



INNOVATION IN HIDDEN
TEMPERATURE CONTROL

Ambiance Air

A concealed luxury PTAC

FRC SERIES

CEILING SPLIT UNIT – MODEL CL 140 - 210

FEATURES

- ✓ Concealed, hidden design
- ✓ VERY QUIET
- ✓ Through the wall installation – No external unit
- ✓ Less build-out than Central AC
- ✓ Ideal for retrofit projects and new constructions
- ✓ High-end residential & commercials
- ✓ UL Listed products
- ✓ No required millwork enclosure

- ✓ Alternative to PTAC units / Central Air systems
- ✓ Ductless mini split system
- ✓ Possible ductwork – 4inchH2O for 50Ft ductwork length
- ✓ Suction accumulator pre-charged with refrigerant R-134a

- ✓ 24-hours operation - Cooling / Heating mode
- ✓ Fast restart due to bypass valve
- ✓ Self-integrated condensate pump with spray system
- ✓ Brushless DC fan for noise reduction
- ✓ Summer fan mode
- ✓ Auto / Manual fan speed mode
- ✓ Energy efficient rotary compressor

- ✓ High efficiency – 15 000 to 23 000 Btu/h
- ✓ High SEER

- ✓ Built-in sensors for remote assistance
- ✓ Digital wireless touchpad controls
- ✓ Bridge / IOS App for remote control

- ✓ Piping length up to 50 Ft between condenser

DIAGNOSTIC FEATURES :

Multiple sensors are built in the Ambiance Air HVAC system. This technology reduces significantly the risk of breakage and leakage and allows to reset alarms, and facilitate maintenance.

A list on how to reset and analyse these alarms are available.

THERMOSTAT OPTION:

a) The Dixell Touch Pad Thermostat's interface is wired to the condenser unit. It communicates with the wifi radio thermostat's small wireless box. The wifi radio thermostat ensures accurate temperature readings and proper positioning without electrical wiring inside the room.

B) Bridge. The bridge device accepts standard 24V AC signals from any thermostat (Ex : Nest, Honey). It gives access to smartphone and IOS Apps such as the Honeywell Apps. These extraordinary diagnostic features offered by the Ambiance Air HVAC system are only available through an optional user interface panel. (our Dixell thermostat) This works in conjunction with the Bridge and the user's thermostat.

