

Chef Base



Installation, Operation and
Maintenance Manual

GENERAL INFORMATION

This technical manual provides information for the installation, operation, maintenance, and inspection of this unit manufactured by Middleby. A complete parts breakdown is also provided.

TECHNICAL SUPPORT

For any questions regarding the installation, operation or maintenance of the unit, contact the factory at the following address:

After Sales Department
Desmon S.p.A. Zona Ind.le F3
83051 Nusco (AV) Italy
Ph. +39 0827 607318
Fax +39 0827 607009
service@desmon.it

SCOPE OF THE MANUAL

This manual provides sufficient information for maintenance of the equipment.

EQUIPMENT DESCRIPTION

The unit consists of the following parts:

- Storage compartment - The insulated food storage compartment is clear storage area. The cooling coil (evaporator) is contained in this area.
- Drawers - Product is stored by means of food pans set in drawers. The drawer face is made of an insulated panel. The drawer face (panel) is fully “gasketed” to provide a tight seal against the cabinet.
- Condensing Unit Compartment - This area contains the condensing unit(s) along with the necessary controls and other components.
- Evaporator Coil - The evaporator coil is located in the storage compartment and is responsible for distributing the cold air associated with the refrigeration system.
- Cabinet - The cabinet is the enclosure in which all of the above mentioned items are housed.

EQUIPMENT SUPPLIED







The unit is shipped from the factory assembled. The complete assembly is palletized and crated to minimize the possibility of damage in shipping and storage

NOTICE! MIDDLEBY RESERVES THE RIGHT TO CHANGE SPECIFICATIONS AND PRODUCT DESIGN WITHOUT NOTICE. SUCH REVISIONS DO NOT ENTITLE THE BUYER TO CORRESPONDING CHANGES, IMPROVEMENTS, ADDITIONS OR REPLACEMENTS FOR PREVIOUSLY PURCHASED EQUIPMENT.

Table of contents

1. Safety
 - 1.1 Safety Notice
2. Specifications
3. Operation
 - 3.1 installation
 - 3.2 Controls and Indicators
 - 3.3 Start-up Procedure
 - 3.4 Switching ON the electronic controller
 - 3.5 Shut-down Procedure
4. FUNCTIONAL DESCRIPTION
 - 4.1 System description
 - 4.2 System operation
 - 4.3 Loading of the Storage Compartment
5. Scheduled Maintenance
 - 5.1 Preparation for Maintenance
 - 5.2 Weekly Inspection and Maintenance
 - 5.3 Monthly Inspection
 - 5.4 Annual Maintenance
 - 5.5 Three Year Maintenance
6. Troubleshooting
7. CONTROLLER INSTRUCTION
 - 7.1 Keyboard
8. EXPLODED VIEW AND PART LIST
9. Electrical and Mechanical
10. Remote Chef Base
 - 10.1 Installation
 - 10.2 Wiring Diagram

1. SAFETY

1.1 Safety Notice	1.2 SAFETY PRECAUTIONS
 <p style="text-align: center;">DANGER</p> <p>This symbol warns of immediate hazards which WILL result in severe injury or death.</p>	 <p style="text-align: center;">DANGER EXPLOSION HAZARD</p> <p>If gas odor is detected, shut down equipment at the main shutoff valve. Immediately call the emergency phone number of your gas supplier.</p>
 <p style="text-align: center;">WARNING</p> <p>This symbol refers to a potential hazard or unsafe practice which COULD result in injury or death.</p>	 <p style="text-align: center;">WARNING FIRE HAZARD</p> <p>For your safety, do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. Keep area around appliances free and clear of combustibles.</p>
 <p style="text-align: center;">CAUTION</p> <p>This symbol refers to a potential hazard or unsafe practice which COULD result in injury, product or property damage</p>	 <p style="text-align: center;">WARNING</p> <p>Asphyxiation can result from improper ventilation. Do not obstruct the flow of combustion and ventilation air to /and from your cooking equipment.</p>
<p>NOTICE! This symbol refers to information that requires special attention or must be fully understood, even though not dangerous.</p>	<p>NOTICE! Be sure this manual and important papers are given to the proper authority to retain for future reference.</p>

2. SPECIFICATIONS

Refrigerated & Freezer Bases													
Model Number	W	D	H	Drawers*			Ref. Volume (cu.ft.)	Compartment Temp	Elec. V/Ph/Hz	Evap Btu/h*	Compressor HP	Amps	Shipping Weight (lbs.)
				18"	26"	31"							
20032	32"	32"	26"	2	-	-	2	4°C	230/1/560	1200	1/5	5	340
20036	36"	32"	26"	2	-	-	2	4°C	230/1/560	1200	1/5	5	340
20048	48"	32"	26"	-	2	-	4	4°C	230/1/560	1800	1/5	5	410
20060	60"	32"	26"	-	-	2	4	4°C	230/1/560	1800	1/5	5	550
20064	64"	32"	26"	-	-	2	4	4°C	230/1/560	1800	1/5	5	550
20072	72"	32"	26"	-	4	-	8	4°C	230/1/560	1900	1/3	6	650
20084	84"	32"	26"	-	-	4	8	4°C	230/1/560	1900	1/3	6	745
20096	96"	32"	26"	2	4	-	10	4°C	230/1/560	1900	1/3	9	855
20108	108"	32"	26"	-	6	-	12	4°C	230/1/560	3000	1/3	9	960
20120	120"	32"	26"	4	4	-	12	4°C	230/1/560	3000	1/3	9	1075
30032	32"	32"	26"	2	-	-	2	-20°C	230/1/560	750	3/8	5	370
30036	36"	32"	26"	2	-	-	2	-20°C	230/1/560	750	3/8	5	370
30048	48"	32"	26"	-	2	-	4	-20°C	230/1/560	1700	3/8	5	450
30060	60"	32"	26"	-	-	2	4	-20°C	230/1/560	1700	3/8	7	600
30064	64"	32"	26"	-	-	2	4	-20°C	230/1/560	1700	1/2	7	600
30072	72"	32"	26"	-	-	2	8	-20°C	230/1/560	1800	1/2	7	700
30084	84"	32"	26"	-	4	-	8	-20°C	230/1/560	1800	1/2	7	800
30096	96"	32"	26"	-	-	4	10	-20°C	230/1/560	1800	4/5	9	950
30108	108"	32"	26"	2	4	-	12	-20°C	230/1/560	3000	4/5	9	1000
30120	120"	32"	26"	-	6	-	12	-20°C	230/1/560	3000	4/5	9	1200

*Evaporator Btu/h according to actual working conditions:

Evaporating temperature :-10°C for Refrigerated Bases

Evaporating temperature :-30°C for Freezer Bases

Condensing Temperature: 43°C

***Pan are not included. Only use NSF approved Pans.**



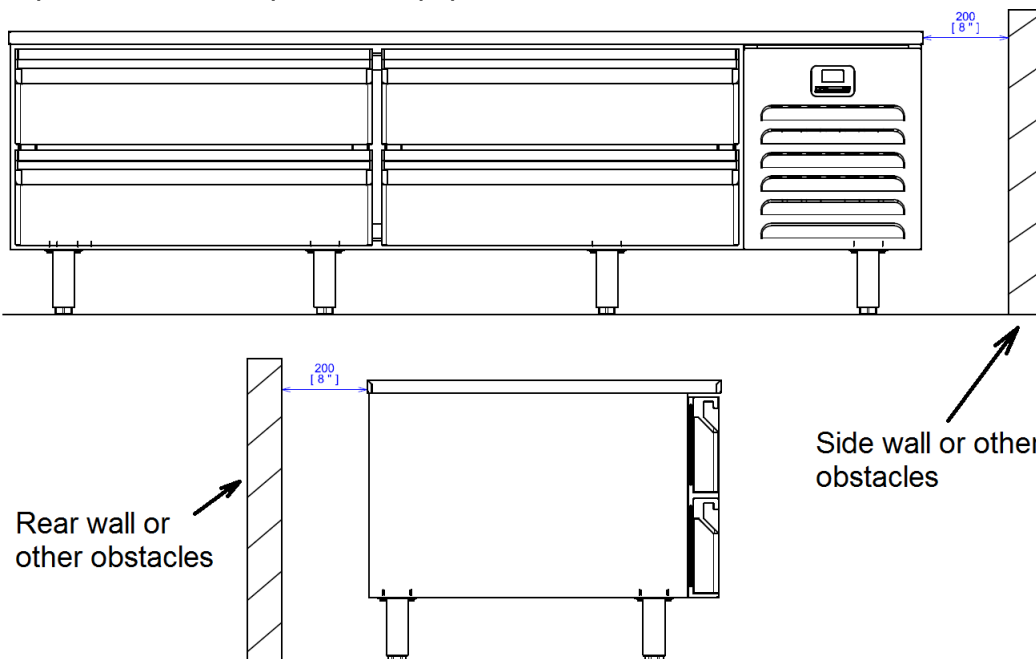
Figura 1- General Arrangement Picture

3. OPERATION

This model is a heavy-duty piece of equipment designed for continuous use. It incorporates automatic controls to regulate the cycling of the refrigeration system.

