



Tecumseh

VTC Compressor and Controller



Key Features and Benefits



REDUCE ENERGY CONSUMPTION

Optimizes energy usage by dynamically matching the capacity of the compressor to the refrigeration system's cooling demand.



COMPACT SIZE

Delivers the same capacity as a larger displacement, single-speed compressor, making more room for refrigerated goods.



ECO-FRIENDLY

Optimized for use with eco-friendly hydrocarbon refrigerant R290 (propane).



GLOBAL VOLTAGE STABILIZATION

Electronic controller handles voltage inputs from 85 - 260 VAC, 50 / 60 Hz. Under/over voltage protection is built-in.



TEMPERATURE CONTROL

High speed compressor operation is used for fast pull-down while low speed operation is used to maintain cabinet temperature with minimal energy consumption.



RAPID PULL-DOWN

Peak periods throughout the day, typically around meal times, place additional demands on refrigerated equipment. By operating the compressor at higher speeds, the time required to pull-down cabinet temperatures is greatly reduced.

COMPRESSOR INFORMATION

Capacity Range:

- LBP Capacity Range: From 165 -1,765 Btu/h
- L/MBP Capacity Range: From 449 - 3,881 Btu/h

Refrigerant:

R290 (Propane)

Application(s):

Low / Medium Temperature: -31°F (-35°C) to +23°F (-5°C).

CONTROLLER INFORMATION

Global Voltage Range: 85-260 VAC, 50/60 Hz

Options:

1. Algorithm for use in “drop in” applications
2. Serial Control or Frequency Control.

Key Features:

- System Control Integration
- Soft-Starting / Current Control
- Communications Interface
- RPM “Skip” Capability
- Sine Wave Motor Speed Control
- Voltage Stabilization
- High-Load Starting
- Diagnostics
- Electronic Protection

VTC Series Compressor

VTC SERIES COMPRESSOR NOMENCLATURE

VTCX330U

VTC

Compressor Family

VTC

X

Digit Number

Number of digits composing the cooling capacity

3

Digit Number

Number of digits composing the cooling capacity

30

Digit Number

Number of digits composing the cooling capacity

U

Refrigerant

U-R290

| Application | |
|-------------------------|-----------------------|
| Evaporation Temperature | Rating Point |
| X - L/MBP | -23°C/-10°F |
| | -6°C/20°F |
| | Motor Starting Torque |
| | High |

| Cooling Capacity |
|--|
| Corresponding to the first two figures of the cooling capacity expressed in Btu/h. |
| In this example 3 total digits, with cooling capacity 30 means 300 Btu/h. |

VTC SERIES COMPRESSOR CAPACITIES

| | Btu/h | 200 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1100 | 1200 | 1300 | 1400 | 1500 | 1600 | 1700 | 1800 | 1900 | |
|----------|-------|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|--|
| VTCX330U | Watt | 59 | 88 | 117 | 147 | 176 | 205 | 234 | 264 | 293 | 323 | 352 | 381 | 410 | 440 | 469 | 498 | 528 | 557 | |
| VTCX360U | | | | | | | | | | | | | | | | | | | | |
| VTCX419U | | | | | | | | | | | | | | | | | | | | |
| VTCX415U | | | | | | | | | | | | | | | | | | | | |

Conditions: Evap -23.3 C, Cond 54.4 C, Ambient 32.2 C, Suction Gas 32.2 C, Liquid Return 32.2 C - ASHRAE 32 LBP 2500 - 4500 RPM / 220 V 60 Hz

| | Btu/h | 500 | 700 | 900 | 1100 | 1300 | 1500 | 1700 | 1900 | 2100 | 2300 | 2500 | 2700 | 2900 | 3100 | 3300 | 3500 | 3700 | 3900 | |
|----------|-------|-----|-----|-----|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|--|
| VTCX330U | Watt | 147 | 205 | 264 | 322 | 381 | 440 | 498 | 557 | 615 | 674 | 733 | 791 | 850 | 909 | 967 | 1026 | 1084 | 1143 | |
| VTCX360U | | | | | | | | | | | | | | | | | | | | |
| VTCX419U | | | | | | | | | | | | | | | | | | | | |
| VTCX415U | | | | | | | | | | | | | | | | | | | | |

Conditions: Evap -6.7 C, Cond 54.4 C, Ambient 32.2 C, Suction Gas 32.2 C, Liquid Return 32.2 C - ASHRAE 32 LBP 2500 - 4500 RPM / 220 V 60 Hz

Cooling for a Better Tomorrow™

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COMPRESSOR AND CONTROLLER DIMENSIONS

Universal Model

