

# SIMOVERT MASTERDRIVES Vector Control Compact and Chassis Units



## Overcurrent protector units (OCP) for rectifier/regenerative units

## Compact and chassis units

### Technical characteristics

The OCP (overcurrent protector unit) is an autonomous module of the SIMOVERT MASTERDRIVES series. It can also be easily retrofitted to already existing equipment that includes rectifier/regenerative units from the SIMOVERT MASTERDRIVES range.

It is connected as a supplementary device in the divided positive cable of the DC link between the rectifier/regenerative unit and the associated inverters.

The OCP is available as a chassis unit with 2 rated currents for DC links with the following supply voltages:

- 3-ph. 380 V to 480 V AC + 10% (DC link voltage 510 V DC to 650 V DC + 10%)
- 3-ph. 660 V to 690 V AC + 15% (DC link voltage 675 V DC to 930 V DC + 15%)

OCPs for DC links with a supply voltage of 3-ph. 500 V to 600 V AC + 10% can be implemented with units for 3-ph. 690 V AC.

Using an OCP has the following benefits and advantages:

- Component and servicing costs are substantially reduced due to avoidance of fuse tripping and destruction of thyristors in the rectifier/regenerative unit.
- Availability is increased, minimizing expensive plant downtime and production stoppage times.
- The OCP can be bypassed in the event of a fault so that the rectifier/regenerative unit continues to be operational without the OCP.

Using an OCP is cost-effective and is therefore especially recommended for retrofitting in existing plant that uses SIMOVERT MASTERDRIVES. For new projects, the use of an AFE (fully pulsed with filter) may be more appropriate as this solution offers additional advantages and benefits.

An AFE

- prevents or eliminates inverter stalling (the OCP minimizes the negative effects of switch-off)
- produces considerably less network perturbations

- enables setting of the power factor up to the level of power factor compensation
- enables highly dynamic closed-loop control of the DC link voltage.

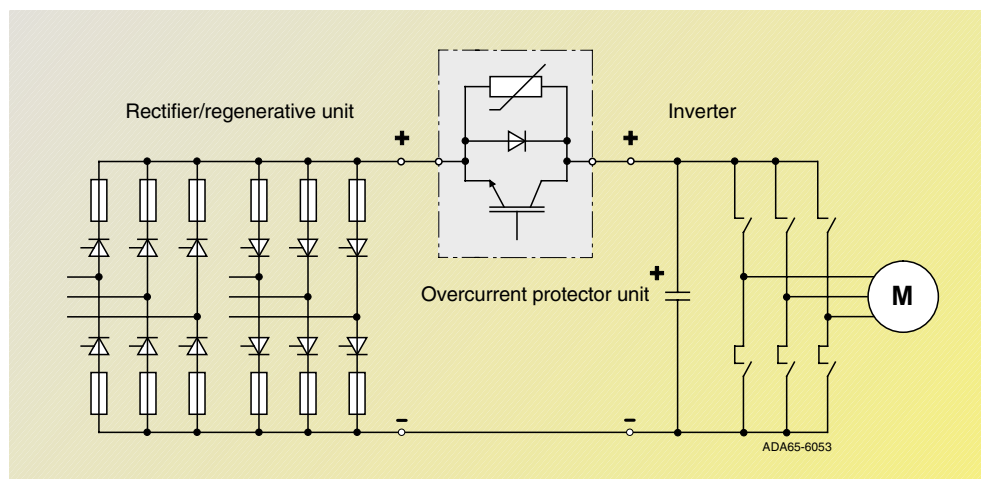


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### Technical data

Cooling-medium temperature	0 °C to +40 °C
Permissible ambient temperature during storage and transport	-25 °C to +70 °C
Cooling air requirement	0.55 m <sup>3</sup> /s
Climatic category	3K3 to DIN IEC 721-3-3/04.90
Pollution degree	Pollution degree 2 to DIN VDE 0110 Part 1/01.89, Moisture condensation not permissible
Overvoltage category (power section)	Category III to DIN VDE 0110 Part 2/01.89
Overvoltage strength (with connected inverter)	Class 1 to DIN VDE 0160/04.91
Degree of protection	IP00 to EN 60 529 (DIN VDE 0470 Part 1/11.92)
Immunity	IEC 801-2, IEC 801-4
Mechanical specifications	To DIN IEC 60 068-2-6/06.90
Sound pressure level $L_{pA}$ (1 m)	80 dB 50 Hz 83 dB 60 Hz

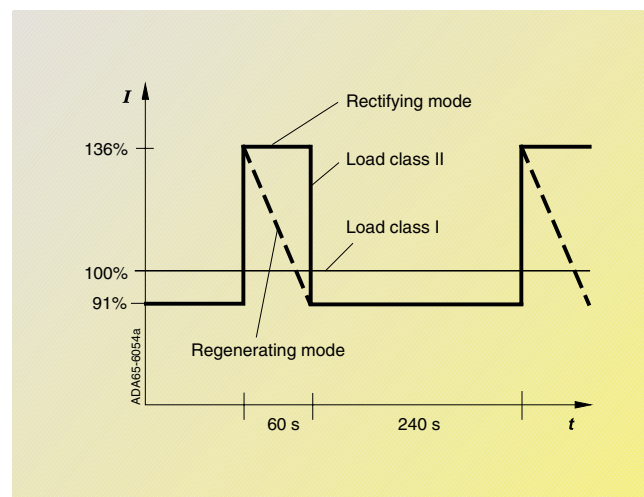


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Base load and overload to load class II to EN 60 146-1-1