3.1 Installation

Respect minimum clearance distance as below during installation. No clearance is required on back/top of the Equipment.



3.2 Controls and Indicators

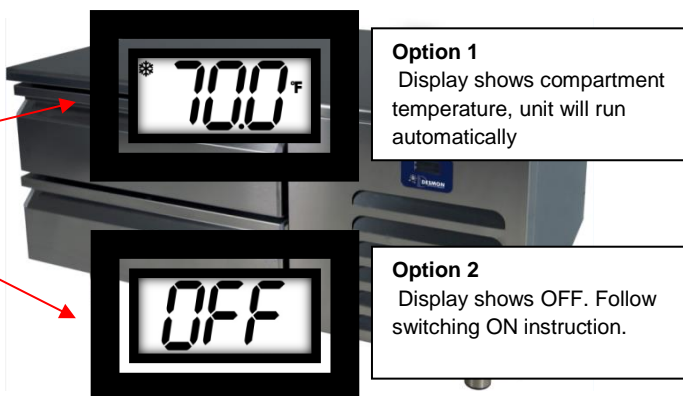
NAME	TYPE	FUNCTION
Suction Valve	Manual Plunger Valve	Isolate suction at the compressor
Discharge Valve	Manual Plunger Valve	Isolate discharge line at receiver
Controller	Contact Points	Cycles the refrigerator system on and off. Allows switching on/off the unit, changing the setpoint temperature, showing actual probes' values, operating the automatic defrost (when applicable) and other functions which will explained later on in this manual.
Solenoid Valve (only freezer)	Automatic Plunger	Opens hot gas circuit for evaporator coil defrost.

3.3 Start-up Procedure

The refrigeration system is completely factory assembled, pre-charged and ready for operation. To energize the system it is only necessary to find the power supply cord and connect it to a proper electrical source. Once the supply cord has been connected to a power source, the unit normally starts automatically. If it doesn't, some additional operation may be necessary to switch on the system, which is described in the next paragraph.

3.4 Switching ON the electronic controller

As explained in the previous paragraph, the unit should start automatically and the display should show the actual air temperature which in the beginning is assumed to be very close to the ambient temperature where the unit has been held before being operated. The electronic controller will keep in its memory the latest operating mode, which is running mode (last step of End Of Line Test in the factory). Nevertheless, it makes sense to explain how to proceed in case the display shows OFF, indicating a stand-by mode which will not allow the unit to start automatically the cool down cycle.



To switch the controller ON, the front panel needs to be removed in order for the user to gain access to the keyboard. To do this, no tool is necessary, just pull the snap-fit panel

from the bottom. Press and hold for 5 seconds on the ON/OFF button. The display will start blinking, and after a few seconds will switch to running mode, showing the current compartment temperature. Put the front panel back in its position and observe unit during cool down.



Once the preset temperature has been reached, i.e. 37°F approximately for refrigerated bases or -4°C for freezer bases, the storage of products can be started. Make sure cooked or hot food is properly cooled down in a dedicated equipment, before storing it in the Chef Base.

3.5 Shut-down Procedure

To shut down, disconnect the electrical supply cord and open or remove the drawer(s) allowing the interior cabinet temperature to equalize with the room temperature. A mild detergent diluted in warm water should be used to wash down the interior and exterior surfaces of the cabinet. The electronic controller also allows to shut down temporary the cooling system with no needs of disconnecting the power cord, by simply using the ON/OFF button located on the keyboard. To do that, remove the front panel as described in the previous paragraph and press and hold on the ON/OFF button for until OFF comes up on the display. However, as a cleaning procedure should always accompany the shut-down, it is strictly recommended to disconnect the power cord when shut-down of the unit is required.

 **WARNING**

Prior to any cleaning of the system involving placing hands in areas with moving parts, the system should be deactivated by disconnecting the power supply cord.

4. FUNCTIONAL DESCRIPTION

4.1 System description

This unit is a self-contained, automatically controlled, continuous duty, perishable food storage system. It is designed with the intent and purpose of storing food items. The operating temperature is automatically monitored by controls that are factory set to maintain a predetermined adequate condition. The equipment is installed in two basic compartment assemblies. They are:

- Condensing Unit Compartment - This area contains the condensing unit along with the necessary controls.
- Storage Compartment - This insulated food storage area is clear storage area.

4.2 System operation

The design of the refrigerated cabinet focuses primarily on the safe storage of food products requiring refrigeration. In engineering, considerable attention was placed on its functionality and its serviceability. The refrigeration system is a closed loop system. Barring a leak in the system, the addition of refrigerant is not required. However, a periodic check of its level is recommended to insure that the system operates at the optimum level at which it was designed. The condensing unit is found within the regular equipment compartment. This compartment also contains the electrical control panel with its on-board power switch and a terminal block. All models feature air forced cooling, by means of cross-flow fans. On all models an evaporator pan is installed underneath the evaporator coil to collect water condensate dripping from the coil. Water condensate is generated on the coil by the moisture normally existing in the air. This moisture will turn into liquid (or some frost) when

encountering the coil colder surface in a refrigerator equipment, while it will ice up on a freezer's coil. In the latter case an automatic hot gas defrost process will melt the ice down regularly. Freezers' evaporator pans will also have a drainage heater which will avoid water condensate to ice up again before discharge. Refrigerators will automatically and regularly perform an air cycle defrost (compressor off and evaporator fan running), which will allow to melt frost or some ice built up on the coils. In both refrigerators and freezers the water is collected in the evaporator pan and drained out in the condensate pan located in the condensing compartment by means of drainage conduits. The condensate pan in its turn is hot gas-heated, by means of the compressor discharge pipe, and will evaporate the water. Moisture generated by water evaporation will be released to the external ambient thanks to the condenser fan. Freezer's frames, where gaskets fit to seal the storage compartment, are heated to avoid condensation/icing of external moisture.

4.3 Loading of the Storage Compartment

Special care in the initial loading of the storage compartment should be taken. It is suggested that the loading be scheduled in three equal portions allowing three hours between each loading. The chilled food compartment is designed for the storage of perishable food items that require a temperature range of 37 to 40 degrees Fahrenheit. It is a general rule that adequate spacing is allowed between stored items to allow for proper air circulation.

5. SCHEDULED MAINTENANCE

To ensure the longest and most trouble free operation of the unit, a thorough maintenance schedule is required to be adhered to periodically. The maintenance system should be designed to maximize the efficient use of maintenance personnel, reduce down time, and provide the orderly acquisition of spare parts support. The Middleby refrigeration cabinet will generally be in operation in a facility where scheduled maintenance is performed according to Maintenance Index Plans. Your unit is no exception to required maintenance. This section of the manual is intended as an alternative to any standard maintenance program that may pre-exist. The preventive maintenance schedule is based upon similar maintenance requirements for commercial refrigeration equipment.

5.1 Preparation for Maintenance

Since many areas affected by the maintenance schedule are electrically supplied, it is recommended that the system be de-energized prior to making the inspections.

5.2 Weekly Inspection and Maintenance

1. The unit should first be de-energized by unplugging it from the mains.

NOTE: It is necessary to first remove the front air grill. This is done by lifting it straight up then pulling the bottom out and down.

2. Using a vacuum or small hand broom, brush the condenser in a vertical motion to remove any dust or debris that may have accumulated.

5.3 Monthly Inspection

1. Check the evaporator drain line at both the inlet and outlet ends to make certain that there are no obstructions. It is not recommended to use any chemicals in clearing a clogged drain. The preferred method of unstopping an obstructed drain is to use compressed air. Approximately 60 lbs. should be sufficient. Simply remove the drain line at the evaporator coil and attach an air-line to it.
2. Determine if there is a leak by using a halide or electronic leak detector. Repair leak(s) if existing.

