



Commercial Glass Door Refrigeration Owner's Manual



Applicable Refrigeration Models: CS-360, CS-660, CS-D100S, CS-D1200S, CS-D1400S

Please read the entire owner's manual before attempting to operate your machine.

Table of Contents

Installation	3
Controls - How to Operate your Refrigerator	3, 4
Cleaning	4
Troubleshooting	4-5
General Safety	5
Maintenance Safety	5
Warranty	6

Installation

Congratulations on your new iBeeCool purchase! Please read the enclosed information to help you become familiar with your new machine.

Please ensure the machine has been transported in an upright position. If not, please let the unit stand one hour before energizing it.

Refrigeration equipment must be properly installed. It must be indoors on a level floor, have adequate air circulation, and be in a cool, dry environment. It cannot be in heat conditions that exceed 26° Celsius (80° F). Operating efficiency may decrease in areas where relative humidity is greater than 55%. Locations must be away from heat and moisture generating equipment because ambient temperatures may cause the unit to malfunction and void the warranty.

The electrical components require proper grounding and a dedicated circuit. Any tampering will void the warranty.

Elitech[®]

ECS-180 Temperature Controller User Manual

1. Product General

Serial code: (A(CC.D D.FF.LL) S234.B.V)	Relay				Sensor				Buzzer	Off power detection
	Refrigeration(CC)	Defrost(DD)	Fan (FF)	Light/external alarm(LL)	Cabinet temp/S	Defrost/S2	Condenser /S3	Door switch/S4	B	V
30/17	5/●	5/▲		√	●	●	●	●	●	●
17/10	10	10/▲		√	●	●	●	●	●	●
5	10/●	10/●	5/●	√	●	●	●	●	●	●

Note: ● represents optional, ▲ represents only one function could be selected. × represents no such configuration, √ represents fixed configuration, The number represents the relay contact capacity.

Serial code: A(CC.DD.FF.LL)S234.B.V;CC.DD.FF.LL represents relay capacity,S234 represents sensors; B represents buzzer; V represents off power detection.

For example: 30 represents the relay contact capacity is 30A, 30/17 represents the relay contact capacity could be selected as 30A or 17A; 5/● represents the relay contact capacity is 5A and the relay is optional.5/▲ represents the relay contact capacity is 5A and the output could only be selected alternatively (that is, only one output could be selected, it could be fan, or light/external alarm)

1.2 Product application description

- ECS-180 temperature controller could be used in the middle and low temperature medicine cabinet, kitchen cabinet, supermarket split cabinet, air curtain cabinet, island counter, wine cabinet, etc.
- The controller adopts building block design concept and users could select defrost, fan, light/external alarm according to their demand.
- The function of evaporator sensor, condenser sensor, door switch, buzzer and off power detection is optional.
- Refrigeration relay output could reach to 30A/240VAC, which could directly drive single-phase 1.5Hp compressor.
- Large panel of color digital tube, work status symbol display, temperature display resolution is 0.1, the front panel waterproof level IP65.
- It has temperature sensor self-test function, and once test the failures, it has multiple protection and alarm methods.
- It has the function of one-key recovery, and the rear adopts the plug-in connection method to effectively simplify processing for equipment manufacturers.
- Temperature measuring unit could switch between Celsius and Fahrenheit.
- With the function of Synchronous defrost switch signal detection, and it could form the network of real-time clock Synchronous defrost.
- Cabinet temperature over limit alarm has two modes: absolute value and relative value.
- Light/external alarm relay could be selected by the software, and when select the function of external alarm relay, it could connect the remote alarm bell.
- If select to install standby power supply access unit, it could realize the function of off-power detection and alarm.
- With the complete control logic of hot-gas defrost start without the pressure difference in the refrigerant pipe, to prevent starting with the pressure, for the purpose of a longer compressor life.

