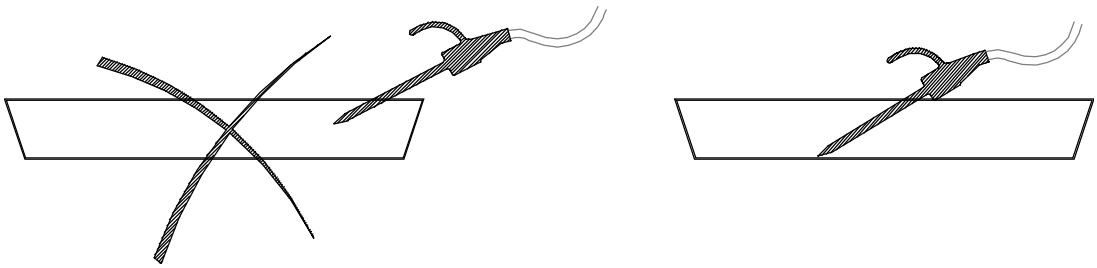
2.2 LOADING

A space of 15 to 20 mm is required between each item to allow refrigerated air to pass around the products.

The chilling depends on the weight, nature and thickness of the food, therefore it is difficult to accurately define a loading capacity.

2.3 CORE PROBE POSITION

The core probe must be introduced as deep as possible in the product to be cooled.



2.4 VENTILATION

To guaranty refrigerating performance, take care the fans grid and the funnel for air outlet have not been blocked up.

2.5 DEFROST WATER EVACUATION

Defrost water is collected in the stainless tray located under the evaporator and ventilation unit.

Evacuation is directly made thanks to a drain trap situated outside the appliance.

Check that nothing blocks up the evacuation hole located at the bottom of the tank in front of the evaporator.

3. MAINTENANCE

IMPORTANT

Before any cleaning operation, ensure
that the appliance is unplugged or isolated
Do not use a spray hose to avoid
water spattering on the products.

3.1 STAINLESS STEEL

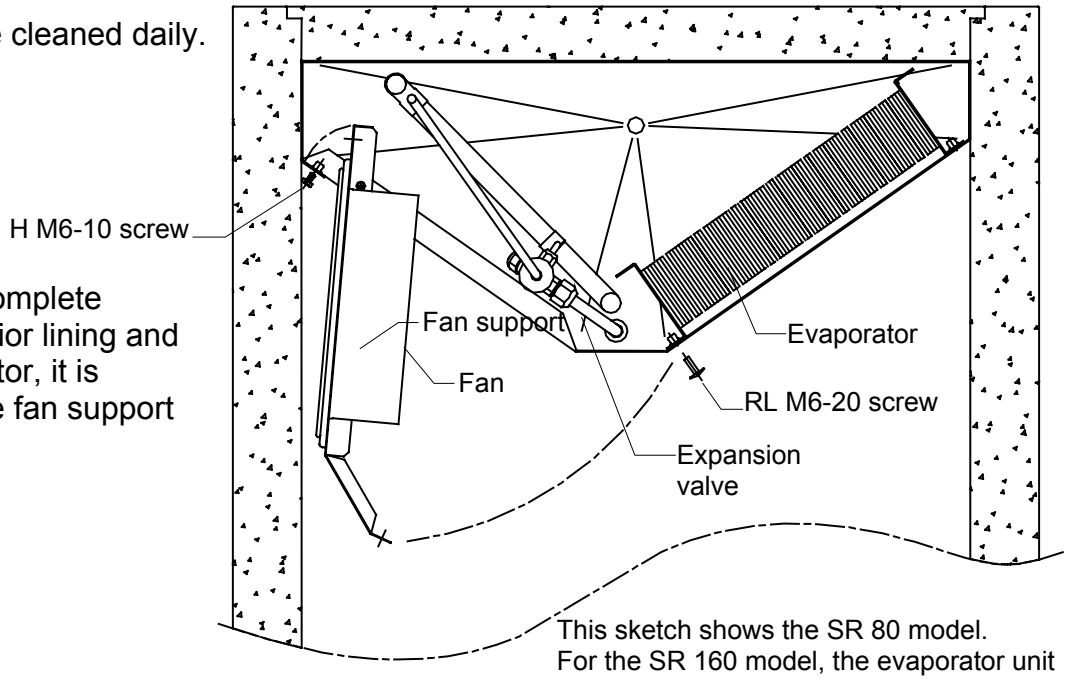
Use warm soapy water or a non corrosive cleaner (such as Teepol or an equivalent product).Then, rinse thoroughly and dry.

Do not use abrasive, aggressive or concentrated cleaning products.

Do not use wire wool under any circumstances. Fingerprints can be removed with a cloth soaked in alcohol.

3.2 INTERIOR LINING

This should be cleaned daily.



This sketch shows the SR 80 model.
For the SR 160 model, the evaporator unit is located on the left side.

To ease the complete cleaning of the interior lining and access the evaporator, it is possible to open the fan support sheet.

3.3 REGULAR CLEANING.

Particularly clean the door seals.

Clean the core probe whenever it is used.

In order to maintain the refrigerating capacity and to ensure the longevity of the compressor, it is necessary to clean regularly (every 3 to 6 months) the condenser in the case of an air refrigerating group. This operation must be carried out by the installer.

INSTRUCTIONS

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IMPORTANT RECOMMENDATIONS

* When installing the unit, ensure that there is adequate circulation and air volume to cool the condenser and compressor.

* Avoid installing the appliance near major sources of heat or in direct sunlight.

* Note that too high an ambient temperature can reduce performance.

* There must be earth continuity between the appliance and the main connections.

* The supply cable that is fitted is a specific part and should only be replaced with an original part. Ensure that the plug is easily accessible.

* The installer should ensure that the electrical connection is suitably protected by an appropriate fuse or circuit-breaker (see rating plate).

* Ensure that the appliance is switched OFF before any intervention on the electrical or refrigeration circuits and during cleaning.

* The compressor condenser must be cleaned regularly (every 3 to 6 months).

* Water splashing can cause damage.
  . To avoid the risk of splash damage, do not clean with a hose or high-pressure spray.
  . Do not locate the unit where it is exposed to the elements.

* After any intervention, ensure that the original installation guidelines are respected to avoid any form of risk.

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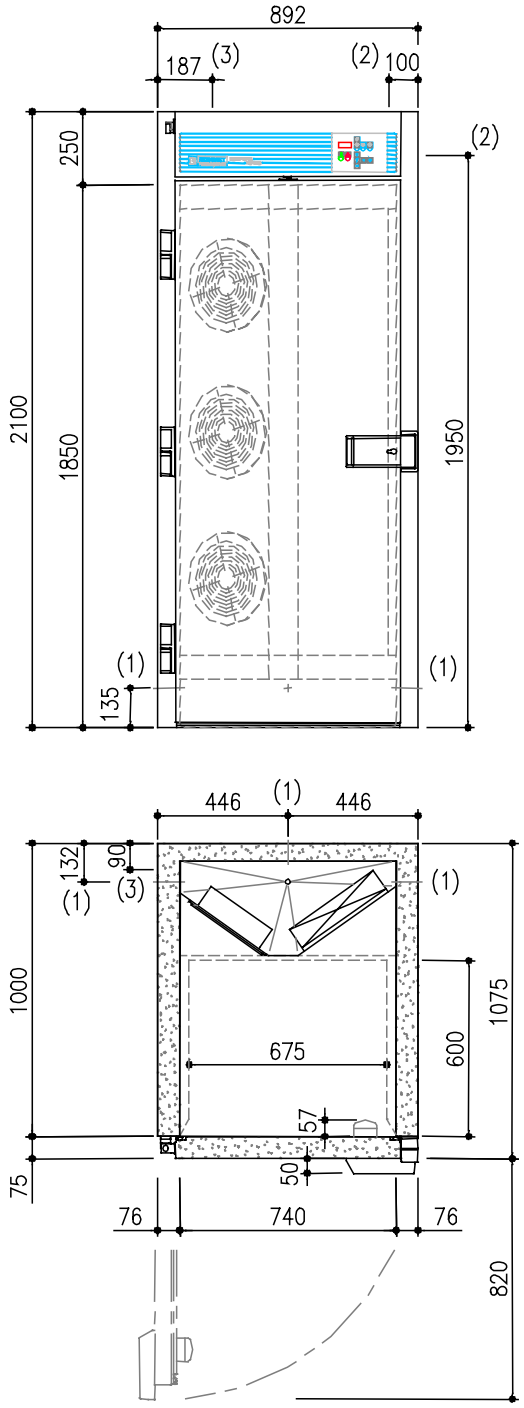
1. TECHNICAL DATA

1.1 SR 80 SG type



Code : **S 102 E 01** Without compressor

POSITIONING

The appliance must be set on a perfectly horizontal smooth and flat surface. Allow for a silicon bead under and on its periphery.

CONSTRUCTION

- Austenitic stainless exterior casing and interior lining.

Insulated body

- Demountable panels with assembling hook system.
- Radiused interior base R 15 mm.
- Polyurethane foam insulation, 76 mm thick
- Thermal break between inner and outer structure.

Door

- Door bib water proof joint.
- 3 rising butt hinges avoiding ground joint friction.
- Central door closing mechanism with interior opening.
- Door opening can be reversed.

DEFROST WATER

Defrost water is collected in a trough with a 20mm ø drain pipe.

A three way drain (1) is provided at the back and on the two sides of the appliance.

A connection set with a 32mm ∅ PVC drain trap is supplied with the appliance.

TECHNICAL DATA

Voltage	: 3N~400V 50 Cycle
Input power	: 1000 W
Protection	: aM 6
Connections (2)	: 2,5 mm2 Section

Provide for the protection against overloads or electrical defects.

The control panel of the delivered appliance includes an insulating switch, a tetrapolar and unipolar circuit-breaker with fuse bar, defrost and ventilation contactors, and a connecting strip with contactors.

Refr. power	: 3320 W at -15/+55°C
Refrigerant	: R404A
Load	: See instruction plate
Evaporator	: Ventilated, corrosion proof
Expansion valve	: Thermostatic R404A
Ventilation	: 3 fans 250mm ø
Defrost	: Electric
Connections (3)	: Suction 7/8", Liquid 3/8"

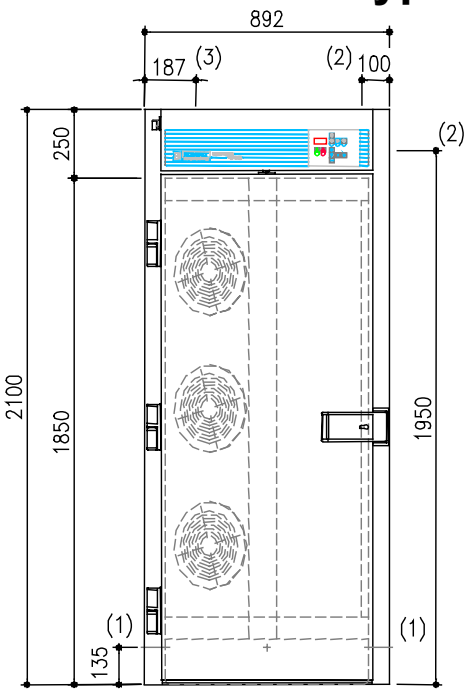
The appliance is delivered with expansion valve and solenoid valve.