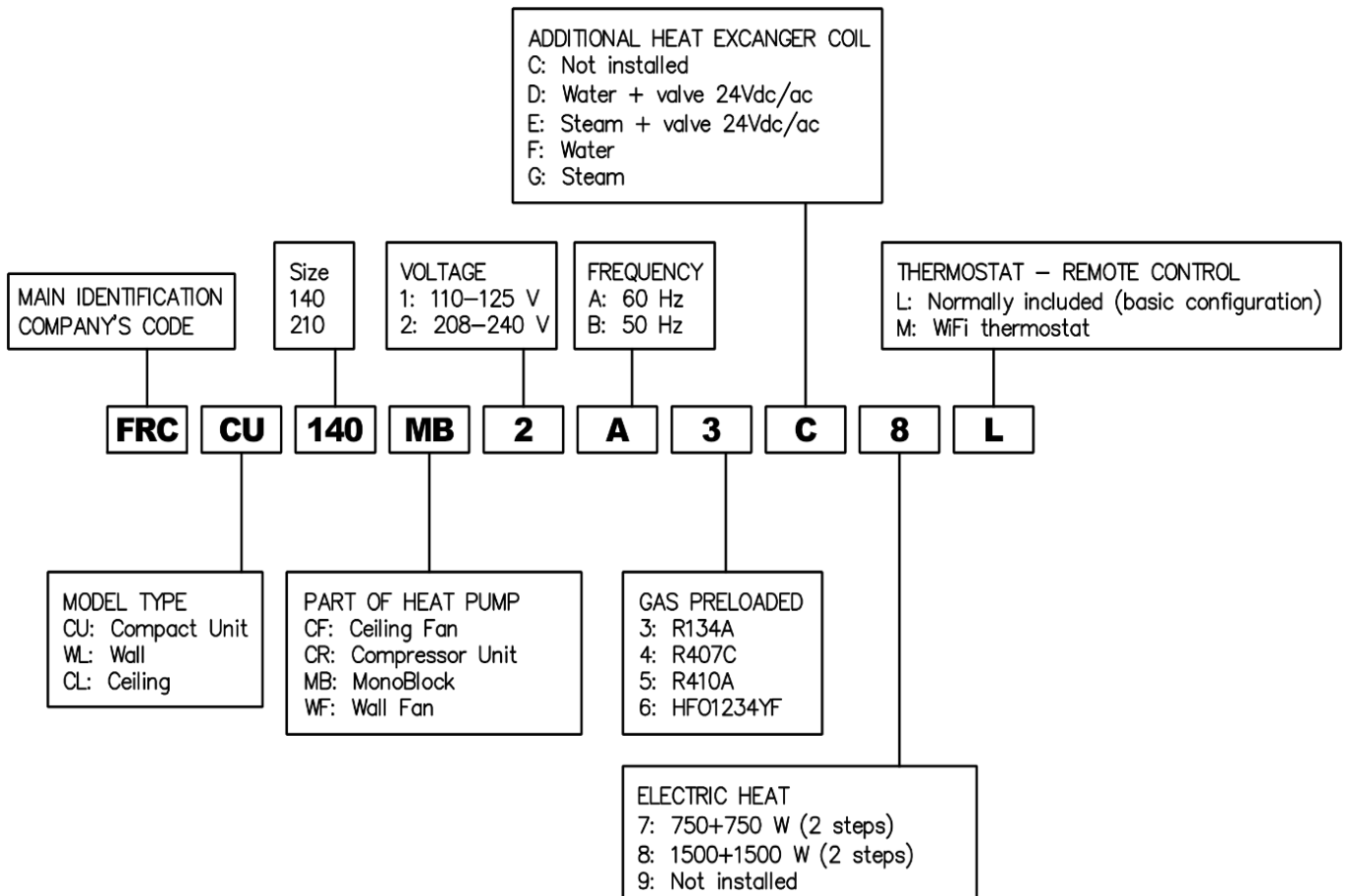
More information:

The bridge device accepts standard 24V AC signals from any thermostat. The signals are configured for Heat (traditionally the White wire), Cool (traditionally the Yellow wire), Fan High (traditionally the Green wire), Fan Low, Summer Mode, and one undefined input. One difference to note is that we are not providing the 24VAC, it must be supplied from an external transformer, which we can supply.

- The Bridge will allow the Ambiance Air HVAC system to be used with any thermostat or home automation controller that supports this standard wiring.
- All the features of the user's thermostat or home automation controller, such as preset temperatures, remote access via a mobile APP, adaptive heating or cooling strategies, are exactly the same when connected to an Ambiance Air HVAC system.
- The extraordinary diagnostic features offered by the Ambiance Air HVAC system are only available through an optional user interface panel (our Dixell thermostat) that would work in conjunction with the Bridge and the user's thermostat. Ambiance Air will be offering these features via a web-based utility in the near future. Please note that the Dixell thermostat is automatically provided with the purchase of the Ambiance Air hvac System.
- Custom programming and integration are available to adapt the Ambiance Air HVAC system to nearly any specific customer requirement, including the development of JSON, XML, MQTT or even pure text APIs. Please forward us a detailed list of the functions you would like to add. Please note that additional costs may apply for custom programming and integration.

