



TRV

**Stainless steel high power
Forced air cooled Resistor**

50kW - 275kW



TRV style resistors are high power, forced air cooled resistors. They are mainly used as brake resistor on top of cranes in harbors. Two or four high power ventilators provide a strong air flow that cools a number of steel tube elements.

The resistor elements are made from stainless steel tube where a resistor spiral is placed inside and filled with magnesium oxide. To prevent any humidity to penetrate the tube and degrade the insulation voltage level, the endings of the tubes are filled with resin.

All parts are made with a protection degree of IP66.

Optional the resistor units can be equipped with shutters to protect the inside of the resistor unit when not in operation.

TRV style resistors are available in three sizes and several power ratings. The construction is made completely of stainless steel AISI304.

For protection of the resistor against overload two safety devices are used to detect a too high temperature on the elements.

TRV resistors are built in a steel cabinet using stainless steel resistor tube elements in AISI316. High power fans generate a strong air-flow to cool the resistor elements. All materials are corrosion proof and the unit has a high ingress protection of IP66.

The unit is fitted with two protection features: fan failure detection and resistor over-temperature.

The main applications for TRV type resistors are in the naval and harbor industry, for example, as brake resistors for large cranes.

The salient characteristics are:

- Construction in AISI304 or AISI316 stainless steel
- Steel tube resistor elements are made in AISI316 stainless steel
- Protection degree IP66
- Continuous power ratings from 50kW to 280kW

Air inlet and outlet can be optionally protected with shutters that open only during fan operation.



TRV				
Type	Power P _n [kW]	power of fans [kW]	Nr. of fans	Weight [kg]
TRV.18.1950	50		2	
TRV.28.1950	75		2	
TRV.36.1950	100			
TRV.45.1950	125			
TRV.55.1950	150			
TRV.64.1950	175			
TRV.72.1950	200			
TRV.82.1950	225			
TRV.90.1950	250	6	4	
TRV.100.1950	275	8	4	±550
General Specifications				
Insulation resistance	≤ TRV 55	≥10 MΩ @ 5,000 VDC		
	≥ TRV 64	≥5 MΩ @ 5,000 VDC		
Dielectric strength		3,500 VAC @ 50Hz 1 min		
Protection degree		IP66		
Fans		230/400 V		
Dimensions		A [mm]	C [mm]	H [mm]
TRV 18 - TRV 36		700	1300	640
TRV 45 - TRV 64		960	1300	640
TRV 72 - TRV 100		860	1350	1040