2. Operation and display panel



3. Specification

- 1) Mounting size:(71mm)×(29mm) (max)
- 2) Product size :(78.5mm) × (34.5mm) × (82mm)






4. Technical parameters

- 1) Measuring range: $-50^{\circ}\text{C} \sim 90^{\circ}\text{C}$ or $-58^{\circ}\text{F} \sim 194^{\circ}\text{F}$ (only when sensor calibration is set as 0)
- 2) Resolution: 0.1°C or 1°F
- 3) Accuracy: $-40^{\circ}\text{C} \sim 50^{\circ}\text{C}, \pm 1^{\circ}\text{C}, 51^{\circ}\text{C} \sim 70^{\circ}\text{C}, \pm 2^{\circ}\text{C}$, others, $\pm 3^{\circ}\text{C}$ or $-40^{\circ}\text{F} \sim 122^{\circ}\text{F}, \pm 2^{\circ}\text{F}, 123^{\circ}\text{F} \sim 158^{\circ}\text{F}, \pm 4^{\circ}\text{F}$, others, $\pm 6^{\circ}\text{F}$
- 4) Controlling range: $-50^{\circ}\text{C} \sim 85^{\circ}\text{C}$ or $-58^{\circ}\text{F} \sim 185^{\circ}\text{F}$
- 5) Power supply: $110 \pm 10\%$ (VAC)
- 6) Power consumption: $< 3\text{W}$
- 7) External standby power voltage: $7.0\text{VDC} \sim 13.5\text{VDC}$
- 8) Input: Cabinet sensor, evaporator sensor, condenser sensor, door switch
(When door is open, sensor signal: normal open)
- 9) Output capacity:

Standard configuration	ECS-180(A)	ECS-180(B)	ECS-180(C)
Refrigeration	30A/240VAC, could drive single-phase 1.5HP compressor	5A/250VAC	17A/250VAC
Defrost	5A/250VAC	10A/250VAC	10A/250VAC
Fan	5A/250VAC	5A/250VAC	10A/250VAC
Light/External alarm	None	10A/250VAC	None
Serial code	A(30.05.05.00)S234.B	A(05.10.10.05)S234.B.V	A(17.10.10.00)S234.B

- 10) Front panel waterproof level: IP65
- 11) Work ambient temperature: $0^{\circ}\text{C} \sim 55^{\circ}\text{C}$
- 12) Storage temperature: $-25^{\circ}\text{C} \sim 75^{\circ}\text{C}$
- 13) Relative humidity: $20\% \sim 85\%$ (non condensing)

5. Indicator light status description

Indicator light	Symbol	Status	Meaning
Setting	Set	ON	Parameter setting
		OFF	Status of temperature measuring and controlling
Refrigeration		ON	Refrigeration work
		OFF	Refrigeration stop
		FLASH	Refrigeration time delay
Defrost		ON	Defrost work
		OFF	Defrost stop
Fan		ON	Fan work
		OFF	Fan stop
Defrost dripping	drip	ON	Start defrost dripping
		OFF	Stop defrost dripping
Door switch		ON	Cabinet door open
		OFF	Cabinet door close
Off power detection		ON	Controller power off

6. Parameter list

Menu	Functions	Setting range	Default						ζ
			H1	H2	H3	H4	H5	H7	
User menu									
St	Temperature set value	Upper limit Lower limit	4℃	-20℃	-20℃	-20℃	-20℃	40	ζ
Po	Administrator menu Password	00~99, password is 55, unmodified	00						/
Administrator menu									
C1	Hysteresis value	0.5℃~9.0℃	4℃	3℃	3℃	3℃	3℃	8	ζ
		1, 20							
C2	Compressor start Min. interval	0 60	5	5	3	3	3	5	min
C3	Compressor initial start Min. interval	0 90	5	5	3	3	3	5	min