 **WARNING**
**The system should be de-energized
when checking for leaks.**

3. Using a mild non-abrasive detergent and soft cloth, wipe the interior lining beginning with the top and working down. Also, wipe the gasket and where it sits on the cabinet exterior.
4. Remove the front air grill and unbolt the condensing unit. Once unbolted, slide it out. The unit is capable of being completely removed due to the extra tubing coiled up behind the unit. With the unit de-energized, check the condenser fan motor and make certain that it is no loose. Inspect the fan for cracks and make sure that it is tight on the motor.
5. To inspect the evaporator motor, first turn the unit off. Then, remove the drain line from the evaporator pan. Loosen the four screws that hold the shroud. Lower the shroud and disconnect the polarized electrical connection. With the shroud out of the cabinet, proceed to inspect the motor mounting bolts and the fan for cracks or excessive play.
6. Using a mild detergent and water, wipe the vinyl gasket. Make certain to also clean under the gasket to remove any mildew or residue.
7. Using a mild, non-abrasive detergent and warm water, wipe the cabinet exterior. When cleaning always follow the grain of the stainless steel to prevent scratching or marring of the finish surface.

5.4 Annual Maintenance

1. Slide condensing unit out of the compartment and check all refrigerant lines for leaks or fatigue. Make certain that no exposed copper tubing is in contact with any other metal surface. If there is contact, install an insulating material between the two metal components.
2. With the condensing unit out and the breaker at the main panel "OFF", inspect the system's wiring. Look for a tight fit of all connections and make certain the that the wire restraining devices are tight. Inspect all wires and cords, paying particular attention to nicks or age cracks in the insulation.

3. Visually inspect the outer panel and components of the cabinet. Check screws and bolts to make certain that they are tight. Also, make sure that the bolts that secure the base frame to the deck are tight.

5.5 Three Year Maintenance

1. Replace the drawer gaskets. To accomplish this, it is first necessary to remove all products from the refrigerated compartment to avoid spoilage. Open the drawers and remove the old gasket. The gaskets snap in and out of a channel on the back side of the door. Clean the track thoroughly. Replace the old gasket with the new one by snapping it into place.
2. Inspect all motors and shafts for both noise and wear. If they show age, replace them.
3. With the main power off, remove the condensing unit from its compartment and inspect all wiring. Also, remove the cover from the controls and check them to make certain that they are operational and do not show signs of wear.
4. Inspect the operation of the drawer slide assembly. Make certain that the moving parts do not show any signs of wear. Make sure that all screws are tight.
5. To recalibrate the thermometer follow the instruction on how to access controller parameters and change the Air Probe Offset value accordingly.

6. TROUBLESHOOTING

This chapter provides a systematic check of components in determining a possible cause of failure in the event of various symptoms. The following tables list the most common symptoms that may be experienced and the recommended corrective action. It is necessary that the individual performing the troubleshooting tasks be familiar with the function of the equipment as described in the Functional Description section.

SYMPTOM	POSSIBLE FAILURE	REMEDY
Unit does not operate	<ol style="list-style-type: none"> 1. Power cord damaged 2. Control failure 3. Incorrect voltage 4. Failed compressor 	<ol style="list-style-type: none"> 1. Replace power cord 2. Adjust or replace control 3. Correct 4. Replace





SYMPTOM	POSSIBLE FAILURE	REMEDY
Unit runs continuously	<ol style="list-style-type: none"> 1. Low on refrigerant 2. Control failure 3. Bad connection at TXV 4. Restricted air flow or dirty 5. Bad condenser fan motor 6. TXV stuck open 7. Compressor failure 8. Ineffective drawer seals 9. Restricted circulation in storage compartment 	<ol style="list-style-type: none"> 1. Leak check system and recharge 2. Adjust or replace control 3. Check and secure sensor bulb to suction line 4. Rectify air flow problem and clean condenser 5. Check and replace if necessary 6. Replace 7. Replace 8. Adjust drawers runners and gaskets. Replace if necessary 9. Redistribute food for even air flow
Low head pressure	<ol style="list-style-type: none"> 1. Defective compressor 2. Low refrigerant 3. Ambient temperature too low 	<ol style="list-style-type: none"> 1. Replace 2. Leak check system and recharge 3. Raise room temperature
High head pressure	<ol style="list-style-type: none"> 1. Blocked or dirty condenser 2. Ambient temperature too high 3. System contains air 4. Refrigerant overcharge 	<ol style="list-style-type: none"> 1. Clean and remove any obstructions 2. Lower room temperatures 3. Evacuate, change filter dryer, recharge 4. Reduce amount of refrigeration in system
Short cycling	Maladjusted control	Adjust control hysteresis or setpoint parameter
Unit does not cool	<ol style="list-style-type: none"> 1. Blown fuse/circuit breaker 2. Bad connection at supply cord 3. Ill fitting gasket 	<ol style="list-style-type: none"> 1. Replace fuse/reset circuit breaker 2. Check supply cord at outlet 3. Tighten strike on door latch

7. CONTROLLER INSTRUCTION

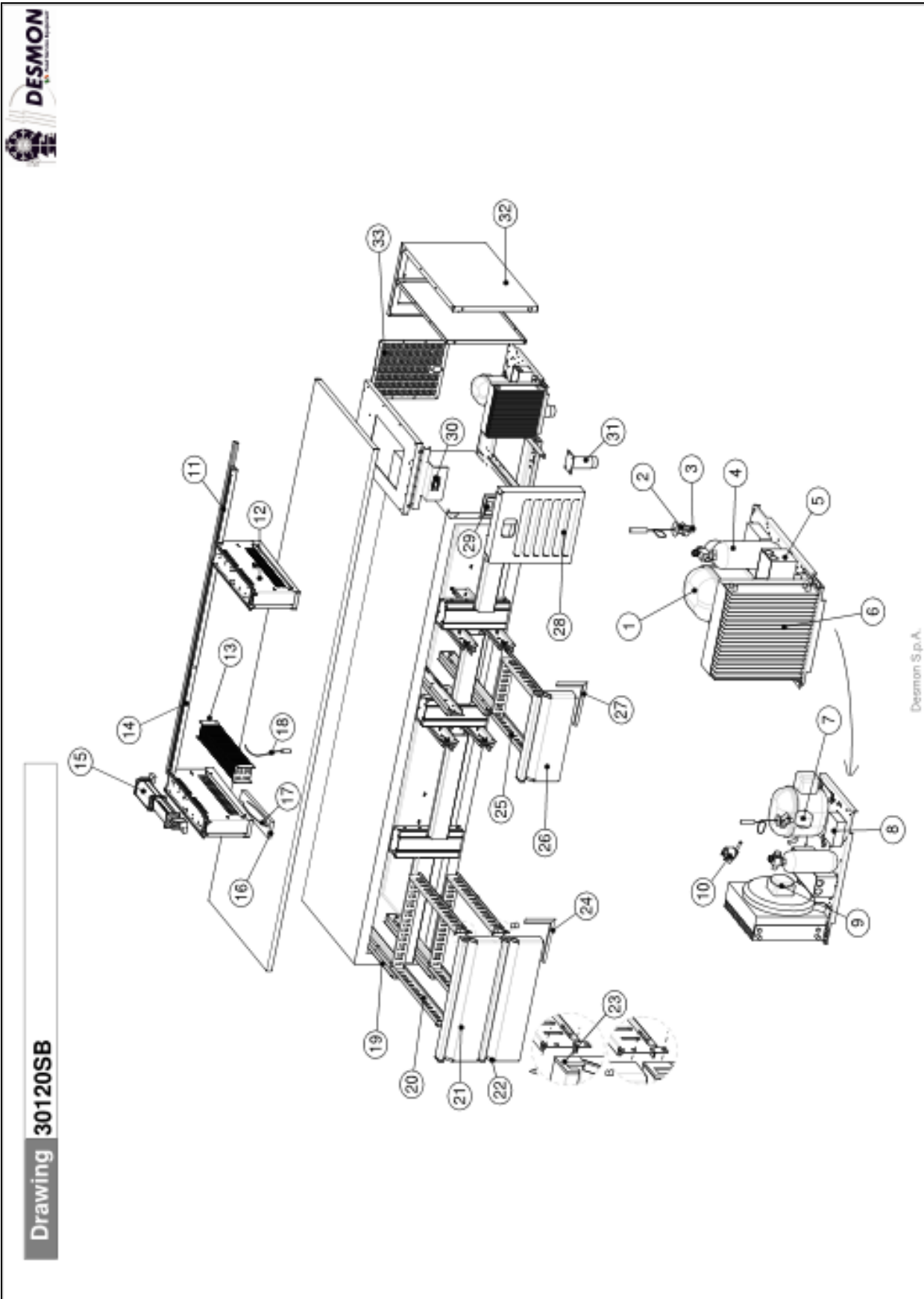
This appliance is equipped with an electronic controller which is preset in the factory and normally doesn't need any adjustment to work correctly (barring start-up procedure described at paragraph 3.3 that is rarely required). Nevertheless, it is worth to include in this manual full instruction for an advanced use of the controller.