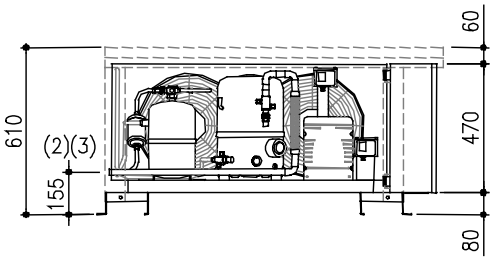
Complies with

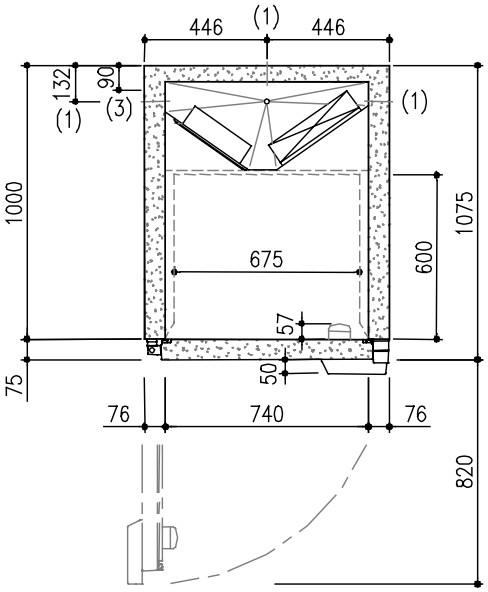
Electric safety	: EN 60 335-1
Food hygiene	: XP U 60 010

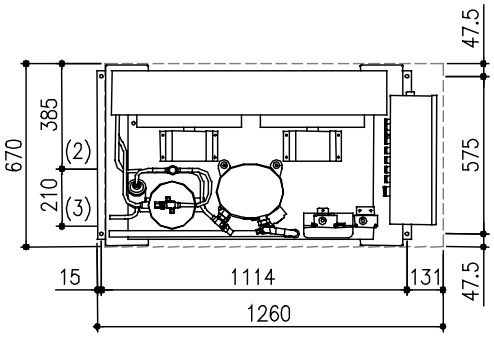
Complies with E.C requirements

1.2 SR 80 GE type









Code : **S 102 E 02** With external compressor

POSITIONING

The appliance must be set on a perfectly horizontal smooth and flat surface. Allow for a silicon bead under and on its periphery.

CONSTRUCTION

- Austenitic stainless exterior casing and interior lining.

Insulated body

- Demountable panels with assembling hook system.
- Radiused interior base R 15 mm.
- Polyurethane foam insulation, 76 mm thick.
- Thermal break between inner and outer structure.

Door

- Door bib water proof joint.
- 3 rising butt hinges avoiding ground joint friction.
- Central door closing mechanism with interior opening.
- Door opening can be reversed.

DEFROST WATER

Defrost water is collected in a trough with a 20mm ø drain pipe.

A three way drain (1) is provided at the back and on the two sides of the appliance.

A connection set with a 32mm ∅ PVCdrain trap is supplied with the appliance.

Refr. power	: 3320 W at -15/+55°C
Refrigerant	: R404A
Load	: See instruction plate
Evaporator	: Ventilated, corrosion proof
Expansion valve	: Thermostatic R404A
Ventilation	: 3 fans 250mm ø
Defrost	: Electric
Compressor	: Hermetic air compressor
Connection (3)	: Suction 7/8", Liquid 3/8"

(a connection is to forecast with 1/2-3/8" reduction for the compressor)

The blast chiller is supplied with an expansion valve and a solenoid valve.

The compressor is delivered pre loaded, with HP and LP pressostats, dryer, sight glass and vibration eliminator.

TECHNICAL DATA

Voltage	: 3N~400V 50 Cycle
Input power	: 4000 W
Protection	: aM 10
Connections (2)	: 2,5 mm2 Section

Provide for the protection against overloads or electrical defects.

The control panel of the delivered appliance includes an insulating switch, an unipolar circuit-breaker with fuse bar, defrost and ventilation contactors, and a connecting strip with contactors.

The compressor is delivered with an electric box including connecting strips, protection circuit-breakers, a circuit-breaker with fuse bar, contactor with thermal relay, voltage and defect indicator (supplied connection between compressor and blast chiller length 10M).

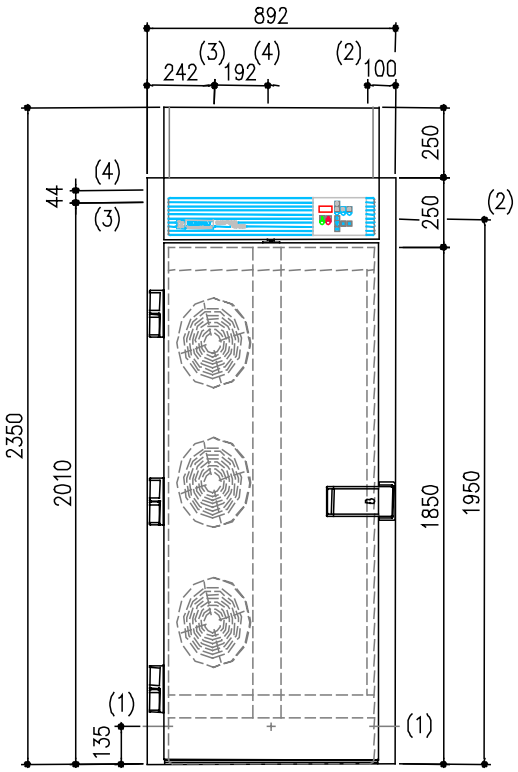
Complies with

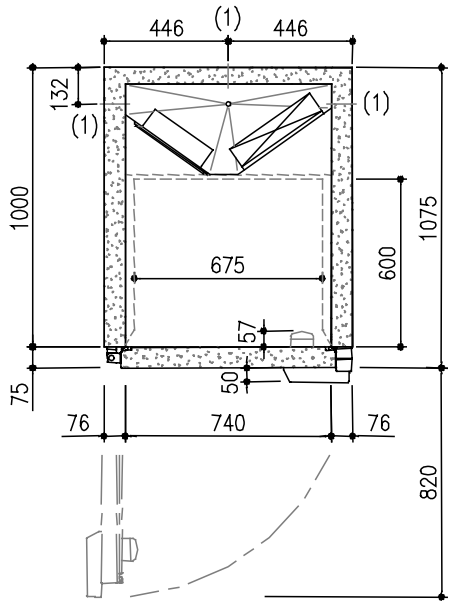
Electric safety	: EN 60 335-1
Food hygiene	: XP U 60 010

Complies with E.C requirements.

1.3 SR 80 GI type

Code : **S 102 E 03** Incorporated compressor





POSITIONING

The appliance must be set on a perfectly horizontal smooth and flat surface. Allow for a silicon bead under and on its periphery.

CONSTRUCTION

- Austenitic stainless exterior casing and interior lining.

Insulated body

- Demountable panels with assembling hook system.
- Radiused interior lining base R 15 mm..
- Polyurethane foam insulation, 76 mm thick.
- Thermal break between inner and outer structure.

Door

- Door bib water proof joint.
- 3 rising butt hinges avoiding ground joint friction.
- Central door closing mechanism with interior opening.
- Door opening can be reversed.

DEFROST WATER

Defrost water is collected in a trough with a 20mm ø drain pipe.

A three way drain (1) is provided at the back and on the two sides of the appliance.

A connection set with a 32mm ∅ PVC drain trap is supplied with the appliance.

TECHNICAL DATA

Voltage	: 3N~400V 50 Cycle
Input power	: 3400 W
Protection	: aM 8
Connection (2)	: 2,5 mm2 Section

Provide for the protection against overloads or electrical defects.

The appliance is delivered with a moulded plug, and the control panel includes an unipolar cicuit-breaker with fuse bar, defrost and ventilation contactors, contactor with thermal relay and a connecting strip.

Refr. power	: 3320 W at -15/+55°C
Refrigerant	: R404A
Load	: See instruction plate
Evaporator	: Ventilated, corrosion proof
Expansion valve	: Thermostatic R404A
Ventilation	: 3 fans 250mm ø
Defrost	: Electric
Compressor	: Hermetic
Condenser	: water type, consumption: 0.5m^3/heure
Connections	: Inlet ø20/27 flexible connection supplied (3) Drain PVCø32 (4)

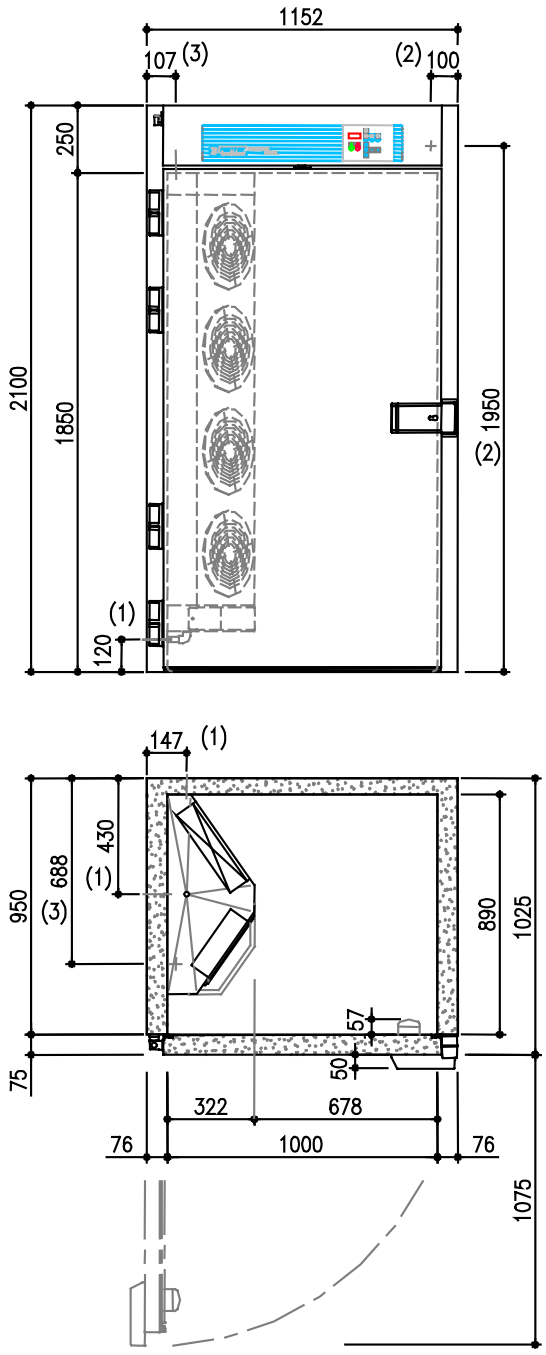
The appliance is delivered with an expansion valve, a solenoid valve, sight glass, dryer, vibration eliminator, HP and LP pressostats, water system with stopcock and an anti return valve, pressostatic valve and external evacuation system with a drain trap.

Complies with

Electric safety	: EN 60 335-1
Food hygiene	: XP U 60 010

Complies with E.C requirements

1.4 SR 160 SG Type



Code : **S 102 E 04** Without compressor

POSITIONING

The appliance must be set on a perfectly horizontal smooth and flat surface. Allow for a silicon bead under and on its periphery.

CONSTRUCTION

- Austenitic stainless exterior casing and interior lining.

Insulated body

- Demountable panels with assembling hook system.
- Radiused interior base R 15 mm.
- Polyurethane foam insulation, 76mm thick
- Thermal break between inner and outer structure.

Door

- Door bib water proof joint.
- 4 rising butt hinges avoiding ground joint friction.
- Central door closing mechanism with interior opening.
- Door opening can be reversed.

DEFROST WATER

Defrost water is collected in a trough with a 20mm ø drain pipe.

A two way drain (1) is provided at the back and on the left side of the appliance.

A connection set with a 32mm ∅ PVC drain trap is supplied with the appliance.

TECHNICAL DATA

Voltage	: 3N~400V 50 Cycle
Input power	: 1200 W
Protection	: aM 6
Connection (2)	: 2,5 mm2 Section

Provide the protection against overloads or electrical defects.

