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### 1.1 Case description

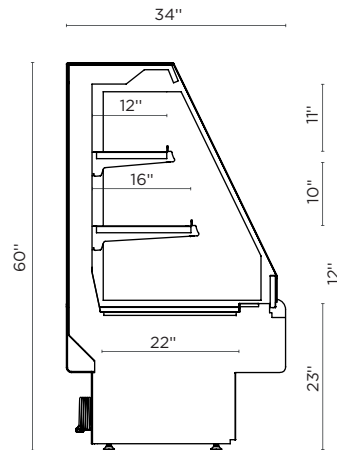
KGL series model (number) system.

KGL RS 40 S

AAA BB CC D

AAA	BB	CC	D
Basic model	Model variation	Length	Type of Unit.
	<b>RS</b> -Rear doors and electrical shutter	<b>40"</b>	<b>S</b> -Self Contained
	<b>OF</b> -Open front	<b>50"</b>	<b>R</b> -Remote
	<b>OS</b> -Open front and electrical shutter	<b>60"</b>	
	<b>DL</b> -Open front and rear doors		
	<b>RM</b> -Rear doors and manual shutter		

## KGL SERIES



KGL-OF-XX-S(R)



KGL-OF-40-S(R)

## 7 Warranty

12 months warranty for all parts and labour from the invoice date. A new part will be provided free of charge. Defective part must be returned to the manufacturer.

Warranty claims: All claims must include model number, serial number, date of purchase, date of installation and additional information about the supposed defect.

All service work must be authorized by MVP group.

MVP group reserves the right to select the service company.

Loss of food or other damages caused by faulty equipment aren't covered by this warranty.

Warranty does not cover damage when uncrating.

Work made necessary, by lack of maintenance or cleaning are not covered by this warranty.

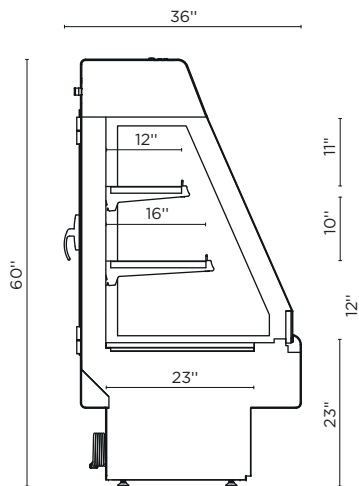
Warranty does not cover damage or malfunction result of improper use or installation.

Warranty does not cover negligence, misuse and operation on wrong voltage.

Warranty does not apply if the serial number is altered or defaced.

Failure to comply with the instructions in this manual shall avoid warranty.





KGL-RS/RM-XX-S(R)



KGL-RS/RM-40-S(R)

Low charge of refrigerant.

Relay defective.

Equipment runs constantly:

Condenser dirty.

Condenser fan malfunction.

Temperature and relative humidity too high.

Starting relay burns out:

Low voltage.

High voltage.

Compressor short cycles.

Incorrect running capacitor.

Incorrect relay.

Head pressure too high:

Unit overcharged.

Air or other non condensable gases in the system.

Clogged condenser.

Defective condenser fan motor.

Unit location too hot.

Restriction in charge line.

Head pressure too low:

Insufficient refrigerant charge.

Leak in the system.

Cold location.

Noisy unit:

Compressor oil charge low.

Fan blade causing vibrations.

Tube rattle.

Loose parts.

Case not leveled.

## 6.2 Service



This operation must be performed by a qualified technician.



For spare parts, contact your distributor.

### 5.9.2 Setting position

 This operation must be performed by a qualified technician.

For more informations go to [www.somfy.com](http://www.somfy.com)

## 6 Troubleshooting/Service

### 6.1 Troubleshooting

 Service must be performed by a qualified technician.

#### Doors not closing:

- Check for leveled floor.
- Check for obstruction.
- Remove doors and check the bearings.

#### Lights not working:

- Check light switch position.
- Check light connections.

#### Warm case temperature:

- Check for air return grille obstruction.
- Check for air drafts.
- Check store temperature.
- Check for condenser obstruction and cleaning.
- Check for frozen evaporator.
- Check set point.
- Display area is over filled.

#### Fans not working:

- Check electrical connections.
- Check for any debris.

#### Case not aligning:

- Check for leveled floor.
- Check instructions for joining.

#### Display not working:

- Check main power switch position..
- Check electrical connections.

#### Compressor not starting:

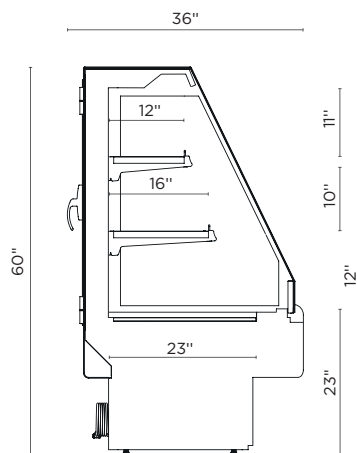
- Disconnect switch open.
- Blown fuse.
- Overload protective tripped.



KGL-RS/RM-50-S(R)



KGL-RS/RM-60-S(R)



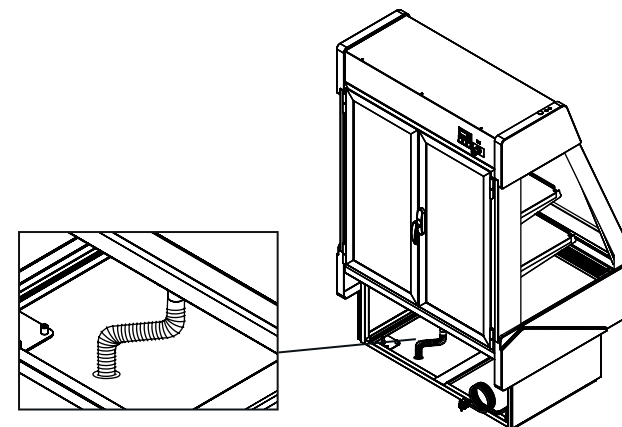
KGL-DL-XX-S(R)



KGL-DL-40-S(R)

## 5.8 Drain inspection

⚠ Check for drain obstruction and correct position every month (Remotes only).

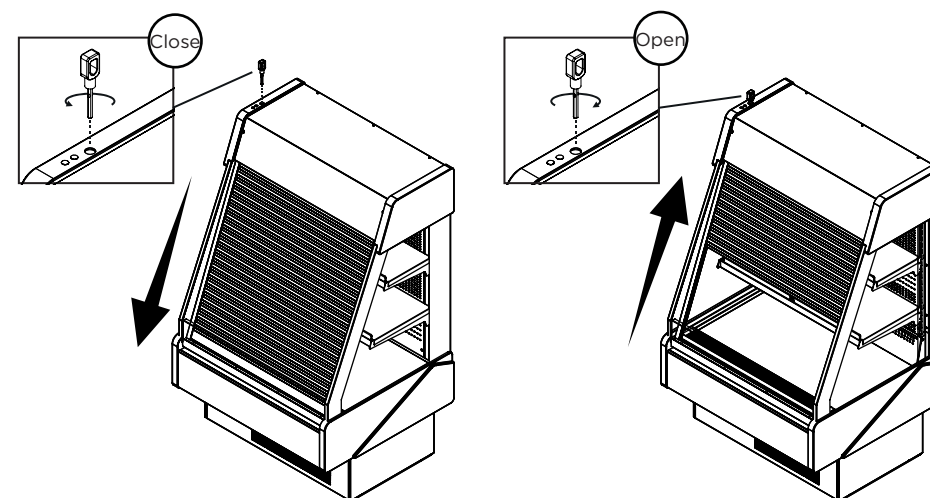


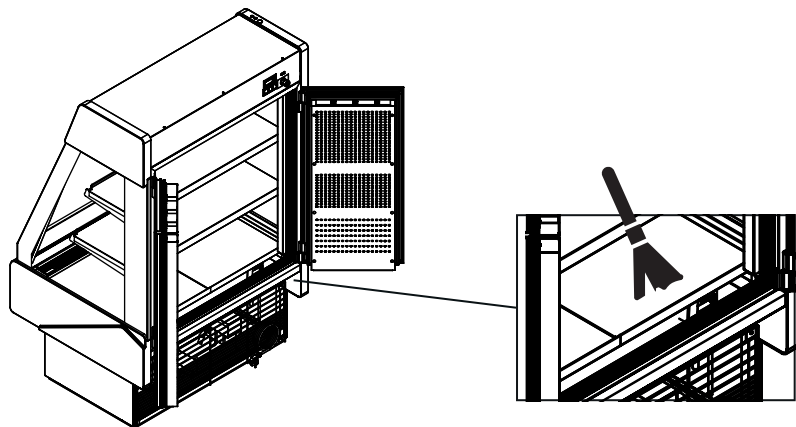
## 5.9 Electric shutter

### 5.9.1 Manual operation

- ⚠ This operation must be performed by a qualified technician.
- ⚠ Manual opening of the shutter only for no power situation.
- ⚠ Make sure to insert the key in the correct place.

For more informations go to [www.somfy.com](http://www.somfy.com)



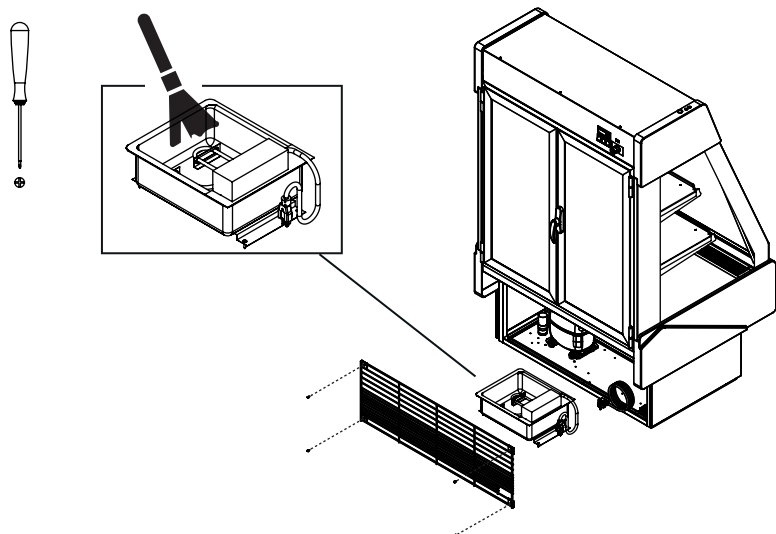


### 5.7 Evap Pan cleaning

- ⚠ This operation must be performed by a qualified technician.
- ⚠ All operations must be done with the unit disconnected.
- ⚠ Pan can be hot!
- ⚠ This operation must be done weekly.

To access the evap pan:

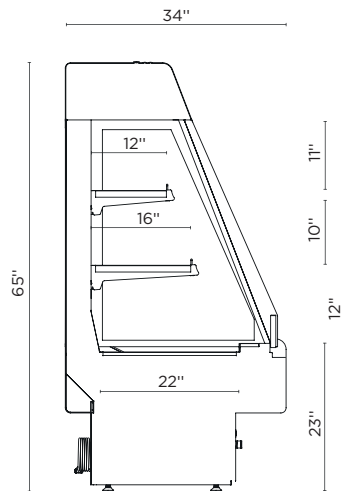
- Remove protection grille.
- Unplug the evap pan.
- Relieve the screws and take the evap pan off.
- Clean with soft detergent or warm water.



KGL-DL-50-S(R)



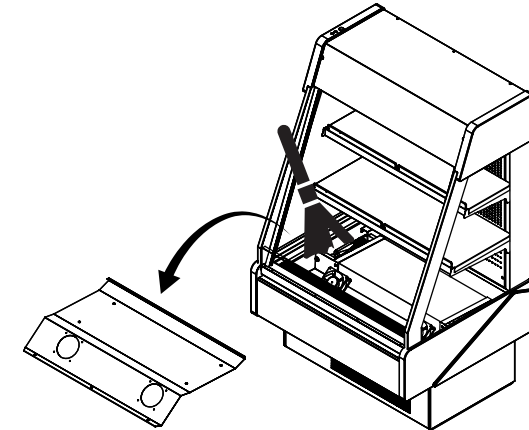
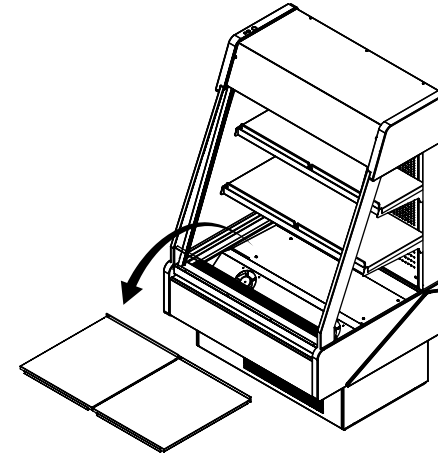
KGL-DL-60-S(R)



KGL-OS-XX-S(R)



KGL-OS-40-S(R)



#### 5.6.1 Evaporator back cleaning (KGL-DL/RS/RM only)

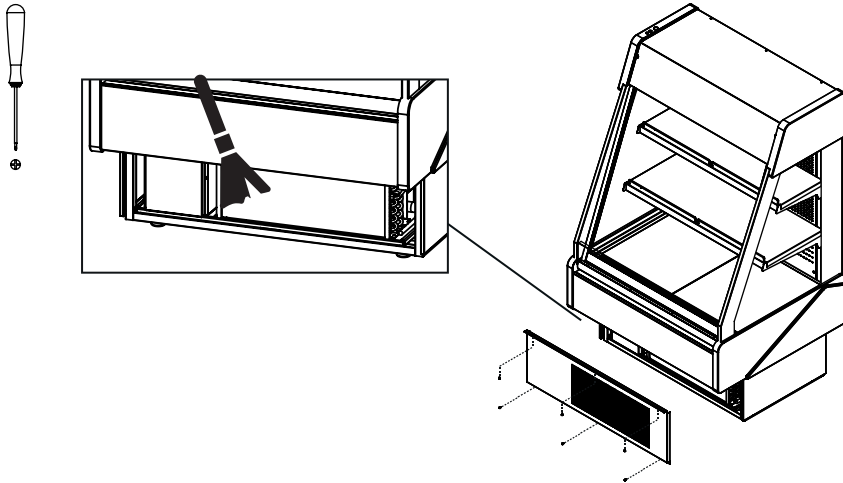
- ⚠ The back of the evaporator must be checked for obstruction every day.
- ⚠ This operation must be performed by a qualified technician.
- ⚠ All operations must be done with the unit disconnected.



### 5.5 Condenser cleaning

- ⚠ This operation must be performed by a qualified technician.
- ⚠ All operations must be done with the unit disconnected.

Condenser must be regularly cleaned (every month). Use a brush or vacuum it. To get to the condenser must remove frontal protection.



### 5.6 Evaporator cleaning

- ⚠ This operation must be performed by a qualified technician.
- ⚠ All operations must be done with the unit disconnected.

To access the evaporator:

- Lift and remove exposition panels
- Use tool for the screws and clean

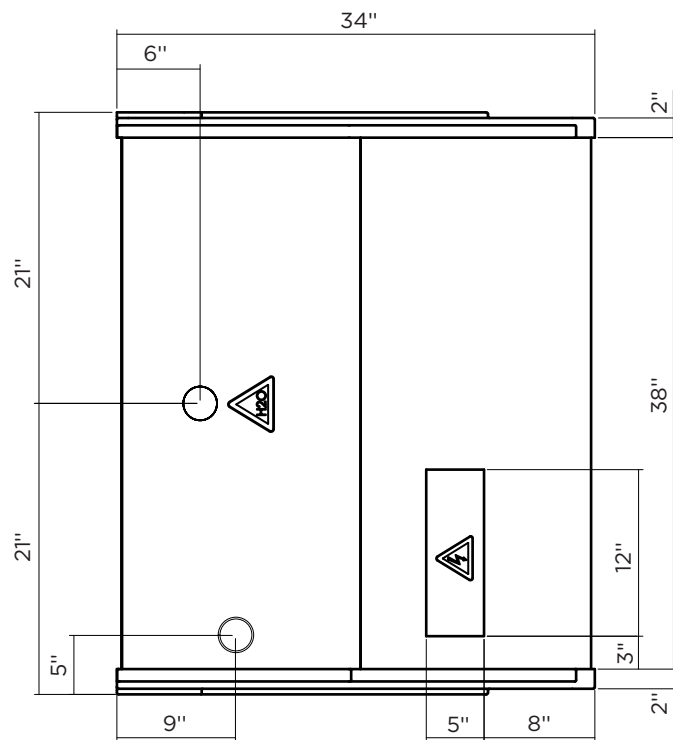
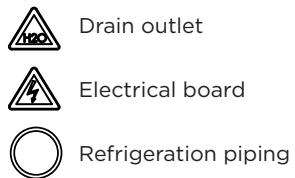


KGL-OS-50-S(R)



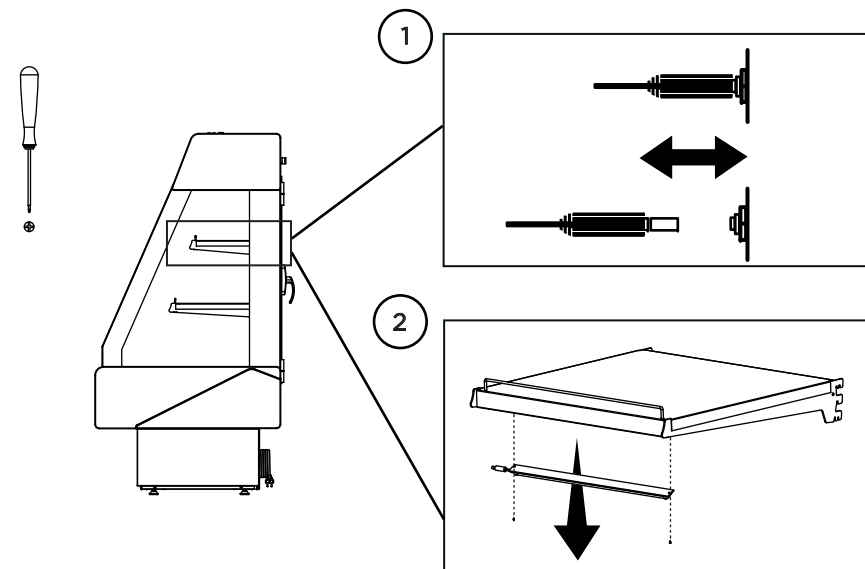
KGL-OS-60-S(R)

## Implantation

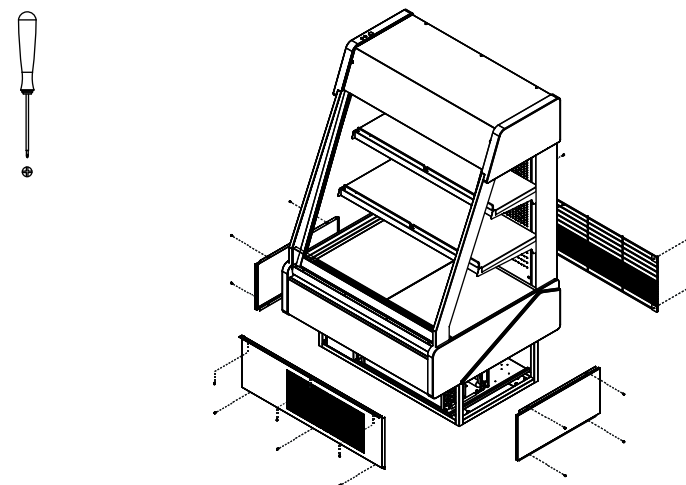


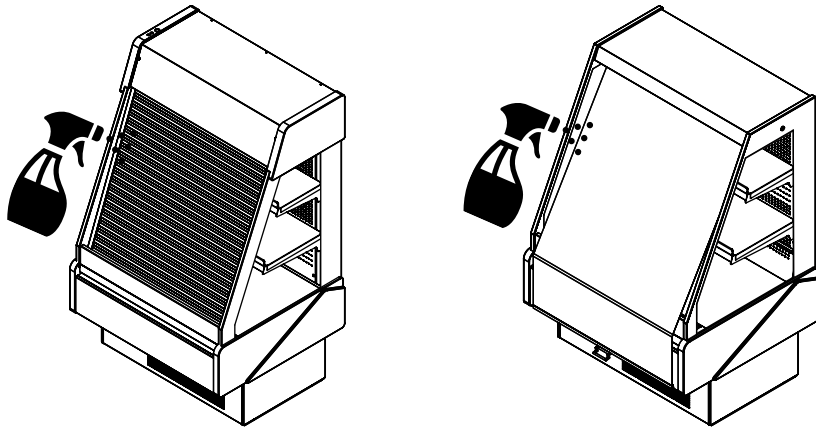
KGL-OF-40-S(R)

- Disconnect the light
- Unscrew the light and remove the light
- Insert a new light in the same place of the old one
- Screw the light and connect it
- Plug and turn on the light




## 5.4 Panels and protection grille removal

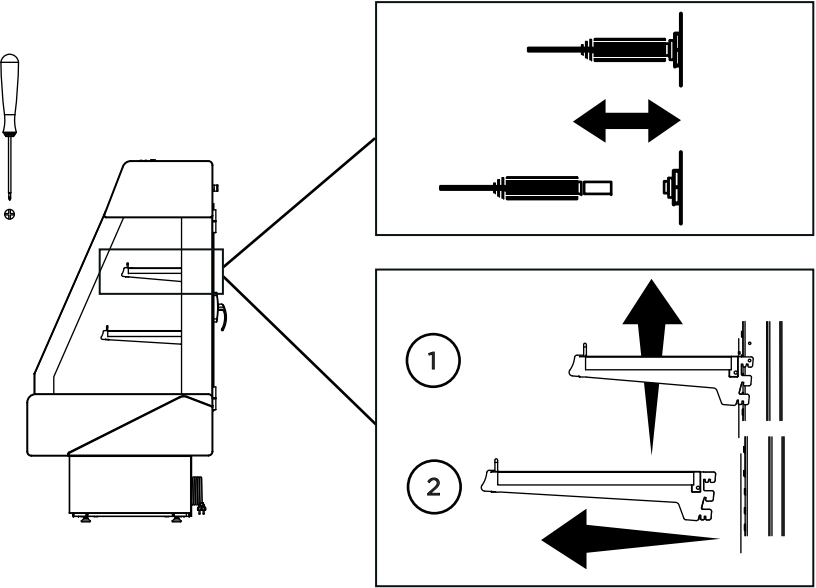




### 5.2 Shelf removing/adjustment


 All operations must be done with the unit disconnected.