Menu	Functions	Setting range	Default							ξ
			H1	H2	H3	H4	H5	H7		
A4	Buzzer alarm output switch	0: Buzzer output disabled 1: Buzzer output enabled	1	0	0	0	0	1	/	
A5	Cabinet temperature lower limit alarm value	-50℃ [~] Cabinet temperature upper limit alarm value	-10℃	-30℃	-30℃	-30℃	-30℃	14	ξ	
		-58℃ [~] Cabinet temperature upper limit alarm value								
A6	Cabinet temperature upper limit alarm value	Cabinet temperature lower limit alarm value 85℃	24℃	40℃	40℃	40℃	40℃	75	ξ	
		Cabinet temperature lower limit alarm value 185								
A7	Cabinet over temperature alarm time delay	0 60	20	0	0	0	0	20	3min	
A8	The initial cabinet over temperature alarm time delay after electrified	0 60	40	0	0	0	0	40	3min	
A9	Over temperature alarm upper deviation	1℃ 30℃	10℃	10℃	10℃	10℃	10℃	20	ξ	
		1 60								
A10	Over temperature alarm lower deviation	1℃ 30℃	5℃	5℃	5℃	5℃	5℃	10	ξ	
		1 60								
A11	Over temperature alarm mode	0: Absolute temperature point 1: set value+ over temperature alarm deviation	0	0	0	0	0	0	/	
A12	Light/Alarm relay selection	0:Light output 1:Alarm output	0	1	1	1	1	0	/	
do1	Control output of door switch	0:Doorswitch is canceled 1:Close fan during door open 2: Turn on the light when door open, turn off the light when door closed 3:Close fan and turn on the light when door open, Turn off the light when door closed 4: When door is open, it is the synchronous signal input of defrost, defrost will start.	0	0	0	0	0	0	/	
do2	Buzzer response when door open	0:OFF 1:ON	0	0	0	0	0	/		
cd1	Condenser sensor selection	0:Disabled 1:Enabled	0	0	0	0	0	0	/	
cd2	Condenser high temperature alarm start value	30℃ [~] 90℃	55℃	55℃	55℃	55℃	55℃	131	ξ	
		86℃ [~] 194								
cd3	Lower hysteresis of condenser high temperature alarm	1℃ [~] 15℃	5℃	5℃	5℃	5℃	5℃	10	ξ	
		2℃ [~] 30								
Hidden menu	Celsius /Fahrenheit selection (note κ)	Fahrenheit Celsius	Celsius	Celsius	Celsius	Celsius	Celsius	Fahrenheit	/	

Note①: Only valid when the cabinet sensor is in proper working.

Note②: After switch between Celsius /Fahrenheit, users need to adjust all related parameters themselves to make sure the correct parameter setting. Celsius /Fahrenheit switch could only be achieved by one-key recovery operation.

7. Keys Function

7.1 Keys description

Keys	Function
Set	Enter the status of parameter setting; Switch between menu and parameter;
	Adjust menu and parameters; Open/close light(only valid for the model with light control)
	View condenser sensor temperature Adjust menu and parameters; Press more than 10s to execute parameter one-key recovery
	View evaporator sensor temperature Exit from parameter setting; Exit from one key recovery status Press 3s to forced switch between refrigeration, defrost/defrost delay, defrost dripping

7.2 Keys operation

1) In the status of temperature measuring and controlling, press Set key for three seconds to enter user menu, it displays the code St, then press Set key again, display the value of St. It could be modified by pressing the key or .

When it displays the code St, press the key , display the code Po, then press Set key, display 00, at this time, press or to input the password of administrator menu.

Press Set key again to confirm the password input, and the controller will automatically verify the correctness of password. When it passes, it could select parameter items St, Po, C1, C2.....Cd3 (that is, any parameter items both in the administrator menu and user manuals) by pressing the key or . Or else, only the parameters items St and Po available, others could not be displayed.

When the parameter item is selected, press Set key to enter to the setting of the current item, press or to modify the value, and then press Set key to return to the menu.

Under the status of parameter setting, press key or no key operation within 30s, it will exit from parameter setting and automatically save the current parameter value.

