



## VIC1500-\*\* Inverter for WR Series FUSION-TEC™ Products

### Introduction

The VIC1500 inverter allows for operation of the FUSION-TEC™ units in free cooling economizer mode during a power outage when a generator is not present at an equipment site. When 230VAC shore power is lost, a power loss relay is activated, and the units will operate in free cooling economizer mode using -24VDC or -48VDC battery power until shore power is restored. A fault signal indicating power loss will also be sent to the LC6000 to indicate the units are running in inverter power mode.

The VIC1500 will operate the WR series units when shore power is lost, but will not indicate a fault signal to the LC6000 controller.

### Inverter Nomenclature

The VIC1500 inverter is available for operation using -24VDC or -48VDC battery power during a loss of shore power.

**VIC1500-48**

Inverter Model

48 – Uses -48VDC battery power  
24 – Uses -24VDC battery power

### Unit Nomenclature

The WR Series unit must be ordered with a heater package that includes the correct breakers to operate blower and economizer operation.

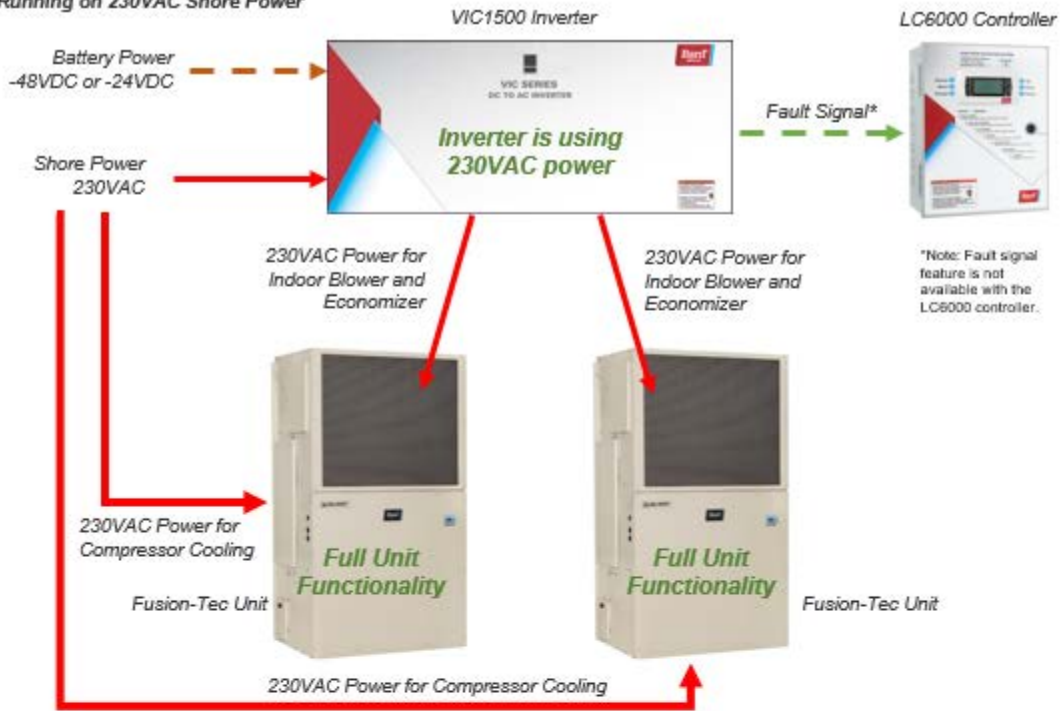
**WR\*\*\*P\*\*MZ\*\*\*\*\***

Unit Model Number

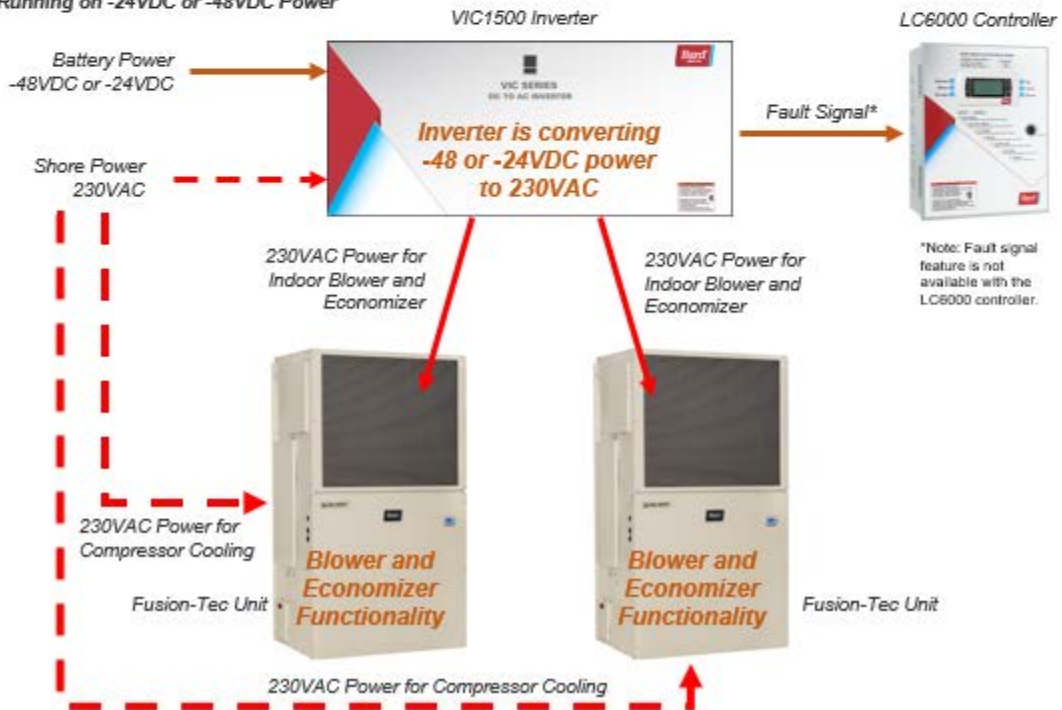
MZ – 0kW with Inverter  
M1 – 1kW with Inverter  
M5 – 5kW with Inverter

# VIC1500 Inverter Operation Overview

## Units Running on 230VAC Shore Power



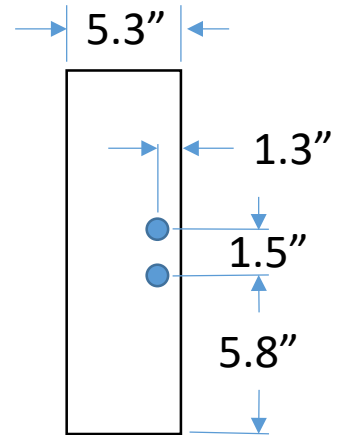
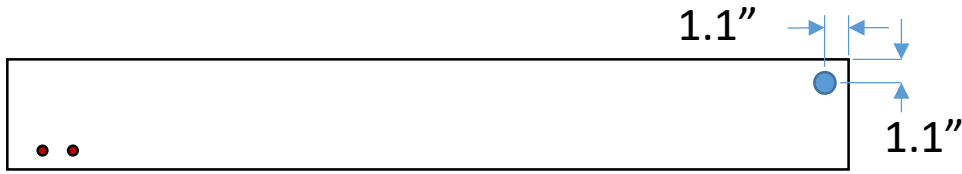
## Units Running on -24VDC or -48VDC Power



# VIC1500 Specifications

Description	Specification
<b>VIC1500-24 Specifications</b>	
-24VDC Voltage range	-21VDC to -33VDC
-24VDC Wiring	Use 6 gauge min. wire between the VIC1500 and the -24VDC power source.