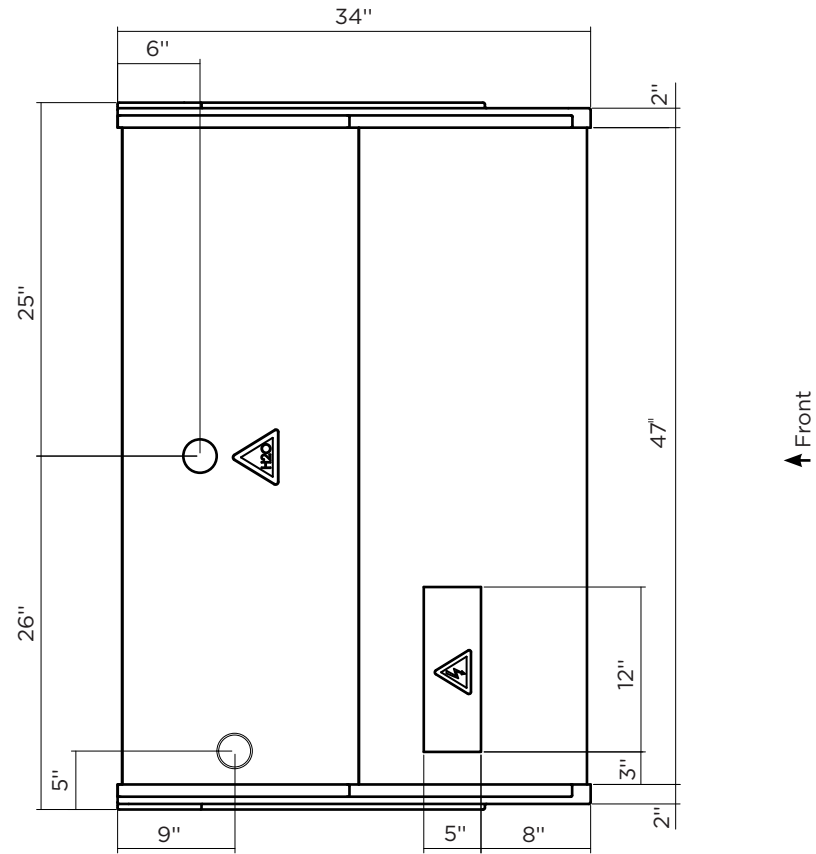
To remove or adjust shelves take care with light connections.



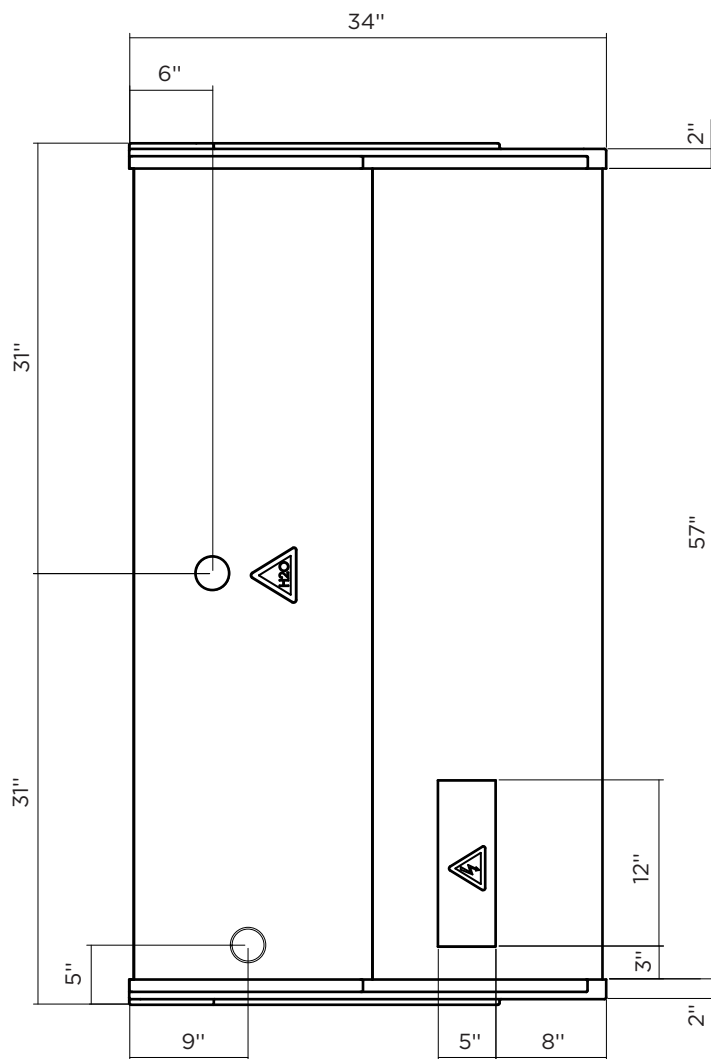
### 5.3 Light substitution

To replace lights follow the steps:

 Turn off power and unplug the equipment.



KGL-OF-50-S(R)



KGL-OF-60-S(R)

↑ Front

## Main parameters

Symbol	Code	Parameter	Models	UOM	Type	Min	Max	Def
	/3	Probe display response	MSYF	-	C	0	15	0
	/5	Select °C or °F 0: °C 1: °F	MSYF	flag	C	0	1	0
	/A2	Configuration of probe 2 (S2) 0: Probe absent 1: Product probe (display only) 2: Defrost probe 3: Condenser probe 4: Antifreeze probe	YF	-	C	0	4	2
			MS	-	C	0	4	2
	/c1	Calibration of probe 1	MSYF	°C/°F	C	-20	20	0,0
	St	Temperature set point	MSYF	°C/°F	F	r1	r2	0,0
	rd	Control delta	SYF	°C/°F	F	0,1	20	2,0
	c2	Minimum compressor OFF time	SYF	min	C	0	15	0
	dt	Interval between defrosts	SYF	hours	F	0	250	8
	dP1	Maximum defrost duration, evaporator	SYF	min	F	1	250	30

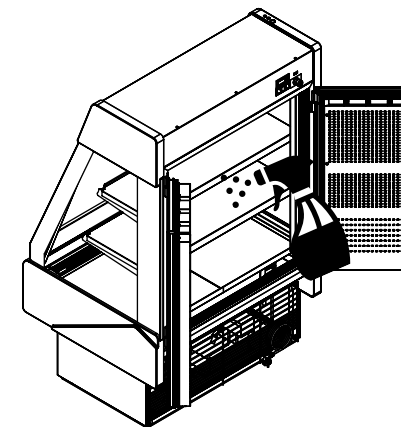
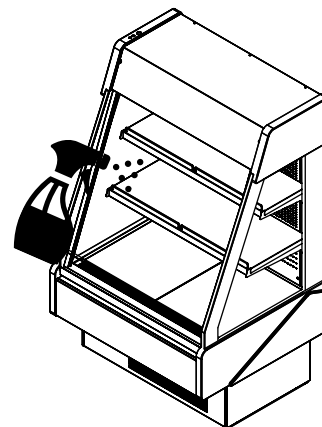
## 5 Maintenance

### 5.1 Cleaning



All operations must be done with the unit disconnected.

Clean surfaces (glass/metal/plastic) with soft detergents or warm water. Do not use abrasive cleanser.



## Signals on the display

The blinking status indicates a request for activation that cannot be implemented until the end of the corresponding delay times.

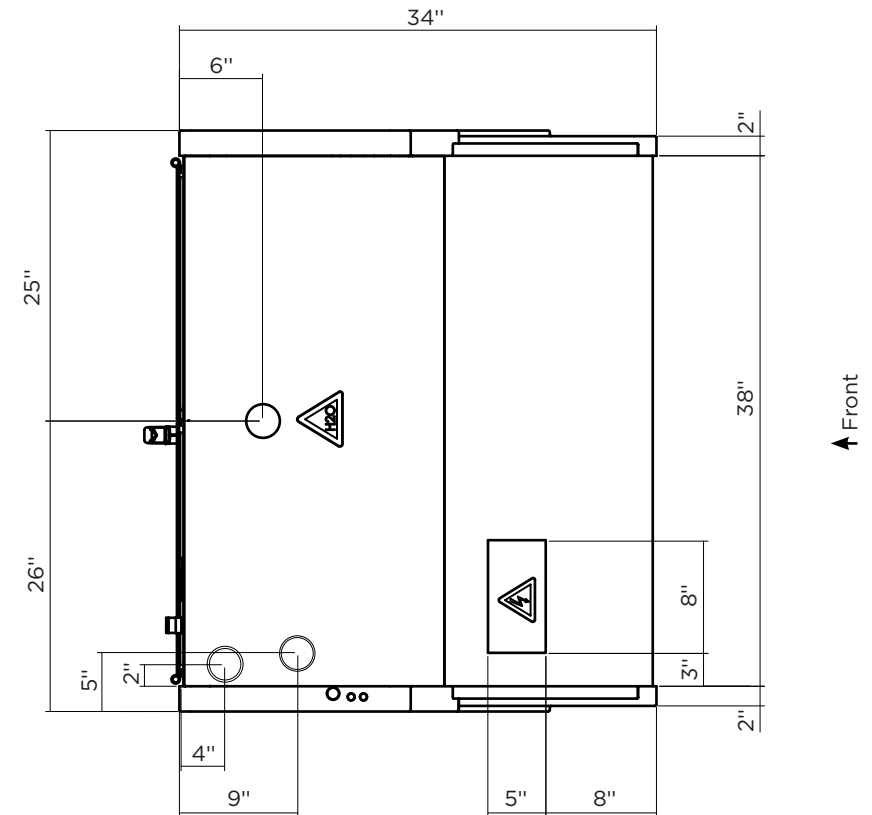
Icon	Function	ON	OFF	blink	Startup
	<b>COMPRESS.</b>	compressor ON	comp. OFF	compressor request	
	<b>FAN</b>	fan ON	fan OFF	fan request	
	<b>DEFROST</b>	defrost in progress	defrost not required	defrost request	
	<b>AUX</b>	auxiliary output AUX active	auxiliary output AUX not active	anti-sweat heater function active	
	<b>ALARM</b>	delayed external alarm (before the expiry of the time "A7")	no alarm present	alarms in normal operation (eg. high/low temp.) or alarm from ext. digital input immediate or delayed	
	<b>CLOCK</b>	at least one timed defrost has been set	no timed defrost is present	clock alarm	ON if Real-Time Clock present
	<b>LIGHT</b>	auxiliary output LIGHT ACTIVE	auxiliary output LIGHT NOT ACTIVE	anti-sweat heater function active	
	<b>SERVICE</b>		no malfunction	malfunction (eg. EEPROM error or probe fault)	
	<b>HACCP</b>	HACCP function	HACCP function enabled	HACCP alarm (HA and/or HF) not enabled	
	<b>CONTINUOUS CYCLE</b>	enabled	not enabled	request	

Controller must be handled by a qualified technician.

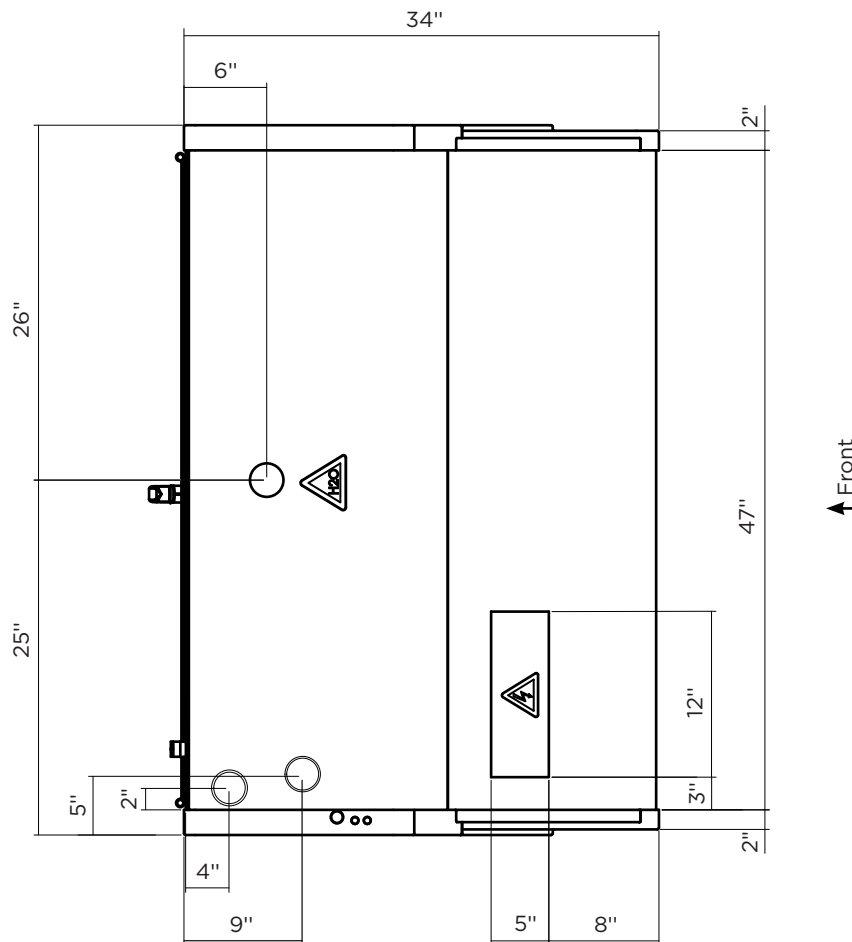
## Buttons on the keypad

		Normal operation	
Button	Press. the button alone	Pressing together with other buttons	
	<ul style="list-style-type: none"> <li>if pressed for more than 5 s accessed the menu for setting type "F" (frequent) parameters</li> <li><b>in the event of alarm:</b> silences the audible alarm (buzzer) and disables the alarm relay</li> </ul>	<ul style="list-style-type: none"> <li>if pressed for more than 5 s together with the <b>SET</b> button, accesses the menu for setting the type "C" (configuration) or downloading the parameters</li> <li>if pressed for more than 5 s together with the <b>UP/AUX</b> button resets any alarm with manual reset</li> </ul>	<b>Start-up:</b> if pressed for more than 5 s at start-up, starts the default parameter setting  <b>Automatic address assignment:</b> if pressed for 1 s enters the automatic serial address assigning procedure
	if pressed for more than 1 s, enables/disables the auxiliary output	<ul style="list-style-type: none"> <li>if pressed for more than 5 s together with <b>DOWN/DEF</b> button, enables/disables the continuous cycle operation</li> <li>if pressed for more than 5 s with <b>SET</b> button, starts the procedure for printing the reports (function available, with management to be implemented)</li> <li>if pressed for more than 5 s together with <b>PRG/MUTE</b> button, resets any active alarm with manual reset</li> </ul>	
	if pressed for more than 5 s, enables/disables a manual defrost	<ul style="list-style-type: none"> <li>if pressed for more than 5 s together with <b>UP/AUX</b> button, enables/disables the continuous cycle operation</li> <li>if pressed for more than 1 s together with <b>SET</b> button, displays a submenu with the <b>HACCP</b> alarm parameters (HA, HAn, HF, HFn)</li> </ul>	
	if pressed for more than 1 s, displays and/or set the set point	<ul style="list-style-type: none"> <li>if pressed for more than 5 s together with <b>PRG/MUTE</b> button, accesses the menu for setting the type "C" parameters "C" (configuration) or downloading the parameters</li> <li>if pressed for more than 1 s together with <b>DOWN/DEF</b> button, displays a submenu with the <b>HACCP</b> alarm parameters (HA, HAn, HF, HFn)</li> <li>if pressed for more than 5 s together with <b>UP/AUX</b>, starts the procedure for printing the report (function available, with management to be implemented)</li> </ul>	

- Drain outlet
- Electrical board
- Refrigeration piping
- Electrical wiring



KGL-RS/RM-40-S(R)



KGL-RS/RM-50-S(R)

Relay outputs	depending on the model					
		EN 60730-1		UL 873		
	model	relay	250 V~	operating cycles	250 V~	operating cycles
	IRxxx(E,A) (P,Q,S,U,V,X,Y,Z)xxx	R2 (*)	5(1)A	100000	5 A resistive 1FLA 6 LRA C 300	300000
	IRxxx(E,A) (N,R,C,B,A,M,L,T)xxx	R3 (*)	5(1)A	100000	5 A resistive 1FLA 6 LRA C 300	300000
	IRxxx(E,A) (N,R,C,B,A,M,L,T)xxx IRxxx(O,L,H) (N,R,C,B,A,M,L,T)xxx	R1,R2  R2,R3 R4 (*)	8 (4)A N.O. 6 (4)A N.C. 2 (2)A N.O./N.C.	100000	8 A resistive 2FLA 12 LRA C300	300000
	IRxxx(E,A) (P,Q,S,U,V,X,Y,Z)xxx IRxxx(O,L,H) (N,R,C,B,A,M,L,T)xxx	R1  R1 (*)	12 (2)A N.O./N.C.	100000	12 A resistive 5FLA 30 LRA C300	300000
insulation from very low voltage parts			reinforced			
			6 mm clearance, 8 mm creepage			
			3750 V insulation			
insulation between the relay outputs independent			basic			
			3 mm clearance, 4 mm creepage			
			1250 V insulation			

SSR outputs Max output voltage : 12 Vdc, Output resistance: 600 Ω, Max output current: 20 mA

(\*): Relay not suitable for fluorescent loads (neon lights, ...) that use starters (ballasts) with phase-shift capacitors. Fluorescent lamps with electronic control devices or without phase-shift capacitors can be used, within the operating limits specified for each type of relay.

Conessioni	Type of connection			Cross-section Max. current
Model	Relay screw	P. Supply screw	Probes screw	for wires from 12 A 0.5 a 2.5 mm <sup>2</sup>
IRxxxxxx0xx	faston	faston	removable	
IRxxxx(E,A)x1xx	removable	removable	removable	
IRxxxxxx2xx	faston	faston	removable	
IRxxxx(E,A)x3xx	vertical screw	vertical screw	vertical screw	

the installer has to provide the correct dimensioning of the power supply and cable connection between the instruments and the loads. Depending on the model, the maximum current in the common terminals 1, 3 or 5 is 12 A. When using the controller at maximum operating temperature and full load, use cables featuring a maximum operating temperature of 105 °C at least.

 Controller must be handled by a qualified technician.

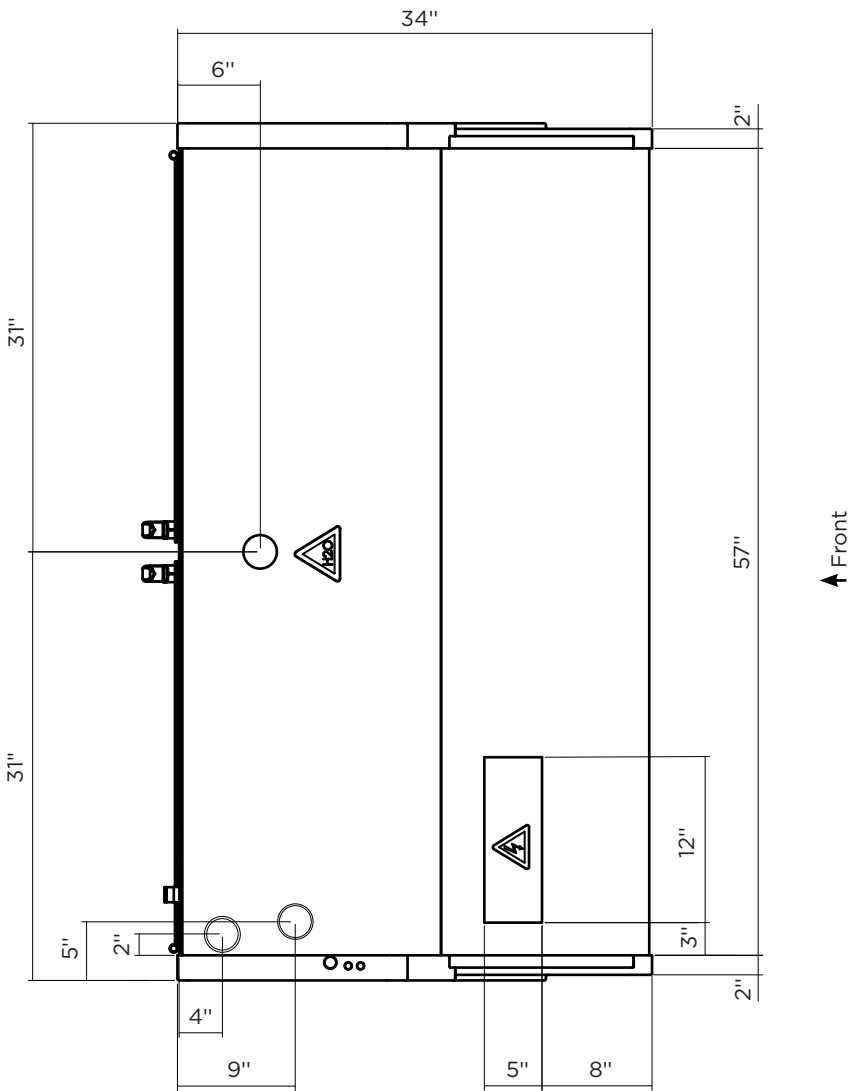
4.4. Electronic controller



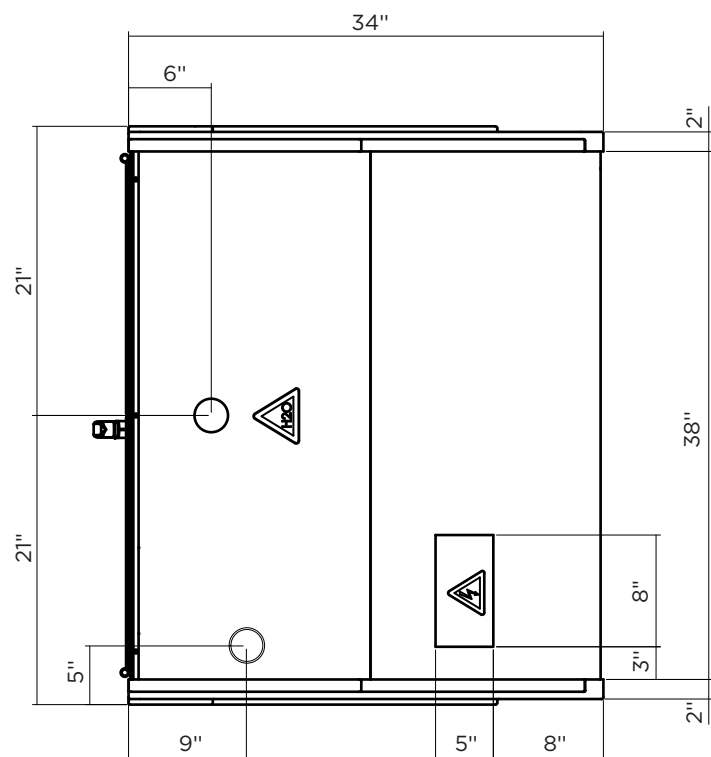
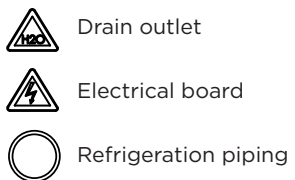
Carel - IR33FOAHEO