7.1 Keyboard



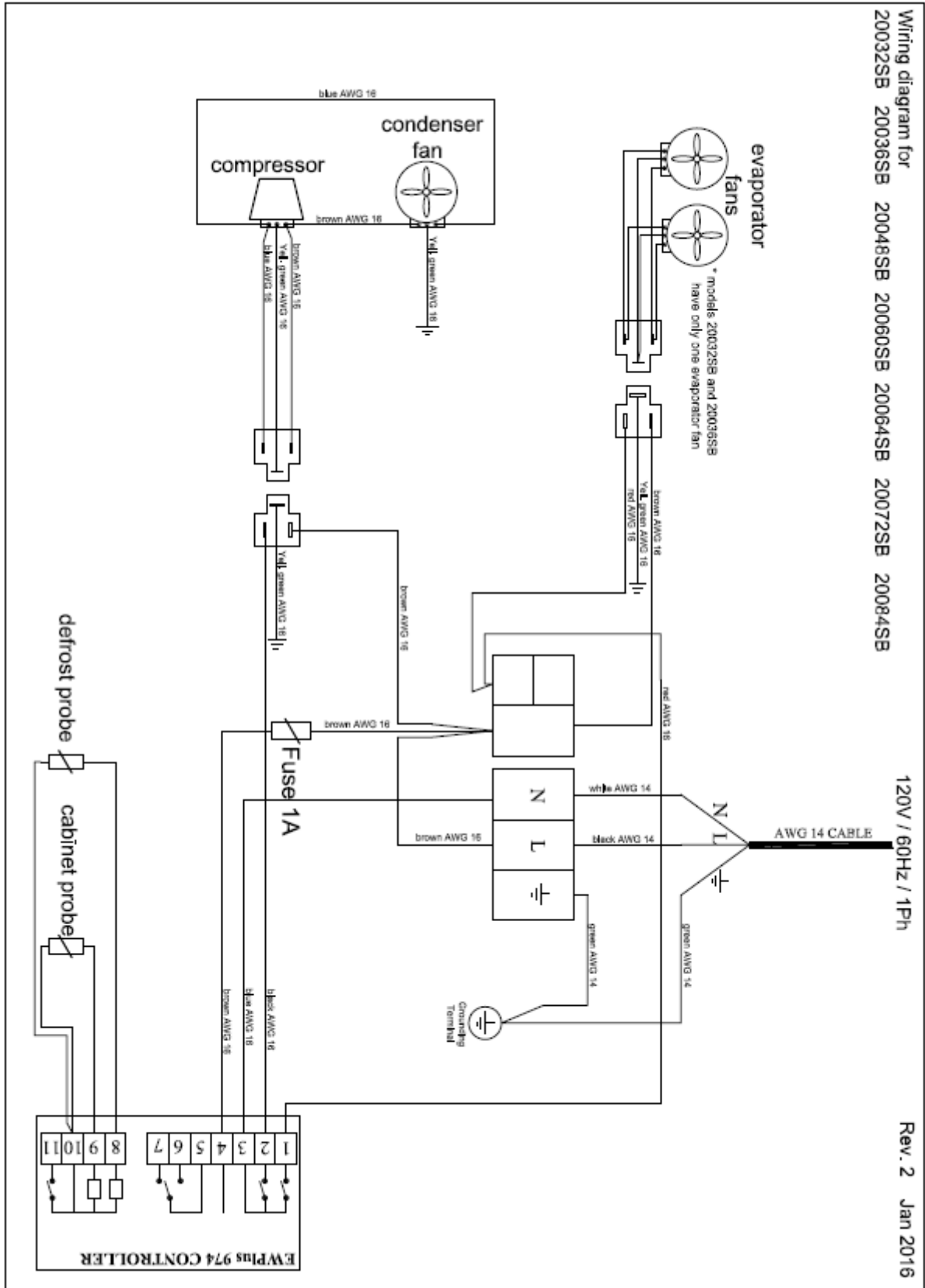
KEYS	
 <p>UP Press and release Scrolls through menu items Increases values Press for at least 5 seconds Activates the Manual Defrost function</p>	 <p>STAND-BY (ESC) Press and release Returns to the previous menu level Confirm parameter values Press for at least 5 seconds Activates the Stand-by function (when no menu is active)</p>
 <p>DOWN Press and release Scrolls through menu items Decreases values Press for at least 5 seconds Configurable function by user (see parameter H32)</p>	 <p>SET (ENTER) Press and release Displays alarms (if active)</p>

