



MULTIPLE « H » SYNCHRO SYSTEM WITH BUS TIE BREAKER

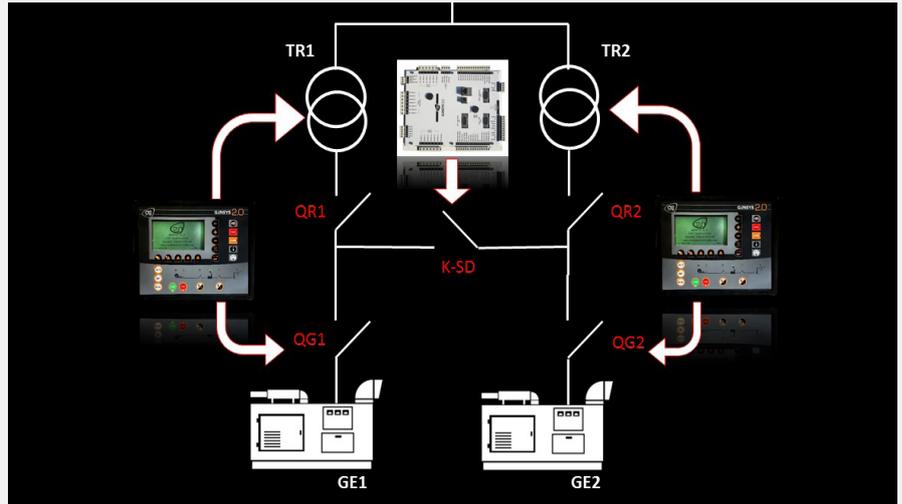
with PLC & GENSY2.0

On critical applications such hospitals, data centers, or banking centers, where energy availability is a priority, power plants are often build following a specific diagram design in H, providing a combination of 2 gensets and 2 utility inputs, connected by a middle bus tie, this design allows many backup operations for a safe power supply. CRE TECHNOLOGY can advise and participate to specification, to recommend the most consistent way of using its products, depending on the end customer request, all applications are possible thanks to our application engineering service and to the flexibility of our products.

EXAMPLE OF «H» APPLICATION

The application describe in this case study is one of the most complete, the CRE TECHNOLOGY system installed is involving 2 **GENSYS 2.0**, each one is controlling 1 utility input and 1 genset.

These modules are combined with 1 **MASTER2.0 CORE** for bus tie synchro sequences and a **PLC** supplied and programmed by CRE TECHNOLOGY, in order to manage all power management scenarios, the PLC is delivered with 2 **Synch Check Relays** for a better security.



APPLICATIONS

Scenario 1

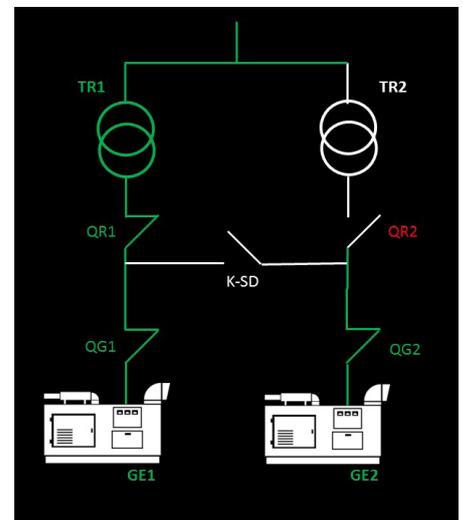
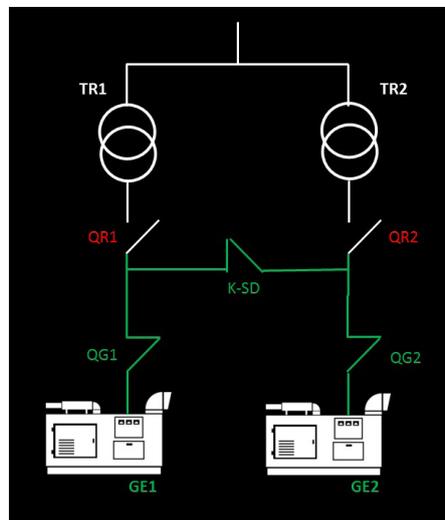
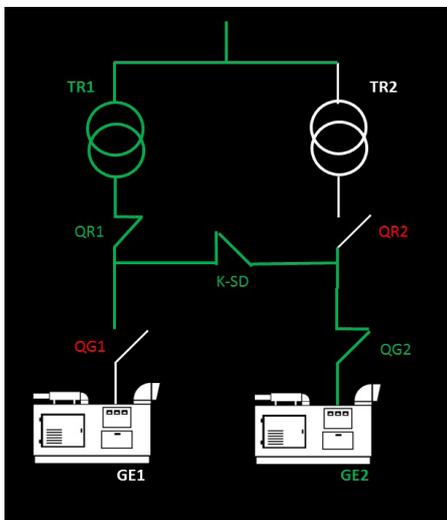
In this case, it is considered that GE n°1 and TR2 utility input are unavailable, so if the system requires the remaining genset to be paralleled with the grid, for a no break load transfer or a base load sequence, the “cross” synchronization between GE n°2 and TR1 will be done by synchronizing the bus tie breaker with the **MASTER 2.0 CORE**, through a signal sent by PLC. The same scenario is applicable between Ge n°1 and TR2.

Scenario 2

In this case, it is considered that all the mains are unavailable, tripping out TR1 and TR2 breakers, if the load is requiring the 2 gensets to be in parallel to supply enough power, each **GENSYS 2.0** will first close their breakers and **MASTER 2.0 CORE** will synchronize both of them to get a 2 genset power plant sharing the load.

Scenario 3

In this case, the 2 gensets are independently running on their own load branch with bus tie open and mains open, if it comes necessary, for a load support or after operator request, to synchronize 1 genset with its branch utility input, each **GENSYS 2.0** can synchronize individually on the grid while the second one remains on single power production.





EXPERT IN GENERATOR SOLUTION

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MULTIPLE «H» SYNCHRO SYSTEM_EN_A2018