Note: The password input of administrator menu only is valid for single entering. After exit from the parameter setting by pressing , it needs to input the correct password again for next parameter adjustment.

2) Temperature viewing

In the status of temperature measuring and controlling, press to view the current evaporator sensor measured temperature value (note: evaporator sensor is enabled and works properly). Press to view the current condenser sensor measured temperature value (note: condenser sensor is enabled and works properly).

3) Manually forced operation

In the status of temperature measuring and controlling, press for three seconds to force the switch between refrigeration, defrost/defrost delay, defrost dripping. Press to open or close the light (Only valid when Light/alarm relay is used as light and there is no linkage between light control and door switch.)

4) Parameter recovery

In the status of temperature measuring and controlling, press the key for 10S, it displays the code H0 and enter to the operation of one-key recovery. It could continue to select the parameter recovery items by pressing key, and the selection range is H0~H7, and press key to execute the parameter recovery and then exit. If there is no parameter recovery operation within 30S, it will automatically exit from the mode without recovery of parameters.

(Note: This operation needs a stable power supply. If the power supply is abnormal, it needs to re-electrify the controller with stable power supply and execute the one-key recovery again.)

H0	Give up parameter recovery, no change of each parameter, no display of parameter recovery success code dr
H1	Recovery the parameter H1, recovery success display dr
H2	Recovery the parameter H2, recovery success display dr
H3	Recovery the parameter H3, recovery success display dr
H4	Recovery the parameter H4, recovery success display dr
H5	Recovery the parameter H5, recovery success display dr
H6	Recovery the parameter H6, recovery success display dr
H7	Recovery the parameter H7, recovery success display dr, Celsius switches to Fahrenheit
	Note: After switch, users need to adjust the related parameter values to make sure the correct parameter setting.

8. Control output

8.1 Compressor:

Normal status: When the cabinet temperature is higher than the set temperature(St) +hysteresis(C1), and finish the compressor start Min. interval, the compress will start;

When the cabinet temperature is lower than the set temperature (St), and the continuous refrigeration running time is larger than C8, the compressor will close.

When the cabinet temperature is between the set temperature(St) and the temperature of the set temperature(St) +hysteresis(C1), if the refrigeration is closed, then after finishing compressor start Min. interval and Max.standby time after finishing compressor start Min. interval (C7), the refrigeration will start.

Note: Compressor start Min.interval is calculated by Compressor initial start Min. interval (C3) after it is electrified for the first time, and it will be calculated by Compressor start Min. interval (C2) in the future.

Cabinet temperature sensor failure:

A1=0, cancel the function of "Run/stop in a proportional time", the compressor closes;

A1=1, open the function of "Run/stop in a proportional time", the compressor will run in cycle according to the proportion (Refrigeration running time A3 and refrigeration stop time A2).

8.2 Defrost

1) d4 = 0, Defrost is forbidden.

2) d4 ≠ 0, when it is not in the state of defrost nor defrost dripping:

① Evaporator sensor is enabled (d1 = 1), and evaporator sensor temperature is higher than Defrost termination temperature (d7), then defrost could not be started.

② Evaporator sensor is enabled (d1 = 1) and evaporator sensor temperature is lower than Defrost termination temperature (d7) or evaporator sensor is disabled (d1 = 0) (Any of the following conditions could start defrost):

a. When defrost cycle (d4) finishes running, defrost is started;

Note: Defrost cycle is calculated according to the selected natural time (d3 = 1) or accumulated refrigeration time (d3 = 0);

b. Hold and press  for three seconds, start defrost;

c. If the door switch is as synchronous signal input of defrost (d01 = 4), the door open is the external synchronous defrost signal, the defrost is started.

Note: When finish time delay after defrost start (d10), there will be an output of defrost.

