Air-cooled generator inlet temperature

Generator sets must be properly installed to ensure that cooling air is not restricted or artificially heated by nearby heat sources or from recirculation. Fortunately, installation influences can be simulated ...

This paper aims at differentiating between the ambient temperature vs. air-on-core (AOC) method of rating the performance of a cooling system used on a generator set.

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 ...

As a starting point, if the ductwork at both inlet and outlet is only some 1.5m long [at each end], then the cross sectional area of the inside of the ductwork should be twice the area that is designed at the ...

Totally Enclosed Air-to-Air Cooled TEAAC (CACA) Cooling air supplied by shaft-mounted fan or separate blowers. 50 to 100 CFM per kW of losses. Oversized for a typical 20o C rise over ...

When discharging air vertically, because the generator is surrounded on all sides, can result in higher than ambient air temperatures being pushed into inlet vents.

If I am challenged with air temperatures, an inexpensive way to increase air flow is to put a free standing fan on the ledge of the inlet air or on the floor to force more inlet air into the ...

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 ...

In this method of cooling, inlet air to the compressor is cooled from ambient temperature to a lower temperature by means of an "ammonia-water" vapor absorption ...

Generators specifically designed for high altitude may have a larger fan to partially compensate for reduced heat capacity of air, or could be oversized to run cooler under these conditions.

Air-cooled generator inlet temperature

Web: https://www.black-hat.co.za