The control panel of the delivered appliance includes an insulating switch, a tetrapolar and an unipolar circuit breaker with fuse bar, defrost and ventilation contactors, and a connecting strip with contactors

Refr. power	: 8650 W at -15/+55°C
Refrigerant	: R404A
Load	: See instruction plate
Evaporator	: Ventilated, corrosion proof
Expansion valve	: Thermostatic R404A
Ventilation	: 4 fans 250mm ø
Defrost	: Electric
Connection (3)	: Suction 7/8", Liquid 3/8"

The appliance is delivered with an expansion valve and a solenoid valve.

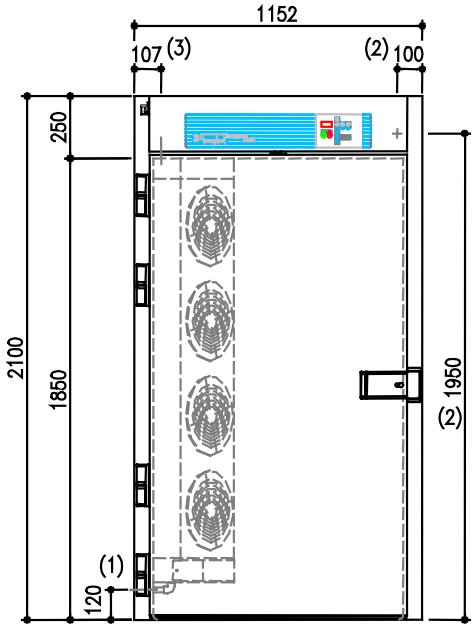
Complies with

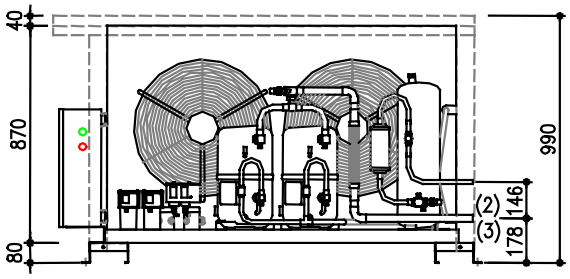
Electric safety	: EN 60 335-1
Food hygiene	: XP U 60 010

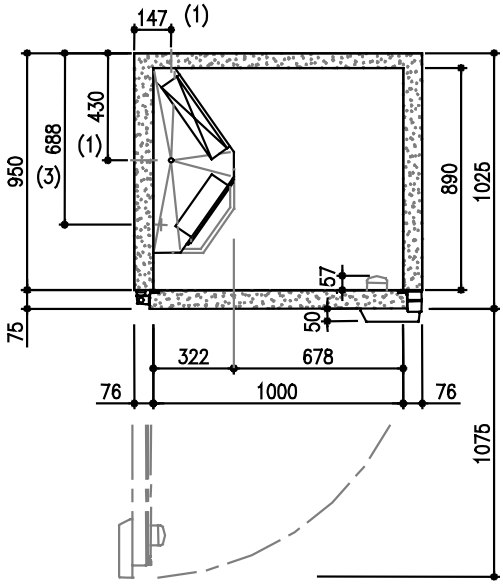
Complies with EC requirements

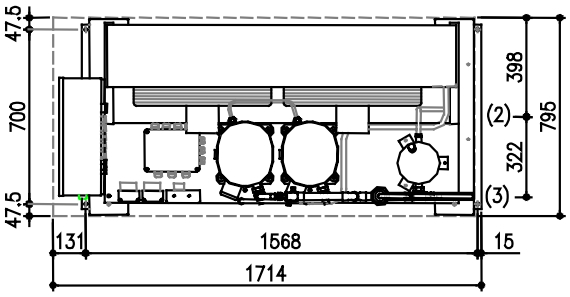
1.5 SR 160 GE type

Code : **S 102 E 05** With external compressor









POSITIONING

The appliance must be set on a perfectly horizontal smooth and flat surface. Allow for a silicon bead under and on its periphery.

CONSTRUCTION

- Austenitic stainless exterior casing and interior lining.

Insulated body

- Demountable panels with assembling hook system.
- Radiused interior base R 15 mm.
- Polyurethane foam insulation, 76 mm thick
- Thermal break between inner and outer structure.

Door

- Door bib water proof joint.
- 4 rising butt hinges avoiding ground joint friction.
- Central door closing mechanism with interior opening.
- Possible inversion of the opening direction.

DEFROST WATER

Defrost water is collected in a trough with a 20mm ø drain pipe.

A two way drain (1) is provided at the back and on the left side of the appliance.

A connection set with a 32mm ∅ PVCdrain trap is supplied with the appliance.

TECHNICAL DATA

Voltage	: 3N~400V 50 Cycle
Input power	: 7100 W
Protection	: aM 20
Connection (2)	: 4 mm2 Section

Provide the protection against overloads or electrical defects.

The control panel of the delivered appliance includes an insulating switch, an unipolar circuit-breaker with fuse bar, defrost and ventilation contactors, and a connecting strip with contactors.

The compressor is delivered with an electric box including a connecting strip, protection circuit-breakers, a circuit-breaker with fuse bar, contactor with thermal relay, voltage and defect indicator (supplied connection between compressor and blast chiller length 10 M).

Refr. power	: 8650 W at -15/+55°C
Refrigerant	: R404A
Load	: See instruction plate
Evaporator	: Ventilated, corrosion proof
Expansion valve	: Thermostatic R404A
Ventilation	: 4 fans 250mm ø
Defrost	: Electric
Compressor	: Hermetic air compressor
Connection (3)	: Suction 7/8", Liquid 3/8"

(a connection is to forecast with1"1/8-5/8" reduction for the compressor)

The blast chiller is supplied with an expansion valve and a solenoid valve.

The compressor is delivered pre loaded, with HP and LP pressostats, dryer, sight glass and vibration eliminator.

Complies with

Electric safety	: EN 60 335-1
Food hygiene	: XP U 60 010

Complies with EC requirements

2. INSTALLATION

2.1 GENERAL REQUIREMENTS

The appliance must be installed, modified and repaired by a specialized engineer in accordance with current regulations.

2.2 HANDLING

The appliance must be handled with suitable lifting equipment, transported on its original pallet, and not stacked.

If moving the appliance without its pallet, it must be carried and not pulled.

2.3 UNPACKING AND INSTALLATION

2.3.1 LOCATION

When choosing the location, make sure that there is sufficient air circulation around the appliance to allow correct cooling of the condenser and compressor.

Do not install near a source of heat.

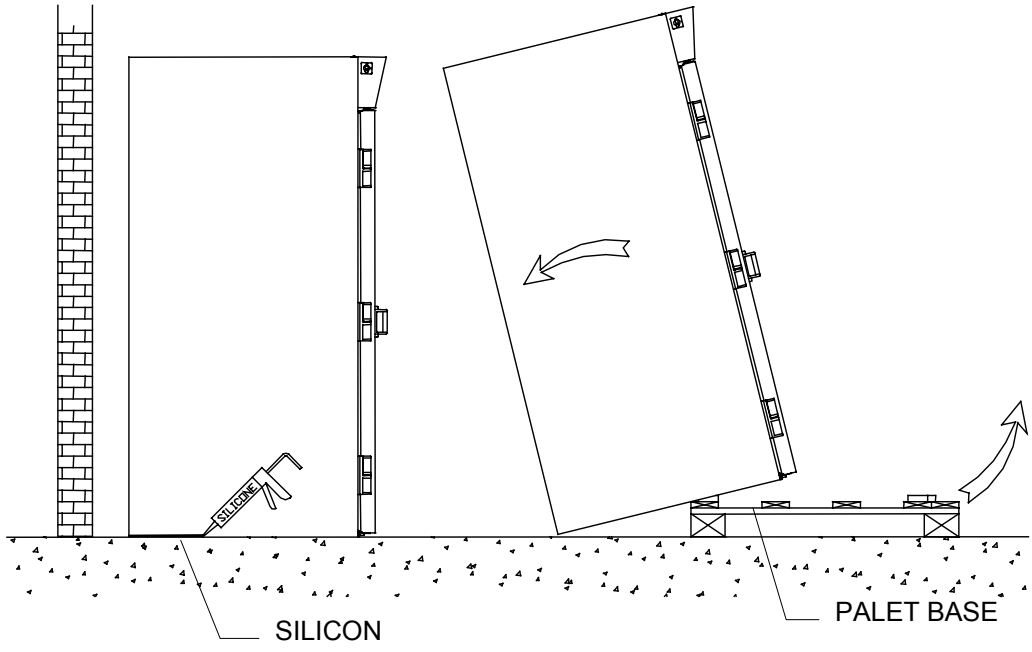
IMPORTANT :Roll in units do not have adjustable feet, therefore they must be placed on a smooth and level floor.

2.3.2 INSTALLATION

After unpacking, slide the unit off its pallet. Ensure that the weight of the unit is evenly distributed.

When the appliance is on its definitive location, remove the handling stiffener situated inside the appliance (only for SR 80).

Apply silicon mastic between the resin bottom and the floor.



2.4 CHILLER DISASSEMBLY

If the selected location is not accessible :

1) Remove the hinges from the service door.
2) Open the front of the control panel by unscrewing the 2 inferior screws located under the front, disconnect the probes, the fans, the solenoid valve, the defrost heater, then close the front.
3) Unpair the solenoid valve fixed to the ceiling (plus the suction line of the compressor for the incorporated group models).
4) Open the fan support of the evaporator unit and unscrew the fixing screw which fix the unit under the ceiling. Close the fan support and steady the unit between the base of the chiller and the drainer.
5) Unlock the assembly boxes of the ceiling at the back of the chiller (using the provided allen wrench) and remove the top after having unscrewed the 8 screws which fix the fixing corners, and the 2 screws fixing the board of the control panel to the chiller's sides (the control panel and the group for the incorporated group models can remain fixed to the ceiling).
6) Unlock the boxes using the allen wrench and remove as follows :
   - The left and right side panels
   - The back panel.

2.5 CHILLER ASSEMBLY

Elements which are delivered un-assembled arrive in one case. For models with incorporated group, the top panel, pre equipped with the compressor unit and the control panel ,is delivered in another case.

During assembly, engage the 8 mm studs in the hook assembly boxes and apply a silicon bead between the different panels of the containment to make it water proof.

Lock the assembly boxes using the supplied allen wrench (rotate in the clockwise direction until you hear a click fit). Block holes in the assembly boxes using the 10 mm plugs provided with the appliance.

