



230V “2-PHASE” POWER DESIGNATION

Our products that require 230/1/60 power are designated 230/2/60 to differentiate them from these applications in Europe.

230V in Europe is true single phase, that is, there is one hot lead and one grounded neutral lead (like our 115V single phase) so there is 230V between the leads. 230V in NA is often delivered with two hot leads that are phased 180° apart, and a separate chassis ground, so that there is 230V between them and 115V between each hot lead and ground. This is how 115V is delivered from the breaker panel to the receptacles in our homes and how we have 230V available for appliances. Here in NA this is sometimes referred to as “split phase”. The MTA factory refers to it as “two-phase”. Both descriptions are accurate. The UL fusing of the MINI 10’s protects both hot leads.

In the case where the 230V is delivered from a single-phase transformer, the set-up will be like the EU version – one hot and one grounded neutral. In this case the neutral leg of the MINI 10’s will have fuse protection that is not necessary, but not a problem.

The chiller only cares that there is 230V potential between the incoming power legs to function, so it will operate in either arrangement. Since we do not know if the supplied power will be true single-phase or “split phase” (“two-phase”), UL requires that we provide protection for the worst (possibly dangerous) case.

So, the “2-phase” labeling is correct and is designed to inform the installing electrician that the chiller is safe for use with incoming power that consists of two hot leads and a separate ground.

Earlier labeling (single phase) was left over from when the factory was shipping true 230V single-phase construction. When we added the fusing to the second leg to satisfy UL, we did not change the label. The latest shipments have factory fusing, thus the new, more accurate labeling.