

Data Sheet no. 1.27/2

High Power Regulators, Types RTT

Application

The powerful regulating transformers are well suited for feeding HIGHVOLT's larger test transformers and resonant test systems. With the regulating transformers the output voltage of the test system can be varied without significant steps.

Brief description

The input and output are electrically isolated by separated input and output windings. For transformers with voltages above 1000 V an intermediate transformer is connected to the output winding. The output voltage is controlled by means of an AC motor with a frequency converter. Thus, the regulating time can be adapted to the customer's demands. The regulator is equipped with an upper and lower limiting switch. The control provides a "zero-start".

All parts are built into an oil-filled steel tank. The oil is mineral-oil-based transformer oil that is PCB free and fulfils all the requirements for oils according to IEC 60296. The regulators are equipped with a conservator with silica gel air breather. They are protected by a Buchholz-relay, an oil level indicator and an oil thermometer. The connections are made by bushings according to the relevant DIN / IEC standards.

The regulating transformers are designed for continuous operation; they can be overloaded for short time duty (details on request).

The short-circuit impedance of these transformers is about 5 % without adaptation transformer and 7.5 % with adaptation transformer.

Specification

Operating frequency	50 / 60	Hz
Max. ambient temperature (operation)	40	°C
Supply voltage for motor drive	400	V (AC); 3-phase
Supply power for motor drive	approx. 1000	VA
Regulating time	50 ... 250	s
Type of cooling	ONAN	
Type of enclosure	Steel tank with switching cubicle IP20 for control	

Other primary and secondary voltages (with different currents) are possible on request.

Type	Rated power (kVA)	Rated input voltage (kV)	Rated out- put voltage (kV)	Rated current (A)	Approx. dimensions (L x W x H) (mm ³) ⁽¹⁾	Oil weight (kg)	Max. weight (kg)
RTT 350/1.0	350	1.0	0 ... 1.0	0 ... 350	1500 x 1400 x 1600	900	4000
RTT 500/1.0	500	1.0	0 ... 1.0	0 ... 500	1700 x 1300 x 2800	1000	4400
RTT 600/1.0	600	1.0	0 ... 1.0	0 ... 600	1800 x 1500 x 3000	1400	6000
RTT 750/1.0	750	1.0	0 ... 1.0	0 ... 750	2000 x 1600 x 3100	1700	8000
RTT 1000/6.3	1000	10.0	0 ... 6.3	0 ... 160	2200 x 1600 x 3300	2000	9200
RTT 1500/6.3	1500	10.0	0 ... 6.3	0 ... 240	2300 x 1700 x 3300	2900	13200
RTT 2000/6.3	2000	10.0	0 ... 6.3	0 ... 315	2500 x 1700 x 3300	3700	16000
RTT 2500/6.3	2500	10.0	0 ... 6.3	0 ... 430	2700 x 1800 x 3300	4500	19800

⁽¹⁾ For the control of the motor drive a switching cubicle is necessary on one side of the unit (depth approx. 500 mm). This should be added to one of the dimensions.

Please contact HIGHVOLT for any special application or parameters.

For further information please contact:

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