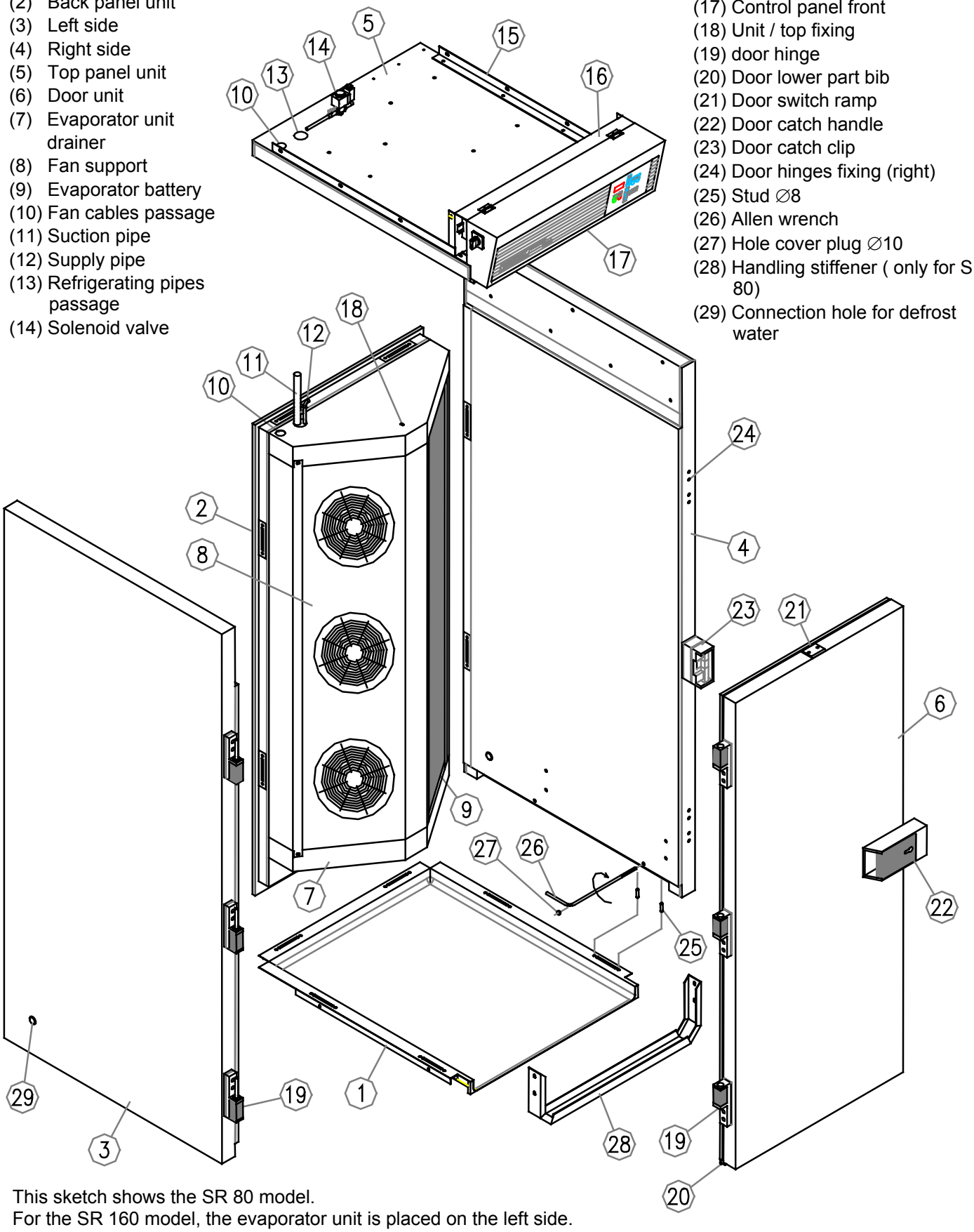
The equipped panels of the evaporator unit must be placed by steadying the unit between the base of the chiller and the unit's drainer.

1) After having put the S/S base on the ground, put the back panel on the back.
2) Place the 2 sides and lock the panels together.
3) Put the top between the sides and on the back, screw it to the sides using the fixing corners and the board of the control panel. Lock the boxes assembling the top to the back of the chiller.
4) Open the fan support of the evaporator unit, fix the top of the unit under the ceiling, close the fan support and remove the block under the drainer.
5) Open the front of the control panel by unscrewing the 2 inferior screws located under the front, connect the probes, the fans, the solenoid valve, the defrost heater, then close the front. Braze the solenoid valve fixed to the top (plus the suction line of the compressor for the incorporated group models).
6) Install the service door (the position of the latches mounted in factory may be modified after removing their casing).
7) Locate the chiller (see paragraph 2.3.2) and end installation.

2.6 EXPLODED VIEW

(1) S/S bottom
(2) Back panel unit
(3) Left side
(4) Right side
(5) Top panel unit
(6) Door unit
(7) Evaporator unit drainer
(8) Fan support
(9) Evaporator battery
(10) Fan cables passage
(11) Suction pipe
(12) Supply pipe
(13) Refrigerating pipes passage
(14) Solenoid valve

(15) Top fixing valley
(16) Electric board
(17) Control panel front
(18) Unit / top fixing
(19) door hinge
(20) Door lower part bib
(21) Door switch ramp
(22) Door catch handle
(23) Door catch clip
(24) Door hinges fixing (right)
(25) Stud ∅8
(26) Allen wrench
(27) Hole cover plug ∅10
(28) Handling stiffener (only for SR 80)
(29) Connection hole for defrost water



This sketch shows the SR 80 model.
For the SR 160 model, the evaporator unit is placed on the left side.

2.7 CONNECTIONS (See paragraph 1 "Technical data")

2.7.1 REFRIGERATING (EXTERNAL REFRIGERATION UNIT)

The chiller is delivered with the pipe of outlet suction located at the exterior of the ceiling and a solenoid valve fixed to the ceiling.

The access to the evaporator expansion valve is made by opening the fan support. (See paragraph 3.2 of the user manual)

The operating temperature of the refrigeration units connected to the chiller must extend from at least –15°C to +10°C (evaporation temperature).

Ask us for connecting the chiller to a refrigerating power station.

2.7.2 WATER CONNECTION (WATER TYPE REFRIGERATION UNIT)

The water-type incorporated group chillers are delivered with a 20/27 power cord and a 32mm ∅ PVC drain trap with 'funnel system' to prevent waste water from returning into the containment.

2.7.3 ELECTRIC

The installer is responsible for protecting the appliance against overloads or electrical defects.

CHILLER WITHOUT REFRIGERATION UNIT (NO DELIVERED GROUP)

The chiller delivered without compressor is delivered with a fitted control panel, an insulating switch, a tetrapolar and an unipolar circuit-breaker plus a connecting strip with fuses. Connection of the electric connecting strip is forecasted with contacts for Pump Down operation or supply in direct control of the refrigeration unit.

CHILLER WITH EXTERNAL REFRIGERATION UNIT (DELIVERED GROUP)

Chiller with refrigeration unit is delivered with :

- Control panel of the chiller with an insulating switch, and a unipolar circuit-breaker plus connecting strip with fuses.
- Electric box fixed to the unit with a control circuit-breaker, a tripolar circuit-breaker plus group connecting strip and the bipolar circuit-breakers for the fans of the air group condenser.
- Cables of electrical connections (10 meters) from the refr. unit to the chiller.

CHILLER WITH INCORPORATED REFRIGERATION UNIT

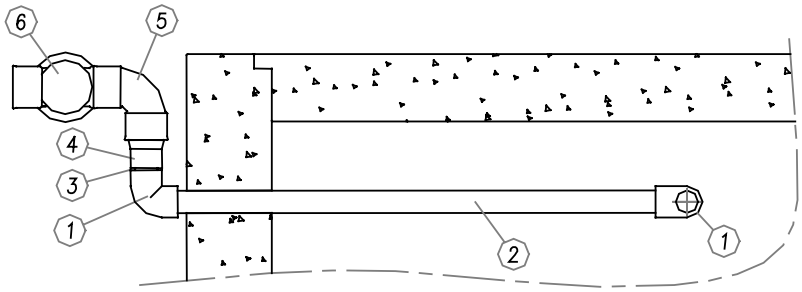
The chiller is delivered with a power cord which must not be disossiated in any circumstances. Installation of a circuit-breaker or protection fuses are the responsibility of the installer.

2.7.4 DEFROST WATER

Following the model, a three way (or two way) drain is provided at the back and on the two sides (or on the left side) of the appliance by reservation holes blocked by hole cover plugs. A connection set with a 32mm ∅ PVC drain trap is delivered with the appliance.

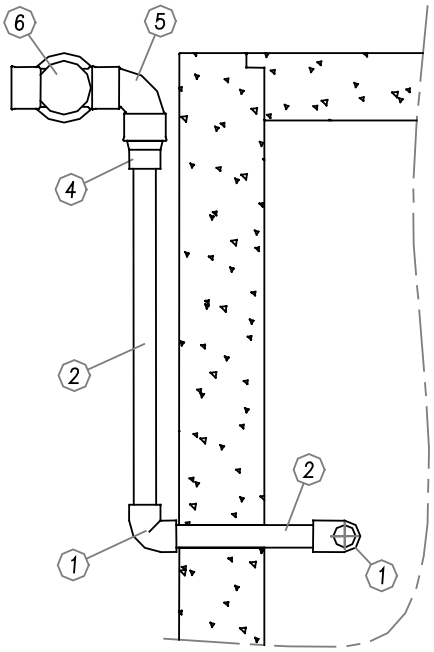
LATERAL OUTLET ASSEMBLING

SR 80 MODEL



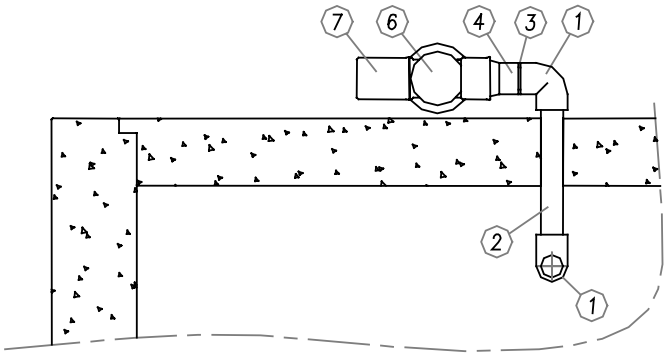
Left assembling shown ; symetrical
for right assembling.

SR 160 MODEL

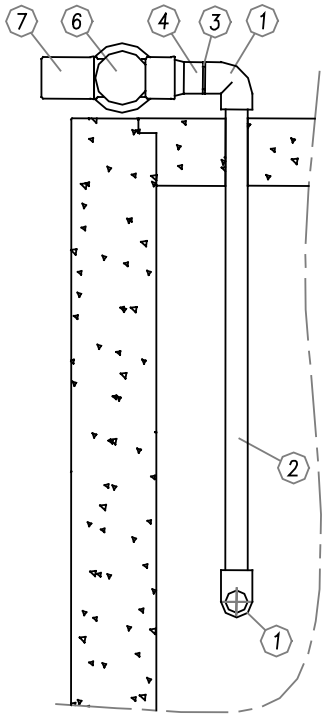


BACK OUTLET ASSEMBLING

SR 80 MODEL



SR 160 MODEL



(1) 90° 20mm ∅ PVC F/F elbow
(2) 20mm ∅ PVC pipe lg.625 (cut according to the assembling)
(3) 20mm ∅ PVC pipe lg.35
(4) reduction sleeve ∅20F/∅20M
(5) 90° 32mm ∅ PVC F/F elbow
(6) 32mm ∅ PVC M/F drain trap
(7) reduction sleeve 32mm ∅ PVC F/F

REMARKS

To prevent waste water from returning into the containment, it is forbidden to connect directly without forecasting a ‘’funnel system’’ between the drain trap of the appliance and the water system.

