

# Application Note 1032

## Generator Application of HVAC Inverter Systems

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## Introduction

This application note is to serve as a guide to applying HVAC inverter systems to generators that supply power for operation.

## Generator Application of HVAC Inverter Systems

Please be advised that using Mitsubishi HVAC Inverter systems on generator applications has benefits over non-inverter systems. The most important benefit is the fact that an inverter system does not start with as high an amp draw as a conventional single speed unit. Therefore, the generator does not have to be sized for a large starting amp draw.

Inverter systems start with soft start, meaning that the compressor starts slow so the unit draws considerably fewer amps on start up. Also the fact that inverter systems match the load of the day by varying the compressor speed makes the system more efficient by allowing the unit to run continuously. Running continuously is a benefit on a generator as it does not have to start and stop so often reducing the wear and tear on the generator itself.

Generators should be sized on the amount of wattage needed for the conditions of operation of the HVAC system and any other loads added to the electrical system. Generators should be able to provide enough wattage and clean voltage between 187 and 253 VAC at all times.