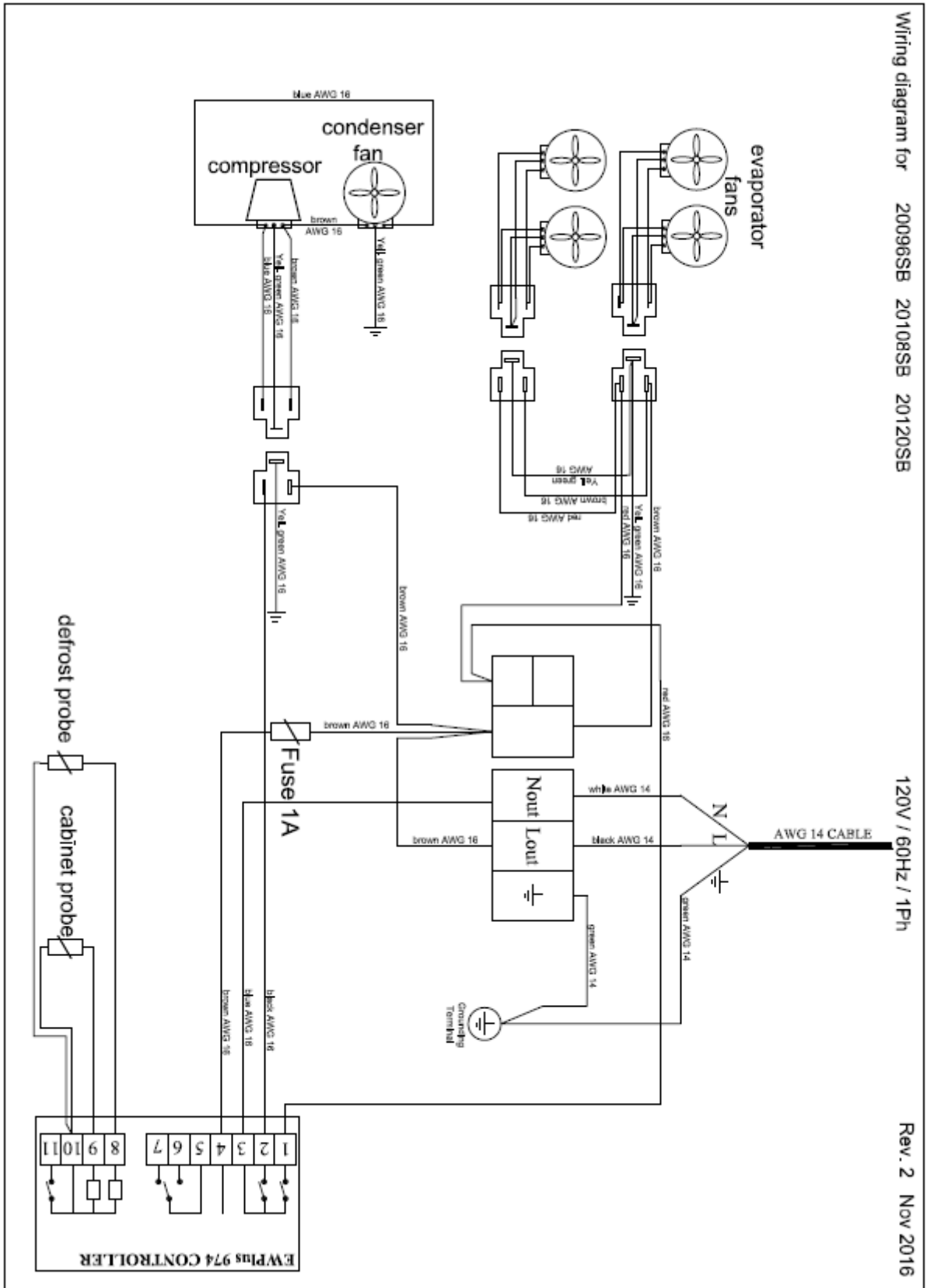
8. EXPLODED VIEW AND PART LIST

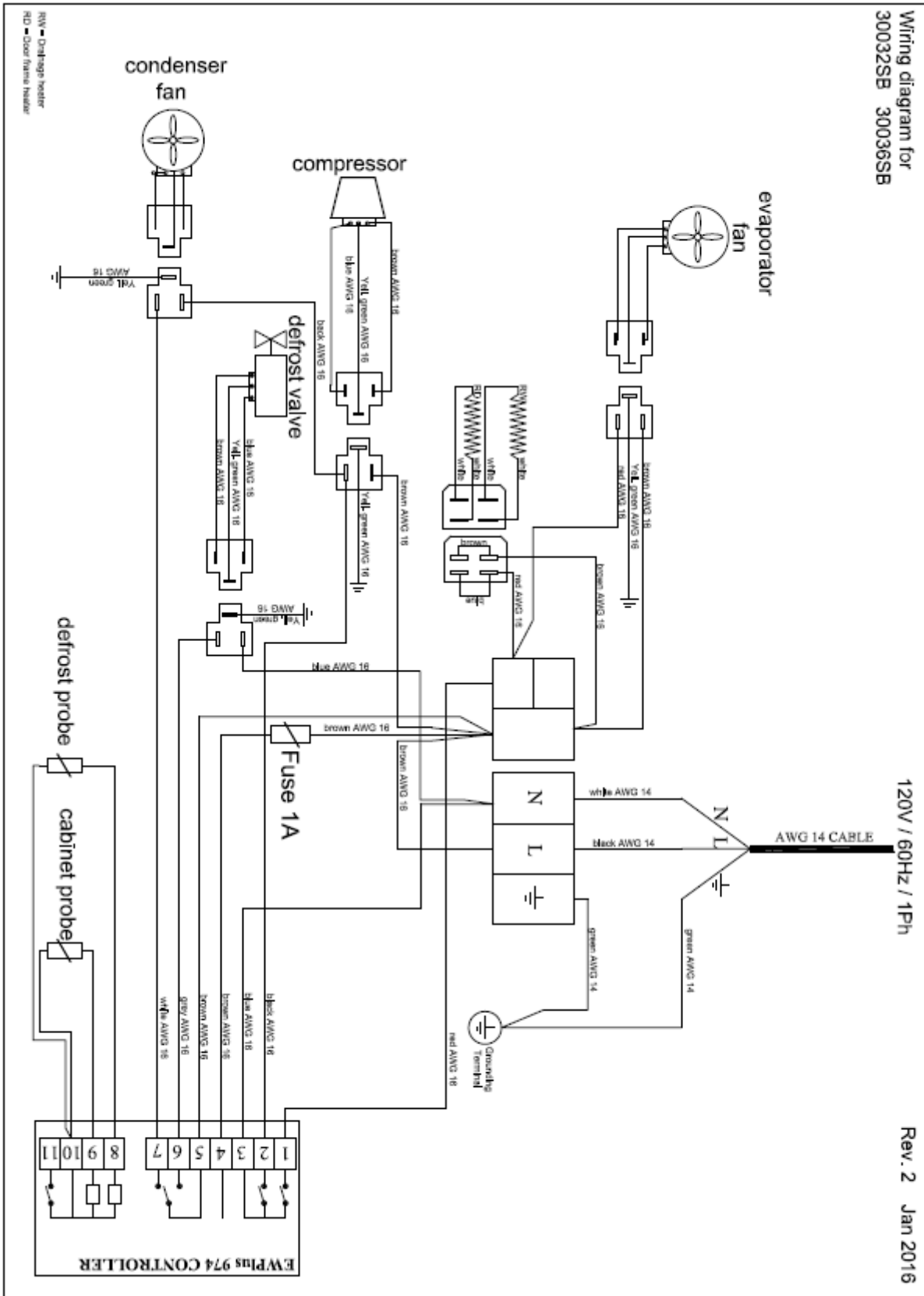


Item #	Part #	Description
1	Q32-0474	COMPRESSOR U.H. CAJ2432Z-A 115/60
2	R30-2231M12S	TX VALVE 2231/M12SE
3	R30-2200S	TX VALVE ORIFICE 2200/S
4	Q32-0010UL	LIQUID RECEIVER RT-306V-TR 0,70L
5	4082123S	CONDENSATE PAN CHEF BASE
6	Q32-0212	CONDENSER ASSY STVF139 COMP.115V 60HZ
7	S06-0002	FILTER DRIER
8	R35-0255UL	FUSE 5x20 1A 250V UL
9	R05-0192	FAN MOTOR 9W-20-2/094 115V 60HZ UL-CSA
10	R30-0161UL	SOLENOID VALVE EVR10 3/8 ODF10MM
11	4182941	TUBE CHANNEL
12	811226280	EVAPORATING UNIT CHEF BASE
13	Q32-0734Y	EVAPORATOR COIL CHEF BASE
14	4182881	TUBE CHANNEL
15	R05-0017	CROSS FLOW FAN 45/1X180X15 115V
16	8946100635	EVAPORATOR TRAY CHEF BASE
17	R35-0051UL	DRAINAGE HEATER 35W L4000 115V/ UL
18	Q32-0578	NTC PROBE 3MT SN691300
19	P28-7135SCC	DRAWER RUNNER CHEF BASE
20	190126260	DRAWER COMPARTMENT
21	180126260	DRAWER PANEL 26" CHEF BASE
22	H99-1870	LEFT CAP GOLD
23	H99-1869	RIGHT CAP GOLD
24	H25-0197	DRAWER GASKET 656x180
25	190118220	DRAWER COMPARTMENT
26	180118220	DRAWER PANEL 18" CHEF BASE
27	H25-0195	MAGNETIC SEAL MM.744x1820 GBF242
28	4160384S	FRONT PANEL CHEF BASE
29	M60-0101	SEE-THROUGH CNTRL PROTECTION
30	R35-EWP0974A-115	CONTROL UN.EWP 974 115V DISPL.AMBER
31	Q32-0006	LEG 2" C/P A304 85X100 R.145-210
32	4110954	RIGHT SIDE COMPARTMENT PANEL CHEF BASE
33	4185903	BACK SIDE GRIDDLE CHEF BASE