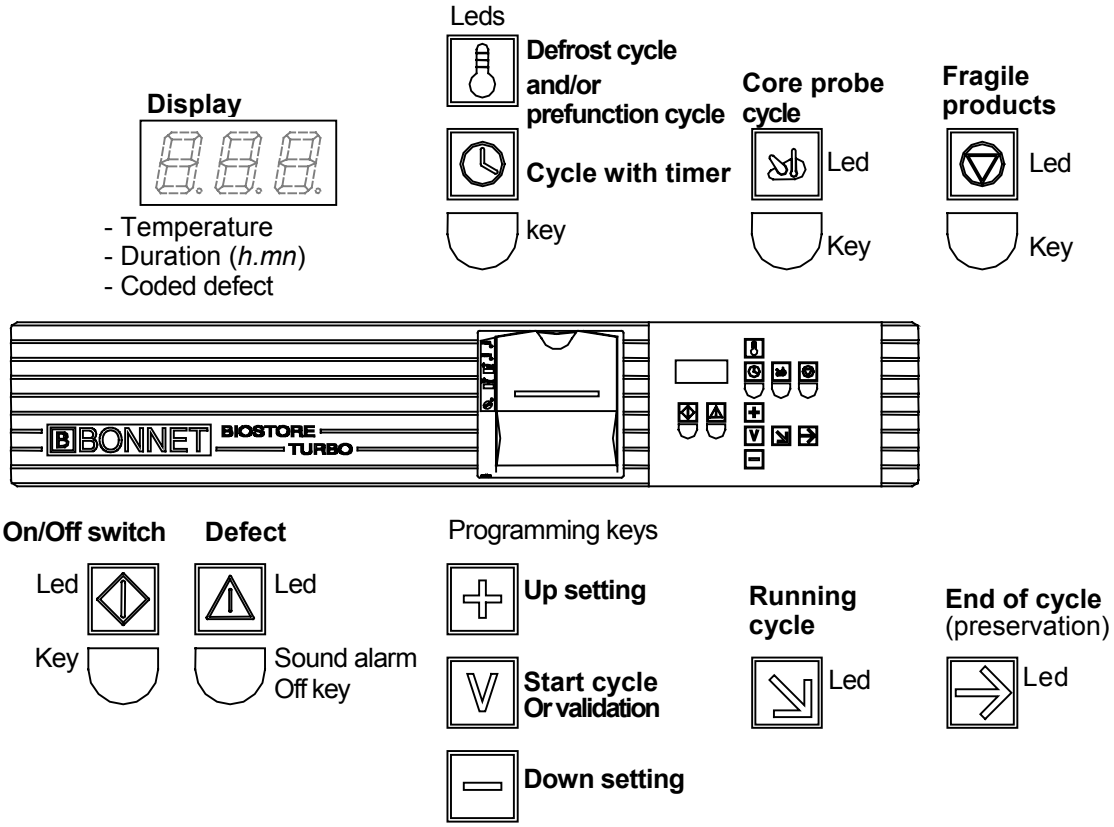
3. OPERATION

3.1 GENERAL REQUIREMENTS

Check that nothing blocks up the fans.

If the appliance has been laid during transport or locating, wait 24 hours before using the appliance to allow return of oil of the refrigerating circuit toward the compressor casing.

3.2 CONTROL PANEL'S KEYBOARD



3.3 ELECTRONIC CARD SETTING

3.3.1 CONFIGURATION OF PARAMETERS

The appliance is delivered from the factory with a standard configuration to fit the most current uses (see paragraph 1.3, page 4 of the user manual). If needed, this configuration can be modified.

There are 2 levels of configuration :

Level 1 : Accessible to user (see 'User Manual' page 9, paragraph 1.6)

Level 2 : Password protected, only accessible to installer to select and change the factory setting of all parameters (see 'Table of parameters' paragraph 3.3.2 de la page 12)

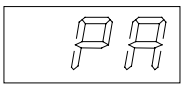
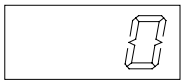
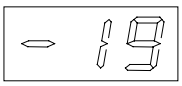
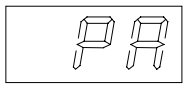
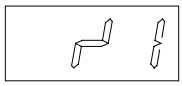
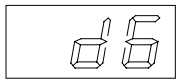
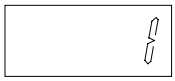
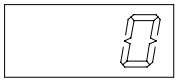
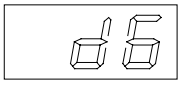
Parameters accessible at level 1 are also accessible at level 2.

The modifications of parameters, at level 1 as well as at level 2, are definitively taken into account, even after the stop of the chiller.

When the appliance is used for the first time, it is necessary to program a code which must be set with the user, and which must be attributed to the chiller with the L5 and L6 parameters. Check the date and the hour of the regulator's internal clock with the i4, i5, i6, i7, and i8 parameters.

3.3.2 ACCESS TO PARAMETERS

The chiller is ON :

1	Access to level 1 : Press simultaneously and for a few sec. ☞ + and −	Beginning of the programmation mode. Display of the indication 
2	Access to PA parameter : Press ☞ V	Pre setting display of the parameter 
3	Setting of the parameter : Press successively ☞ + or −	To adjust value -19. Display of the parameter's value 
4	Validation of the parameter's setting : Press ☞ V	Display of the modified parameter's code 
5	Access to level 2 : Press simultaneously And for a few sec. ☞ + and −	Beginning of the programmation mode. Display of the first parameter 
6	Selection of parameters : Press successively ☞ + or −	Display of the parameters one after another. Display of the parameter's codes 
7	Access to the selected parameter : Press ☞ V	Pre setting display of the parameter 
8	Modification of the parameter setting Press successively ☞ + or −	Display of the parameter's values one after another Display of the parameter's values 
9	Validation of the parameter's setting : Press ☞ V	Display of the modified parameter's code 

Start again stage 6 to 9 for the other parameters.

10	To exit programmation Press simultaneously and for a few sec. ☞ + and −	Restart of the system. During or after programmation, the system restarts automatically if no key is pressed in less than 15 seconds.

The parameter's modifications are definitively taken into account.

3.3.3 TABLE OF PARAMETERS

Code	Parameters		Min	Max	Fact.
(2) PA	Password to access level 2	(set on –19)	-55	99	0
/ = PROBES					
/1	Core probe calibration	(correction by 1/8°C)	-55	99	0
/3	Number of core probe points	0 = 1 point, 1 = 5 points	0	1	1
/5	Ambient probe calibration	(correction by 1/8°C)	0	6	0
/8	Temperature scale	0 = °F, 1 = °C	0	1	1
o = MACHINE CONFIGURATION					
o0	Cycle type	0 = Chill. 1 = Comb	0	1	0
o1	Door contact	0 = No, 1 = Yes	0	1	1
o2	Choice of cycle when closing the door	0 = No, 1 = Yes	0	1	0
o3	Automatic prefunction cycle when powered up	0 = No, 1 = Yes	0	1	0
R and **c** = REGULATOR CONFIGURATION					
r0	Prefunction cycle regulation differential	(°C)	1	15	3
r1	Prefunction cycle set-point	(°C)	-55	99	-15
c0	Preservation after cycle regulation differential	(°C)	1	15	3
(1) c1	Chilling cycle duration without core probe	(mn)	30	180	120
(1) c2	End of chilling cycle set-point with core probe	(°C)	0	99	10
c3	Chilling cycle preservation temperature set-point	(°C)	-55	99	3
(1) c4	Chilling/freezing cycle duration without core probe	(mn)	30	300	270
(1) c5	End of chilling/fr. cycle set-point with core probe	(°C)	-55	0	-18
c6	Chilling/fr. cycle preservation temperature set-point	(°C)	-55	99	-20
c7	Ambient / core probe insertion check (with cb = 1)	(°C)	0	99	5
(1) c8	Temperature level for countdown start	(°C)	0	99	63
c9	End of cycle buzzer alarm duration	(s)	0	99	3
(2) cA	Core probe temperature	(read only)	--	--	--
cb	Core probe insertion test (according to c7 and cE)	0 = No, 1 = Yes	0	1	1
(2) cc	Fragile products ambient probe set-point	(°C)	-55	99	-15
cd	Temperature level for weak/strong ventilation cycle	(°C)	-55	99	12
cE	Core probe insertion test duration (with cb = 1)	(s)	1	99	30
C = COMPRESSOR PROTECTIONS					
C0	Compressor delay at power up	(mn)	0	15	0
C1	Min. time between 2 starts of the compressor	(mn)	0	15	0
C2	Min. break after stop of the compressor	(mn)	0	15	0
d = DEFROST					
d0	Time between 2 defrosts	(h)	0	99	8
d1	Defrost type	0 = Ventil, 1 = Elect	0	1	1
d2	End of defrost temperature (Ambient probe)	(°C)	0	30	5
d3	Defrost max. duration (safety time)	(mn)	1	99	15
d4	Defrost at the beginning of the chilling cycle	0 = No, 1 = Yes	0	1	0
d5	Defrost delay at the beginning of the pres. cycle	0 = Without (mn)	0	99	0
(2) d6	Defrost at the beginning of the prefunction cycle	0 = No, 1 = Yes	0	1	1
d7	Draining time	(mn)	0	99	0
db	Time basis	0 = H mn, 1 = mn s	0	1	0

(1) :Parameters corresponding to legislation (H-L indication if the cycle doesn't comply with these settings).
(2) :Configuration parameters on level 1, accessible to user.

TABLE OF PARAMETERS (2nd part)

Code	Parameters		Min	Max	Fact.
F = VENTILATION					
F0	Ventilation ON in preservation cycle	0 = weak, 1 = strong	0	1	0
(2) F1	Ventilation ON with fragile products	0 = weak, 1 = strong	0	1	1
F4	Ventilation ON in defrost cycle	0 = weak, 1 = strong	0	1	0
F5	Ventilation rythm after draining		0	15	0
u = OUTLET ASSIGNATION					
u0	RL1 relay operation	0 = on/off, 1 = alarm	0	1	1
u1	RL1 relay polarity	0 = NO, 1 = NC	0	1	0
i = PRINTER					
i0	Printer presence	0 = no, 1 = yes	0	1	1
(2) i1	Printing frequency in chilling cycle	(4) (mn)	0	60	5
(2) i2	Printing frequency in preservation cycle	(5) (mn)	0	60	30
(2) i3	Printing at the beginning of the cycle	0 = yes, 1 = no	0	1	0
(2) i4	Date setting	Day	1	31	(3)
(2) i5		Month	1	12	(3)
(2) i6		Year	990	050	(3)
(2) i7	Time setting	Hour	0	23	(3)
(2) i8		Minute	0	59	(3)
L = NETWORK					
L1	Instrument address		1	15	1
L2	Instrument group		0	7	0
L3	Timeout link		2	250	7
L4	Transfer rate	0 = 1200 bauds 1 = 2400 bauds 2 = 4800 bauds 3 = 9600 bauds	0	3	1
L5	Machine code		A	Y	(3) A
L6	Machine number		1	99	(3) 1

(2) : Configuration parameters on level 1, accessible to user.
(3) : Configuration parameters which must be set during the installation.
(4) : 0 = Printing at the beginning of the cycle.
(5) : 0 = No printing.

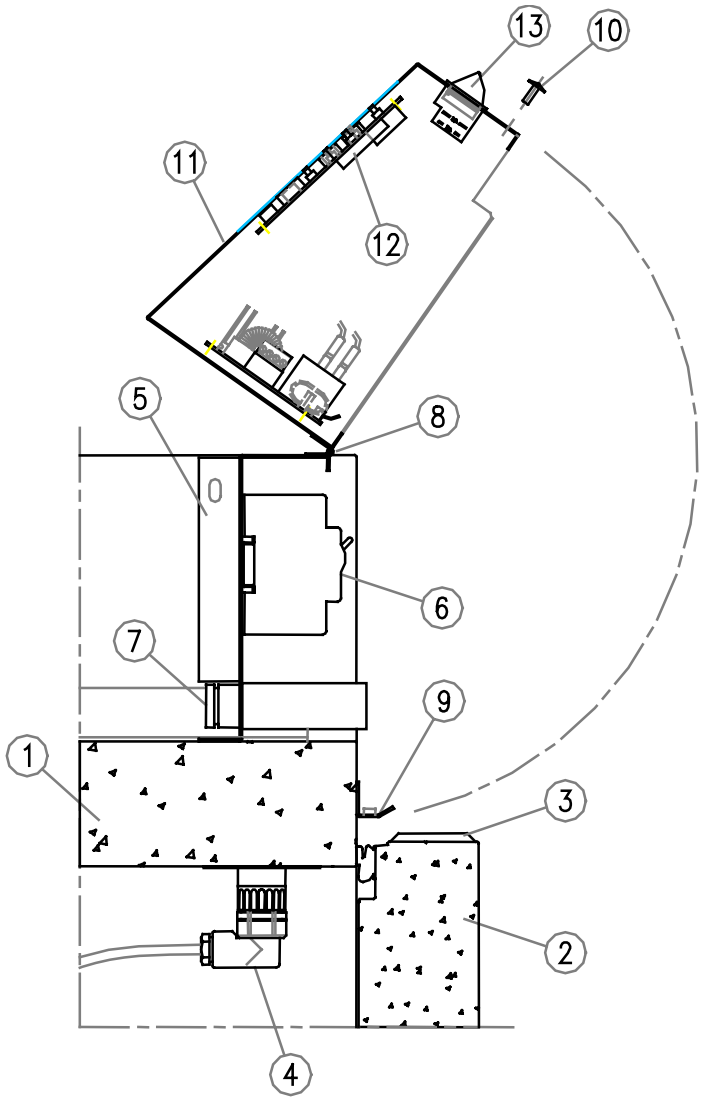
4. INTERVENTIONS AND REPAIRS

IMPORTANT

Before any operation, ensure that
the appliance is unplugged or isolated.