TECHNICAL SPECIFICATIONS

	Model	Voltage	Power
Power supply	IRxxxxExxxx	230 V~, 50/60 Hz	3 VA, 25 mA~max.
	IRxxxxAxxxx	115V~, 50/60 Hz	3 VA, 50 mA~max.
	IRxxxxHxxxx	115 to 230 V~, 50/60 Hz	6 VA, 50 mA~max.
	IRxxxxLxxxx IRxxxxOxxxx	12 to 24V~, 50/60 Hz, 12 to 30 Vdc 12V~, 50/60 Hz, 12 to 18 Vdc	3 VA, 300 mA~/mA <sub>dc</sub> max. Use only SELV power supply
Insulation guaranteed by the power supply	IRxxxxExxxx IRxxxxAxxxx IRxxxxHxxxx	insulation in reference to very low voltage parts	reinforced 6mm clearance, 8 mm creepage 3750 V insulation
		insulation from relay outputs	basic 3mm clearance, 4 mm creepage 1250V insulation
	IRxxxxLxxxx IRxxxxOxxxx	insulation in reference to very low voltage parts	externally guaranteed by safety transformer (SELV power supply)
		insulation from relay outputs	reinforced 6mm clearance, 8 mm creepage 3750 V insulation
Inputs	S1 (probe 1)	NTC (IRxxx0xxxxx) o NTC e PTC (IRxxx7xxxxx)	
	S2 (probe 2)	NTC (IRxxx0xxxxx) o NTC e PTC (IRxxx7xxxxx)	
	DI 1	free contact, contact resistance < 10 Ω, closing current 6 mA	
	S3 (probe 3)	NTC (IRxxx0xxxxx) o NTC e PTC (IRxxx7xxxxx)	
	DI 2	free contact, contact resistance < 10 Ω, closing current 6 mA	
	S4 (probe 4)	NTC (IRxxx0xxxxx) o NTC e PTC (IRxxx7xxxxx)	
	Maximum durance of probes and digital inputs less than 10 m. <b>Note:</b> during installation keep the power and loads connection separate from probe cables, digital inputs, repeater display and supervisory system.		
Probe type	Std. CAREL NTC	10 kΩ at 25 °C, - 50T90 °C range	
		measurement error:	1 °C in the - 50T50 °C range 3 °C in the - 50T90 °C range
	NTC high temperature	50 kΩ at 25 °C, - 40T150 °C range	
		measurement error:	1,5 °C in the - 20T115 °C range 4 °C in the - 20T115 °C range
	PTC std. CAREL (specific model)	985 Ω a 25 °C, range da - 50T150 °C	
		measurement error:	2 °C in the - 50T50 °C range 4 °C in the - 50T150 °C range



KGL-RS/RM-60-S(R)

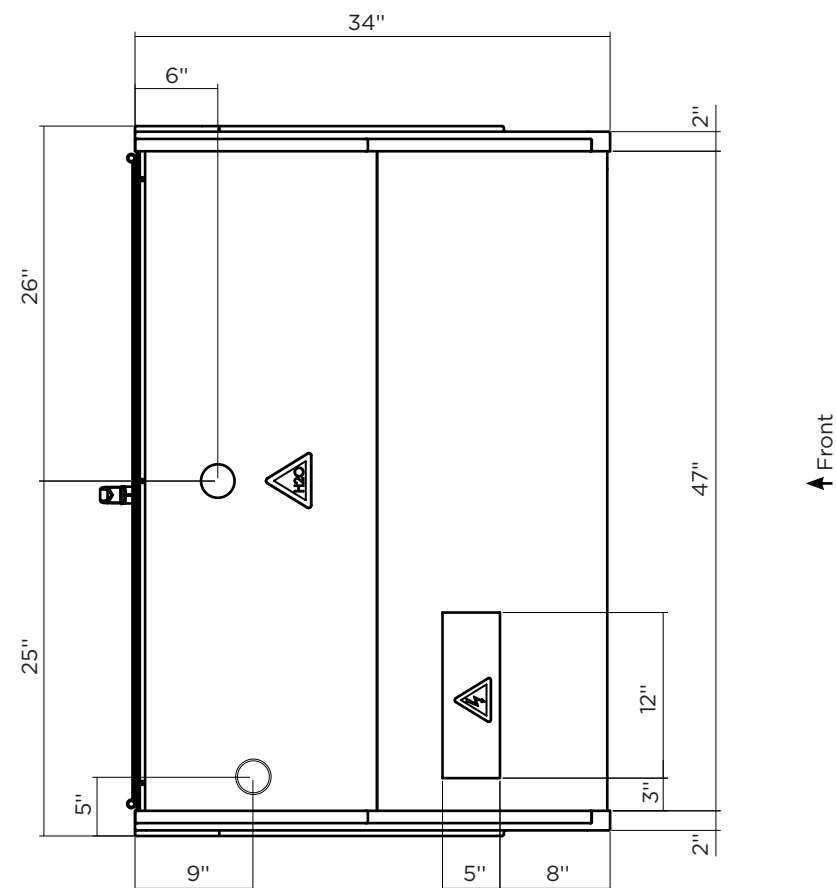
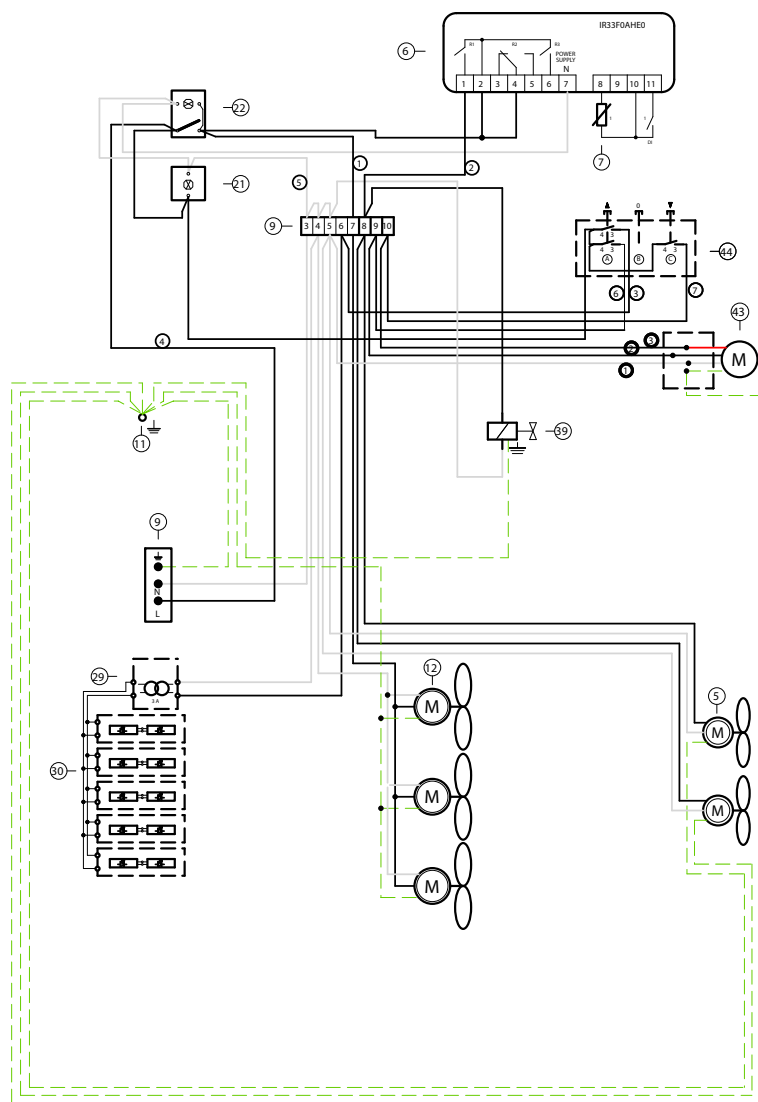


↑ Front

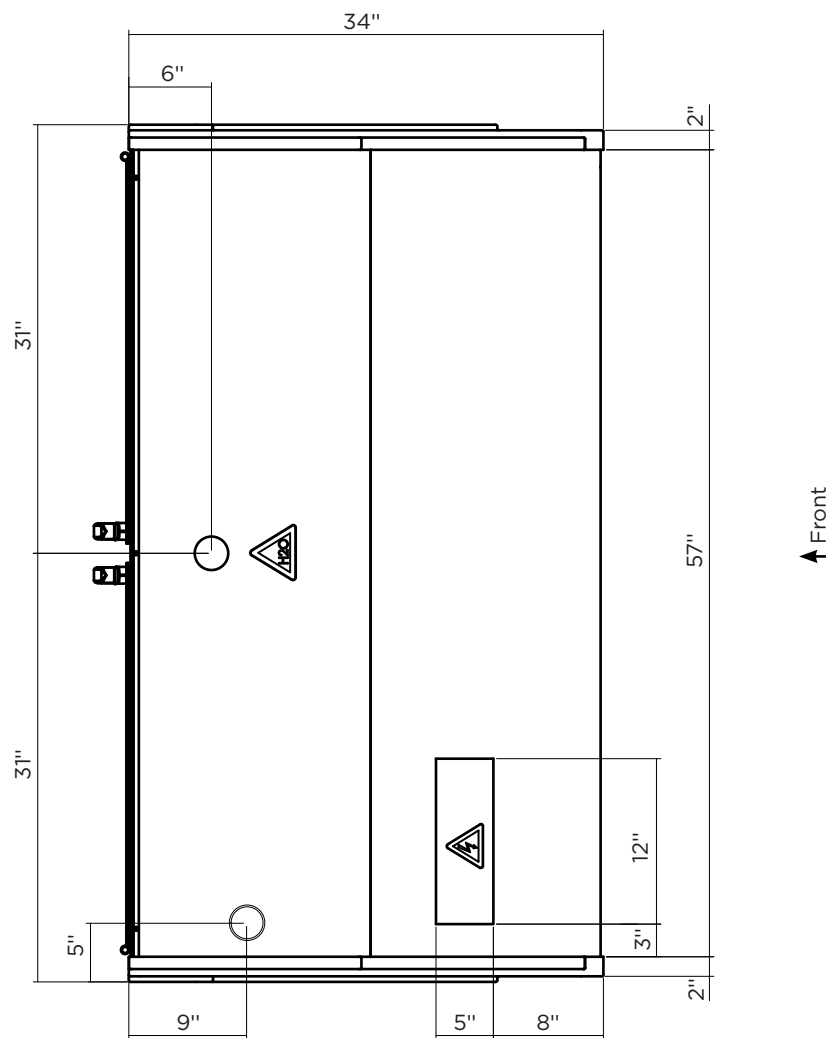
KGL-DL-40-S(R)

N°	Discription	Number for length	
		50 Inch	60 Inch
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
21	Pilot light	1	1
22	Switch	1	1
29	Transformer	1	1
30	Led lighting	3	5
39	Solenoid valve	1	1
43	Electrical shutter	1	1
44	A key switch shutter	1	1



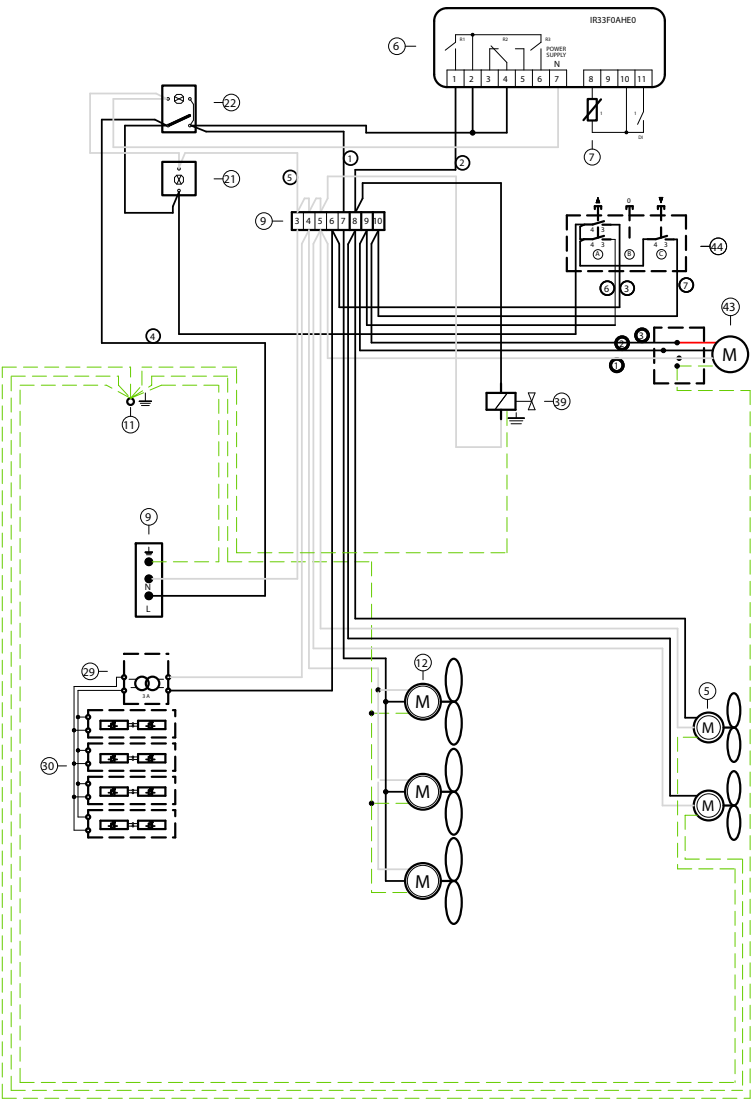






KGL-DL-50-S(R)

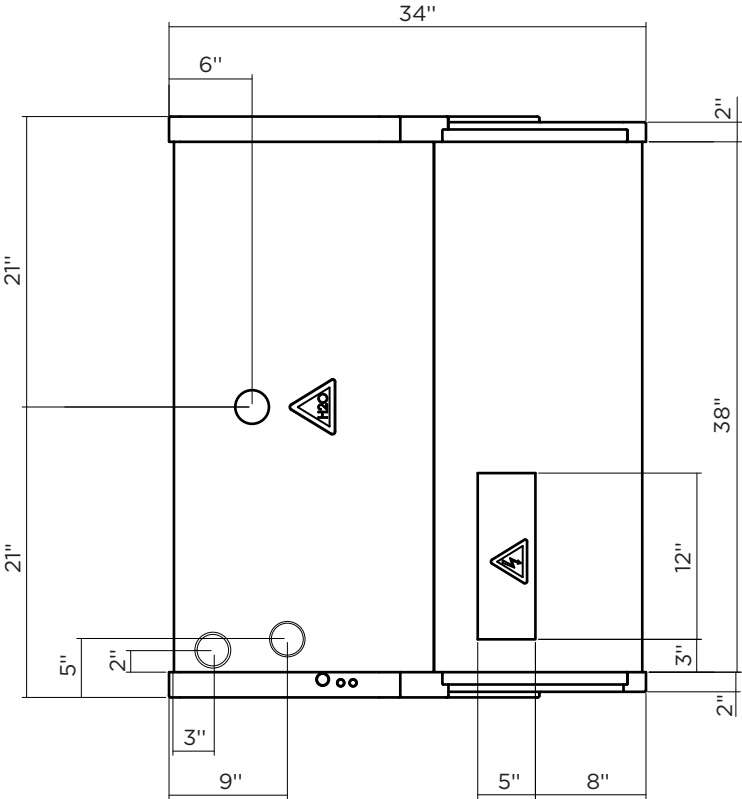


KGL-DL-60-S(R)

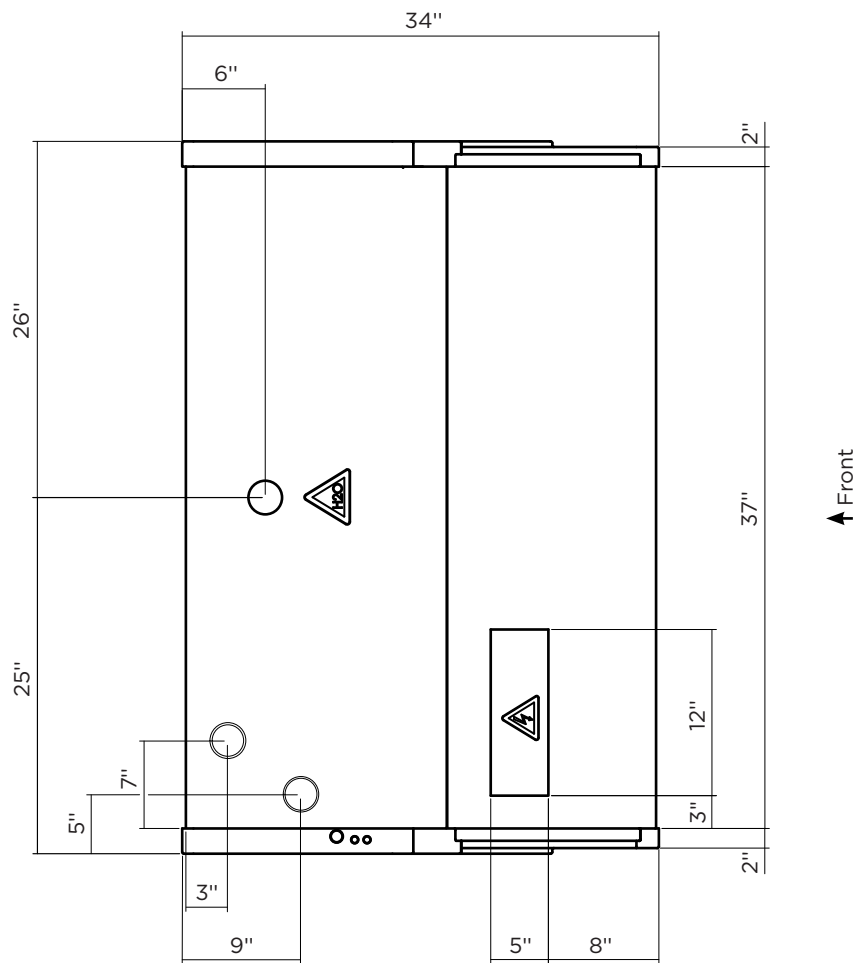
N <sup>o</sup>	Discription
6	Controller
7	Temperature probe
9	Terminal block
11	Ground connection
12	Evaporator fan
21	Pilot light
22	Switch
29	Transformer
30	Led lighting
39	Solenoid valve
43	Electrical shutter
44	A key switch shutter