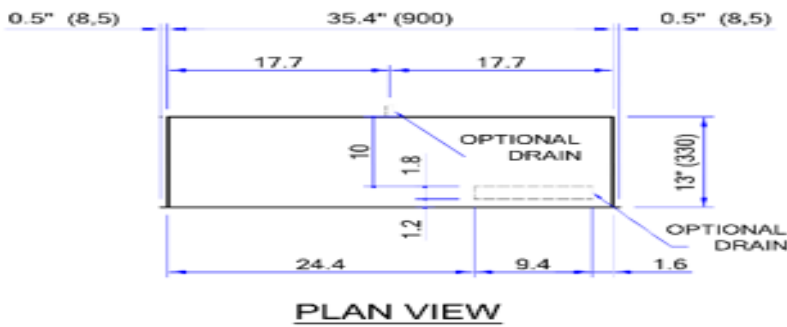
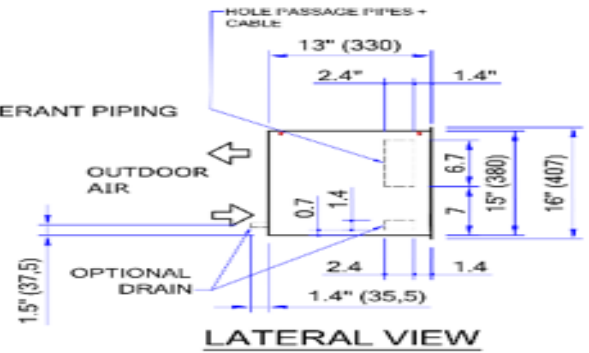
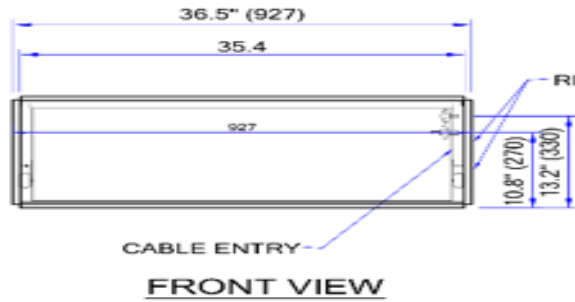
GENERIC ELECTRICAL DIAGRAM

Ask us for more details



**FRC SERIES
MODEL CL 140**

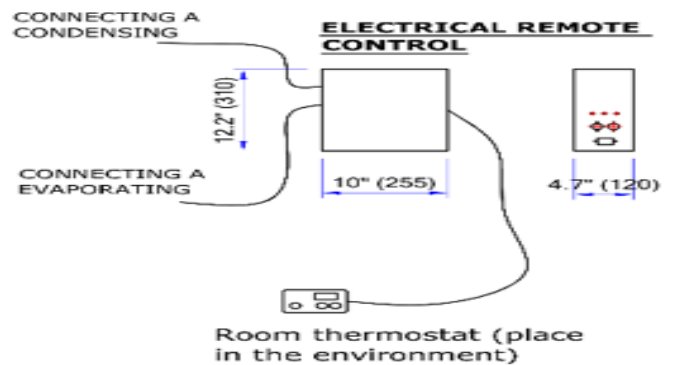
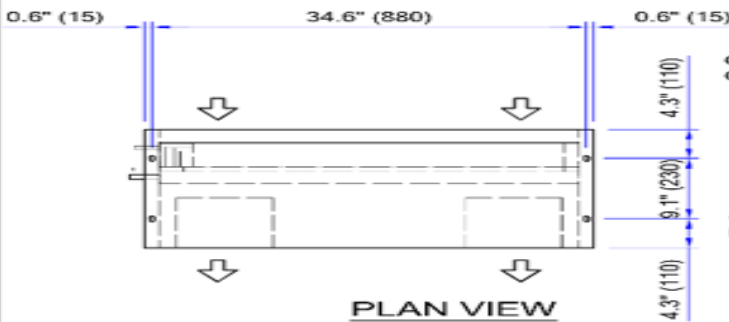
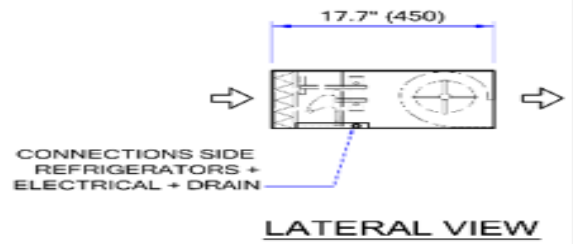
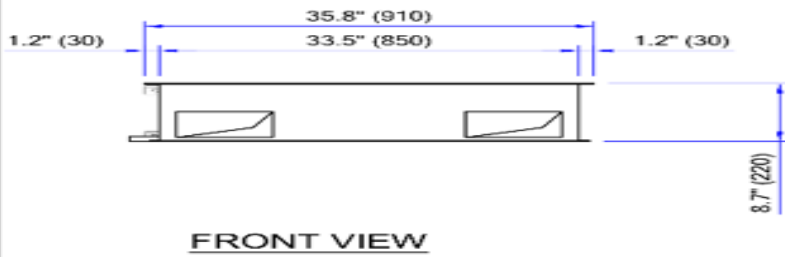
**DIMENSIONS CEILING SPLIT UNIT
MODEL CL 140 – up to 15 710 Btu/h**