4.1 CONTROL PANEL

The access to the regulation components is possible by pivoting the front face of the control panel after having unscrewed the 2 inferior screws located under the front.



(1) Chiller's top
(2) chiller's door
(3) Door switch ramp
(4) Core probe connector
(5) Electric board
(6) regulation components
(7) Cable protection
(8) Control panel hinges
(9) Control panel fixing element
(10) Control panel fixing screw
(11) Control panel front
(12) Front electronic card
(13) Door switch

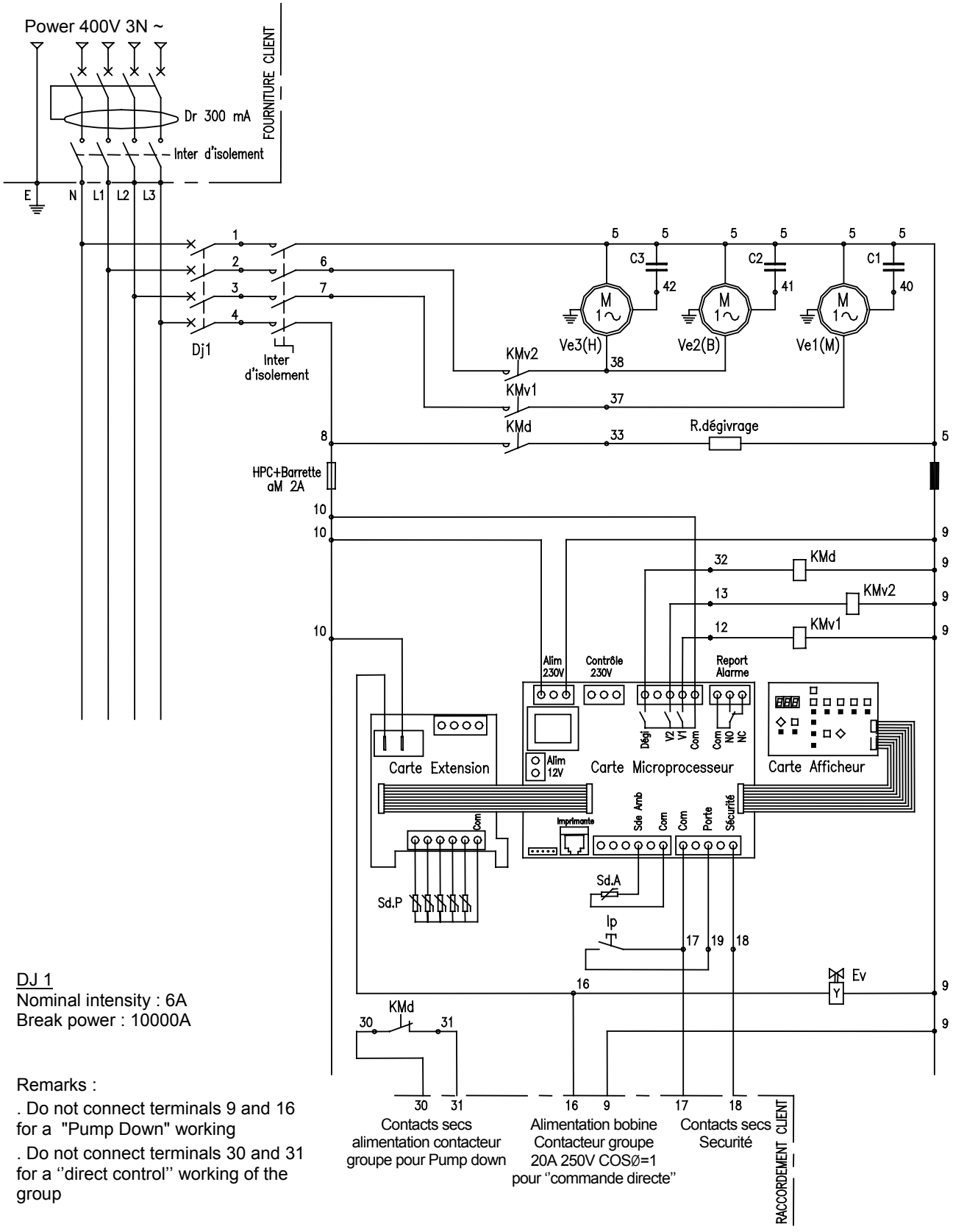
4.2 EVAPORATOR EXPANSION VALVE

To have access to the expansion valve, open the fan support (see paragraph 3.2 of the user manual)

5. ELECTRICAL DIAGRAMS

5.1 PRINCIPLE DIAGRAM FOR SR80 SG (N°SE156)

REFRIGERATION UNIT NOT SUPPLIED



DJ 1
Nominal intensity : 6A
Break power : 10000A

Remarks :

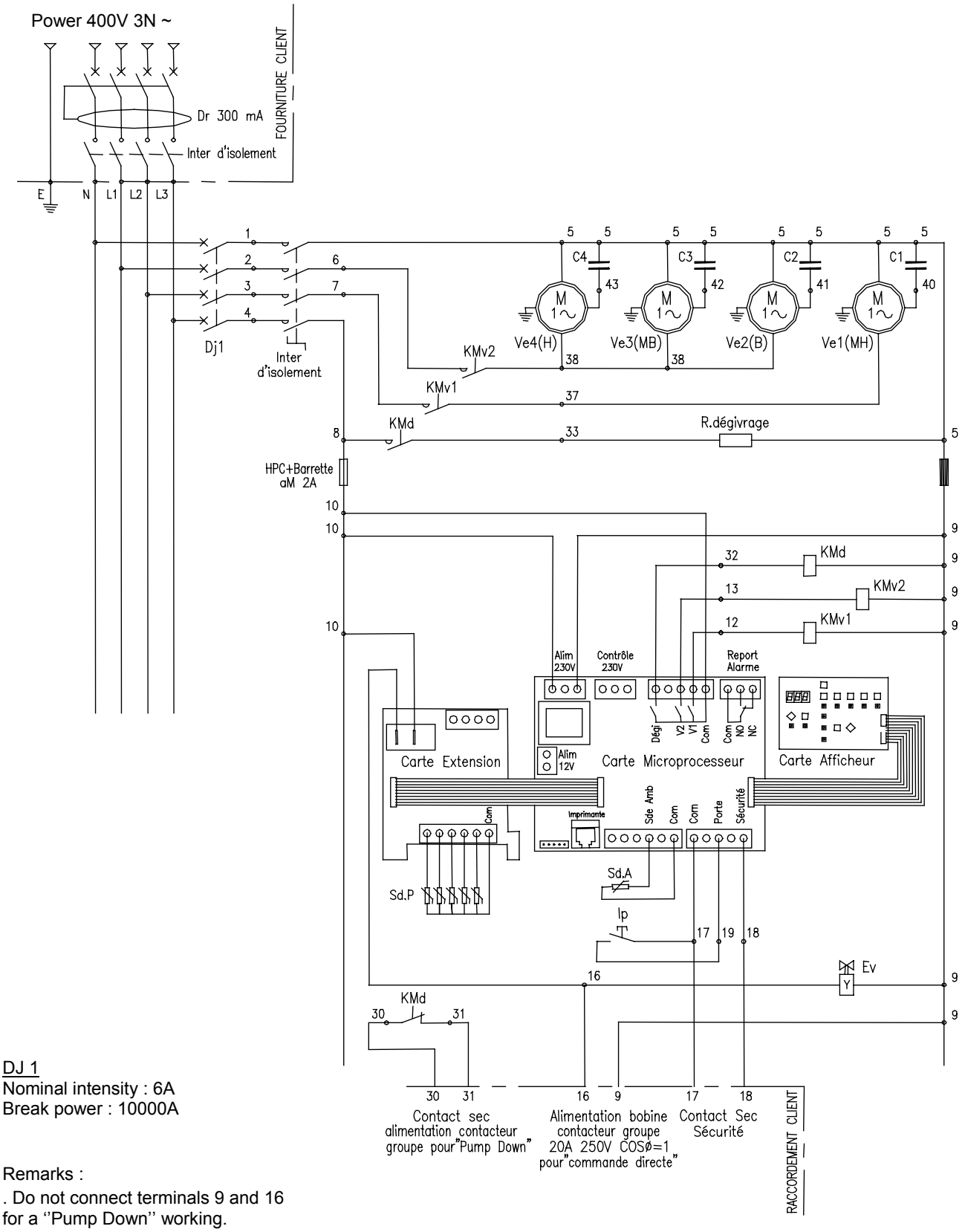
. Do not connect terminals 9 and 16 for a "Pump Down" working

. Do not connect terminals 30 and 31 for a ''direct control'' working of the group

The installer is responsible for protecting the appliance against overloads or electrical defects

5.2 PRINCIPLE DIAGRAM FOR SR 160 SG

REFRIGERATION UNIT NOT SUPPLIED (N°SE192)



DJ 1
Nominal intensity : 6A
Break power : 10000A

Remarks :

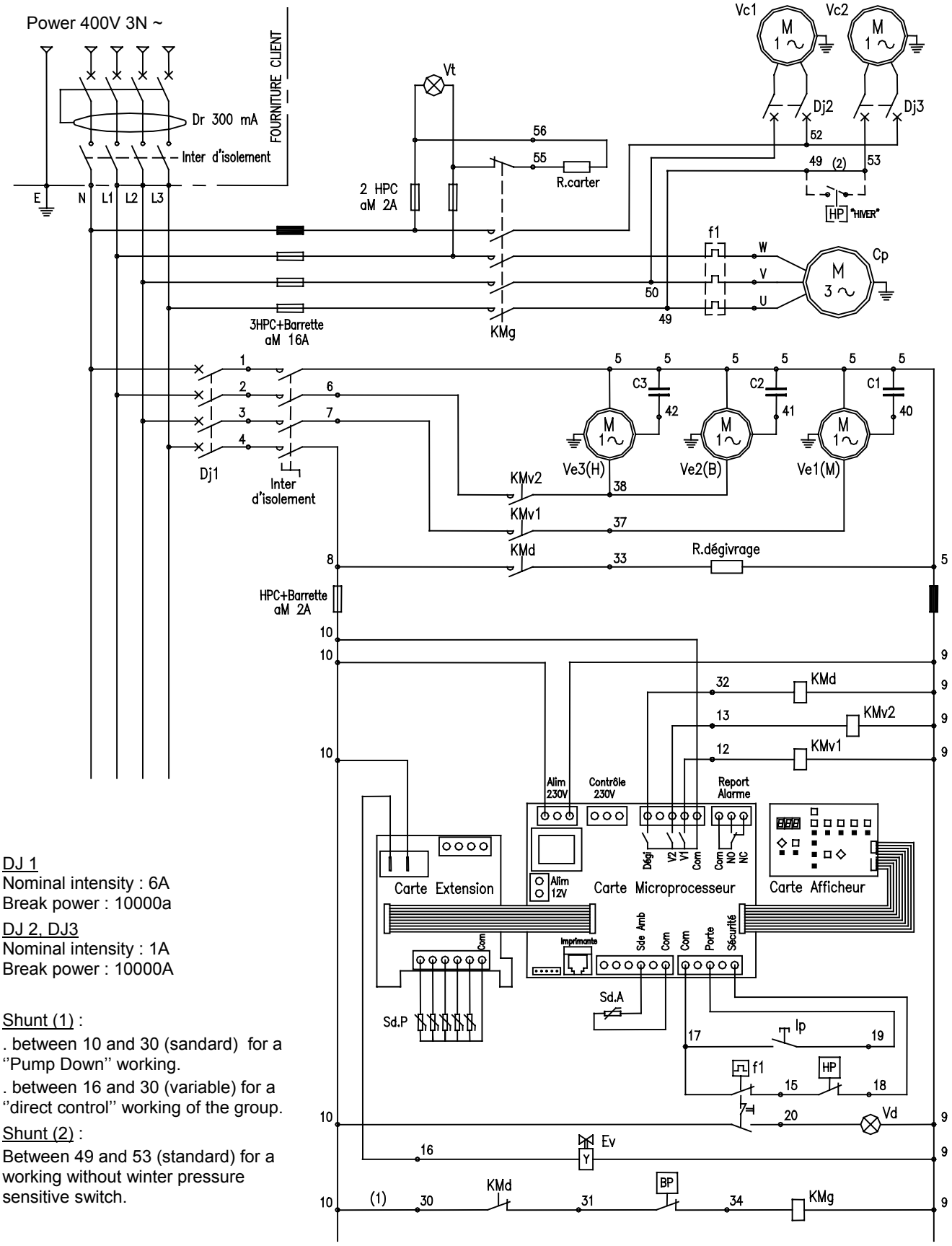
. Do not connect terminals 9 and 16 for a ''Pump Down'' working.

