

# PSK 83.3Hz Generator



The PSK 83.3Hz Generator was engineered and produced in collaboration with Tekfer Industries. It can supply track circuits with 83.3Hz alternating voltage and modulated with the specific phase modulation law (PSK). Two regulated voltages Indoor (Locale) and Outdoor (Campagna) are generated; its value can be set to a predetermined range by means of a dedicated connector block.

The principle advantage of powering the Track Circuits at 83.3Hz is to make them immune to interferences generated from adjacent 25kVac lines at 50Hz. The PSK 83.3Hz Generator is always supplied in a kit consisting of two generators and a switch control board in order to guarantee a 1 out of 2 hot standby. The switch control board ensures

the continuous load connection to only one of the generators and in case of breakdown, in a time (typically 12mS) inferior to the Reset Time of the signalling relay, it will switch the load over to the second generator.

The PSK 83.3Hz Generator is characterized by a high level of reliability and simplicity in its construction and it is equipped with a sophisticated control system that manages its operating modes and diagnostic alerts. The product is approved according to the **RFI DTCDNSSSTB SR IS 06 029A** Italian Railway Specification.



## SAFETY

The PSK 83.3Hz Generator is realized with a safety architecture that ensures a SIL4 Safety Integrity Level, according to the Cenelec EN 50129 and EN 50126 regulations.



## VOLTAGE CHANGE

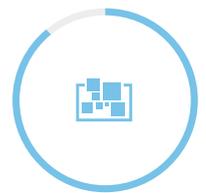
The PSK Generator is equipped with a Manual Voltage Change that permits to select 1 of the 6 possible Voltages for each of its two outputs.



## VARIOUS MODELS

Available configurations:

- CAT/PROG 820/930**  
2 generators 3kVA (Vin: 380Vac three phase) and 1 switch control board
- CAT/PROG 820/931**  
2 generators 5kVA (Vin: 380Vac three phase) and 1 switch control board
- CAT/PROG 820/932**  
2 generators 7,5kVA (Vin: 380Vac three phase) and 1 switch control board
- CAT/PROG 820/935**  
2 generators 15kVA (Vin: 380Vac three phase) and 1 switch control board
- CAT/PROG 899/665**  
2 generators 3kVA (Vin: 150Vac single phase) and 1 switch control board
- CAT/PROG 899/666**  
2 generators 5kVA (Vin: 150Vac single phase) and 1 switch control board



## MODULAR

Each configuration is equipped with a suitable switch control board to manage the generators in hot standby. It is possible to set the switch control board to manual, to allow the maintenance of one of the two generators without any service interruption.