VIC1500-24 DC Breaker	-24VDC Incoming Power uses a 30A circuit breaker.
<b>VIC1500-48 Specifications</b>	
-48VDC Voltage range	-42VDC to -66VDC
-48VDC Wiring	Use 6 gauge min. wire between the VIC1500 and the -48VDC power source.
VIC1500-48 DC Breaker	-48VDC Incoming Power uses a 20A circuit breaker.
<b>General Specifications</b>	
Fault Wire to LV1000	Use 18 gauge min. wire between the VIC1500 and the LC6000 for fault detection.
230VAC Inverter Wiring	Use 14 gauge min. wire between the VIC1500 and the HR unit blower circuit breaker.
Grounding	Earth ground must be used. Grounding posts and lugs are included with VIC1500.
<b>Inverter Specifications</b>	
Rated Power	1500VA±3%
Surge Power	<2650VA
Maximum Output Power	>1500VA~1730VA (100%~115%)
Output Wave Form	Pure sine wave (THD <3% @ Normal Load)
Operating Temperature	-4°F (-20°C) to 104°F (40°C)
Storage Temperature	-22°F (-30°C) to 158°F (70°C)
Storage Humidity	10 to 95%RH
DC Input Reverse Polarity	Protected by fuse.
LED Indicators	Input Voltage Level, Output Load Level, Fault Status.
Output Overload Protection	Shutdown output voltage, restart to recover.
Input Overload Protection	Shutdown output voltage, restart to recover.
Over Temperature Protection	Heat sink temperature over 176°F, shutdown output voltage, recover automatically after heat sink temperature goes down to 140°F.
Cooling	Temperature and load control cooling fan.

# VIC1500 Dimensions



.88" Knockouts (4) Places



Ground Lug Locations



Bard Manufacturing Company, Inc.  
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 www.bardhvac.com

Due to our continuous product improvement policy,  
 all specifications subject to change without notice.

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