-  Drain outlet
-  Electrical board
-  Refrigeration piping
-  Electrical wiring

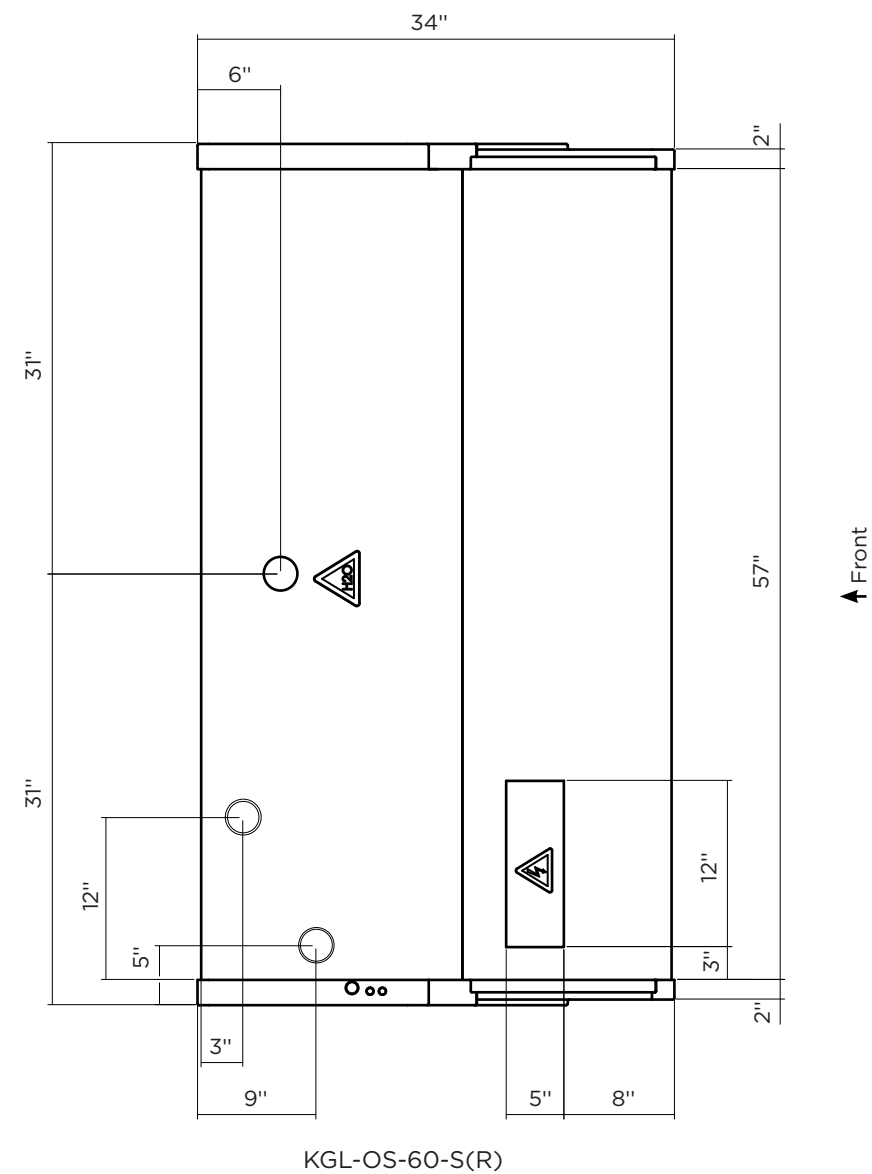
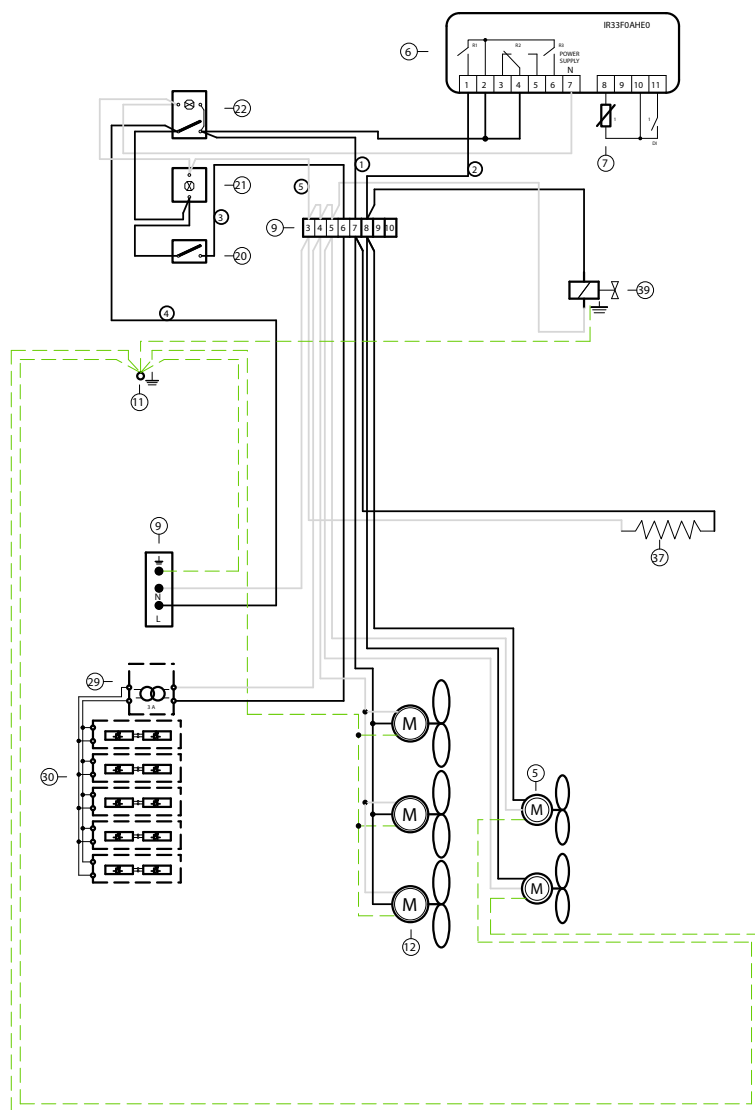


KGL-OS-40-S(R)



KGL-OS-50-S(R)

N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
20	Lamp switch	1	1
21	Pilot light	1	1
22	Switch	1	1
29	Transformer	1	1
30	Led lighting	3	5
37	Anti sweat heater	2	2
39	Solenoid valve	1	1



KGL series intended for grab-n-go, beverage and produce, are type 1 equipment - 75°F/55%RH.

Temperature of the KGL-OF/OS cases is set for 36°F.

Temperature of the KGL-RS/DL/RM cases is set for 39°F.

All shelves of the KGL series have a 31 lb/ft<sup>2</sup> loading limit.









Model	Dimensions (LxDxH in inches)	Service dimensions (LxDxH in inches)	Volume (ft <sup>3</sup> )
KGL-OF-40-S(R)	40 <sup>3</sup> / <sub>4</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	40 <sup>3</sup> / <sub>4</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	13,0
KGL-OF-50-S(R)	50" x 59 <sup>1</sup> / <sub>4</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	50" x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	19,9
KGL-OF-60-S(R)	60 <sup>7</sup> / <sub>16</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	60 <sup>7</sup> / <sub>16</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	16,2
KGL-DL-40-S(R)	40 <sup>3</sup> / <sub>4</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	40 <sup>3</sup> / <sub>4</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 51 <sup>3</sup> / <sub>4</sub> "	13,0
KGL-DL-50-S(R)	50" x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	50" x 59 <sup>1</sup> / <sub>4</sub> " x 56 <sup>5</sup> / <sub>16</sub> "	19,9
KGL-DL-60-S(R)	60 <sup>7</sup> / <sub>16</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	60 <sup>7</sup> / <sub>16</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 61"	16,2
KGL-OS-40-S(R)	40 <sup>3</sup> / <sub>4</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	40 <sup>3</sup> / <sub>4</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	13,0
KGL-OS-50-S(R)	50" x 64 <sup>15</sup> / <sub>16</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	50" x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	19,9
KGL-OS-60-S(R)	60 <sup>7</sup> / <sub>16</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 33 <sup>7</sup> / <sub>16</sub> "	60 <sup>7</sup> / <sub>16</sub> " x 59 <sup>1</sup> / <sub>4</sub> " x 35 <sup>13</sup> / <sub>16</sub> "	16,2
KGL-RS/RM-40-S(R)	40 <sup>3</sup> / <sub>4</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	40 <sup>3</sup> / <sub>4</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 51 <sup>3</sup> / <sub>4</sub> "	13,0
KGL-RS/RM-50-S(R)	50" x 64 <sup>15</sup> / <sub>16</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	50" x 64 <sup>15</sup> / <sub>16</sub> " x 56 <sup>5</sup> / <sub>16</sub> "	19,9
KGL-RS/RM-60-S(R)	60 <sup>7</sup> / <sub>16</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 35 <sup>15</sup> / <sub>16</sub> "	60 <sup>7</sup> / <sub>16</sub> " x 64 <sup>15</sup> / <sub>16</sub> " x 61"	16,2

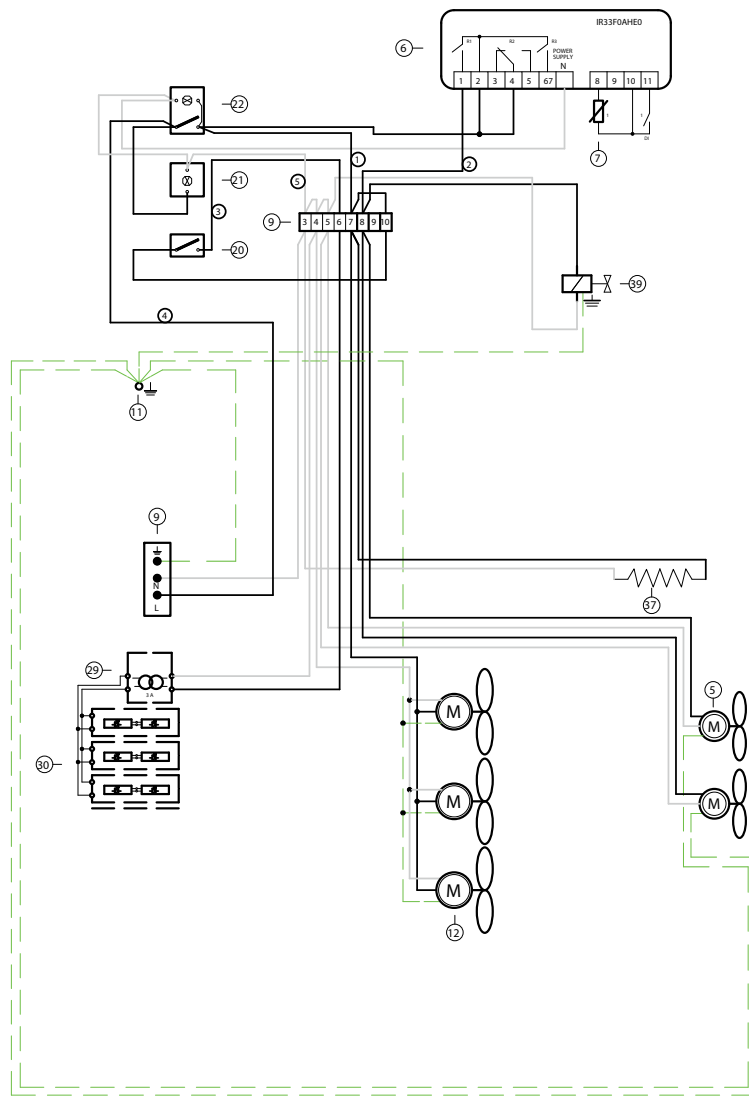
N <sup>o</sup>	Discription
6	Controller
7	Temperature probe
9	Terminal block
11	Ground connection
12	Evaporator fan
21	Pilot light
22	Switch
29	Transformer
30	Led lighting
37	Anti sweat heater
39	Solenoid valve

## 2 Getting started with your KGL series

### 2.1 Location

To your new equipment perform well please respect the following warnings:

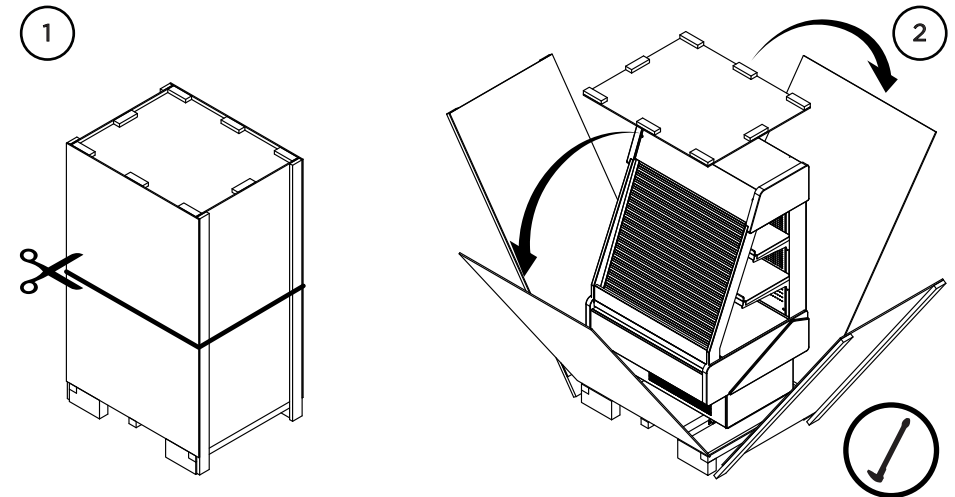
-  This is type 1 equipment, intended to work with 75°F / 55%RH.
-  This equipment is intended for maintaining temperature only.
-  Be sure products are not ambient temperature (must be cold)
-  This equipment must be located in an indoor environment.
-  Check for drafts and avoid them.
-  Air movement from ac units shouldn't be directed to the equipment.
-  The equipment must not be directly or indirectly exposed to the sun.
-  Check for rejected heat from another refrigeration units and avoid that.



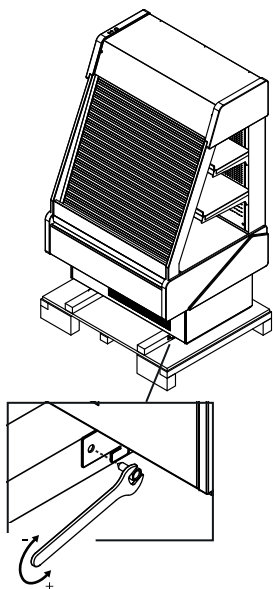
- ⚠ Place the equipment in a levelled floor.
- ⚠ Do not obstruct the air way in front of the condenser.
- ⚠ Make sure there is a drain preparation (remotes only).
- ⚠ KGL series with shutter must be handled carefully. Open and close shutter only when needed.
- ⚠ Models to be positioned against a wall keep a safe distance of  $2\frac{3}{8}$ ".
- ⚠ This equipment should be handled by a qualified technician.

## 2.2 Uncrating

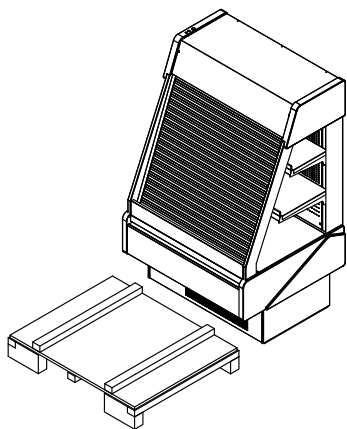
- ⚠ All operations must be done carefully.
- ⚠ All plastic protective films must be removed before using the equipment for the first time.



3



4



### 2.3 Check for damage

At the end of production HYDRA KOOL products are carefully inspected. No damaged units are sent out.

HYDRA KOOL doesn't take responsibility for damage between factory and client.

Possible damage on the unit must be checked to file a claim near the transportation company.

The unit must be checked in the following points:

Exterior panels

Doors

Shelves

Glasses

Paint job

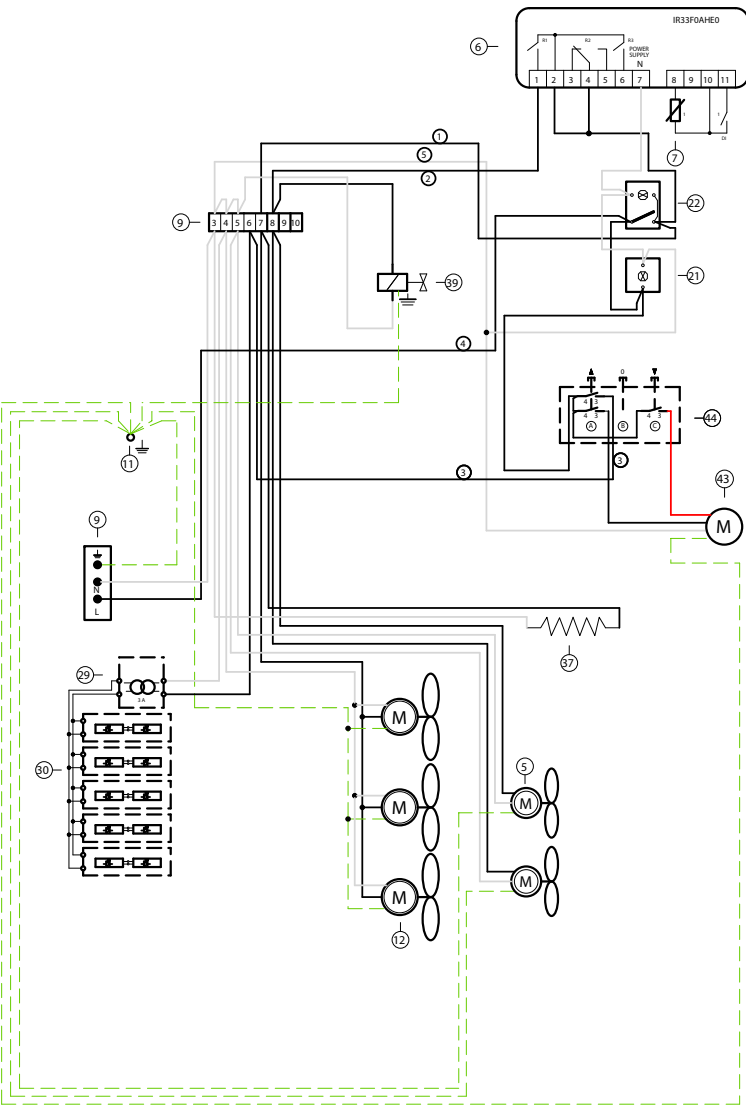
Door handles

Base structure

Shutter

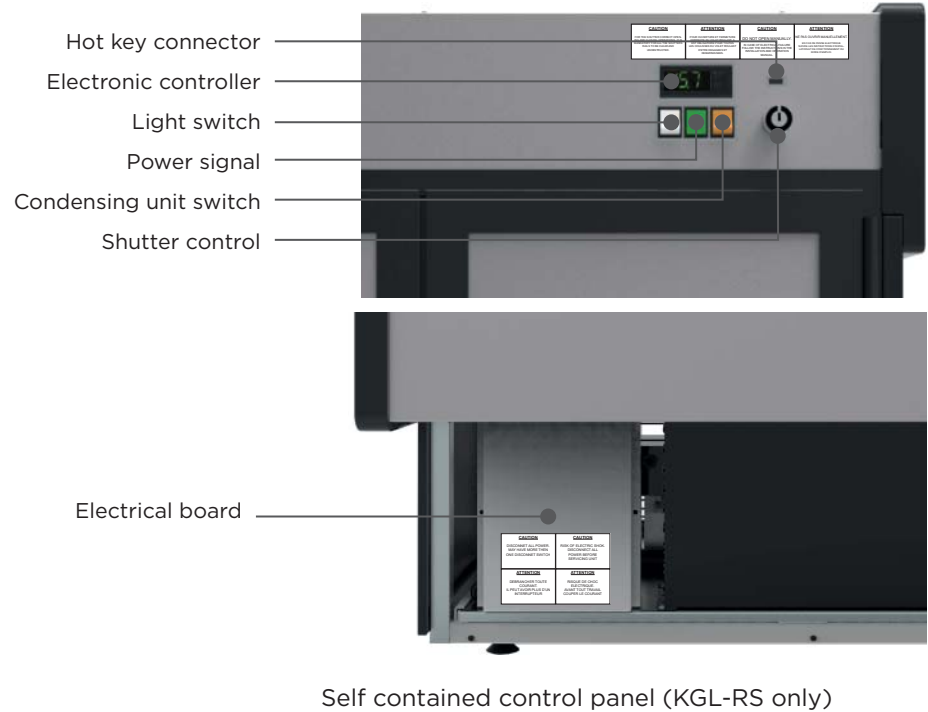
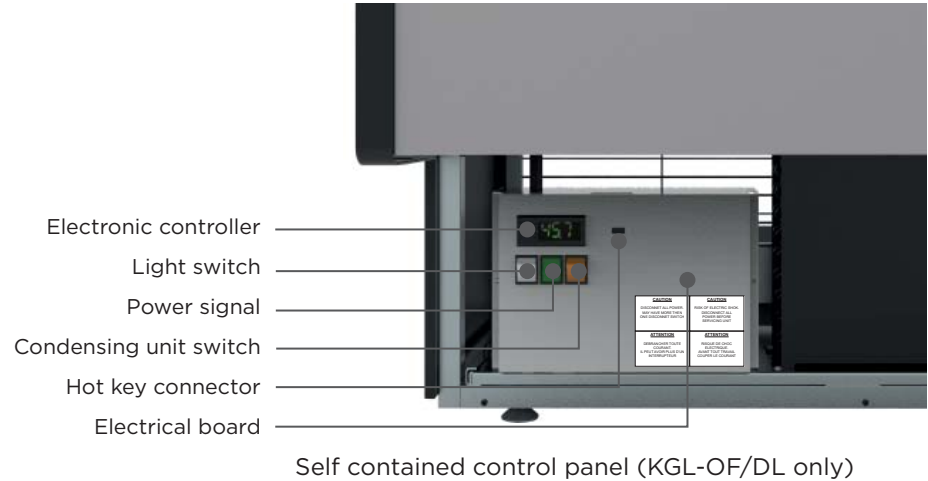
N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
21	Pilot light	1	1
22	Switch	1	1
29	Transformer	1	1
30	Led lighting	3	5
37	Anti sweat heater	2	2
39	Solenoid valve	1	1
43	Electrical shutter	1	1
44	A key switch shutter	1	1

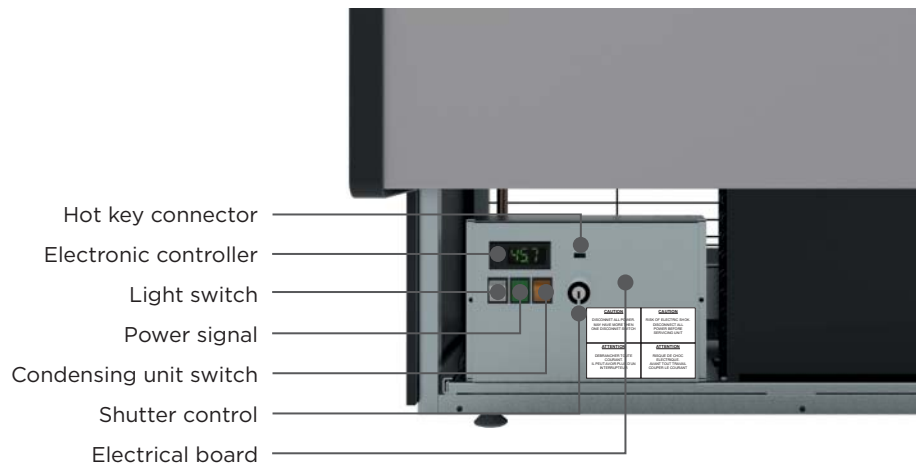




2.4 Control panel and main features

The pictures below, shows the main features and all necessary controls.



