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POWERSAFE-PWM

High Performance
Voltage Stabilisers
PWM Technology

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HIGH PERFORMANCE VOLTAGE STABILISERS PWM TECHNOLOGY

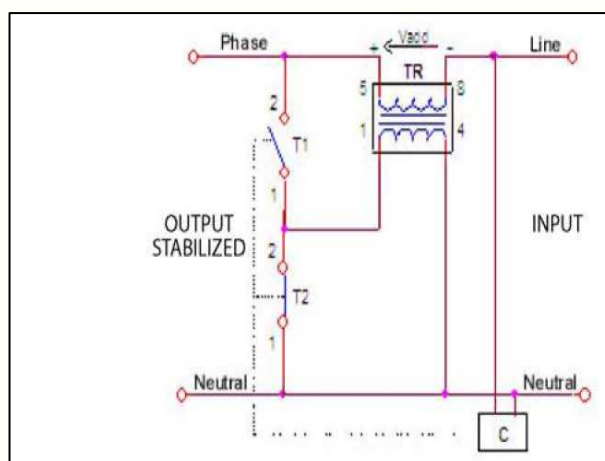
(Electronic, IGBT Bases)

TR: series transformer (booster)

T1-T2: IGBT solid state switch (high frequency inverter)

C: Voltage control main card integrated circuit

V add: Additional Voltage



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Belotti Variatori introduce the latest IGBT solid state power electronics technology (patent pending) in the voltage stabilisation field. Variable transformer, driving engine and specific voltage control circuit of electromechanical stabilizer are eliminated by the use of solid state IGBT switch. No moving parts (**brushless**) and perfect magnetic/electronic integration allows **high stabilization precision ($\pm 1\%$) and speed 30ms, complete range linearity** (no holes in the regulation range) and more efficient voltage resolution than any other electromechanical stabilizers. This means **no maintenance need**, higher performance and **lighter and more compact machines**. Other electronic stabilisers use triac components in order to adjust voltage output: this cause the system to work as a step regulator (no linearity), leading to a limited resolution and waveform distortion. IGBT State of the art semiconductor power technology manages only the power part which needs to be regulated, allowing for high reliability, efficiency and no waveform distortion. Single phase and three phase system available with voltage regulation capacity in a broad range and standard power ranging from 2 to 40 kVA (lower or higher power system available on demand). Open frame and enclosed system available to cover different customer applications.

System Architecture