. Do not connect terminals 30 and 31 for a ''direct control'' working of the group.

The installer is responsible for protecting the appliance against overloads or electrical defects.

5.3 PRINCIPLE DIAGRAM FOR SR 80 GE

REFRIGERATION UNIT SUPPLIED (N°SE157)



DJ 1
Nominal intensity : 6A
Break power : 10000a

DJ 2, DJ3
Nominal intensity : 1A
Break power : 10000A

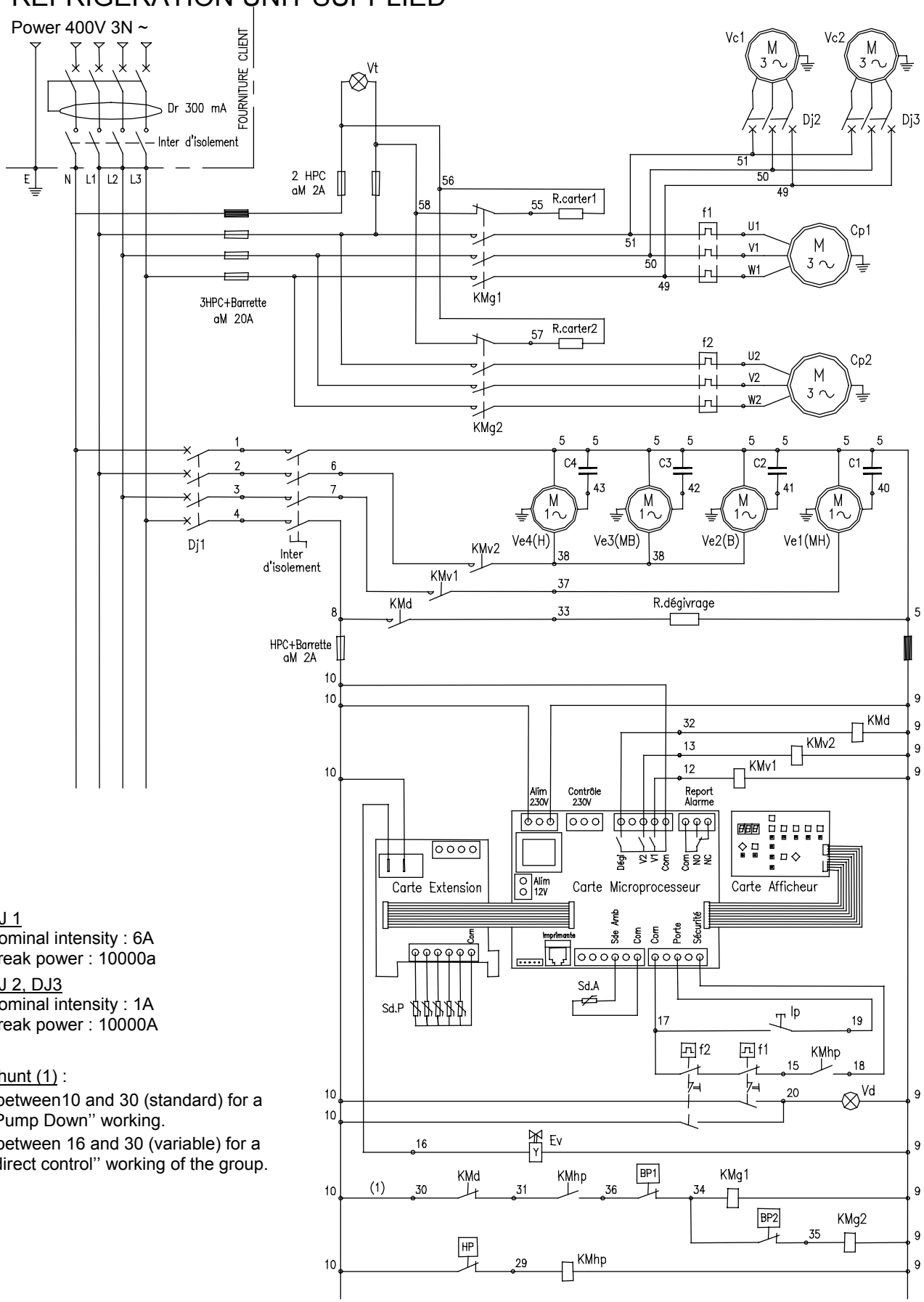
Shunt (1) :
. between 10 and 30 (sandard) for a ''Pump Down'' working.
. between 16 and 30 (variable) for a ''direct control'' working of the group.

Shunt (2) :
Between 49 and 53 (standard) for a working without winter pressure sensitive switch.

The installer is responsible for protecting the appliance against overloads or electrical defects.

5.4 PRINCIPLE DIAGRAM FOR SR 160 GE (N°SE193)

REFRIGERATION UNIT SUPPLIED



DJ 1
Nominal intensity : 6A
Break power : 10000a

DJ 2, DJ3
Nominal intensity : 1A
Break power : 10000A

Shunt (1) :

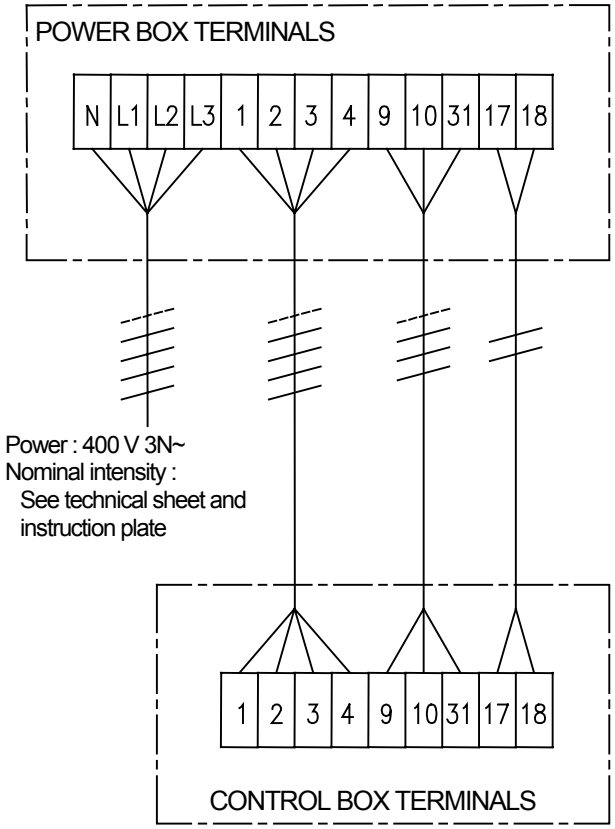
. between10 and 30 (standard) for a ''Pump Down'' working.

. between 16 and 30 (variable) for a ''direct control'' working of the group.

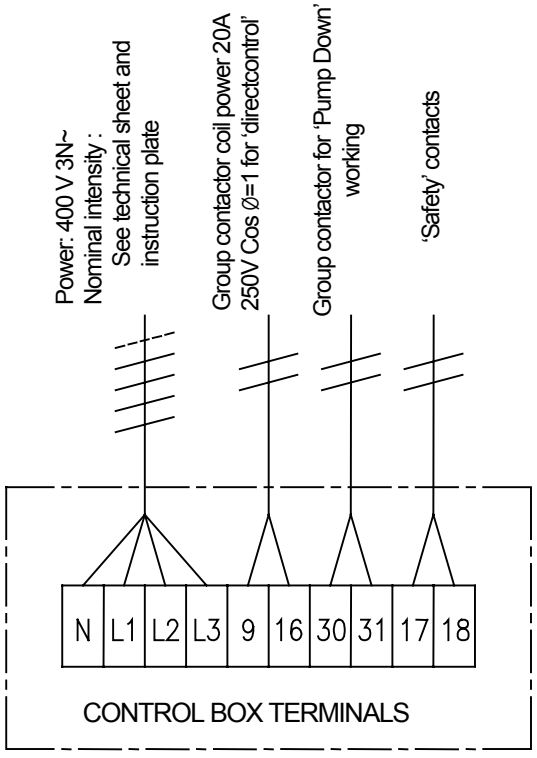
The installer is responsible for protecting the appliance against overloads or electrical defects.

5.5 CONNECTION DIAGRAMS (N°SE162)

5.5.1 UNITS DELIVERED WITH EXTERNAL REFRIGERATION UNIT



5.5.2 UNITS DELIVERED WITHOUT REFRIGERATION UNIT



Remarks :