3) In the state of defrost (Any of the following condition could close defrost):

① Evaporator sensor is enabled (d1 = 1), and evaporator sensor temperature is higher than defrost termination temperature (d7), defrost is closed;

② When finish running the maximum time of defrost (d6), defrost is closed;

③ Hold and press  for three seconds, defrost is closed;

4) After defrost, it enters the state of defrost dripping, and within dripping time after defrost (d8), refrigeration output is forbidden. The dripping will be discharged during this time period. After finishing dripping time after defrost, it enters to the status of refrigeration cycle.

Note: Defrost status display

d5=0: Display cabinet temperature

d5=1: Display dEF during defrost and defrost time delay, display cabinet temperature after finishing defrost time delay.

d5=2: Always display dEF during defrost and defrost dripping

d5=3: Always display start-defrost cabinet temperature during defrost and defrost dripping

Defrost type:

d11=0: Electric heating defrost

d11=1: Hot gas defrost

8.3 Fan:

Fan running mode:

1) Fan and compressor run or stop synchronically;

2) Fan runs continuously, stops during defrost;

3) Fan runs continuously, stops during defrost and defrost dripping;

4) Fan runs continuously, stops during defrost, fan starts when finish time delay after defrost (F3);

When the door switch parameter is selected as 1 or 3, when the cabinet door is open, fan will be close.

And when the door is closed, fan will recover to the working state before door open.

Note: Fan will not be permitted to run until finish Fan initial start time delay after electrified (F2).

8.4 Light

do1=0 or 1: press  to open the light, and press  again to close the light.

do1=2 or 3: When door open, the light will be opened, and when close the door, light will be closed.

Note: A12 = 0, Light/Alarm relay will be used as light relay, and light relay will pick-up when the light opens, disconnect when the light closes.

A(30.05.05.00)S234.B No configuration of light relay.

8.5 Internal Alarm

Temperature sensor failure alarm:

When cabinet sensor fails, the digital tube display E1;

When evaporator sensor fails, the digital tube display E2;

When condenser sensor fails, the digital tube display E3;

Condenser high temperature alarm: If the condenser sensor is selected, when the condenser temperature is higher than the condenser high temperature alarm start value, it will alarm and display cH. While it will not have an effect on the control output. When the temperature falls back to (the condenser high temperature alarm value-condenser high temperature alarm lower hysteresis), the alarm is released.

Cabinet over temperature alarm: When the cabinet temperature is higher than the cabinet temperature upper limit alarm value(A11=0) or higher than (set value+ over temperature alarm upper deviation: A11=1), and cabinet over temperature alarm time delay or the initial cabinet over temperature alarm time delay after electrified has been finished, the digital tube will display rH, and the alarm will not be released until the temperature is lower than the cabinet temperature upper limit alarm value(A11=0) or lower than (set value+ over temperature alarm upper deviation: A11=1); When the cabinet temperature is lower than the cabinet temperature lower limit alarm value(A11=0) or lower than (set value- over temperature alarm lower deviation: A11=1), and cabinet over temperature alarm time delay or the initial cabinet over temperature alarm time delay after electrified has been finished, the digital tube will display rL, and the alarm will not be released until the temperature is higher than the cabinet temperature lower limit alarm value or (set value- over temperature alarm lower deviation: A11=1).

If the buzzer is selected as 1, when there is alarm, door open(do2 is set as 1) or power supply is disconnected(now it is powered by standby power supply, A(30.05.05.00)S234.B has no such configuration) , the buzzer beeps; When all alarm is released, door is closed(do2 is set as 1) and there is normal power supply, the buzzer mutes, or press any key to mute the alarm.

Alarm code	Alarm reason
E1	Cabinet temperature sensor failure
E2	Evaporator sensor failure
E3	Condenser sensor failure
cH	Condenser high temperature alarm
rH	Cabinet high temperature alarm
rL	Cabinet low temperature alarm

8.6 External alarm output (A12=1)

The external alarm relay will pick up when there is alarm or door is open (do2 is set as 1), and it will disconnect when all alarm is released and the door is closed (do2 is set as 1).

