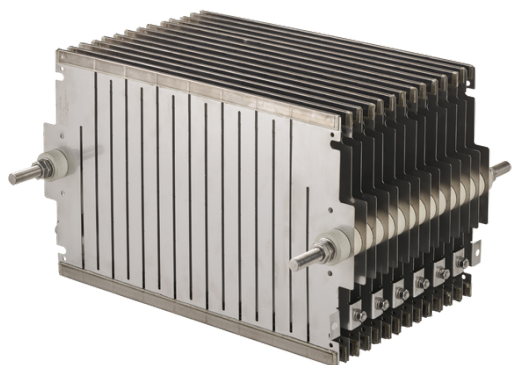




GRID POWER RESISTORS MODEL OBGR

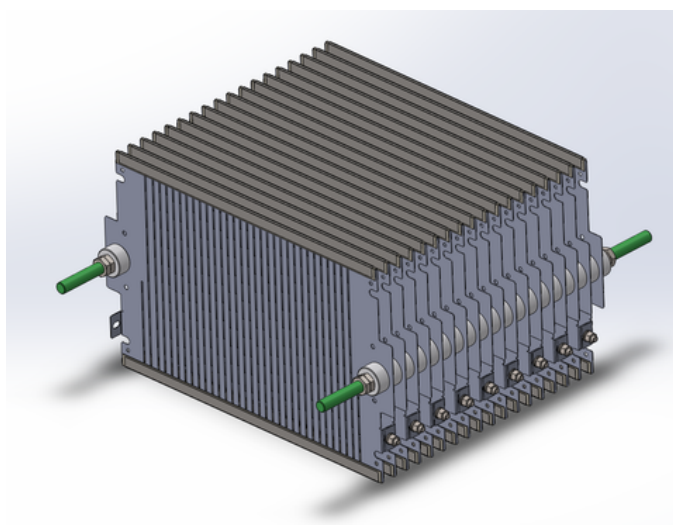
GENERAL CHARACTERISTICS

Open-construction resistor (IP00) assembled in banks with high specific power, available in both single-phase construction (typically used for braking large inverter-driven motors or as an earthing resistor for systems with insulation voltages up to 1000V) and three-phase (as a load bank or as a fixed-step starting bank for wound-rotor motors).

The specific configuration of the individual grid elements making up the bank gives this resistor particularly quiet operation during braking when the latter is controlled by a chopper, and at the same time high mechanical strength, which makes it particularly suitable for use in all those applications where vibrations or shaking may occur (for example on overhead cranes).

The high mass of the active parts makes the OBGR model the ideal resistor whenever large amounts of energy need to be absorbed in a short time, as for example in the emergency braking systems of wind power plants.

The main characteristic that sets it apart from the GRF model is the possibility of manufacturing it with different steel alloys and various thicknesses, which allow its use in numerous applications.



ELECTRICAL CHARACTERISTICS

Standard tolerance	± 10%
Temperature coefficient	Depending on the type of material used
Maximum Applicable Voltage	1000 V a.c.
Insulation resistance	> 100 Mohm (500 Vdc)
Working temperature limit	+500 °C (800 °C for pulses depending on the alloy used)
Types of available materials	AISI 304 (Standard) / AISI 430 / AISI 310 / FeCrAl
Degree of protection	IP 00

OPTIONAL

Possibility of providing fixed intermediate taps.
Non-standard tolerances.
Construction with protection in a special enclosure

MAXIMUM LOAD LIMIT

The rated power P_n is considered for the resistor placed with its terminals facing downwards or sideways, in free air circulation, at an ambient temperature of 40°C.
With forced ventilation, the rated power the resistor can dissipate increases as a function of the air speed.

TECHNICAL CHARACTERISTICS

TYPE	P_N (*)	RESISTANCE Range of values (**)	RATED VOLTAGE a.c.	WEIGHT (***)	NOMINAL DIMENSIONS [mm]	
	[W]	[Ω]	[V]	[kg]	A	B
OBGR 12	9600	From 0.02 to 15	≤ 1000	16	460	335
OBGR 16	12800	From 0.02 to 20	≤ 1000	21	550	420
OBGR 20	16000	From 0.02 to 25	≤ 1000	27	630	505
OBGR 30	24000	From 0.02 to 38	≤ 1000	40	850	730
OBGR 36	28800	From 0.02 to 45	≤ 1000	48	970	850

(*) Values referred to a maximum ambient temperature of 40°C with free air circulation

(**) Values referred to grids in AISI 304, thickness 10/10; non-standard ohmic values can be produced on request

(***) The weight is to be considered as an average value; the actual weight may differ from the one indicated depending on the thickness and type of grids installed

NOTE: Resistor packs can be produced with a customised number of grids, dimensioned according to the type of use, with minimum steps of 800 W

DIMENSIONAL CHARACTERISTICS

