



RS 3300 CJ

Water-cooled triode for Industrial RF Heating



- Output power: 450 kW (CW mode)
- Anode voltage: 17 kV
- Anode dissipation: 150 kW
- Frequency up to 30 MHz

450 kW triode for RF induction heating machines

Based on more than 60 years of experience in the design and manufacture of electron tubes, Thales is a long-standing partner to most producers of industrial heating machines. And we are the benchmark supplier of grid tubes.

The very high-power RS 3330 CJ triode, intended for high-power induction heating applications, delivers continuous RF power of 450 kW. It is especially well suited to industrial applications such as the manufacture of rolled welded tubes, heat treatment of metals and pipe welding.

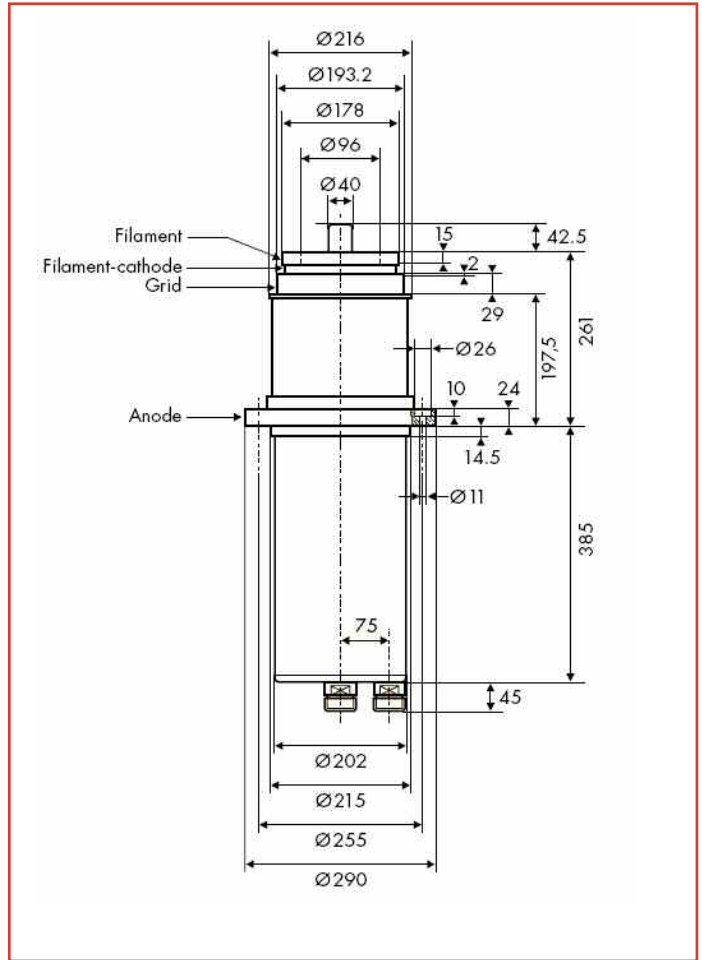
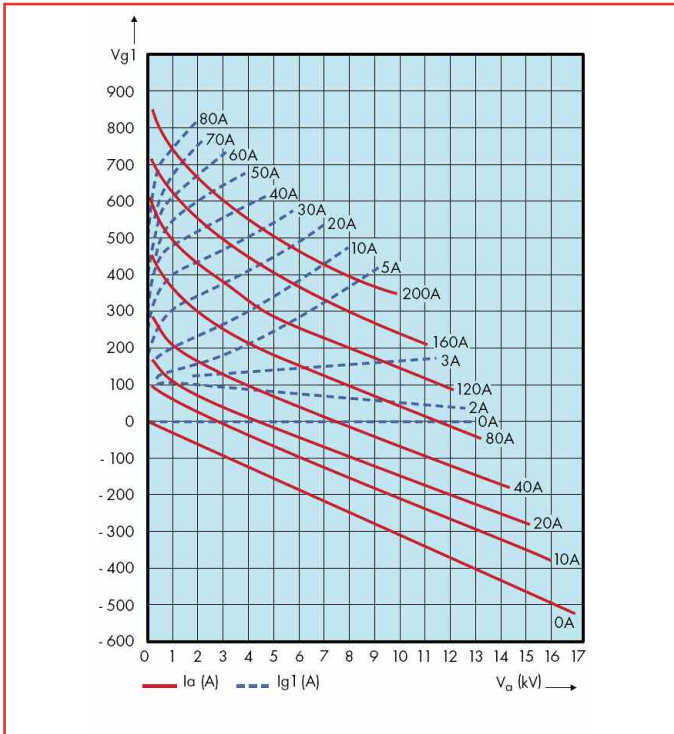
This water-cooled triode uses a coaxial design and metal-ceramic technology. It may be operated in CW or pulse modes. For operation in pulse mode, the parameters depend on each equipment characteristics. Contact us for specific information.

Thales is fully committed to the long-term viability of tube technology, and to delivering high-tech products based on our proven expertise in complex processes. We offer the widest range on the market, whether for dielectric or induction and laser applications, backed by all the customer support and technical assistance services you need.

RS 3300 CJ

Industrial RF Heating

Constant current characteristics



Technical specifications	
Cathode	thoriated tungsten
Filament voltage	16 V
Filament current	425 A
Max. heater surge current	1350 A
Amplification factor	35
Capacitance	
• grid-anode	140 pF
• grid-cathode	270 pF
• cathode-anode	5 pF
Mechanical characteristics	
Operating position	vertical
Weight	62 kg
Dimensions	290 x 733.5 mm
Cooling characteristics (industrial water)	
Max. water temperature at tube outlet	50 °C
Min. water pressure at tube inlet	5 bar
Max. T° at any point on the tube envelop	220 °C
Min. air flow on filament connections	4 m ³ /min

Maximum ratings			
Frequency	30	MHz	
Anode voltage up to 15 MHz	17	kV	
Anode voltage from 15 to 30 MHz	13	kV	
Grid voltage	-2500	V	
Grid current, at full load up to 15 MHz	8	A	
Grid current, off load up to 15 MHz	10	A	
Cathode current	50	A	
Anode dissipation	150	kW	
Grid dissipation up to 15 MHz	4.5	kW	
Grid dissipation from 15 to 30 MHz	3.5	kW	
Grid resistance	3	kΩ	
Class C, RF oscillator for industrial applications			
Frequency	<15	<15	MHz
Anode voltage	16	14	kV
Anode current	36.3	32	A
Anode input power	581	448	kW
Anode output power	450	350	kW
Anode dissipation	123	90	kW
Grid current, on load	6.5	6.3	A
Grid dissipation	3	2.8	kW
Grid resistance	112	127	Ω
Feedback ratio	8.6	10.4	%
Oscillator efficiency	77.5	78	%
<i>Operations at higher frequencies available on request.</i>			

For more technical information regarding this tube, feel free to ask our distributor Richardson Electronics - www.rell.com

THALES MICROWAVE & IMAGING SUB-SYSTEMS
 2, rue Marcel Dassault - BP 23
 78141 Vélizy-Villacoublay Cedex - France

Phone: + 33 (0) 1 30 70 35 00
 Email: rfms.marketing@thalesgroup.com

RICHARDSON ELECTRONICS, Ltd
 40W267 Keslinger Road
 LaFox, IL 60147-0393 - USA

Phone: +1 630 208 2200
 Email: edg@rell.com