CONDENSER UNIT

DESCRIPTION : CONDENSER - MODEL HEAT PUMP
FRC – CL – 140 RIF : NYC / Cooling : 15,710 BTU/H

DEPTH x WIDTH x HEIGHT (Sleeve)
13¹³/₆₄" x 35¹³/₃₂" x 14⁶¹/₆₄"



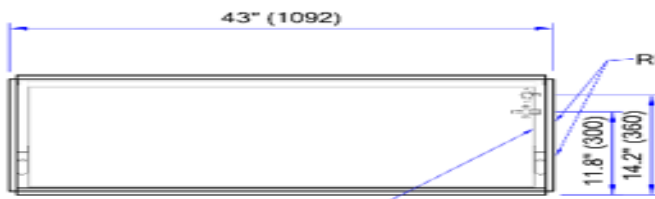
Room thermostat (place in the environment)

DEPTH x WIDTH x HEIGHT
17²³/₃₂" x 35⁵³/₆₄" x 9¹/₁₆"

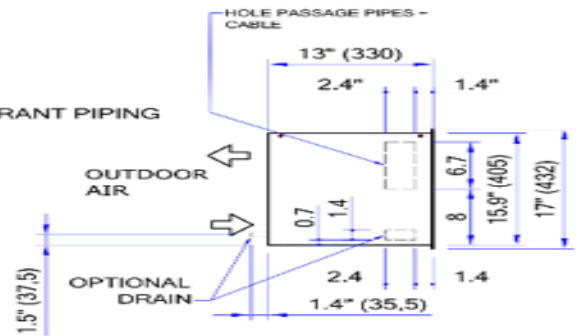
DESCRIPTION : EVAPORATOR
FRC – CL – 140 RIF : NYC

**FRC SERIES
MODEL CL 210**

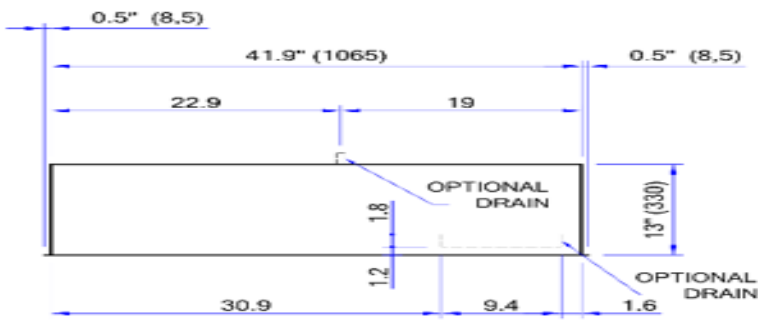
**DIMENSIONS CEILING SPLIT UNIT
MODEL CL 210 – up to 22 850 Btu/h**



