

## CASE STUDY

<b>Project:</b>	<b>Philips AVR</b>
<b>Countries:</b>	<b>Head Offices in the Netherlands and Worldwide</b>
<b>Project Value:</b>	<b>Various</b>
<b>Year:</b>	<b>2003 -ongoing</b>
<b>Product:</b>	<b>AVR</b>



Sollatek™

**PHILIPS**

sense and simplicity

## Sollatek aids Philips deliver accurate patient diagnosis

Sollatek, world leader in the field of voltage regulation and protection, is now tasked by Philips to ensure total integrity of its technologically advanced medical equipment in countries where electrical supply is irregular or compromised.



Philips, worldwide manufacturer of sophisticated medical equipment, produces Magnetic Resonance Imaging (MRI) and Computer Tomography (CT) scanners. Both these scanners image structures inside the human body, the CT scanner acting as complementary to MRI in pinning down the precise diagnoses of many pathologies. The sophistication and synergy of these two scanners put them at the forefront of today's fine-tuned diagnostic and monitoring expertise and they are therefore much in demand globally.

As preferred supplier for Automatic Voltage Regulators (AVR) to Philips, Sollatek is now to equip all the company's sophisticated medical equipment bound for developing countries or, where electrical supply is erratic. This is because Sollatek's comprehensive range of precision voltage regulators has the scope to provide the ideal solution to all installation needs.

Protection against voltage fluctuation, spikes and disturbance on the main electricity supply are paramount when medical equipment is in use. This is to ensure the delivery of accurate data to the medical practitioner on the patient being monitored. His/her confident diagnosis and follow-up treatment depend on this, as does the future well being of the patient.



Philips MRI and CT scanners are designed to tolerate optimal change in main voltage and, in many cases, for a supply which keeps within that range, no further stabilisation is needed. However, beyond certain parameters, additional protection is essential.

The Sollatek AVR is designed with a sensing circuit that constantly measures the supply voltage, automatically switching the taps of a secondary winding to maintain output voltage within a few percentage of nominal. Sollatek AVR tap switching is done electronically using semiconductor switching devices. This means no moving parts inside - therefore no maintenance needed.

The solid stage technology of the Sollatek AVR is ideally designed to function well in harsh environments, the AVR boasting a very

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wide input range of over 50%. Sollatek is to supply AVR custom made to Philips own specification, guaranteeing smooth running of Philips high tech equipment, even in places where electrical supply is highly erratic.

**Sollatek AVRs Three Phase** – 100 amps per phase comprise three identical single-phase regulator units. Each of these monitors its own output voltage and adjusts for variations in mains supply voltage to maintain an output voltage within close limits. Requiring no maintenance and having an excellent track record, Sollatek AVR will protect valuable and sensitive equipment for years to come to ensure that users can treat their patients confidently, safely and effectively.



*Internal view of a Sollatek Outdoor Isolating AVR.*

# Voltright™

## The Sollatek AVR Range

The Sollatek range of Automatic Voltage Regulators covers single and three phase applications. From small domestic (250 watt) to large industrial 500kVA applications, single and three phase applications, the Sollatek range of voltage regulators is your solution in the most erratic of power conditions.



AVR single phase

AVR single phase

AVR single phase

AVR single phase

AVR single phase

AVR three phase

AVR three phase OI