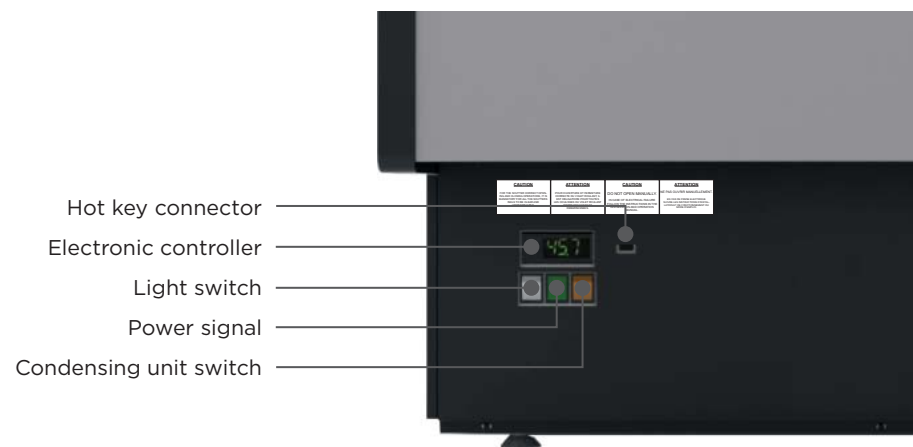
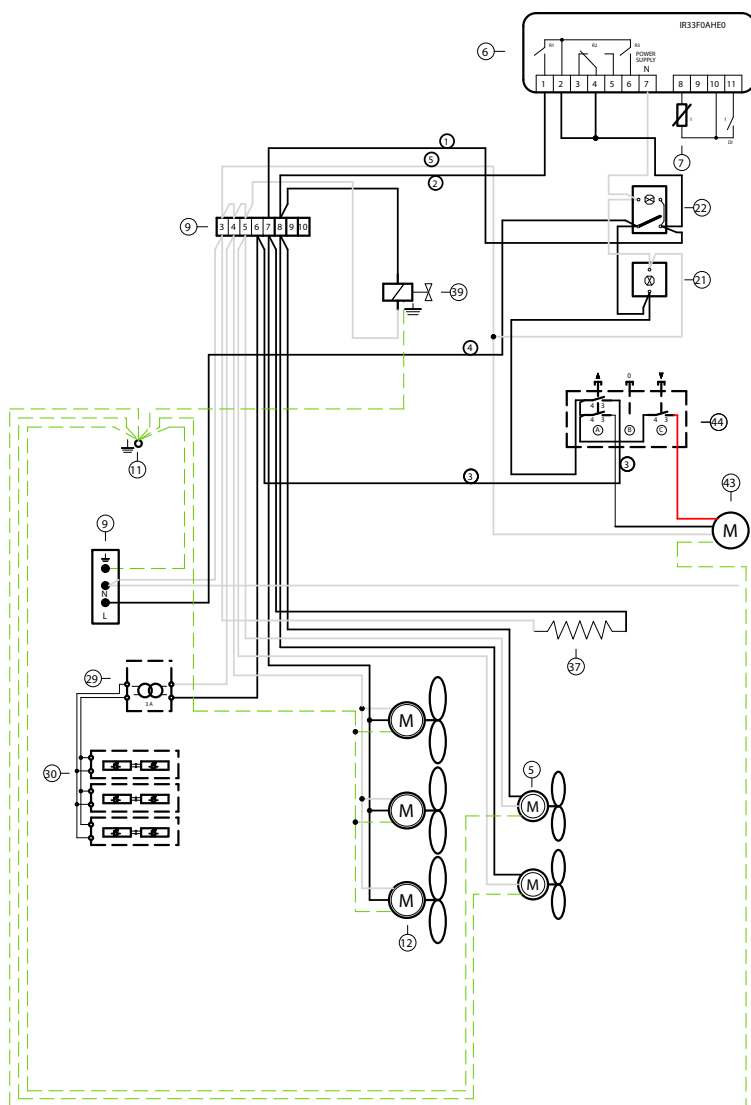


Self contained control panel (KGL-OS only)

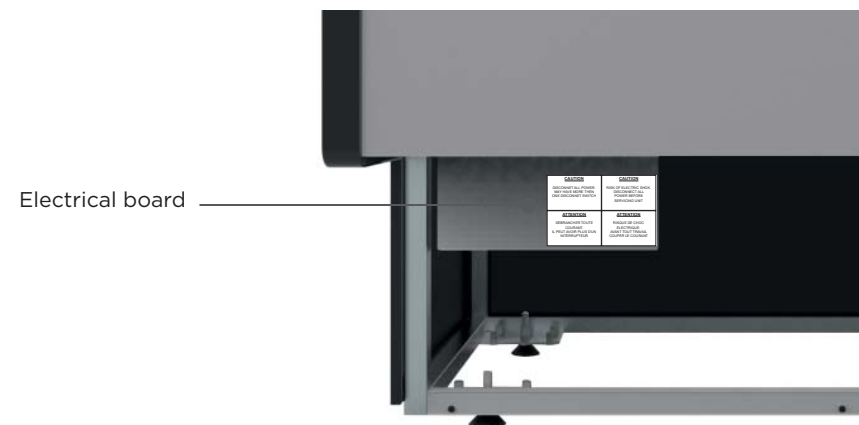


Self contained control panel (KGL-RM only)

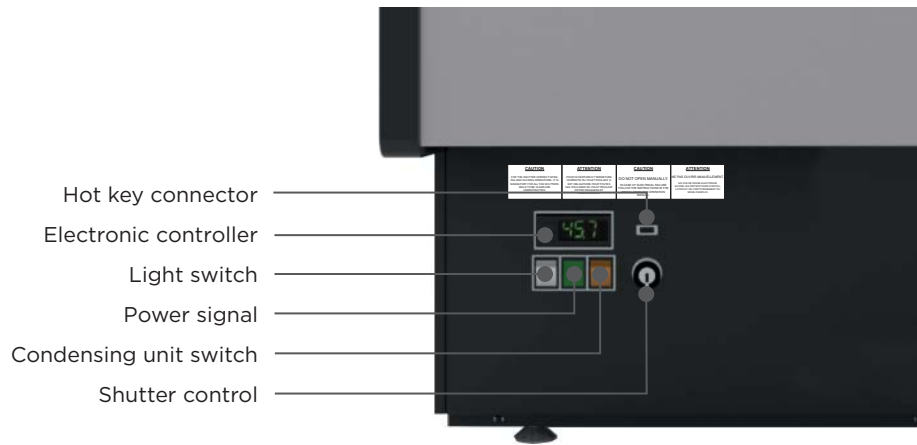
N°	Description
6	Controller
7	Temperature probe
8	Earth two pin plug
9	Terminal block
11	Ground connection
12	Evaporator fan
21	Pilot light
22	Switch
29	Transformer
30	Led lighting
37	Anti sweat heater
39	Solenoid valve
43	Electrical shutter
44	A key switch shutter



Remote control panel (KGL-OF/DL only)



Remote control panel (KGL-RS only)

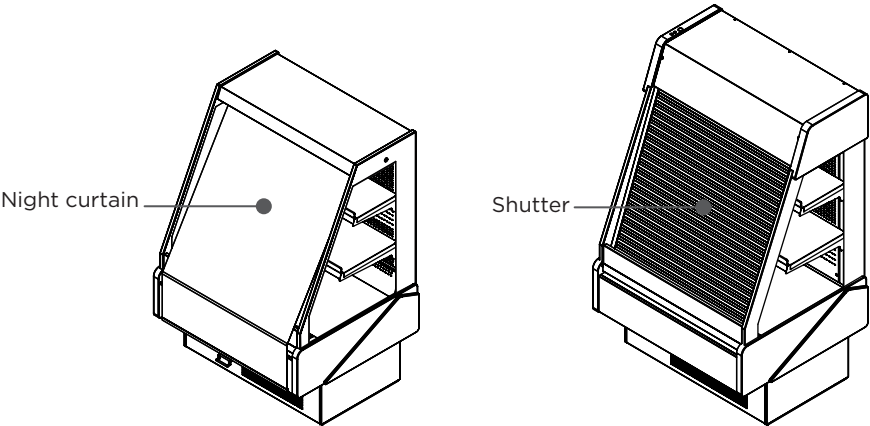
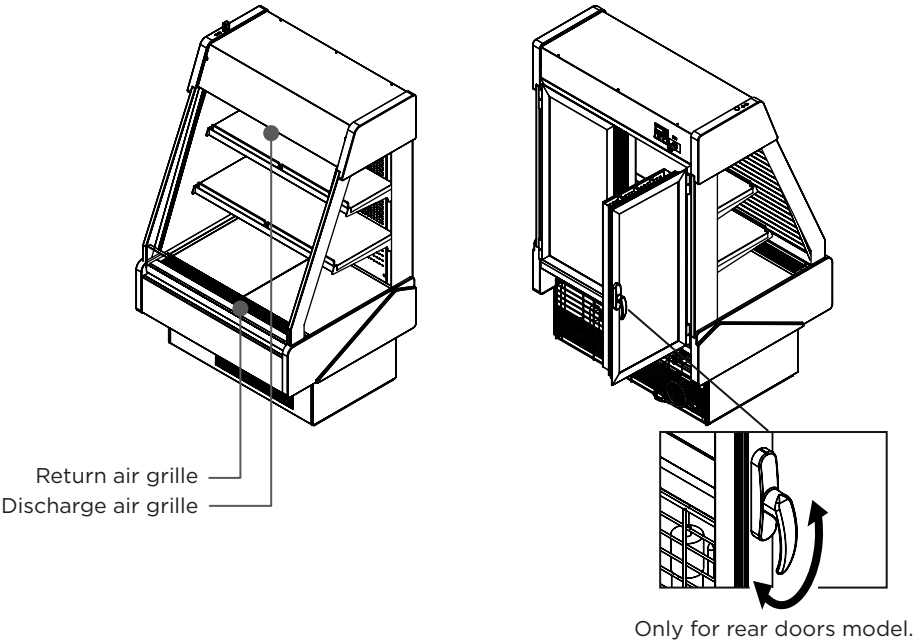
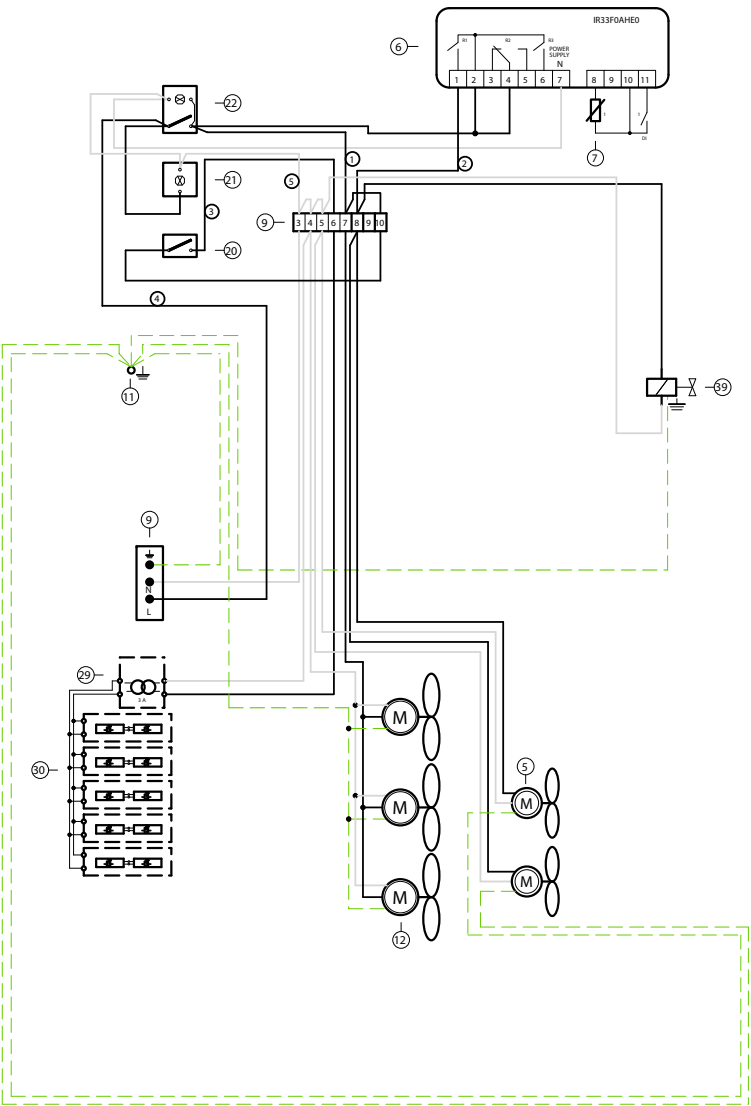


Remote control panel (KGL-OS only)



Remote control panel (KGL-RM only)

N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
20	Lamp switch	1	1
21	Pilot light	1	1
22	Switch	1	1
29	Transformer	1	1
30	Led lighting	3	5
39	Solenoid valve	1	1







2.5 Check serial, model numbers and requested options

Before starting your equipment, check the serial number, model numbers and requested options. This inspection should be made visually in the following items:

A close-up photograph of the interior of a metal cabinet. A label is visible on the inside of the door, providing technical specifications for the equipment. The label includes the following information:

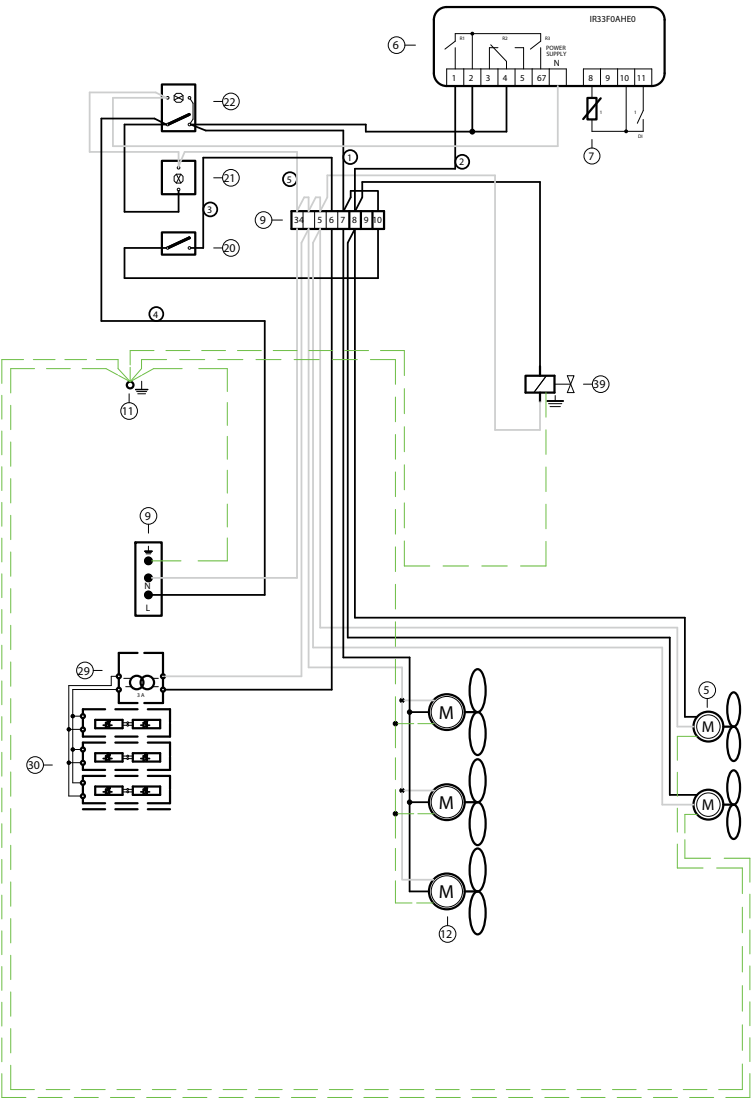
- Model: 1000
- Power: 1000W
- Voltage: 230V
- Frequency: 50/60Hz
- Current: 4.3A
- Weight: 10kg
- Dimensions: 400x400x1000mm

<b>MVP GROUP CORP.</b>  For service, please call: (514) 737-8701  <a href="http://www.mvpgroupcorp.com">www.mvpgroupcorp.com</a>	<b>COMMERCIAL REFRIGERATOR CONFORMS TO UL STANDARD 471 AND NSF STANDARD 7 CERTIFIED TO CAN/CSA STD C22.2 NO. 120</b>																																			
<div style="text-align: center;">   <b>Intertek</b>  <b>4004083</b> </div>	  <b>120V CIRCUIT</b>																																			
<b>MADE IN PORTUGAL</b>  <b>ETL MODEL</b> <input style="width: 150px; height: 25px;" type="text"/>  <b>CASE FAMILY</b> <input style="width: 150px; height: 25px;" type="text"/>  <b>SERIAL NO.</b> <input style="width: 150px; height: 25px;" type="text"/>  <b>DATE MFG</b> <input style="width: 150px; height: 25px;" type="text"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 15%;">EVAP PAN</th> <th style="width: 15%;">DOOR HEATER</th> <th style="width: 15%;">LIGHTS</th> <th style="width: 15%;">ANTI-S FANS</th> <th style="width: 15%;">EVAP FANS</th> <th style="width: 15%;">COND FANS</th> <th style="width: 20%;">COMP</th> </tr> <tr> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> </tr> <tr> <td>REF AMOUNT LEFT</td> <td>REF AMOUNT RIGHT</td> <td>REF TYPE</td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> </tr> <tr> <td colspan="2">PSI HIGH SIDE <input style="width: 50px;" type="text"/></td> <td colspan="2">PSI LOW SIDE <input style="width: 50px;" type="text"/></td> <td colspan="2"> <b>MINI BRANCH CIRCUIT AMPACITY</b>  <b>MAX OVERCURRENT PROTECTION AMPS</b> </td> <td><input style="width: 50px; height: 25px;" type="text"/></td> </tr> <tr> <td colspan="2"><b>psig</b> <input style="width: 50px;" type="text"/></td> <td colspan="2"><b>psig</b> <input style="width: 50px;" type="text"/></td> <td colspan="2"><b>AMPS</b> <input style="width: 50px;" type="text"/></td> <td><input style="width: 50px; height: 25px;" type="text"/></td> </tr> </table>	EVAP PAN	DOOR HEATER	LIGHTS	ANTI-S FANS	EVAP FANS	COND FANS	COMP	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	REF AMOUNT LEFT	REF AMOUNT RIGHT	REF TYPE	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	<input style="width: 50px; height: 25px;" type="text"/>	PSI HIGH SIDE <input style="width: 50px;" type="text"/>		PSI LOW SIDE <input style="width: 50px;" type="text"/>		<b>MINI BRANCH CIRCUIT AMPACITY</b> <b>MAX OVERCURRENT PROTECTION AMPS</b>		<input style="width: 50px; height: 25px;" type="text"/>	<b>psig</b> <input style="width: 50px;" type="text"/>		<b>psig</b> <input style="width: 50px;" type="text"/>		<b>AMPS</b> <input style="width: 50px;" type="text"/>		<input style="width: 50px; height: 25px;" type="text"/>
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<b>MADE IN PORTUGAL</b>  <b>ETL MODEL</b> <input style="width: 150px; height: 25px;" type="text"/> <b>CASE FAMILY</b> <input style="width: 150px; height: 25px;" type="text"/> <b>SERIAL NO.</b> <input style="width: 150px; height: 25px;" type="text"/> <b>DATE MFG</b> <input style="width: 150px; height: 25px;" type="text"/>	<div style="text-align: right; margin-bottom: 5px;"><b>120V CIRCUIT</b></div> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center; vertical-align: top;"> <b>DOOR HEATER</b>  <input style="width: 40px; height: 25px;" type="text"/> </td> <td style="width: 25%; text-align: center; vertical-align: top;"> <b>LIGHTS</b>  <input style="width: 40px; height: 25px;" type="text"/> </td> <td style="width: 25%; text-align: center; vertical-align: top;"> <b>ANTI-S FANS</b>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/> </td> <td style="width: 25%; text-align: center; vertical-align: top;"> <b>EVAP FANS</b>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/>  <input style="width: 40px; height: 25px;" type="text"/> </td> </tr> <tr> <td></td> <td></td> <td style="text-align: right; vertical-align: top;"> <b>--AMPS--</b>  <b>--QTY--</b>  <b>--PHASE--</b>  <b>--HRTZ--</b> </td> <td></td> </tr> </table>		<b>DOOR HEATER</b> <input style="width: 40px; height: 25px;" type="text"/>	<b>LIGHTS</b> <input style="width: 40px; height: 25px;" type="text"/>	<b>ANTI-S FANS</b> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/>	<b>EVAP FANS</b> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/> <input style="width: 40px; height: 25px;" type="text"/>			<b>--AMPS--</b> <b>--QTY--</b> <b>--PHASE--</b> <b>--HRTZ--</b>	
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<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">PSI HIGH SIDE</td> <td style="width: 25%; text-align: center;">PSI LOW SIDE</td> <td style="width: 50%;"></td> </tr> <tr> <td style="text-align: center;"> <input style="width: 60px; height: 25px;" type="text"/> </td> <td style="text-align: center;"> <input style="width: 60px; height: 25px;" type="text"/> </td> <td></td> </tr> </table>			PSI HIGH SIDE	PSI LOW SIDE		<input style="width: 60px; height: 25px;" type="text"/>	<input style="width: 60px; height: 25px;" type="text"/>			
PSI HIGH SIDE	PSI LOW SIDE									
<input style="width: 60px; height: 25px;" type="text"/>	<input style="width: 60px; height: 25px;" type="text"/>									
<b>TOTAL CASE AMPS</b> <input style="width: 80px; height: 25px;" type="text"/>										
<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; text-align: right;"><b>MINI BRANCH CIRCUIT AMPACITY</b></td> <td style="width: 50%; text-align: center;"> <input style="width: 100px; height: 25px;" type="text"/> </td> </tr> <tr> <td style="text-align: right;"><b>MAX OVERCURRENT PROTECTION AMPS</b></td> <td style="text-align: center;"> <input style="width: 100px; height: 25px;" type="text"/> </td> </tr> </table>			<b>MINI BRANCH CIRCUIT AMPACITY</b>	<input style="width: 100px; height: 25px;" type="text"/>	<b>MAX OVERCURRENT PROTECTION AMPS</b>	<input style="width: 100px; height: 25px;" type="text"/>				
<b>MINI BRANCH CIRCUIT AMPACITY</b>	<input style="width: 100px; height: 25px;" type="text"/>									
<b>MAX OVERCURRENT PROTECTION AMPS</b>	<input style="width: 100px; height: 25px;" type="text"/>									

1	Compressor
7	Temperature probe
9	Terminal block
11	Ground connection
12	Evaporator fan
20	Lamp switch
21	Pilot light
22	Switch
29	Transformer
30	Led lighting
39	Solenoid valve

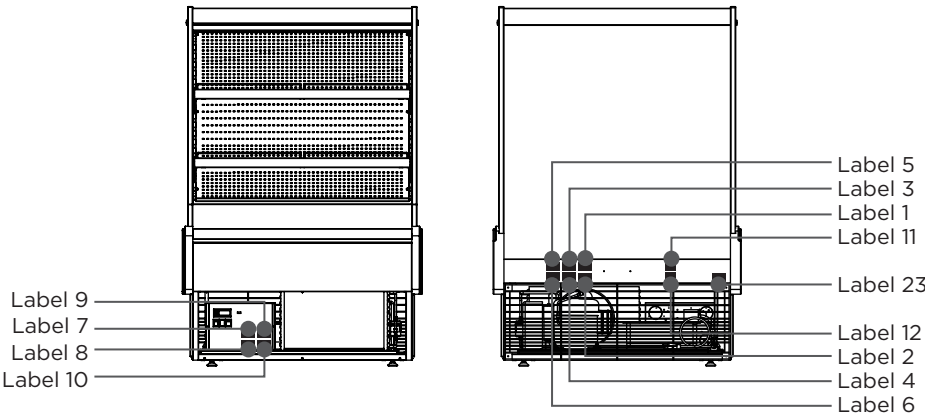
### Description



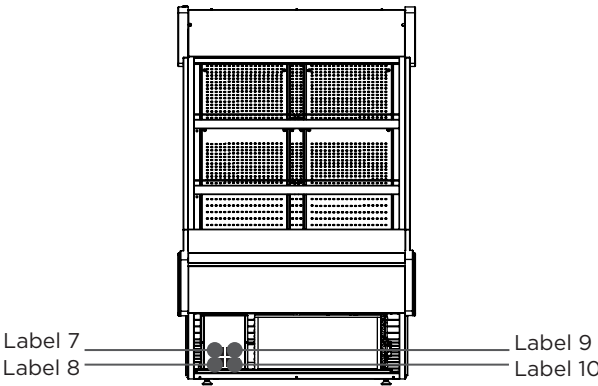
2.6 Warning/Caution labels

 Before starting, HYDRA KOOL products have caution and warning labels to be respected.