FRONT VIEW



LATERAL VIEW

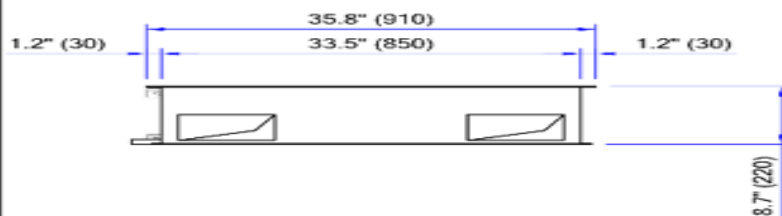


PLAN VIEW

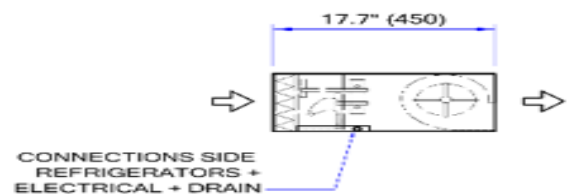
CONDENSER UNIT

DESCRIPTION : CONDENSER - MODEL HEAT PUMP
FRC - CL - 210 RIF : NYC / Cooling : 22.850 BTU/H

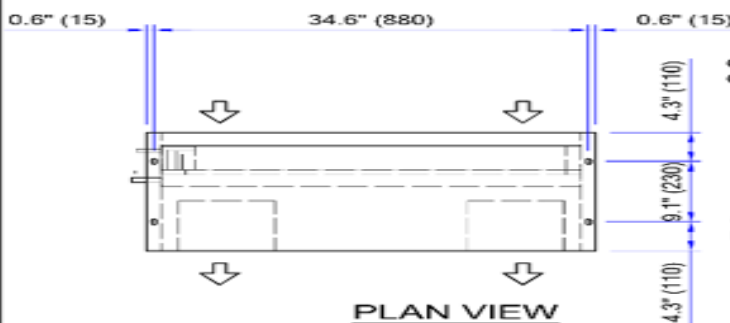
DEPTH x WIDTH x HEIGHT (Sleeve)
13" x 41²⁹/₃₂" x 15¹⁵/₁₆"



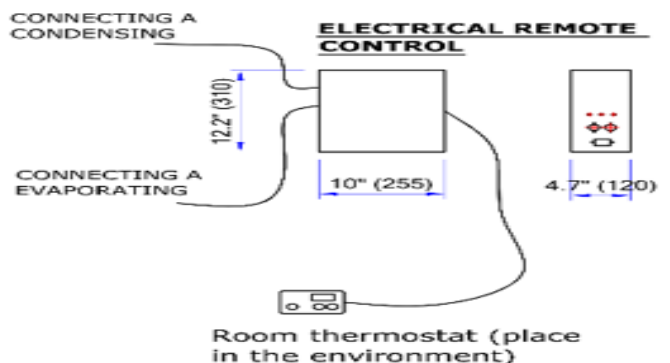
FRONT VIEW



LATERAL VIEW



PLAN VIEW



Room thermostat (place in the environment)

EVAPORATOR UNIT

DESCRIPTION : EVAPORATOR
FRC - CL - 210 RIF : NYC

DEPTH x WIDTH x HEIGHT
17²³/₃₂" x 35⁵³/₆₄" x 9¹/₁₆"



