

# UNDER COUNTER COMBI SERIES

## WITH INVERTER SYSTEM



Introducing our Under Counter Combination Chiller & Freezer Series with Inverter Compressor System – engineered for efficiency, safety, and durability. Enjoy superior energy savings, rapid cooling, and optimized performance.

Our Undercounter Combination Chiller and Freezer series combines efficient cooling with ample prep space on top, perfect for busy commercial kitchens. Designed to thrive in high-heat environments (up to 43°C), these units are crafted from durable stainless steels, ensuring long-lasting performance and easy cleaning.



Features & Configurations	03-04
Inverter Compressor System	05-06



DN-IAWRF15 / DN-IAWRF18

Model No	DN-IAWRF15	DN-IAWRF18
Net Volume (L)	380L	430L
External Dimension (W x D x H mm)	1500 x 750 x 850	1800 x 750 x 850
Cooling Type	Ventilated	
Defrosting Type	Automatic	
Temperature Range (°C)	+0°C ~ -20°C	
Ambient Temperature (°C)	43T	
Refrigerant	R-290	
Voltage / Frequency	220V / 50-60 Hz	
Rated Power / Current	259W / 1.3A	
Phase	Single Phase	
Compressor Model	VENT406U	
Door	2	2
Type	Combination	Combination

## FEATURES & CONFIGURATIONS

- No welding and polishing on the exterior surface of the unit.
- Door gasket is easy to remove for cleaning and replacement.
- Wide round edges and corners for easy cleaning.
- Monoblock refrigeration system, easy to remove for repairing and cleaning.
- External LED lighting for operation.
- Adjustable feet, up to 200mm (40mm for some models).
- High density, CFC-free insulation, 60mm thickness, 40Kg/M<sup>3</sup>.
- Self-closing door.
- Heated door frame to avoid water condensation (for freezer models only).
- Full copper evaporator, fast cooling.
- High-speed fan motor ensures even cooling throughout the interior.
- Digital thermostat with temperature display for precise food temperature control.
- Defrosting system by time and temperature (natural defrosting for chiller).
- Draining system/hole inside for defrosting water.
- Works in ambient temperatures up to 43°C (38°C for some models).
- Exterior of AISI 304 stainless steel, back of galvanized metal plate. Interior of AISI 304 stainless steel.
- Options: Castor wheels, AISI 304 stainless steel, 220V/60Hz.



38°C - 43°C  
ambience



Inverter  
Compressor



Forced Air  
circulation



Defrosting by  
heating element



Evaporated  
by hot gas

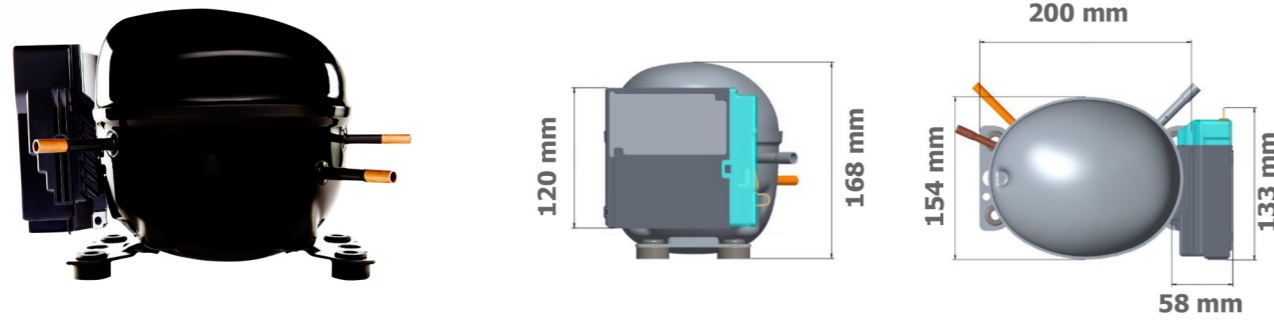


R-290

Warranty: One-year parts & labor for entire unit, 2<sup>nd</sup> year on compressor only, excluding doors & exterior damages.