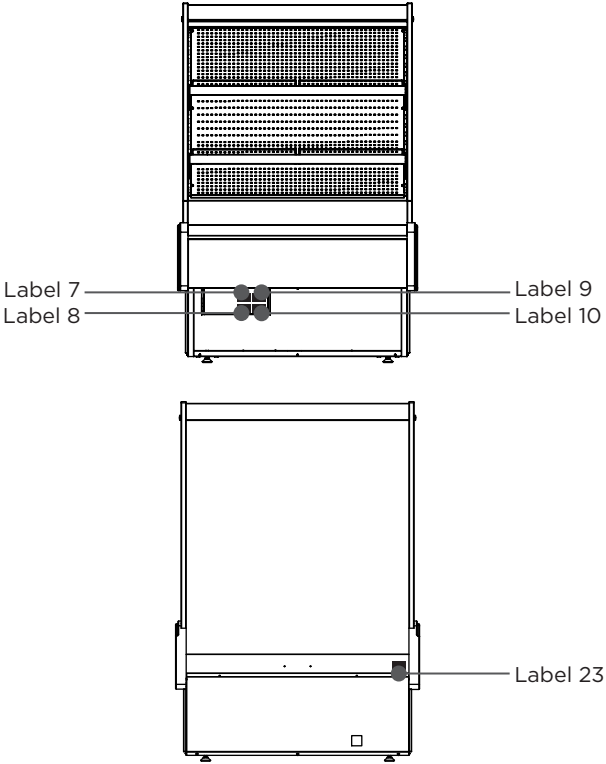
Self contained labels



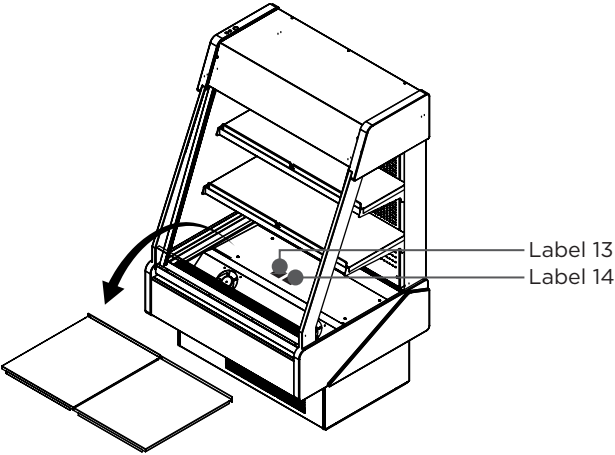
Self contained labels (RS/MR only)



Remote labels

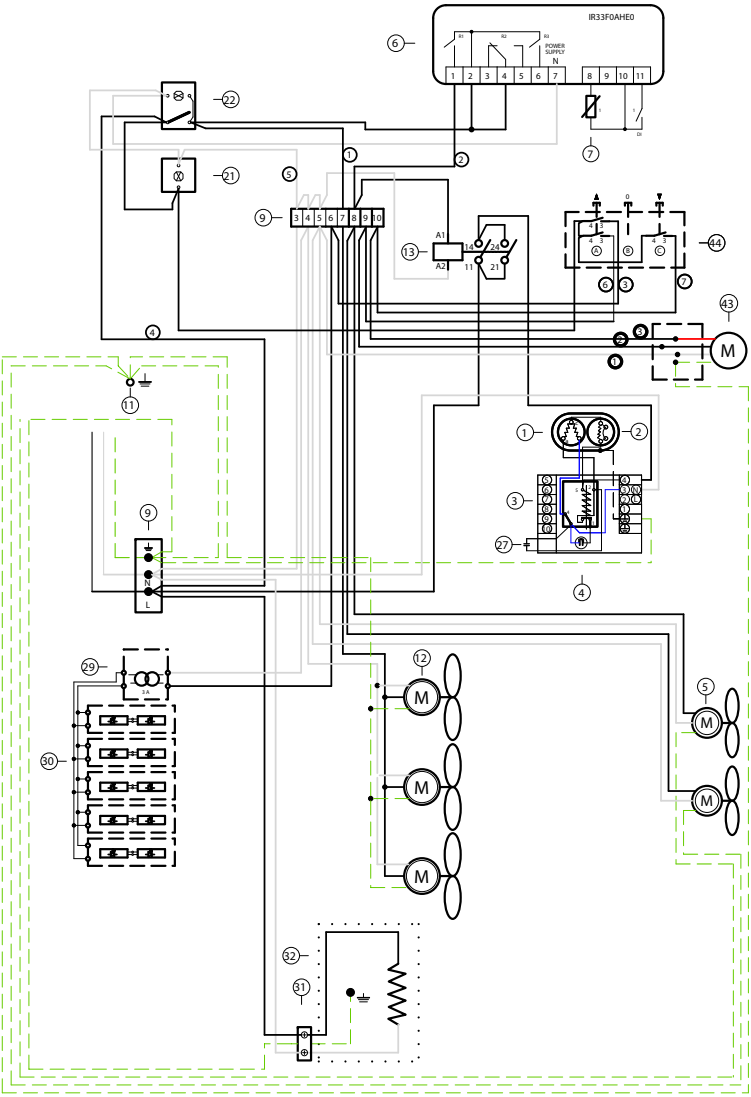


Self contained and remote labels (evaporator)

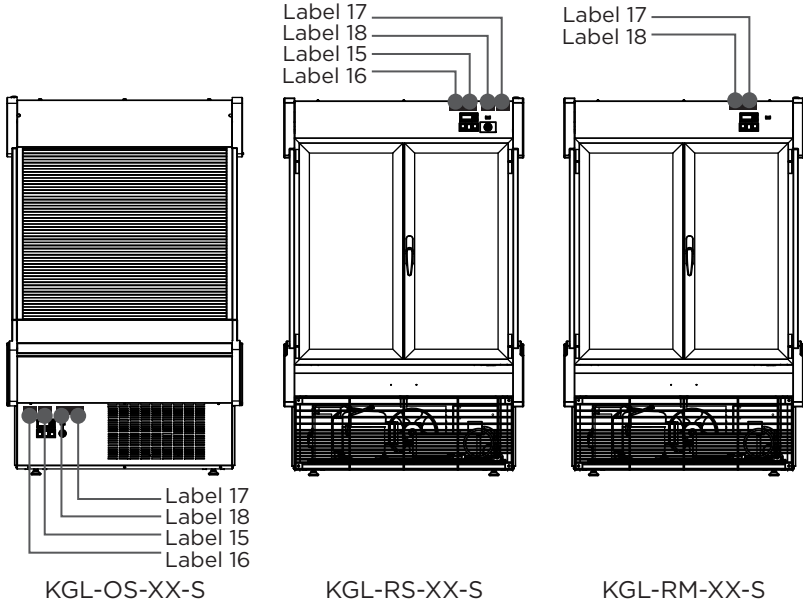


N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
1	Compressor	1	1
2	Overload	1	1
3	Relay	1	1
4	Start capacitor	1	1
5	Condenser fan	1	1
6	Controller Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
13	Compressor relay	1	1
21	Pilot light	1	1
22	Switch	1	1
27	Run capacitor	1	1
29	Transformer	1	1
30	Led lighting	3	5
31	Socket	1	1
32	Evaporative condensate pan	1	1
37	Anti sweat heater	2	2
43	Electrical shutter	1	1
44	A key switch shutter	1	1

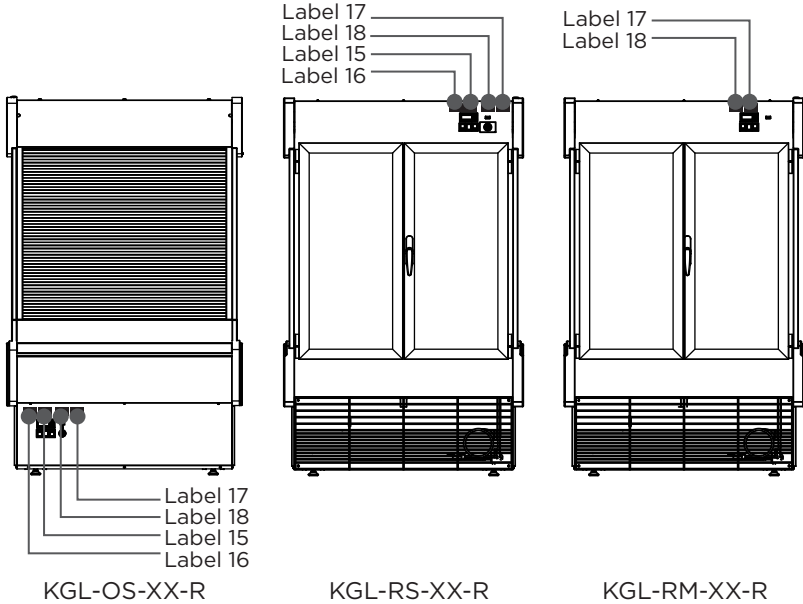




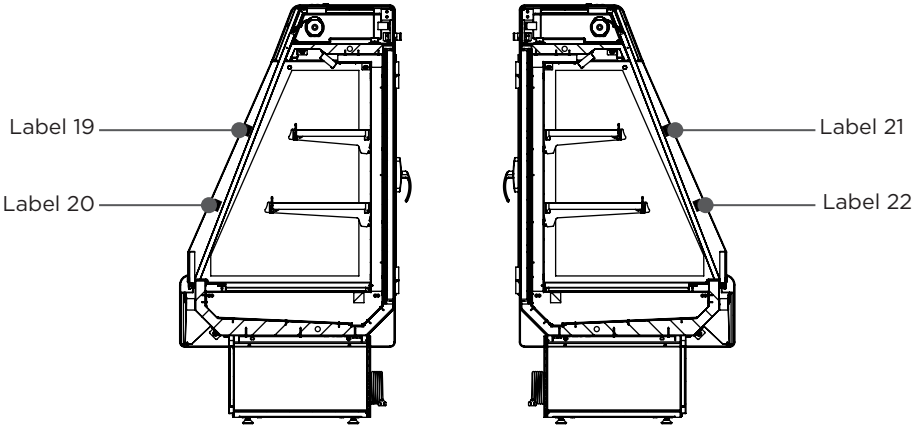
Self contained labels (OS/RS only)



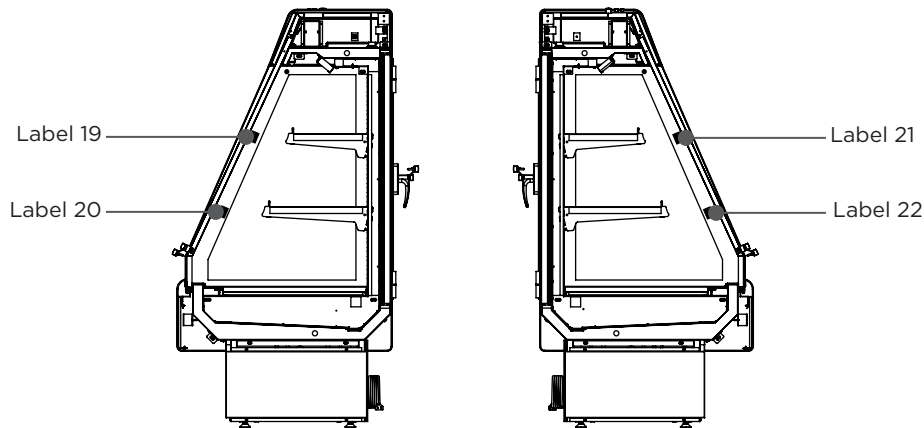
Remote labels (OS/RS only)



Shutter rails (OS/RS only)



Shutter rails (RM only)



Label 1

**CAUTION**

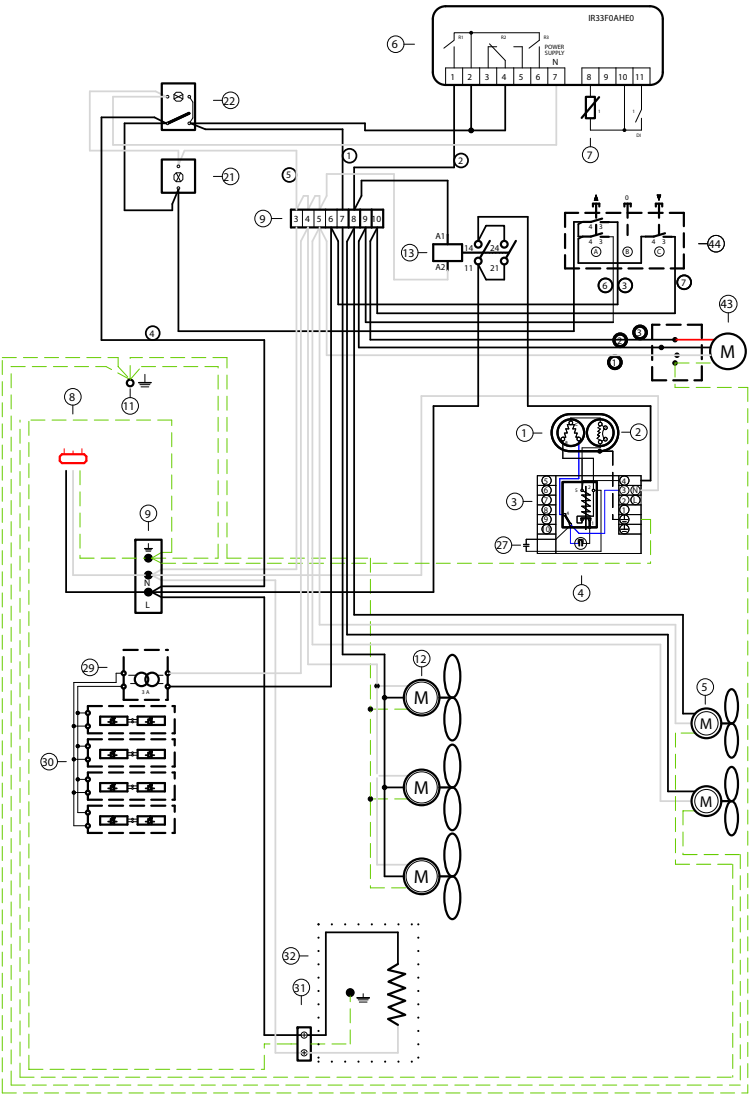
MOVING PARTS.  
DO NOT OPERATE UNIT  
WITH (PART) REMOVED

Label 2

**ATTENTION**

PIÈCES MOBILES.  
NE FAIRE PAS  
FONCTIONNER AVEC  
DES PIÈCES ENLEVER

N <sup>o</sup>	Description
1	Compressor
2	Overload
3	Relay
4	Start capacitor
5	Condenser fan
6	Controller
7	Temperature probe
8	Earth two pin plug
9	Terminal block
11	Ground connection
12	Evaporator fan
13	Compressor relay
21	Pilot light
22	Switch
27	Run capacitor
29	Transformer
30	Led lighting
31	Socket
32	Evaporative condensate pan
37	Anti sweat heater
43	Electrical shutter
44	A key switch shutter



Label 3

**-NOTE-**  
THIS A TYPE 1 CASE AND IS  
DESIGNED TO OPERATE AT  
THE FOLLOWING STORE  
CONDITIONS THAT DOES NOT  
EXCEED  
75 F AND 55% R.H.

Label 5

**-NOTE-**  
THIS EQUIPMENT IS INTENDED  
FOR THE STORAGE  
AND DISPLAY OF PACKAGED  
FOOD PRODUCTS ONLY

Label 7

**CAUTION**  
DISCONNET ALL POWER.  
MAY HAVE MORE THEN  
ONE DISCONNET SWITCH

Label 9

**CAUTION**  
RISK OF ELECTRIC SHOK.  
DISCONNECT ALL  
POWER BEFORE  
SERVICING UNIT

Label 4

**-NOTE-**  
CETTE VITRINE TYPE 1 EST  
CONÇUE POUR FONCTIONNER  
SELON LES CONDITIONS DU  
MAGASIN ET NE DOIT  
DÉPASSER  
75 F AND 55% R.H.

Label 6

**-NOTE-**  
CET EQUIPEMENT EST PREVU  
UNIQUEMENT POUR LE  
STOCKAGE ET EXPOSITION DE  
PRODUITS ALIMENTAIRES  
EMBALLER

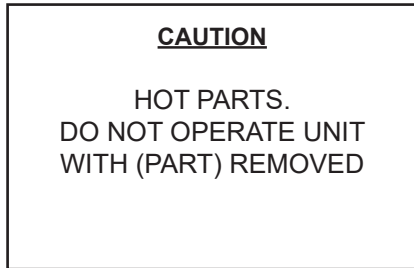
Label 8

**ATTENTION**  
DEBRANCHER TOUTE  
COURANT.  
IL PEUT AVOIR PLUS D'UN  
INTERRUPTEUR

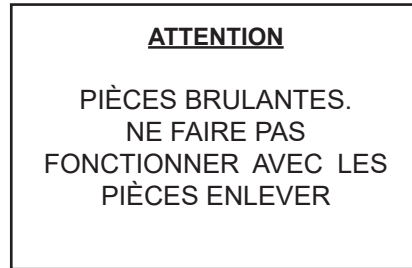
Label 10

**ATTENTION**  
RISQUE DE CHOC  
ELECTRIQUE.  
AVANT TOUT TRAVAIL  
COUPER LE COURANT

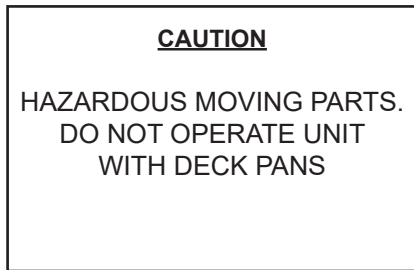
Label 11



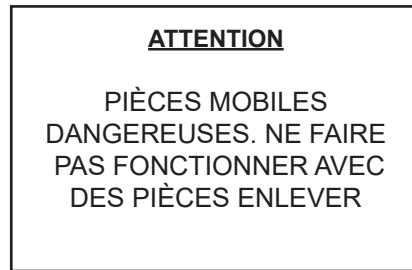
Label 12



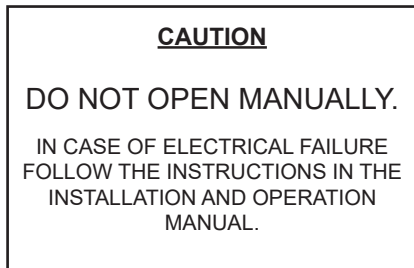
Label 13



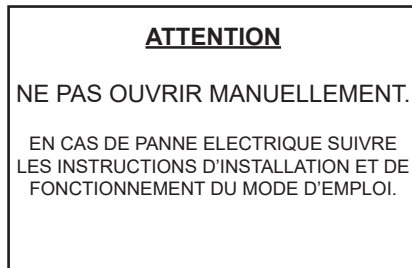
Label 14



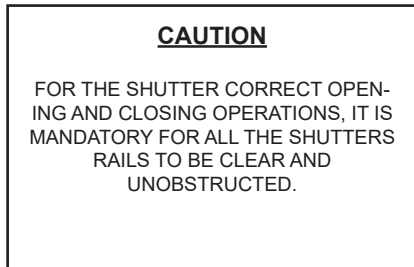
Label 15



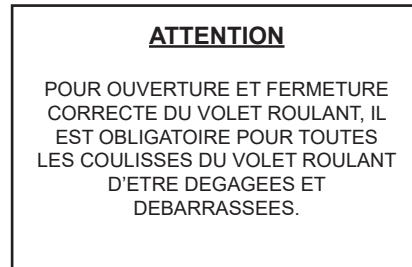
Label 16



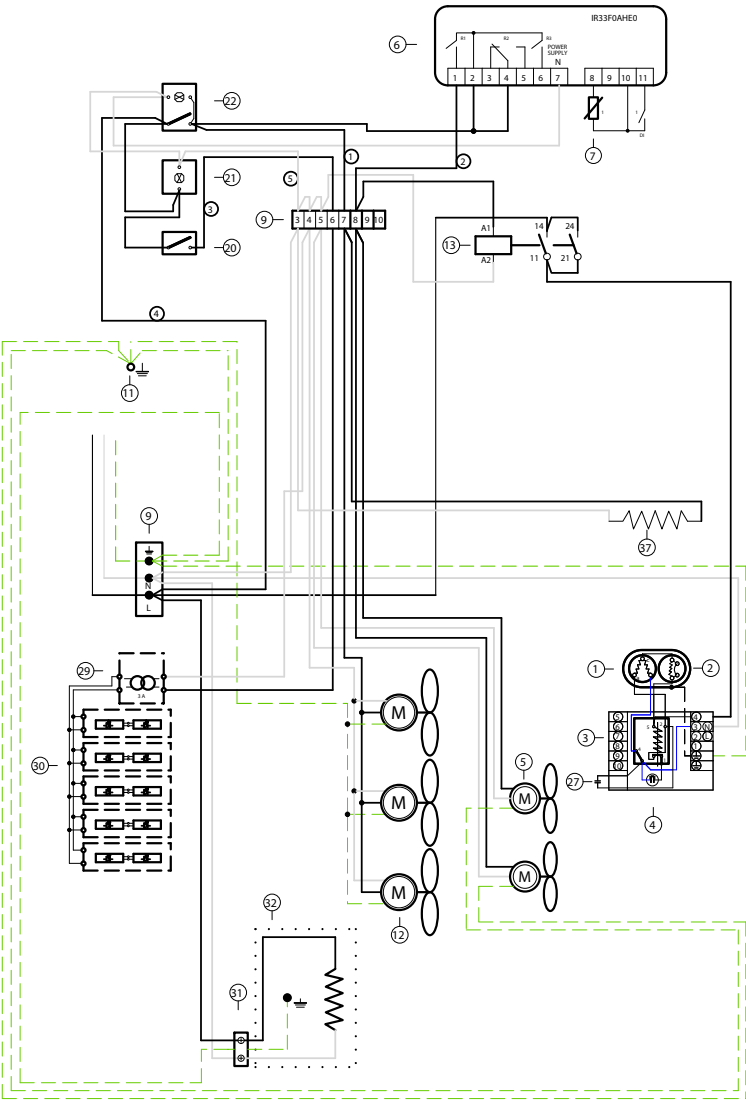
Label 17



Label 18



N <sup>o</sup>	Description	Number for length	
		50 Inch	60 Inch
1	Compressor	1	1
2	Overload	1	1
3	Relay	1	1
4	Start capacitor	1	1
5	Condenser fan	1	1
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
13	Compressor relay	1	1
20	Lamp switch	1	1
21	Pilot light	1	1
22	Switch	1	1
27	Run capacitor	1	1
29	Transformer	1	1
30	Led lighting	3	5
31	Socket	1	1
32	Evaporative condensate pan	1	1
37	Anti sweat heater	2	2



Label 23

**Warning**

- This appliance requires a properly grounded dedicated circuit using a NEMA rated wall receptacle do not remove the grounding prong on the plug or the risk of an injury due to shock from the ungrounded electrical service may occur.

