

The Difference Between Single Phase and Three Phase Generators

As we offer a wide variety of generators, designed to meet any requirement, there may be a few technical differences you don't quite understand if you're not well-versed in generator jargon. For example, the difference between our Single Phase (1PH) & Three Phase (3PH) UK-manufactured Generators. In this post, we'll give a brief and easily understood answer to one of our more frequent questions.

Simple Definitions



A Single Phase generator contains 3 cables, Live, Neutral and Earth. A Single Phase Generator is usually quite small, typically having a voltage between 180 to 240v depending on whereabouts in the world the generator is being shipped. Here in the UK, the typical domestic household is 1PH supplied, and this is easy to remember if you also know that a UK plug has an Earth, Neutral and Live wire also.

Three Phase Generators on the other hand contain 5 cables. These include the same Live, Neutral and Earth wires, but with 2 extra Live cables. Like a Single Phase Generator, the voltage of a Three Phase Generator depends on the region but is normally between 380 to 440v. It's larger size means its most common use case is larger-scale operations, such as in hospitals, hotels and more.

Which do I need?

With a Single Phase generator, power is generated across one single wave. This means the power level will likely begin to drop throughout the process. These drops generally are essentially insignificant smaller-scale operations but could cause complications as the power you need increases. In smaller construction sites, residential homes or other small areas with a fairly low power need, a Single Phase Generator from us is a perfect power solution.



In larger operations, you are likely to need a Three Phase Generator. This is because a Three Phase generator produces three individual waves of power operating simultaneously. This guarantees that power levels never vary and dip, unlike Single Phase Generators. Due to this design, Three Phase generators output far more power than their 1PH counterparts and are considered far more reliable. With increased power and reliability, our Three Phase Generators are best applied when larger-scale operations need a power solution. For example, larger offices or medical centres.

Why buy either from CPS?

Here at CPS Generators, we offer the highest quality generators, Three Phase or Single Phase; Silent or Open Set, no matter where you are in the world. Made by our industry-leading team in the UK, with only the best genuine parts. We offer a wide variety of Diesel Generators for any occasion, and bespoke power solutions tailored to perfectly suit your needs. No matter what you need, CPS will supply it with Industry-leading quality, competitive pricing and unrivalled after service care. So check out our selection [HERE](#) today.