

Type series WPAZQ..



### Technologies

- very compact design
- high degree of protection IP 54
- very low excess of surface temperature ( <40K)</li>
- designed for water cooling by industrial water and almost any standard cooling liquid (dirt particles ≤ 1mm)
- max. working pressure 4 bar (test pressure 10 bar)
- max. drop of pressure 0,5 bar
- with temperature switch

## Construction

#### Power resistor:

Electrical connection at terminals 16-95mm<sup>2</sup> (depending on design) in terminal box incl. cable gland up to M50.

#### Cooling:

The integrated Cu-tubes are for industrial water and almost any standard cooling liquids or oils – not for aggressive liquids, sea water or demineralized water.

Water connection at 1 ¼ inch thread for max. 3600 litre/hour. Maximum "In-Water" +30°C, maximum "Out-Water" +45°C.

## Application

An important application is the use as internal load resistor or as brake resistor. The big advantage is the excellent transport of heat by the integrated cooling water connection.

## **Special design**

- Mounting and connection material out of stainless steel
- with additional PT100 element
- integrated into switch cabinet

10 – 40 kW, IP 54, water cooled, with terminals and terminal box



Wire wound flat type resistors in protection degree IP 54 in aluminium enclosure, combined with water cooler with integrated Cu-tubes. Electric wiring on terminals in attached terminal box. Cooling connection on two pipe connections 1 ¼ inch (DIN ISO 228).

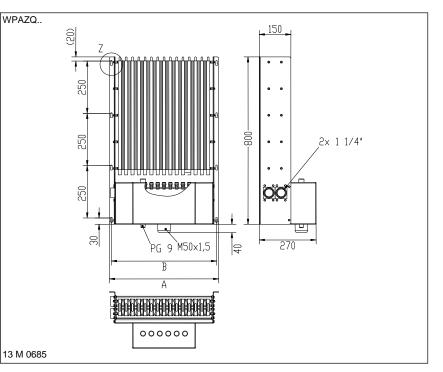
# Electrical and mechanical data

type series	continuous	necessary	production		dimensions		approx.
	dissipation in	flow of	range		in mm		weight
	kW for cold "In-	cooling liquid	Ω-value				in kg
	Water" of 20°C	in litre / h at a					
	at 100%ED and	"Out-Water"					
	a max. surface	temperature	from up to	un to	А	В	
	excess	rise of 12K		up io			
	temperature of						
	30 K						
WPAZQ90404	10	900	4,5	2,7 k	220	200	25
WPAZQ90604	15	1350	3,0	3,3 k	280	260	33
WPAZQ90804	20	1800	2,3	3,9 k	340	320	40
WPAZQ91004	25	2250	1,8	4,7 k	400	380	48
WPAZQ91204	30	2700	1,5	5,6 k	460	440	55
WPAZQ91404	35	3150	1,3	6,8 k	520	500	63
WPAZQ91604	40	3600	1,2	8,2 k	580	560	70

The given power rating values are valid for 100%CD (continuous dissipation). For short time operation you will find the values in the following table as a function of the duty cycle factor (DCF). Just multiply by the corresponding overload factor (OLF).

DCF	60%	40%	25%	15%	6%	
OLF	1,2	1,6	2,2	3,1	5,5	

These overload factors are valid for a total cycle time of maximum 120 s



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