Note: **A (30.05.05.00) S234.B has no configuration of external alarm relay.**

8.7 Standby power supply

When it is supplied by standby power, it will close the control output of compressor, fan, defroster and light/external alarm, but the controller will display the sensor measured temperature normally, and normally keep all alarm status. If the controller is electrified again, the compressor, defroster, fan and light will work according the mode of initial electrification.

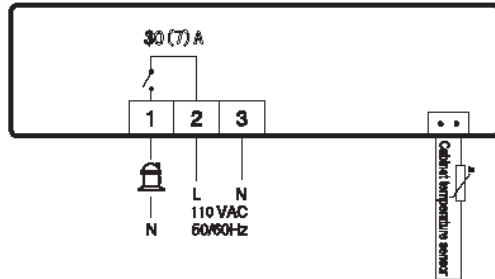
Note: the voltage range of external power supply is **7.0~13.5VDC**, and the controller will be damaged if it is connected with the standby power supply beyond the range. Please do not exceed this range!

A (30.05.05.00) S234.B has no such configuration of standby power supply.

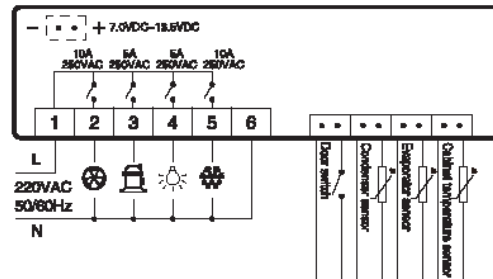
8.8 The table of controller output status

System status	Defrost type	
	Electric heating defrost	Hot gas defrost
Refrigeration output	Compressor start	Compressor start
	Electric heating close	Four-valves close
Defrost time delay	Compressor stop	Compressor stop
	Electric heating close	Four-valves open
Defrost output	Compressor stop	Compressor start
	Electric heating open	Four-valves open
Defrost dripping	Compressor stop	Compressor stop
	Electric heating close	Four-valves open

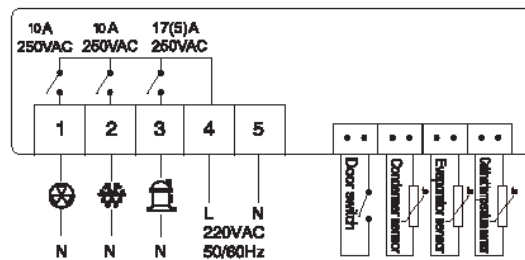
9. Wiring diagram



A (30.00.00.00) S.B



A (05.10.10.05) S234.B.V



A(17.10.10.00)S234.B

10. Safety rules:

★Danger:

- 1) Strictly distinguish the power wire, relay output, sensor down-lead and data line, and the relay could not be overloaded.
- 2) Prohibit connecting the wire terminals without electricity cut-off.
- 3) When connect the standby power supply, it should connect the isolation safety power supply. Before connection, it is necessary to check whether the standby power voltage range meets the requirement of the controller, or else, It might cause the accident of Insulation level drop of controller, the parts burning, or the electric shock, etc.

★Warning:

Prohibit using this unit under the environment of over damp, high temp., strong electromagnetism interference or strong corrosion.

★Notice:

- 1) The power supply should conform to the voltage value indicated in the instruction, and make sure a steady power supply.
- 2) To avoid the possible interference, the sensor down-lead/data line and power wire should be kept in a proper distance.
- 3) When evaporator sensor is installed, the sensor should be well connected with the copper tube which is 5cm away from evaporator inlet.

Cleaning

When cleaning your cabinet or shelves, we recommend using warm water with a mild soap. Your evaporator and condenser will require annual maintenance cleaning to be conducted by a refrigeration technician.

Troubleshooting

The compressor is not running.

- Check your circuit breaker.
- Check if your power cord is unplugged.
- Check if your thermostat is too high.
- Check if your machine is in a defrost cycle.

The condensing unit is running for a too long a period of time.