- This product can expose an individual to chemicals that have been identified by the state of California to possibly be dangerous leading to various diseases birth defects or other human reproductive system harm. For more information go to [www.p65warnings.ca.gov](http://www.p65warnings.ca.gov).

Label 19



Label 20



Label 21



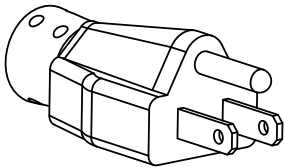
Label 22



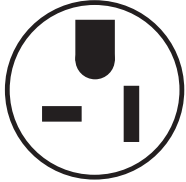
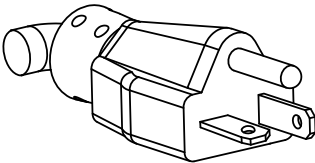
2.7 Check your electrical installation

2.7.1 Cord connected

- ⚠ This equipment must be connected to an outlet with 115V/ 60Hz/ 1 phase.
- ⚠ For the wright connection check tension and frequency stated In the marking plate.





Nema-5-15P



Nema-5-20P

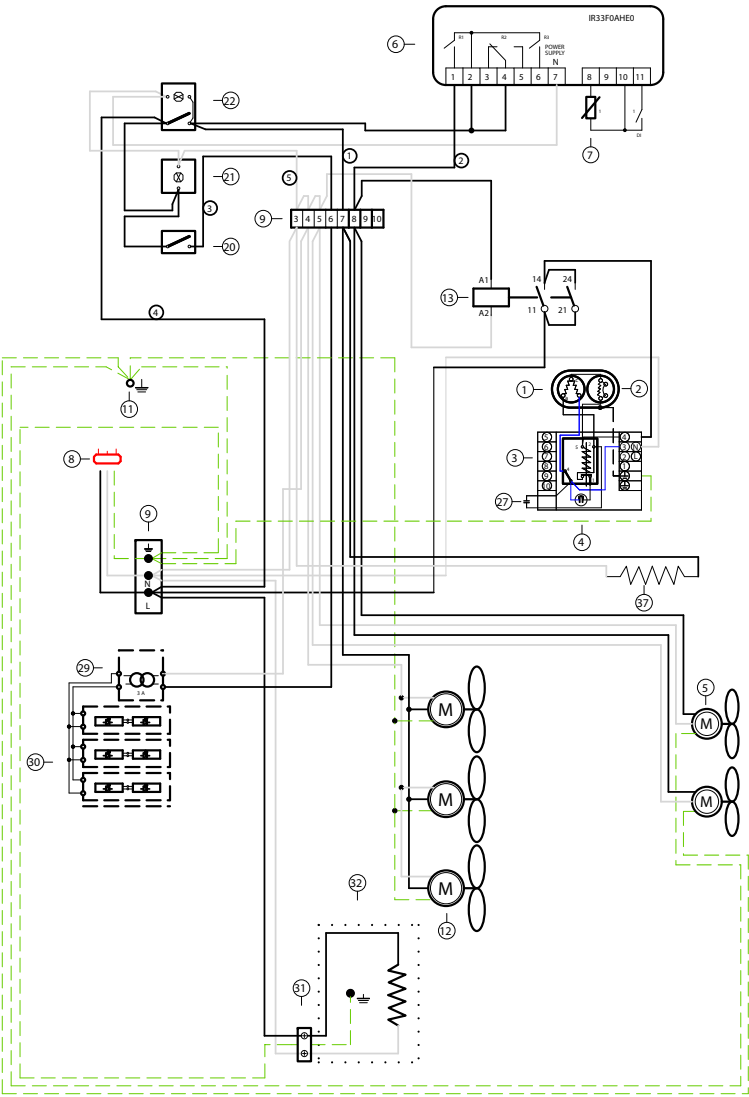
2.7.2 Permanently connected (remotes only)

-  This equipment must be connected to an outlet with 115V/ 60Hz/ 1 phase or 220V/ 60Hz/ 1 phase
-  For the wright connection check tension and frequency stated In the marking plate.


To proceed to electrical to safe electrical connections follow the steps below:

- Check connections box behind protection grilles (use proper tool);
- Select wiring accordingly with labeling;
- Check ratings on the nameplate for the tension applicable;
- Open connections box and identify correct connector (check tension);
- Prepare wire through correct passage (hole) and connect the 3 wire cable correctly (check phase/neutral/earth labeling);
- Secure connections;
- Close box;

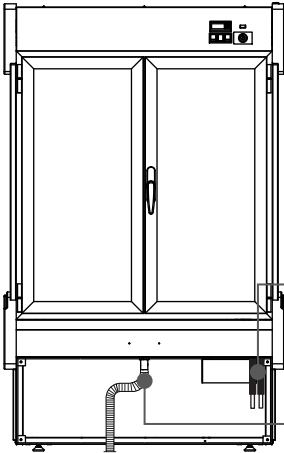
<div>oi</div> <div>N</div>	Discription
1	Compressor
2	Overload
3	Relay
4	Start capacitor
5	Condenser fan
6	Controller
7	Temperature probe
9	Terminal block
11	Ground connection
12	Evaporator fan
13	Compressor relay
20	Lamp switch
21	Pilot light
22	Switch
27	Run capacitor
29	Transformer
30	Led lighting
31	Socket
32	Evaporative condensate pan
37	Anti sweat heater



2.8 Refrigeration and drain assemblies (remotes only)

 Installation and service must be performed by a qualified technician.

Equipments for remote installation come with nitrogen under pressure and an easy prep kit (tubing connections needed only) for installation.

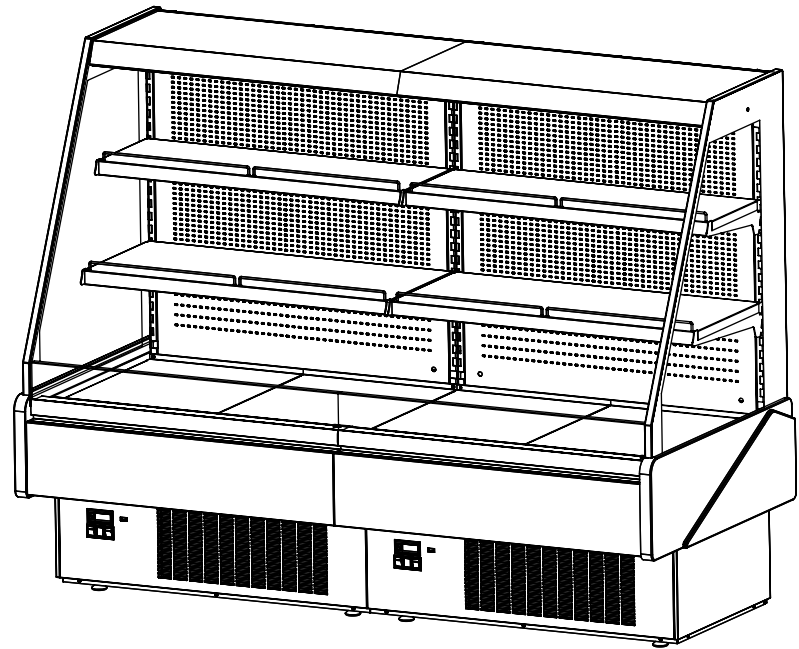


Equipments for remote installation come with nitrogen under pressure and an easy prep kit (tubing connections needed only) for installation.

Prepare a drain installation

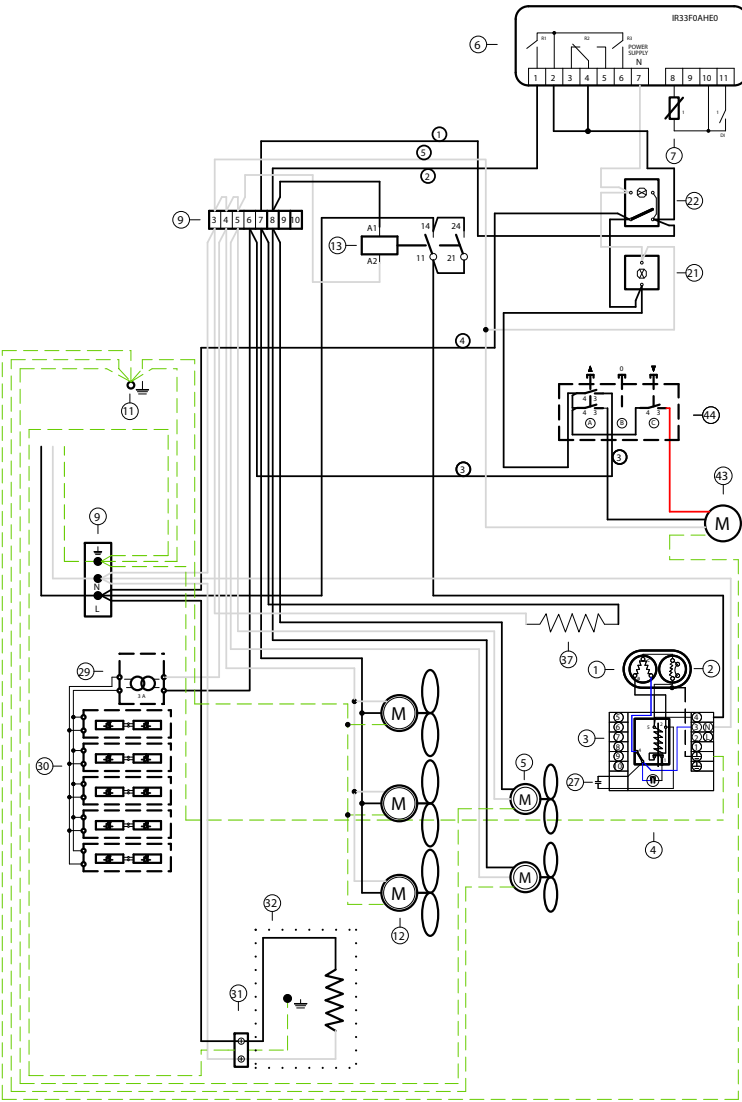
2.9 Joining

For joining follow the steps described (KGL-OF/DL only).



N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
1	Compressor	1	1
2	Overload	1	1
3	Relay	1	1
4	Start capacitor	1	1
5	Condenser fan	1	1
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
13	Compressor relay	1	1
21	Pilot light	1	1
22	Switch	1	1
27	Run capacitor	1	1
29	Transformer	1	1
30	Led lighting	3	5
31	Socket	1	1
32	Evaporative condensate pan	1	1
37	Anti sweat heater	2	2
43	Electrical shutter	1	1
44	A key switch shutter	1	1





2x - DIN933 M6x80



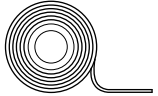
4x - DIN933 M6x25



12x- DIN9021 M6



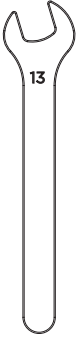
6x - DIN934 M6



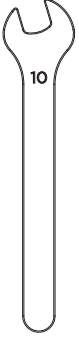
2X FIT00201301 (189")



1x



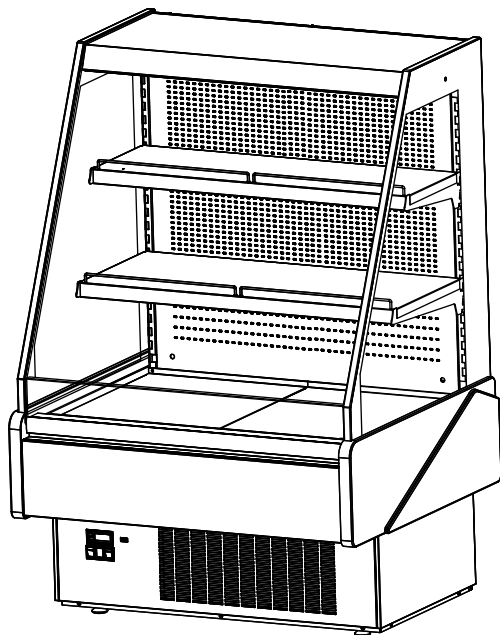
1x



1x



1x

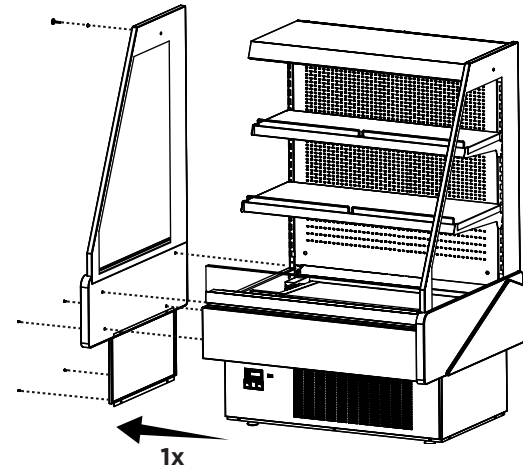
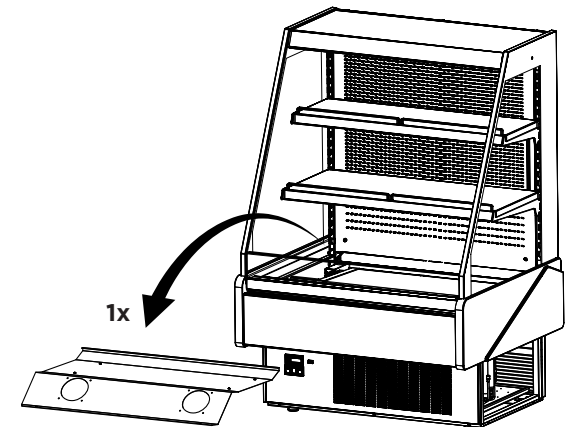
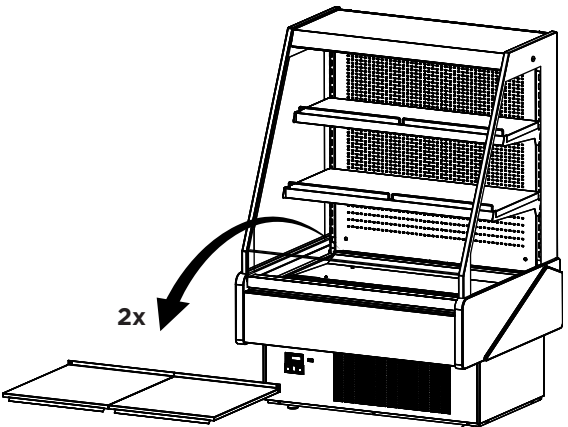
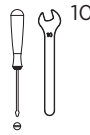
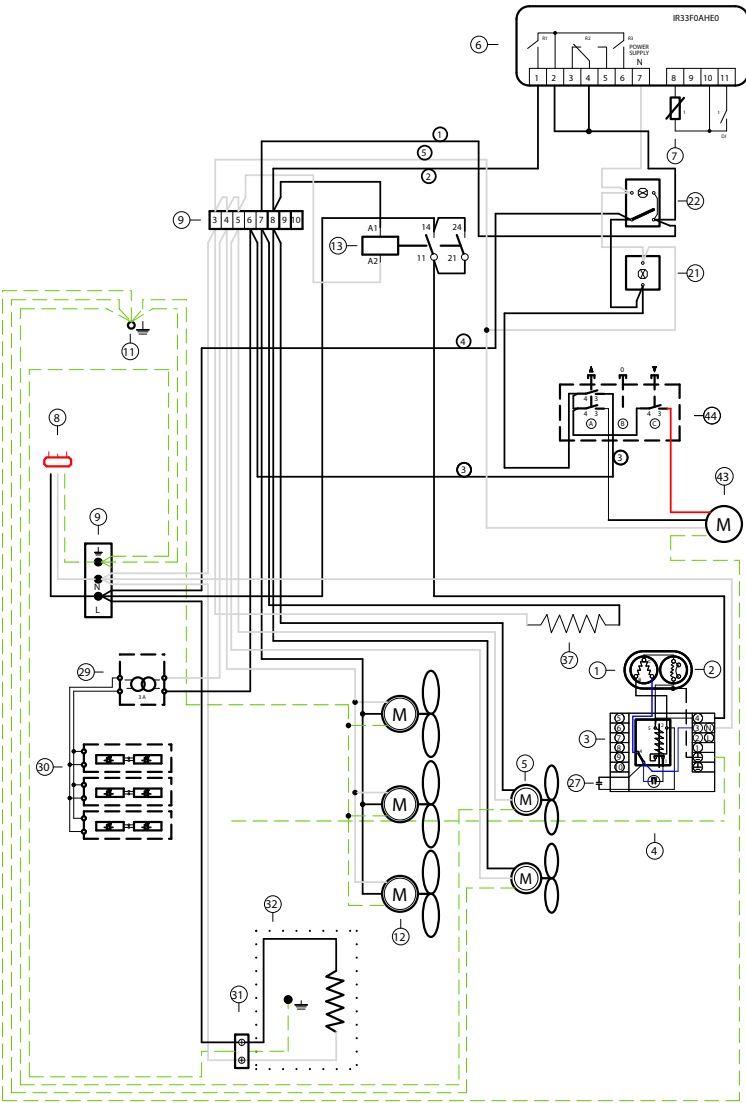