9. ELECTRICAL AND MECHANICAL



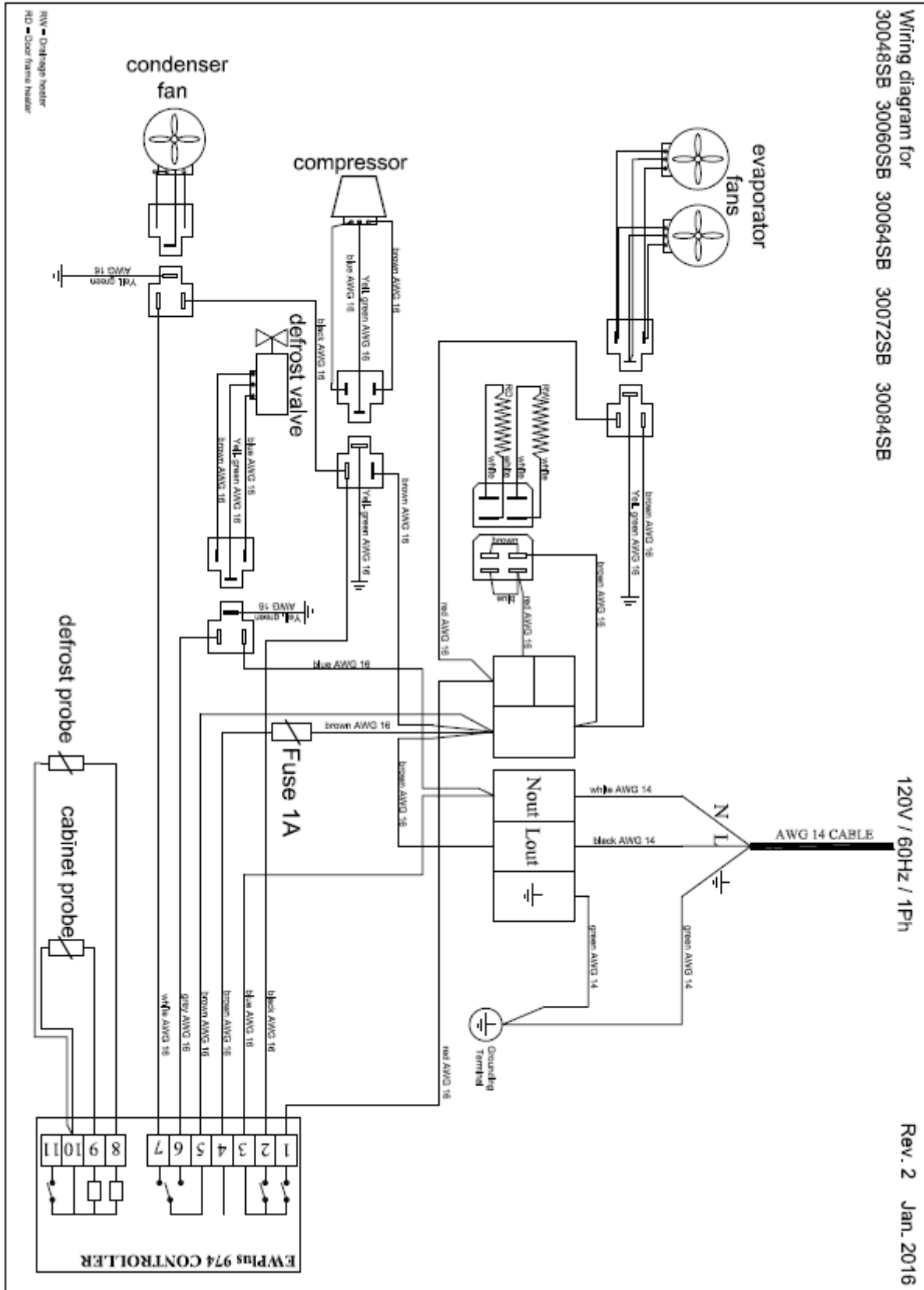




Wiring diagram for
 30048SB 30060SB 30064SB 30072SB 30084SB

120V / 60Hz / 1Ph

Rev. 2 Jan. 2016



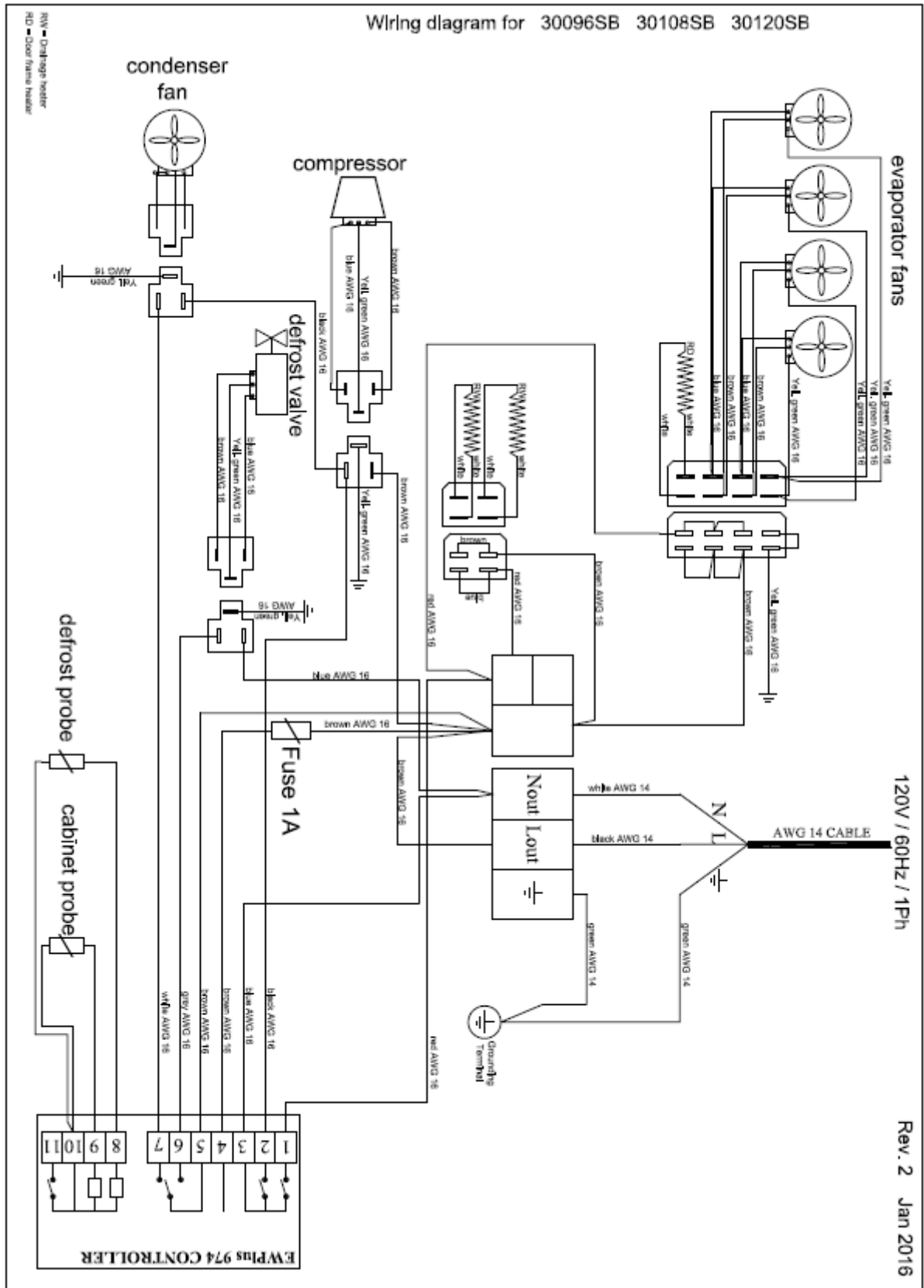


Figure 9.1 - Electrical Schematic

PIPING DIAGRAM FOR: 20032SB 20036SB 20048SB
 20060SB 20064SB 20072SB 20084SB

A = horizontal welded pocket joint

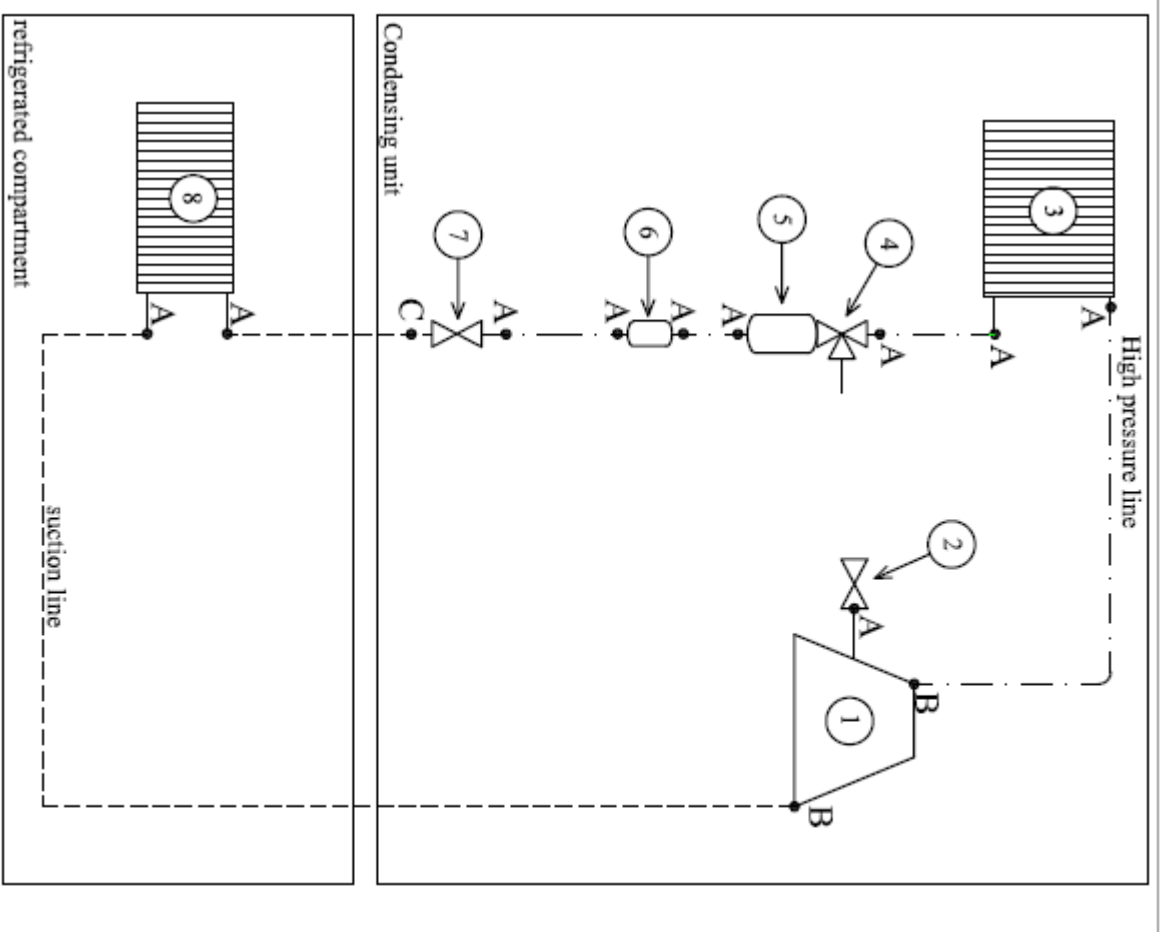
B = descending vertical welded pocket joint

