

# Air outlet temperature standard for air-cooled generators



## Overview

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Cooling systems are designed to provide adequate cooling for full load operation at a specified ambient air temperature typically between 40C° (104F°) and 50C° (122F°). Air cooled unit draws cooling air from different ends of the unit to cool the system, dependent upon the units cooling system design. Check with the generator's manufacturer to determine the optimal cooling method for the system. Factors such as climate and direction of prevailing winds must be . al use alternators is 40°C. Like ICE-powered automobiles, ICE electrical generator systems have radiators and exhaust systems that reject heat.

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### Cummins Onan Generators

Although generator air inlet and outlet configurations vary from generator set to generator set (or model to model, etc.), hot air recirculation must be considered in each case, and a conscious effort in

### Microsoft PowerPoint

For totally enclosed water-air cooled machines, the cooling air temperature is that of the air leaving the coolers. On machines designed for cooling water from 50 to 300 C -the temperature



### [Ambient Capability of Enclosed Generator Sets , Cat , Caterpillar](#)

When specing a generator set with an enclosure for use in a hot climate, outside air temperature defines the ambient capability. Site conditions, including altitude and relative humidity, will cause the ambient

### Generator temperature in an enclosed compartment , Eng-Tips

Champion generators states that 40C or 104F is the max ambient operating temperature for their air cooled generators. Since Honda ignored my request for information, I assume the





## GENERIC GENERATOR INSTALLATION MANUAL

Factors such as climate and direction of prevailing winds must be considered in an outdoor installation. If your generator is expected to be in temperatures lower than -20 o F (-29 o C) consult the generator

### AGN 088 Air Flow and Cooling

The air outlet ductwork must again be designed to incorporate no 90o sharp bends, and be of a cross sectional area designed in conjunction with the ductwork overall length, such that the pressure drop



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Examples are NFPA110 which requires the minimum ambient temperature around the generator set to be 40 ?F (4 ?C), and CSA 282 which requires this minimum temperature to be 10 ?C (50 ?F).

### [Examples of Airflows for Different Enclosed Generator Applicatio](#)

the manufacturer had to consider the same airflow requirements for indoor applications. This information sheet discusses the design requirements for generator system enclosures, the different types of



### Generator Enclosure Spacing Design Guidelines

Most electrical generator systems utilize a unit-mounted radiator system with an air-moving fan

to provide cooling and robust operation. This white paper provides guidelines on best practices to

## Generator Enclosure Spacing

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