

# EcoDC MACS

## MODULAR ANODE CONTROL SYSTEM

**EcoDC MACS** is an innovative system design that enables flexible control of individual anodes or groups of anodes, by using a modular rectifier design. **EcoDC MACS** enables to program voltage or current profiles parallel to body movements.

Compared to conventional thyristor technology, **EcoDC MACS** provides a uniform coating over the entire vehicle body. The design of the rectifier modules uses IGBT technology to configure the system with maximum flexibility and optimal efficiency.

### Benefits of EcoDC MACS

- » Better energy efficiency
- » Better availability
- » High coating quality
- » Modular construction
- » Simple extension
- » Little space requirement
- » No standby rectifiers needed



# EcoDC MACS – MODULAR ANODE CONTROL SYSTEM

## Flexibility thanks to modularity

EcoDC MACS replaces conventional rectifiers units which use thyristor technology with modular rectifiers using IGBT technology with integrated galvanic separation. The modular control of individual anodes and specifically groups of anodes allows the software to be programmed for the control of the equipment. As a result each vehicle body type can have an individual voltage and current profile. The modular construction of the system can specifically affect the entire coating process.

## Better efficiency with high coating quality

IGBT technology provides a very low ripple level of less than 2% over the entire voltage and current range. This makes it possible to provide better coating with low surface irregularities. In addition, its efficiency factor is very high at 96% or more, providing energy savings.

## Better availability

EcoDC MACS is synonymous with lower production downtime. In case of the failure of a module or an anode, neighbouring anodes are compensated. Thus no production is lost and the impact on the coating quality is minimal. In addition, standby rectifiers are not required, creating further savings.



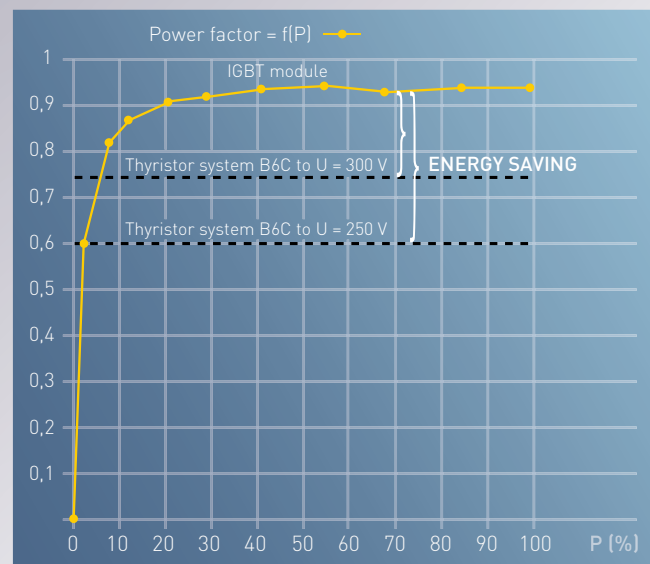
» Cabinet with compact rectifier modules

## Mains supply

The system can be supplied by the normal production mains electricity supply due to integrated galvanic module isolation. Isolation transformers which are needed in conventional systems can be eliminated.

## EcoDC MACS – Selected references:

- » Audi
- » BAIC Motors
- » BMW (Mini)
- » Chrysler
- » Fiat GAC
- » Ford
- » Porsche
- » Shanghai GM
- » Shanxi Victory Group
- » Valmet
- » Volkswagen
- » etc.



## Your contact

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