**Main Component**

**EMBRACO COMPRESSOR (Inverter) Series**

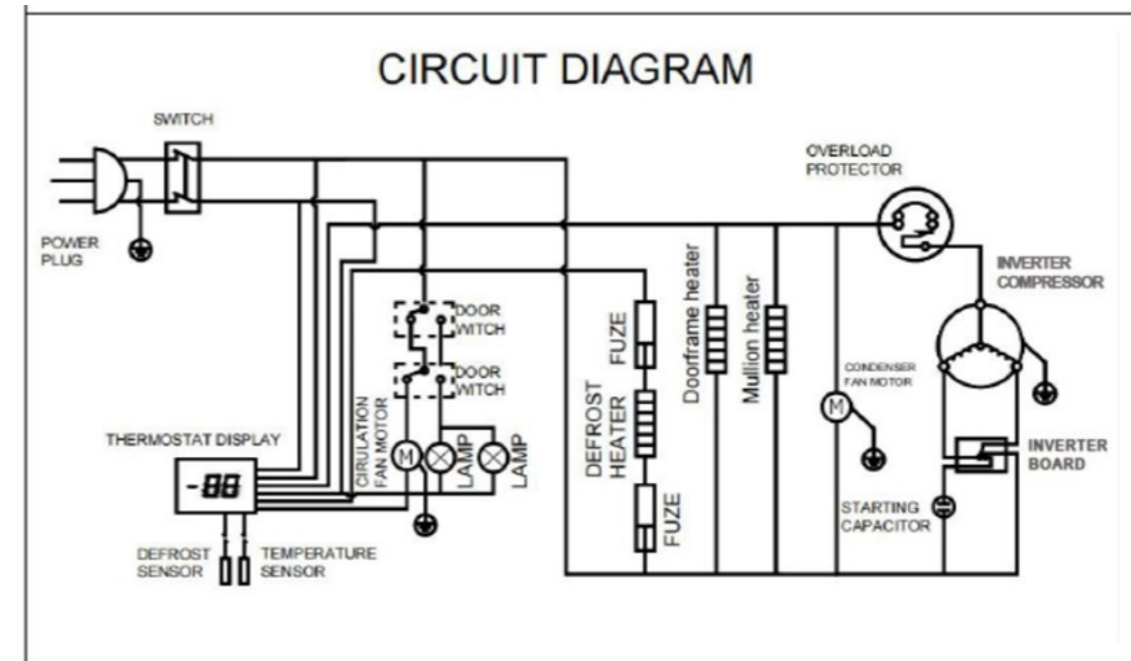


Embraco variable speed compressors are a solution for residential and commercial applications which demand fast cooling, low energy consumption, operate with a low starting voltage and with a wide operating range, low noise and vibration levels. The variable speed compressor associated with an inverter allows the compressor to run in different RPM, delivering the cooling capacity needed according to the thermal load.

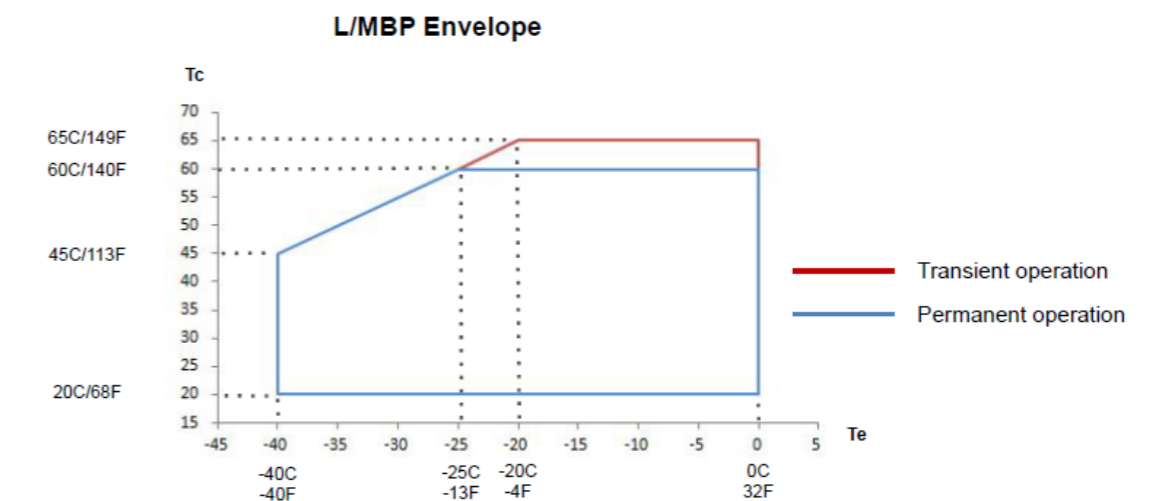
**FEATURES**

- **Efficiency:** Higher EER on R290 for commercial applications at variable speed
- **Wide Voltage Range:** Guarantee for the equipment to run even with voltage fluctuation
- **Environmentally Friendly:** Uses R290 natural refrigerant with no impact on the ozone layer (GWP: 3)
- **Lower Noise & Less Vibrations:** Consistent noise level reduction
- **Longer Expected Lifespan:** Softer startup, lower stress on mechanical and electrical parts

Model No	VENT406U	VEHT409U	VEHU413U
Nominal Voltage (V)	115-240V	115-240V / 220-240V	115-240V / 220-240V
Frequency (Hz)	50-60Hz		
Disp (CC)	6.36	9.04	12.74
Refrigerant	R-290		
Inverter - Power Input	400W DV	550W DV / 1000W PFC	1000W DV / 1000W PFC
Operating Temperature	+0°C ~ -40°C		
Speed Range (RPM)	1600 to 4500		
Cap Range - Cooling Capacity	155 - 445	228 - 675	343 - 939
Max Coefficient of Performance (W / W)	1.72	1.79	1.71



**L/MBP (Low/Medium Back Pressure) Compressor Operating Envelope**



**Insights:**

- The condensing temperature can go up to 60°C (140°F) in continuous operation but can spike up to 65°C (149°F) transiently.
- The evaporating temperature can drop as low as -35°C for safe continuous use, with the compressor capable of handling even lower temperatures (-40°C), but only temporarily.
- The graph shows the compressor's performance limitations and indicates where it performs best without risking damage due to excessive pressure or temperature extremes.

**DANENG KITCHEN EQUIPMENT PTE LTD**  
Commercial Kitchen Equipment Specialist in Singapore

Sales: +65 6747 0435 / Email: sales@daneng.com.sg  
Office: 3 Kaki Bukit Industrial Terrace, Singapore 416091

www.daneng.com.sg