INNOVATION IN HIDDEN
TEMPERATURE CONTROL

Ambiance Air

A concealed luxury PTAC

Serie FRC – CL (Ceiling Unit)			MODEL 140	MODEL 210
HEATING PUMP CAPACITY Indoor temperature 70°F Indoor humidity 55% Outdoor air +47°F	high speed	BTU/h	18,024	25,942
	medium speed	BTU/h	16,777	23,185
	low speed	BTU/h	16,106	21,580
	high speed	kW	5.9	8.5
	medium speed	kW	5.5	7.6
	low speed	kW	5.3	7.1
Coefficient of performance	C.O.P.	(BTU/h)/kW	14.8	14.1
Total power input	nominal	kW	1.4	2.1
Electrical power	nominal	A	7.2	10.9
2 STAGE HEATERS Indoor temperature 70°F Indoor humidity 55%	high speed	BTU/h	10,227	10,227
	medium speed	BTU/h	5,114	5,114
	low speed	BTU/h	5,114	5,114
	high speed	kW	3.0	3.0
	medium speed	kW	1.5	1.5
	low speed	kW	1.5	1.5
Total power input	nominal	kW	3.3	3.3
Electrical power	nominal	A	15.6	15.9
COOL CAPACITY TOTAL Indoor temperature 80°F Indoor humidity 51% Outdoor temperature +95°F Outdoor humidity 39%	high speed	BTU/h	15,710	22,850
	medium speed	BTU/h	15,287	22,279
	low speed	BTU/h	15,342	21,679
	high speed	kW	4.6	6.7
	medium speed	kW	4.5	6.5
	low speed	kW	4.5	6.4
Energy efficiency ratio	E.E.R.	(BTU/h)/kW	13.7	13.5
Total power input	nominal	kW	1.1	1.7
Electrical power	nominal	A	5.7	8.5
Air flow	high speed	cfm	387	481
	medium speed	cfm	327	391
	low speed	cfm	286	331
Power only fan	high speed	kW	0.09	0.11
	medium speed	kW	0.08	0.10
	low speed	kW	0.08	0.08
Available air pressure	max	Pa	90	60
Power consumption	stand-by	kW	0.01	0.01
Maximum power consumption	max	A	10	16
Source voltage		standard	208-230 volt\1phase\60herz	
Refrigerant		type	R134A	
Noise room level cold	max-med-min	dB(A)	41-32-30	44-36-33
Noise room level heat pump	max-med-min	dB(A)	42-33-30	44-38-34
Noise room level electric heaters	max-med-min	dB(A)	35-31-29	37-32-29
Noise external level	max-min	dB(A)	45-33	49-36
Refrigerating pipes	nominal	inches	1/4 - 3/4 (up 5 meters)	
Weight internal unit		kg	15	15
Weight external unit		kg	36	40

Noise hemispheric field at a distance of 3 m in room ambient - Noise hemispheric field at a distance of 10 m in external ambient

Heatpump designed to operate up to 32°F outside in winter - Temperatures below the heating is provided only by electric heaters

Specifications are subject to change without notice.

Copyright © 2017 AMBIANCE AIR



ACCESSORIES for all version CU-WL-CL

FRC SERIES MODEL 140	FRC SERIES MODEL 210
WATER COIL + 24Vdc/ac (140) VALVE	WATER COIL + 24Vdc/ac (210) VALVE
STEAM COIL + 24Vdc/ac (140) VALVE	STEAM COIL + 24Vdc/ac (210) VALVE
WATER COIL (140)	WATER COIL (210)
STEAM COIL + 24Vdc/ac (140) VALVE	STEAM COIL + 24Vdc/ac (210) VALVE
ELECTRIC HEATER 750+750W	ELECTRIC HEATER 1500+1500W
STANDARD WIFI KBLUE THERMOSTAT	
WATER CONDENSATE DRAIN PUMP SPRAY + WATER FILTER	
FREON LINES 3/8" and 1/4" – Maximum Length 50 Feet	

Custom shop details:

- Custom fan for long ductworks: up to 65 Feet long / pipe diameter: 9.8"
Please contact us for specific needs

MODEL – HEAT PUMP – FRC SERIES CL 140 / 210



- COMPRESSOR UNIT
- EVAPORATOR UNIT