C = ascending vertical welded pocket joint

- ① COMPRESSOR
- ② SUCTION CHECK VALVE
- ③ CONDENSER
- ④ ROTALOCK TAP
- ⑤ LIQUID RECEIVER
- ⑥ DRYER FILTER
- ⑦ THERMOSTATIC EXPANSION VALVE
- ⑧ EVAPORATOR

--- Copper pipe outer diameter = 8 mm, thickness = 1 mm

- - - Copper pipe outer diameter = 6 mm, thickness = 1 mm



PIPING DIAGRAM FOR: 20096SB 20108SB 20120SB

A = horizontal welded pocket joint

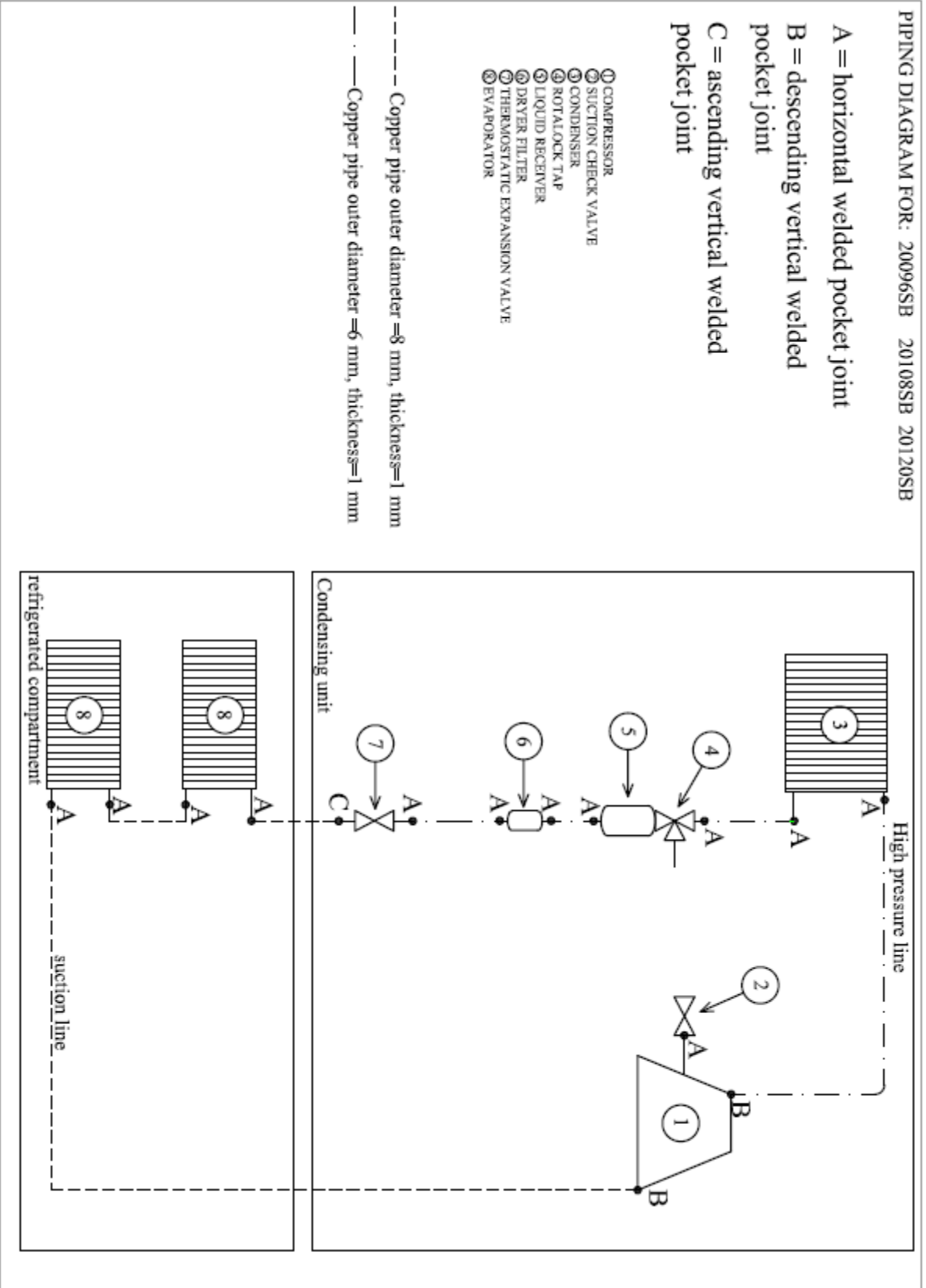
B = descending vertical welded pocket joint

C = ascending vertical welded pocket joint

- ① COMPRESSOR
- ② SUCTION CHECK VALVE
- ③ CONDENSER
- ④ ROTALOCK TAP
- ⑤ LIQUID RECEIVER
- ⑥ DRYER FILTER
- ⑦ THERMOSTATIC EXPANSION VALVE
- ⑧ EVAPORATOR

----- Copper pipe outer diameter = 8 mm, thickness = 1 mm

----- Copper pipe outer diameter = 6 mm, thickness = 1 mm

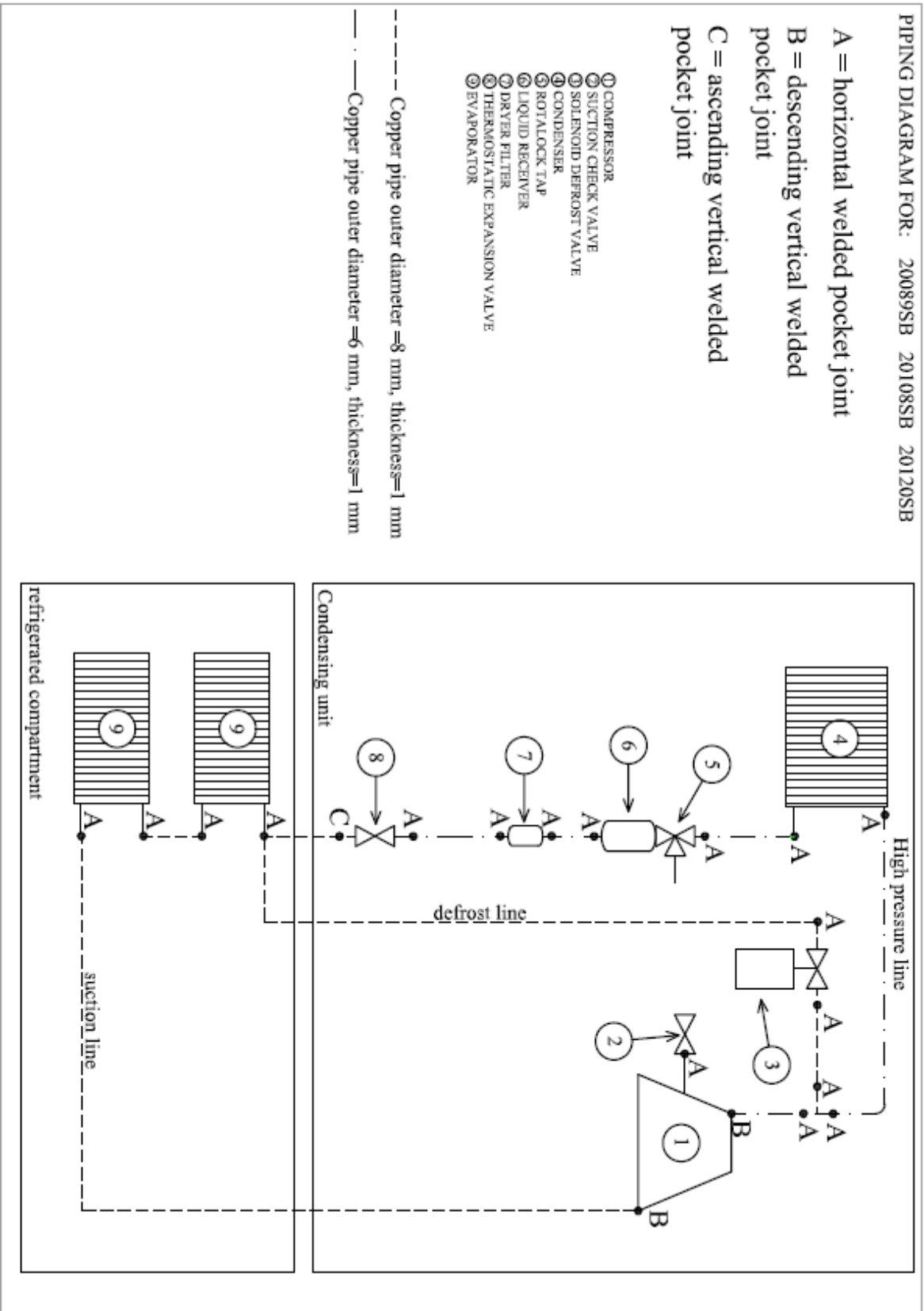


PIPING DIAGRAM FOR: 20089SB 20108SB 20120SB

A = horizontal welded pocket joint
 B = descending vertical welded pocket joint
 C = ascending vertical welded pocket joint