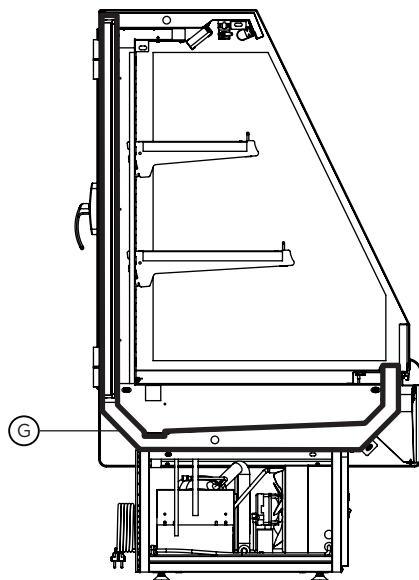
2x KGL-DL



KIT0004U01000

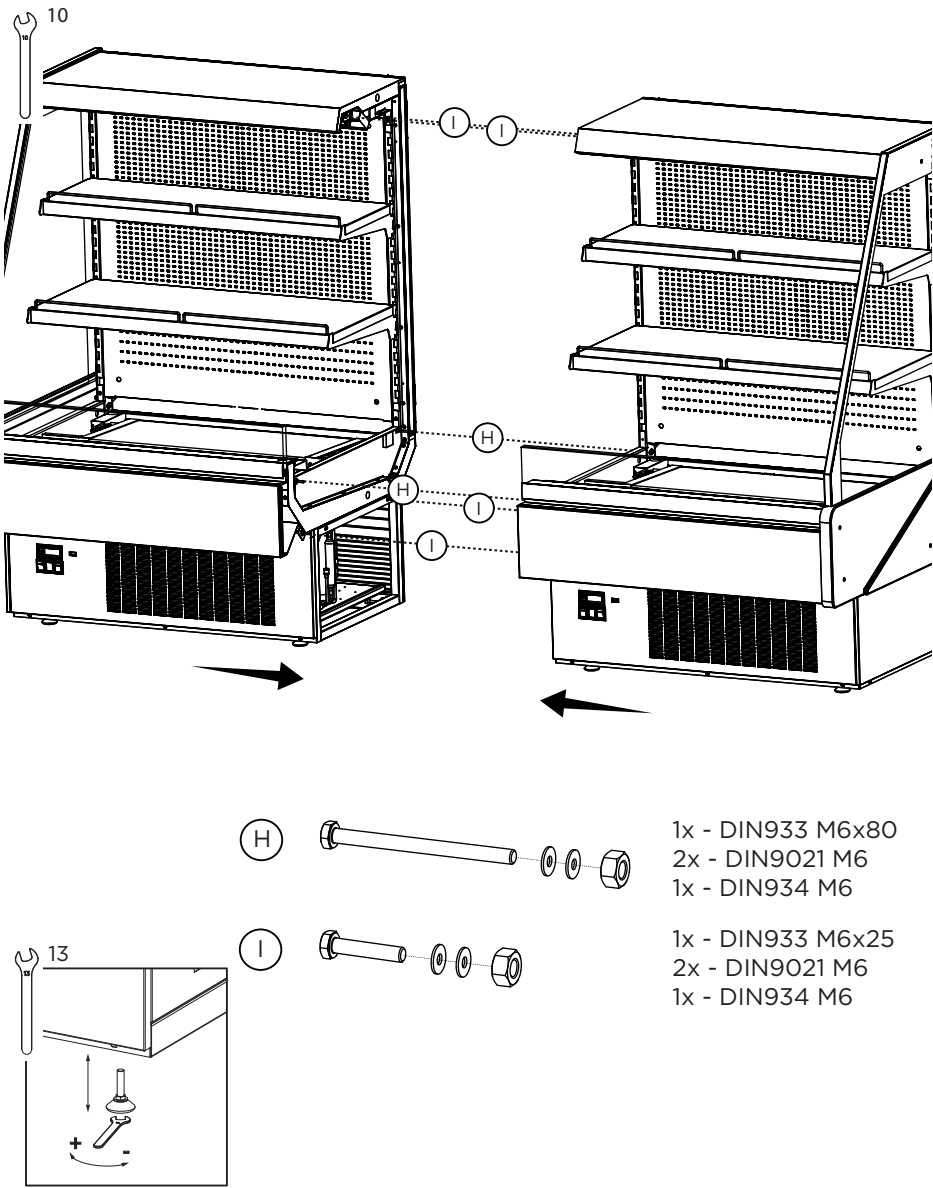
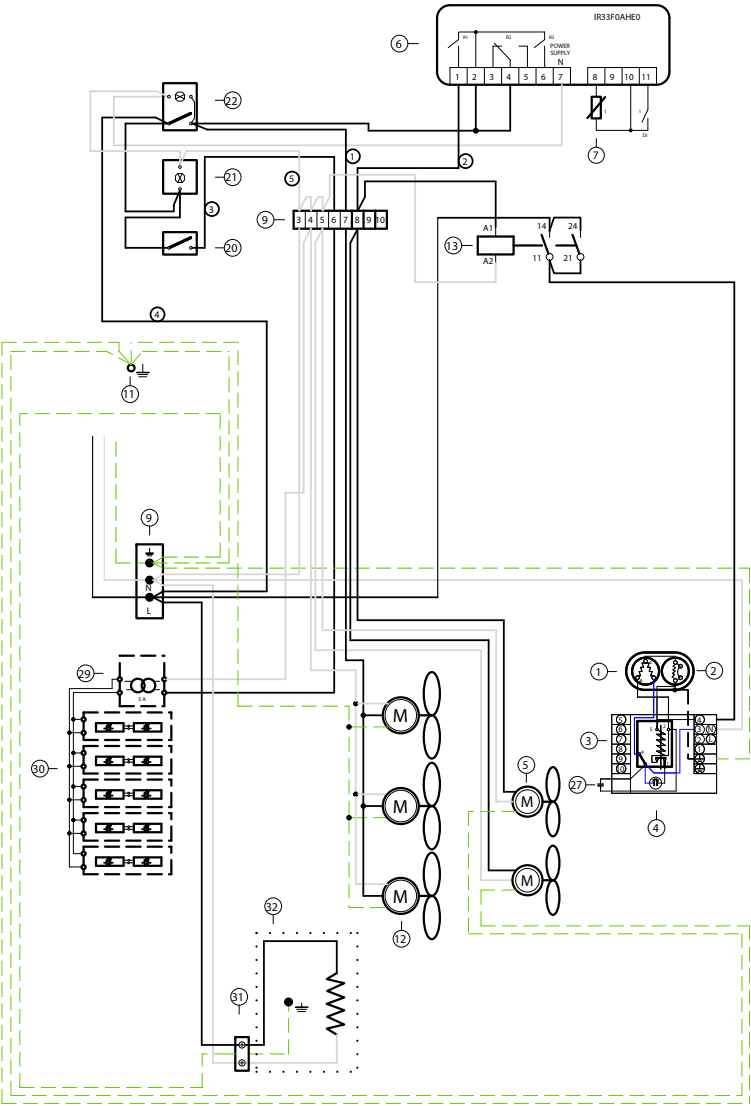
N <sup>o</sup>	Description
1	Compressor
2	Overload
3	Relay
4	Start capacitor
5	Condenser fan
6	Controller
7	Temperature probe
8	Earth two pin plug
9	Terminal block
11	Ground connection
12	Evaporator fan
13	Compressor relay
21	Pilot light
22	Switch
27	Run capacitor
29	Transformer
30	Led lighting
31	Socket
32	Evaporative condensate pan
37	Anti sweat heater
43	Electrical shutter
44	A key switch shutter

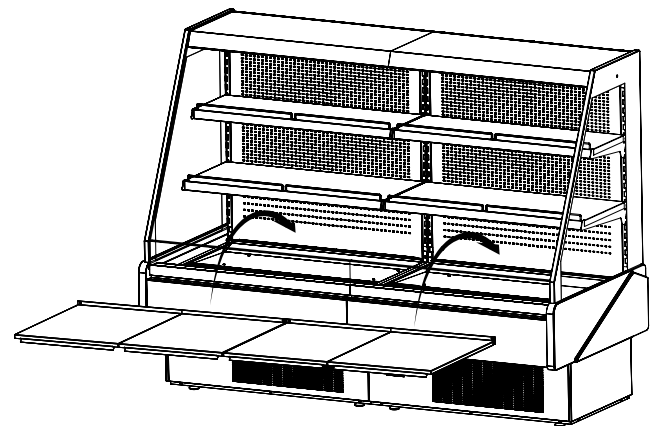
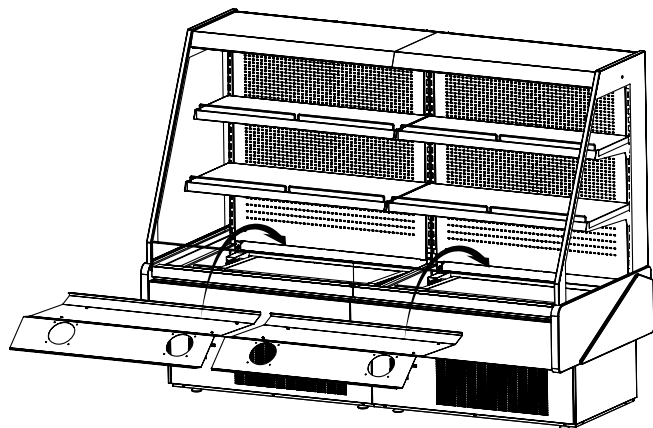




2X - FIT00201301 (189")

N <sup>o</sup>	Discription	Number for length	
		50 Inch	60 Inch
1	Compressor	1	1
2	Overload	1	1
3	Relay	1	1
4	Start capacitor	1	1
5	Condenser fan	1	1
6	Controller	1	1
7	Temperature probe	1	1
9	Terminal block	2	2
11	Ground connection	1	1
12	Evaporator fan	3	4
13	Compressor relay	1	1
20	Lamp switch	1	1
21	Pilot light	1	1
22	Switch	1	1
27	Run capacitor	1	1
29	Transformer	1	1
30	Led lighting	3	5
31	Socket	1	1
32	Evaporative condensate pan	1	1





N <sup>o</sup>	Discription
1	Compressor
2	Overload
3	Relay
4	Start capacitor
5	Condenser fan
6	Controller
7	Temperature probe
9	Terminal block
11	Ground connection
12	Evaporator fan
13	Compressor relay
20	Lamp switch
21	Pilot light
22	Switch
27	Run capacitor
29	Transformer
30	Led lighting
31	Socket
32	Evaporative condensate pan

## 2.10 Plugging and start

To start your equipment follow the steps:

1 - Check for page with parameters inside the manual.

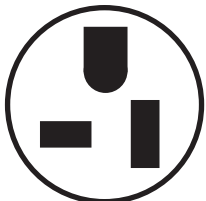
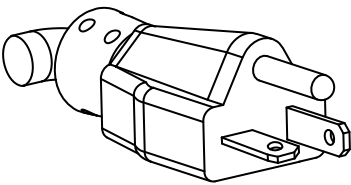
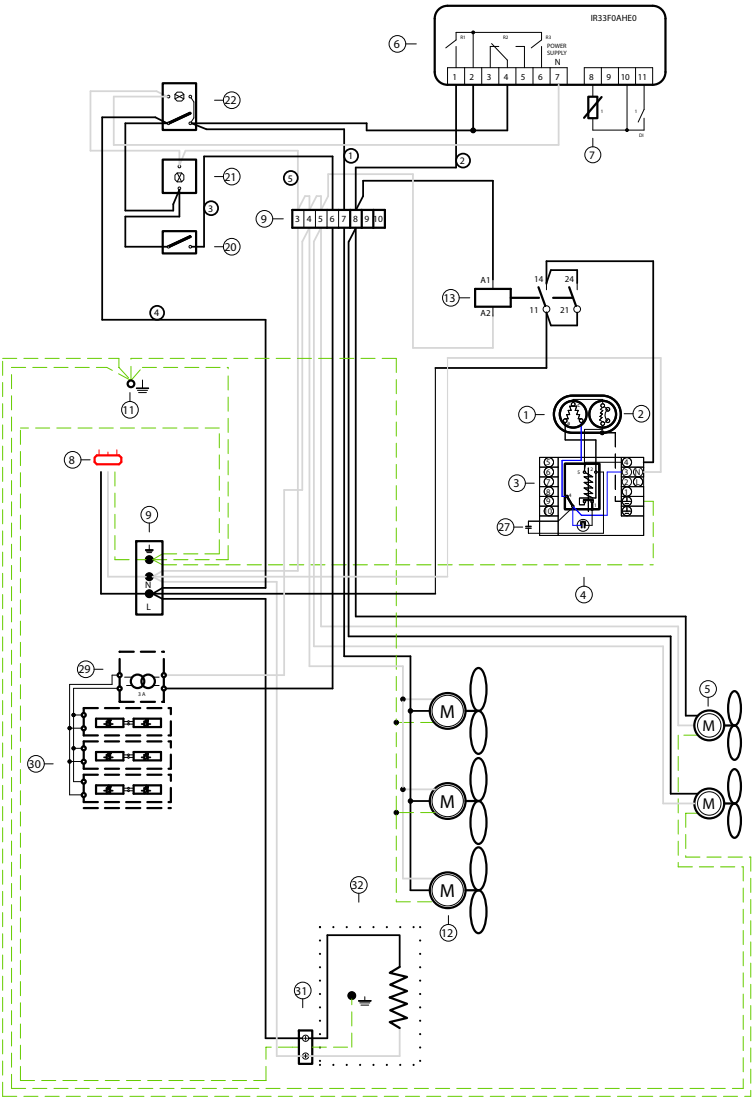
2 - After uncrating and placed the equipment respecting all warnings set in 2.1 chapter, and all switches are set to off position, connect the equipment.



Make sure you have the correct outlet!

4.3. Electrical diagrams

KGL-OF/RM-40-S



Nema-5-20P

3 - Check lights, using button referenced on chapter 2.4. If not working consult the maintenance chapter. KGL-OF/DL/RM only.

3.1 - For KGL-OS/RS, lights and shutter are controlled by key referenced on 2.4 chapter. Turn the key to check lights and shutter. (Open shutter = lights ON)

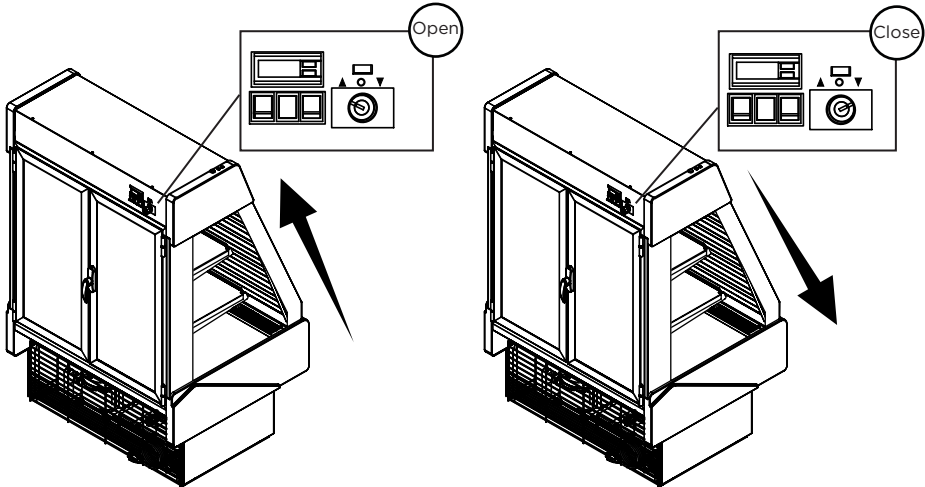
⚠ Open or close shutter only when needed, to prevent motor burning.

4 - Check for shutter normal operation.

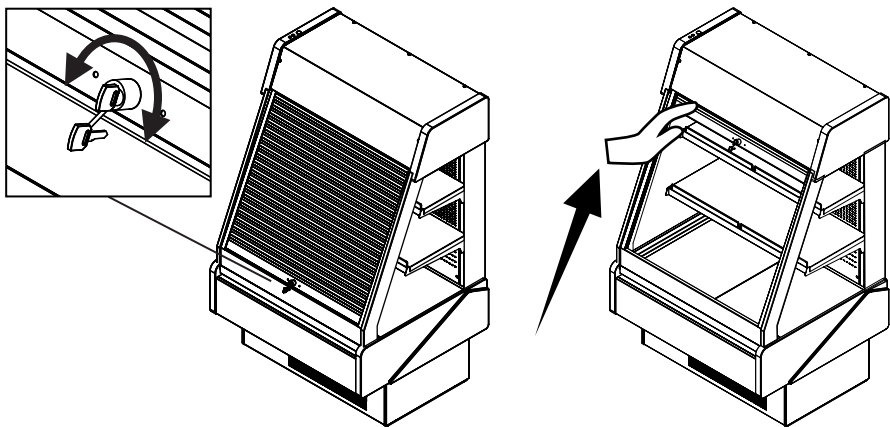
4.1 - Electrical shutter.

⚠ Keep the shutter rails clear for proper operation.

Turn the key to control the shutter.



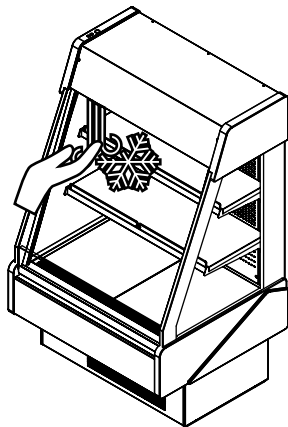
4.2 - Manual shutter.



5 - Turn ON power button referenced in 2.4 chapter.

**!** Noise will be heard when compressor starts! If compressor doesn't start, call a technician!

6 - Check for air movement in the discharge air grille.



7 - Before loading, leave the equipment working for about 30 min. With night curtain or shutter on.

**!** Rear doors closed (KGL-RS/DL/RM only).

115V/60Hz/1 phase-self contained amps

Model	Compressor F.L.A./L.R.A.	Lights (all shelves and top)	Fans		Evap pan	Anti sweat heaters REAR	Total amps (self contained)
			EVP	CND			
KGL-OF/OS-40-S	8,9/47	0,12	0,28	0,45	6,67		16,42
KGL-OF/OS-50-S	16/64	0,54	0,28	0,9	6,67		24
KGL-OF/OS-60-S	16/64	0,19	0,30	0,9	6,67		24,06
KGL-DL/RS/RM-40-S	8,9/47	0,12	0,20	0,45	6,67	0,52	16,86
KGL-DL/RS/RM-50-S	16/64	0,15	0,42	0,9	6,67	0,52	24,66
KGL-DL/RS/RM-60-S	16/64	0,19	0,40	0,9	6,67	0,86	25,02

The data regards to standard options only.

115V/60Hz/1 phase-remote amps

Model	Total amps (remote)
KGL-OF/OS-40-R	0,40
KGL-OF/OS-50-R	0,43
KGL-OF/OS-60-R	0,49
KGL-DL/RS/RM-40-R	0,84
KGL-DL/RS/RM-50-R	1,09
KGL-DL/RS/RM-60-R	1,45



All self contained KBD series use the following equipment: capillary tube, finned coil ventilated systems (condenser/evaporator), hermetic compressor, electrical water evaporation system.

Model	Circuit pressure (psig)		Refrigerant and charge (OZ)	Defrost
	High side	Low side		
KGL-OF/OS-40-S	331	174	R 404A 24,7	Automatic 4/day
KGL-OF/OS-50-S	331	174	R 404A 26,5	Automatic 4/day
KGL-OF/OS-60-S	331	174	R 404A 33,5	Automatic 4/day
KGL-DL/RS/RM-40-S	331	174	R 404A 35,62	Automatic 4,8/day
KGL-DL/RS/RM-50-S	331	174	R 404A 31,04	Automatic 4,8/day
KGL-DL/RS/RM-60-S	331	174	R 404A 46,91	Automatic 4,8/day

3.2 Refrigeration loads (remotes only)

Installation of remote equipment must be done by a qualified technician.

Model	BTU*/h	Expansion valve type	
KGL-OF/OS-40-R	4125	TS2	00
KGL-OF/OS-50-R	4897	TS2	00
KGL-OF/OS-60-R	5141	TS2	00
KGL-DL/RS/RM-40-R	4190	TS2	00
KGL-DL/RS/RM-50-R	4982	TS2	00
KGL-DL/RS/RM-60-R	5835	TS2	00

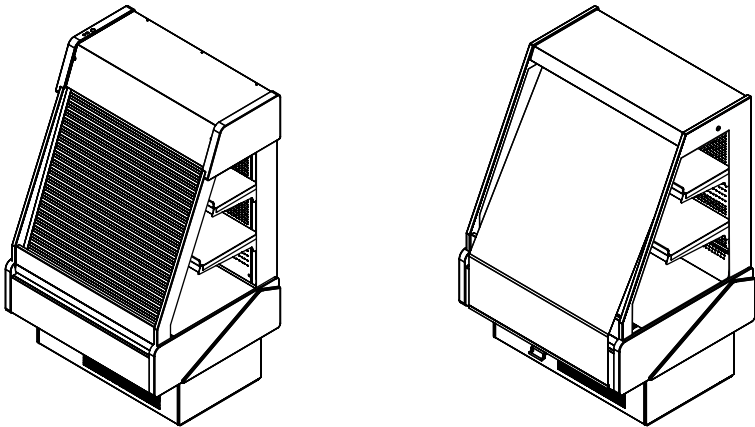
\*values presented are indicative for 14°F evap, and 90°F ambient.

4 Electrical

4.1. Electrical specifications data

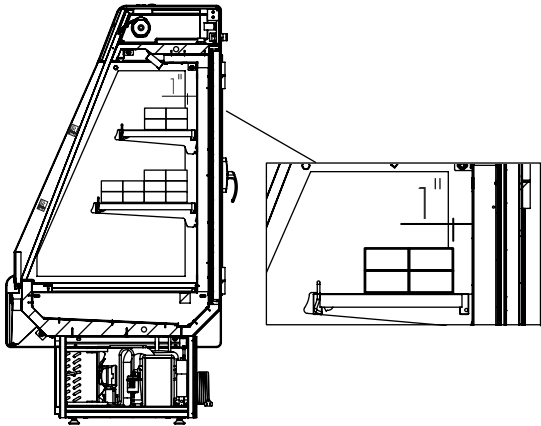
⚠ Electrical data can be found on the marking plate.

Standard equipment includes led lighting in all shelves and top, and anti sweat heaters. (RS/DL/RM only)

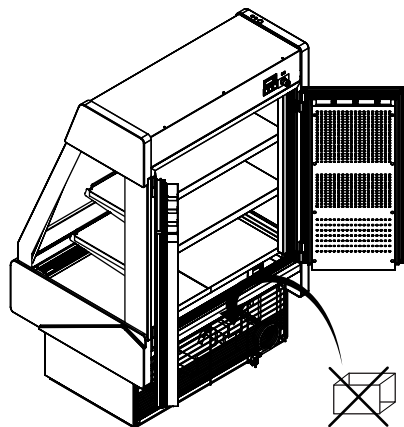


8 - Load your KGL-Series.

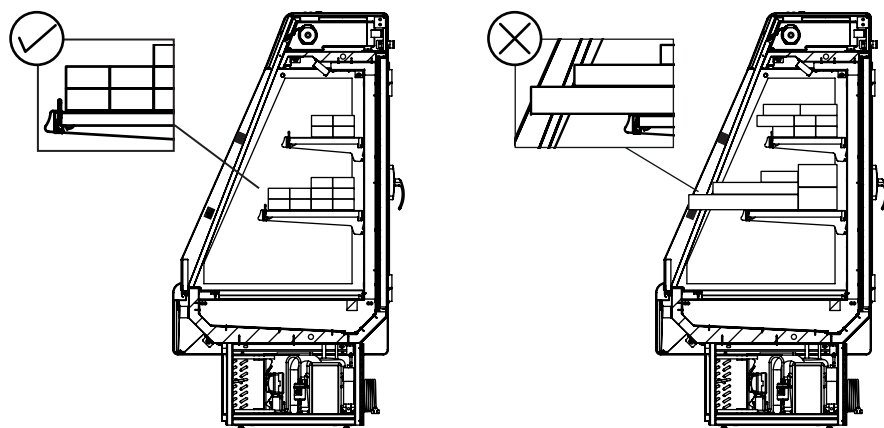
- ⚠ Loading must be done respecting loading limits and weight per square foot mentioned in chapter 1. This equipment is intended for maintaining temperature, be sure the products are cold, and not ambient temperature.
- ⚠ After loading check for any obstruction in the discharge and return air grilles.



- ⚠ Maintain doors closed after loading. (KGL-DL/RS only)
- ⚠ When loading KGL-OS/RS, using the back doors, objects can fall into the evaporator. Remove them if any encountered there.



⚠ Volumes inside the KGL must respect the refrigerated shelf area.



9 - If any problem encountered, see troubleshooting or call a technician!

### 3 Refrigeration

#### 3.1 Self contained refrigeration equipment and defrost

The refrigeration equipment it's laid out in the base of the equipment.