- Check if an excessive amount of warm product has been placed inside the cabinet.
- Check if the door has been left open too long or if the door is open.
- Check if the door gasket is sealing properly.
- Check if the condenser or evaporator coil is dirty.
- Check if the evaporator coil is iced up.

The cabinet temperature is too warm.

- Check if the thermostat is set too high.
- Check if the airflow is blocked.
- Check if an excessive amount of warm product has been placed inside the cabinet.

General Safety

It's important to stay safe. This appliance has been designed with your safety in mind. It has many features to keep you from being harmed. However, safe operation and maintenance are your responsibilities.

1. When using this unit, please move it carefully. If on casters, be sure the casters do NOT run over the power cord.
2. Lock the casters when in use.
3. Seek help when moving the machine. This machine is heavy. Be sure you have enough help to avoid tipping or dropping the cabinet.
4. Prevent children from playing in or on the cabinet.
5. Follow all instructions. There are many safety labels and directions on the unit. Heed them.
6. Watch your fingers. There may be pinch points near the door hinges.

Maintenance Safety

ALWAYS use a certified technician to repair R290 equipment.

ALWAYS use iBeeCool parts. Use of aftermarket parts can be dangerous with R290 equipment.

NEVER clean a frozen evaporator with a sharp object.

NEVER clean a dirty condenser with a sharp object.

NEVER store gasoline, kerosene, or any other flammable material near the cabinet.

Warranty

Limited Warranty: 2 Year Parts and Labour; 5 Year Parts-Only Warranty on the Compressor

CoolSteel refrigeration units have a 2-year warranty coverage on parts and labour, and 5 years, parts only, on compressors. This is a limited warranty starting from the date of purchase. For further information, do not hesitate to contact the undersigned.

Customer Service
166 Millennium Blvd
Moncton E1C 2G8
1.855.388.5999
support@ifoodequipment.ca

Terms and Conditions

This agreement constitutes the entire agreement between CoolSteel and the owner. All representations made by the service provider, which are not included in this written agreement, are not part of this agreement. This agreement will automatically be cancelled if the equipment is moved from the location indicated on the original invoice. All material and labour not covered by this agreement will be provided at the owner's expense. CoolSteel or the service provider will not be held liable for any loss of product, damage or injury resulting from a delay in repairs, or improper installation. Maximum 100 kilometers for travel for units residing at a remote location as stipulated in this agreement.

Limitation of Liability

Any liability on the part of CoolSteel will under no circumstances, exceed the amount of the costs of the unit incurred by CoolSteel to repair the equipment during Monday to Friday, between 8 am to 5 pm, and the reasonable costs related to the labour and parts replacement. CoolSteel reserves the right to charge a customer for non warranty claims and to request a method of payment before a claim is dispatched. Refrigeration that is being used in a mobile application, such as a Food Truck, will not be eligible for warranty coverage of any kind.

Owner's Responsibilities

The owner is entirely responsible for the following items: All services or repairs not covered by this agreement. Checking or replacing breakers and operating the equipment according to the manufacturer's instructions and performing routine maintenance or any special maintenance mentioned in the owner's manual. Routine maintenance includes cleaning the condenser and evaporator coil and drain tube. An annual preventive maintenance service is strongly recommended. Providing the service provider with free access to the equipment and its controls. Moving all materials, fixtures or partitions that may interfere with the service provider's work. Refrigeration equipment must be properly installed and requires an indoor level floor and adequate air circulation in a conditioned environment where the temperature does not exceed 26° Celsius (80° Fahrenheit). Electrical requires proper grounding and a dedicated circuit, any tempering will void the warranty. CoolSteel reserves the right to void any warranty if any of the terms or condition are not observed in accordance with conditions and limitations.

How to Obtain Service

Customers are required to register their purchases with customer service during hours of operation Monday to Friday, 8 am to 5 pm, Atlantic time. When repairs are required, call 1-855-388-5999 and include your model and serial number. If your service provider requires parts, have them reach us by email or give us a call to discuss part selection.