- ① COMPRESSOR
- ② SUCTION CHECK VALVE
- ③ SOLENOID DEFROST VALVE
- ④ CONDENSER
- ⑤ ROTALOCK TAP
- ⑥ LIQUID RECEIVER
- ⑦ DRYER FILTER
- ⑧ THERMOSTATIC EXPANSION VALVE
- ⑨ EVAPORATOR

--- Copper pipe outer diameter = 8 mm, thickness = 1 mm
 - - - Copper pipe outer diameter = 6 mm, thickness = 1 mm



PIPING DIAGRAM FOR: 20032SB 20036SB 20048SB
 20060SB 20064SB 20072SB 20084SB

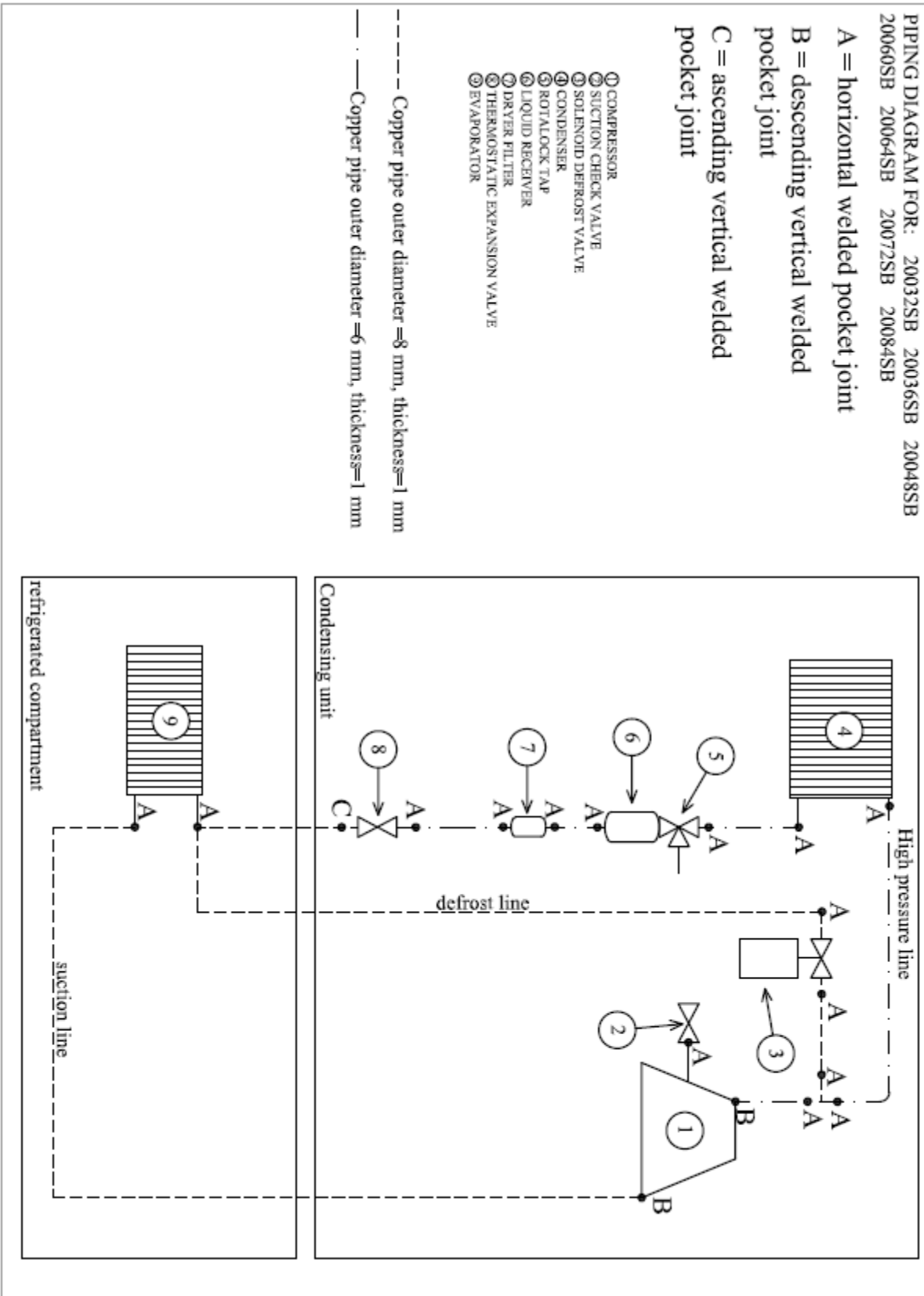
A = horizontal welded pocket joint

B = descending vertical welded pocket joint

C = ascending vertical welded pocket joint

- ① COMPRESSOR
- ② SUCTION CHECK VALVE
- ③ SOLENOID DEFROST VALVE
- ④ CONDENSER
- ⑤ ROTALOCK TAP
- ⑥ LIQUID RECEIVER
- ⑦ DRYER FILTER
- ⑧ THERMOSTATIC EXPANSION VALVE
- ⑨ EVAPORATOR

--- Copper pipe outer diameter = 8 mm, thickness = 1 mm
 - - - Copper pipe outer diameter = 6 mm, thickness = 1 mm



10. REMOTE CHEF BASE

On the following table the specification for all the models:

Model Number	W	D	H*	Drawers			No. of Pans 13"x21"x4"	Ref. Volume (cu.ft.)	Elec. V/Ph/Hz	Evap. BTU	Amps	Shipping
				18"	26"	31"						Weight (lbs.)
20032R	32"	36"	26"	2	-	-	4		230/1/50	1100	1	300
20036R	36"	32"	26"	-	2	-	4	6.8	230/1/50	1100	1	300
20048S	48"	32"	26"	-	-	2	4	13	230/1/50	1100	1	400
20060R	60"	32"	26"	2	2	-	6	14	230/1/50	1100	1	510
20064R	64"	32"	26"	2	2	-	6		230/1/50	1100	1	510
20072R	72"	32"	26"	-	2	2	8	17.5	230/1/50	1600	1	610
20084R	84"	32"	26"	4	2	-	8	21	230/1/50	1600	1	715
20096R	96"	32"	26"	-	6	-	12	24.6	230/1/50	1600	1	815
20108R	108"	32"	26"	-	2	4	12	28.2	230/1/50	1600	1	920
30032R	32"	36"	26"	-	2	-	4		230/1/50	1100	2	
30036R	36"	32"	26"	-	2	-	4		230/1/50	1100	2	300
30048R	48"	32"	26"	-	-	2	4		230/1/50	1100	2	400
30060R	60"	32"	26"	2	2	-	6		230/1/50	1100	3	510
30064R	64"	32"	26"	2	2	-	6		230/1/50	1100	3	510
30072R	72"	32"	26"	-	2	2	8		230/1/50	1600	3	610
30084R	84"	32"	26"	4	2	-	8		230/1/50	1600	4	715
30096R	96"	32"	26"	-	6	-	12		230/1/50	1600	4	815
30108R	108"	32"	26"	-	2	4	12		230/1/50	1600	4	920

10.1 INSTALLATION



Connect pipes (braze or flare fit) to the existing refrigeration lineset (suction and liquid line). Provide the lines et with valves and charging ports and refrigerant lock system. Close the valves and prepare the unit for vacuum. Make sure the solenoid valve (provided with the bas) is open during the vacuum process (just switch on the unit and wait for the valve to open, as the thermostat will call for cooling). Once the unit is completely vacuumed, close charge ports and open valves to allow refrigerant to enter the circuit. The unit is ready to operate.