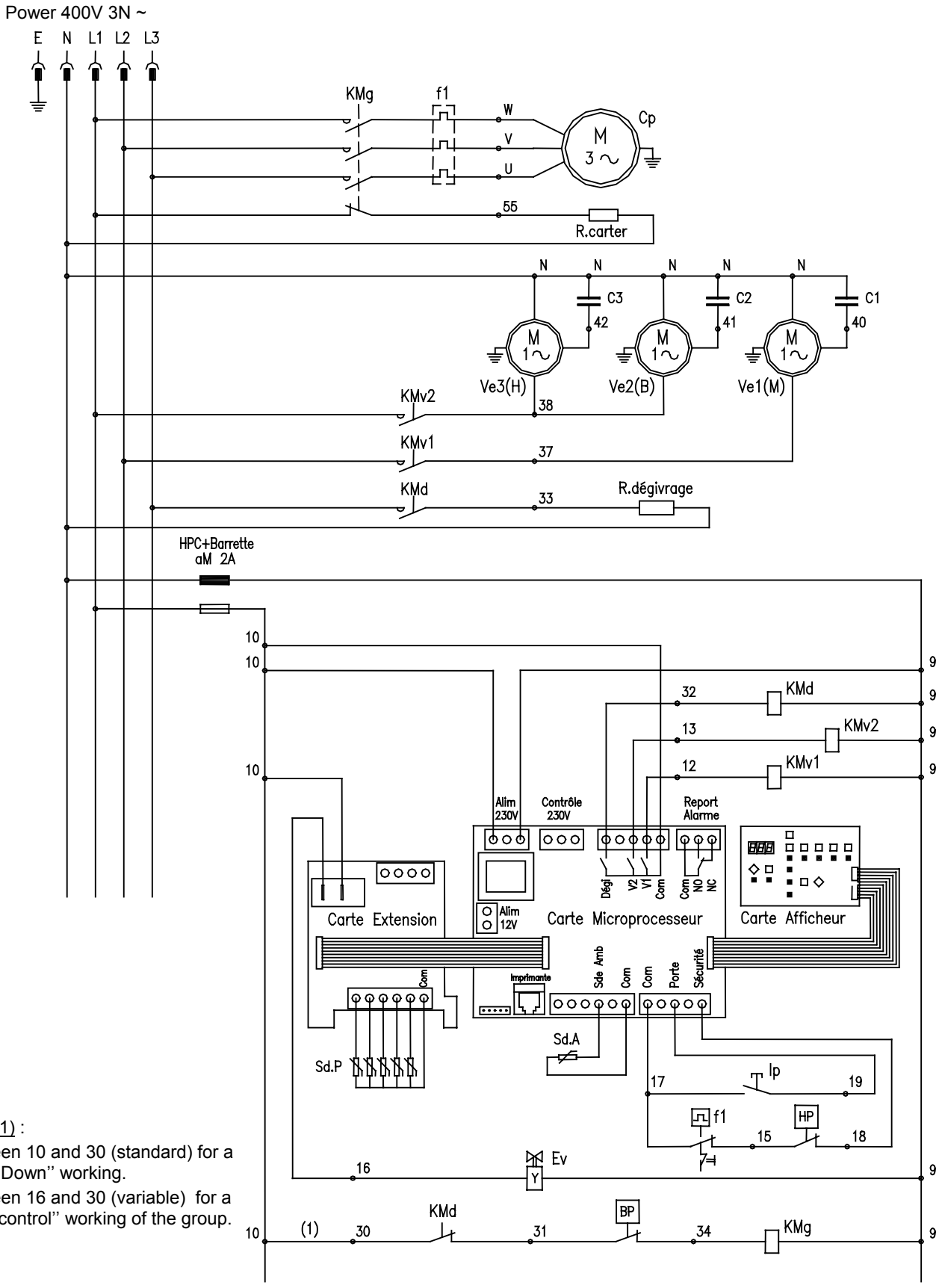
. Do not connect terminals 9 and 16 for a ''Pump Down'' working.

. Do not connect terminals 30 and 31 for a ''direct control'' working of the group.

5.6 PRINCIPLE DIAGRAM FOR SR 80 GI

INCORPORATED REFRIGERATION UNIT

(N°SE158)



Shunt (1) :

. Between 10 and 30 (standard) for a ''Pump Down'' working.

. Between 16 and 30 (variable) for a ''direct control'' working of the group.

The installer is responsible for protecting the appliance against overloads or electrical defects.

6. SPARE PARTS

6.1 CASING

80 SG	80 GE	80 GI	160 SG	160 GE	Code	Designation
●	●	●			S107P56	Solid door with seals, hinges and lock
			●	●	S107PA56	---"---
●	●	●			S105P56	Insulated door (bare)
			●	●	S105PA56	---"---
●	●	●			S212P11	Door magnetic seal
			●	●	S216P11	---"---
●	●	●			S438P45	Door lower part seal set
			●	●	S574P45	---"---
●	●	●	●	●	S090P01	Door hinge
●	●	●	●	●	S092P01	Door handle with clip
●	●	●	●	●	S409P42	Door switch ramp
			●	●	S577P45	Fixing cover Clip
			●	●	S578P45	---"--- Hinges
●	●	●	●	●	S441P45	Evaporator unit drainer
●	●	●	●	●	S443P45	Evaporator unit upper support
●	●	●	●	●	S444P45	Evaporator unit left vertical
●	●	●	●	●	S445P45	Evaporator unit right vertical
●	●	●			S446P45	Support 3 fans Ø250
			●	●	S583P45	---"--- 4 fans Ø250
●	●	●			S447P45	Defrost water connection set
			●	●	S585P45	---"---
●	●	●	●	●	S773PO42	Probe connection connector fixing plate
●	●	●	●	●	S451P45	Core probe support
●	●	●			S453P45	Electric board (sheet part only)
			●	●	S579P45	---"---
●	●	●	●	●	S456P45	Control panel fixing element
●	●	●			S457P45	Control panel front (sheet part only)
			●	●	S580P45	---"---
●	●	●	●	●	S455P45	Control panel hinge
		●			S893P42	Insulated switch cover
			●	●	S599P45	Draining crash bar
❍	❍	❍			S148P02	Crash bars Fixing axle Pl.670976
❍	❍	❍			S448P45	---"--- Rear back thrust
❍	❍	❍			S450PM45	---"--- Lateral thrust right fixing
❍	❍	❍			S450PN45	---"--- Lateral thrust left fixing
❍	❍	❍			S449P45	---"--- Lateral thrust

CASING (2nd part)

80 SG	80 GE	80 GI	160 SG	160 GE	Code	Designation
	●				S488PN45	Group frame cross-piece
				●	S600PN45	---"---
	●				S489P45	Electric box fixing valley
				●	S601P45	---"---
❍	❍				S610P45	Chiller casing Back protecting board
			❍	❍	S612P45	---"--- ---"---
❍	❍				S611P45	---"--- Roofing
			❍	❍	S613P45	---"--- ---"---
	❍				S490P45	Group casing Left side
				❍	S602P45	---"--- ---"---
	❍				S491P45	---"--- Right hand front vertical side
	❍				S492P45	---"--- Right hand rear vertical side
				❍	S603P45	---"--- Right side
	❍				S493P45	---"--- Roofing
				❍	S747P66	---"--- ---"---
	❍				S494P45	---"--- Perforated front
				❍	S605P45	---"--- ---"---
		❍			S485PM45	Group cover facia Left side
		❍			S485PN45	---"--- Right side
		❍			S486P45	---"--- front
		❍			S487P45	---"--- Side stiffener

6.2 REFRIGERATING ELECTRIC EQUIPMENT

80 SG	80 GE	80 GI	160 SG	160 GE	Code	Designation
●	●	●	●	●	S032P30	4N60T 350LT Pl.673402 Evaporator
●	●	●	●	●	S141P20	TES2 –40/+10 – 68Z3405 with MOP Expansion valve
●	●	●	●	●	S139P20	Expansion valve nozzle n° 04
●	●	●	●	●	S085P20	3/8 Solenoid valve
●	●	●	●	●	S155P15	2VGV 25 250A axial 4MF 400V fan
●	●	●	●	●	S154P15	1000W 230V Pl.673403 Defrost heater
●	●	●	●	●	S147P02	Defrost heater fixing clip
●					S110PA56	Full control panel/ board set 80 SG
			●		S122PA56	---"--- 160 SG
	●				S110PB56	---"--- 80 GE
				●	S122PB56	---"--- 160 GE
		●			S110PC56	---"--- 80 GI

REFRIGERATING ELECTRIC EQUIPMENT (2nd part)

80 SG	80 GE	80 GI	160 SG	160 GE	Code	Designation
●	●	●	●	●	S196P20	Regulation electronic cards set
●					S111PA56	Full SG electric board
			●		S111PD56	---"---
	●				S111PB56	Full GE electric board
				●	S111PE56	---"---
		●			S111PC56	Full GI electric board
●	●	●	●	●	S198P20	Regulation microprocessor card
●			●		S423P15	Tetrapolar circuit-breaker
		●			S102P15	LC1D1210M7 group contactor
		●			S076P15	LA1D11 auxiliary contact
		●			S116P15	LR2D1316 thermic relay
●	●	●	●	●	S406P15	Unipolar circuit-breaker
●	●	●	●	●	S306P15	aM 2A 10.3x38 Fuse
●	●	●	●	●	S103P15	CA2KN22M7 defrost contactor
●	●	●	●	●	S104P15	LC1K0910M7 ventilation contactor
		●			S846P51	Power cord with plug 3N~430V+T
●	●				S112PA56	Full control panel front 80 SG/GE
		●			S112PB56	---"--- 80 GI
			●	●	S112PD56	---"--- 160 SG/GE
●	●	●	●	●	S308P11	Control panel lexan label
●	●	●	●	●	S199P20	Regulation extension card
●	●	●	●	●	S197P20	Regulation front card
●	●		●	●	S207P15	Control panel insulated switch
●	●	●	●	●	S128P15	RDI door switch Ref.780 203
●	●	●	●	●	S194P20	Ambient probe
●	●	●	●	●	S200P20	Core probe
●	●	●	●	●	S201P20	Core probe connection connector
❍	❍	❍	❍	❍	S168P20	Ticket printer
❍	❍	❍	❍	❍	S169P20	Printer power card
	●				S019P40	TFH 4540 ZHR Group
		●			S169P40	TFH 4540 Z Compressor
				●	S020P40	TGD 4590 ZHR Group
	●	●			S102P19	Vibration eliminator 7/8"
				●	S101P19	---"--- 1"1/8
	●				S016P20	Dryer WAH 164 S
		●			S018P20	---"--- WAH 083 S
				●	S017P20	---"--- WAH 305 S

REFRIGERATING ELECTRIC EQUIPMENT (3rd part)

80 SG	80 GE	80 GI	160 SG	160 GE	Code	Designation
	●				S167P19	Sight glass SGN 12 S
		●			S166P19	---"--- SGN 10 S
				●	S169P19	---"--- SGN 16 S
	●	●		●	S034P20	Pressostat BP KP1
	●	●		●	S032P20	---"--- HP KP5
		●			S052P30	Water type condenser CEBV 235
		●			S112P19	Valve preventing water from returning
		●			S113P19	Supply stop valve
		●			S079P20	Pressostatic water valve WVFX 10
	●				S119PA56	Full power box set 80 GE
				●	S119PB56	---"--- 160 GE
	●			●	S429P15	3P+N 32A Circuit-breaker
	●				S303P15	10.3x38 Fuses AM 10A
				●	S357P15	---"--- AM 20A
	●			●	S423P15	Tetrapolar circuit-breaker
	●			●	S300P15	32A Fuse support
	●			●	S306P15	AM 2A 10.3x38 Fuses
	●			●	S102P15	LC1D1210M7 Group contactor
	●			●	S076P15	LA1DN11Auxiliary contactor
	●			●	S116P15	LR2D1316 Thermic relay
				●	S104P15	HP LC1K0910M7 Contactor
	●				S424P15	Bipolar circuit-breaker
				●	S422P15	Tripolar circuit-breaker
	●			●	S192P15	XB2EV164 Red indicator
	●			●	S193P15	XB2EV163 Green indicator
	●			●	S195P15	AO 236 neon lamp for indicator

BONNET

DECLARATION DE CONFORMITE

CONFORMITY DECLARATION

HERSTELLERKONFORMITÄTSERKLÄRUNG

CE

TYPE */ TYPE / TYP* :
N° DE SERIE */ SERIAL N° / FAB Nr* :

Cet appareil est conforme aux dispositions de la directive « Basse tension » 73/23/CEE et de la directive « Compatibilité électromagnétique » 89/336/CEE.

This appliance complies with the provisions of the low voltage directive EEC/73/23 and with the provisions of the electromagnetic compatibility directive EEC/89/336.

Dieses Gerät entspricht nach den Bestimungen der niederspannung-richtlinie EWG/73/23 und den Bestimmungen der elektromagnetischen Übereinstimmung-richtlinie EWG/89/336.

Il est également conforme aux dispositions de normes européennes harmonisées suivantes :

It is in compliance with the following harmonized standards :

Und entspricht ebenfalls der folgenden Europaïschen Norme :

- EN 60335 - 1 **Sécurité des appareils électrodomestiques et analogues**
Safety of houseold and similar electrical appliances
Elektrische Geräte für den Hausfebrauch und ähnliche Zwecke

DIRECTION GENERALE
Général Manager
Betriebsleiter

H.GIRAUD

FORM055A1/1