



## RS 3060 CL

Air-cooled triode for Industrial RF Heating



- Output power: 120 kW (CW mode)
- Anode voltage: 14 kV
- Anode dissipation: 35 kW max.
- Frequency up to 100 MHz

### 120 kW triode for RF dielectric 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 RS 3060 CL triode, intended for dielectric heating applications, delivers continuous RF power of 120 kW. It is especially well suited to industrial applications such as agrifood and textile drying.

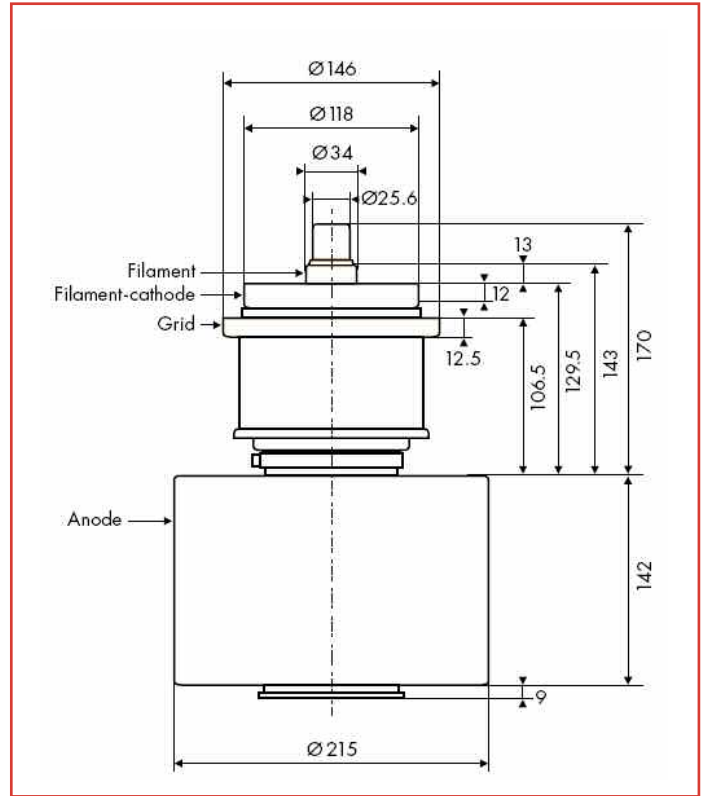
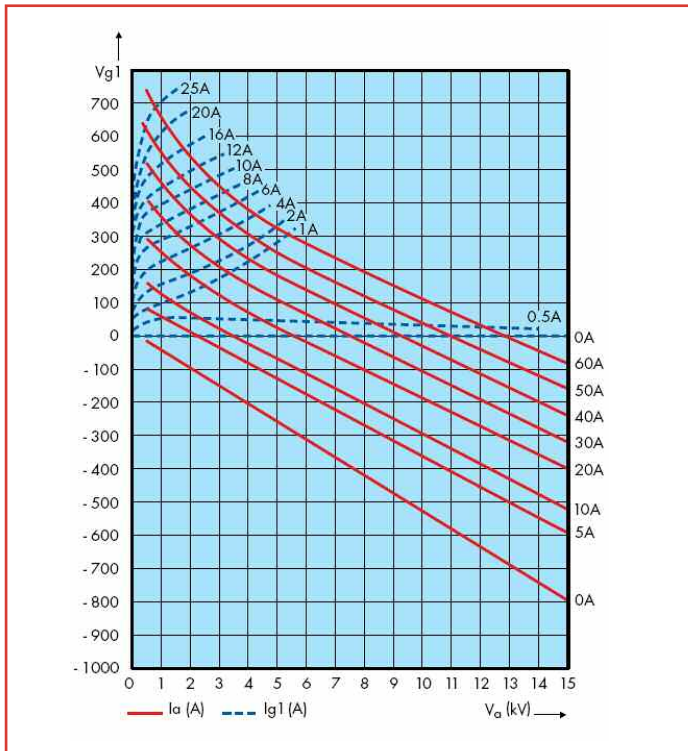
This air-cooled triode uses a coaxial design and metal-ceramic technology. It may be operated in CW or pulse modes. For operation in pulse mode, the parameters depend on each equipment characteristics. Contact us for specific information.

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 3060 CL

## Industrial RF Heating

### Constant current characteristics



### Maximum ratings

Frequency	30	MHz
Anode voltage		
• up to 15 MHz	14	kV
• from 15 to 30 MHz	10	kV
Grid voltage	-1500	V
Grid current, at full load up to 15 MHz	2.2	A
Grid current, off load up to 15 MHz	2.8	A
Grid current, at full load from 15 to 30 MHz	2.1	A
Grid current, off load from 15 to 30 MHz	2.7	A
Cathode current	15	A
Anode dissipation	35	kW
Grid dissipation		
• up to 15 MHz	1.2	kW
• from 15 to 30 MHz	1.1	kW
Grid resistance	8	kΩ

### Class C, RF oscillator for industrial applications

Frequency	<30	<30	MHz
Anode voltage	13	12	kV
Anode current	12.1	10.7	A
Anode input power	157	128	kW
Anode output power	120	100	kW
Anode dissipation	35	26	kW
Grid current, on load	1.75	1.75	A
Grid dissipation	750	730	W
Grid resistance	540	540	Ω
Feedback ratio	12.5	13.4	%
Oscillator efficiency	76	78	%

Operations at higher frequencies available on request.

### Technical specifications

Cathode	thoriated tungsten
Filament voltage	10 V
Filament current	190 A
Max. heater surge current	600 A
Amplification factor	22
Capacitance	
• grid-anode	46 pF
• grid-cathode	95 pF
• cathode-anode	2.6 pF

### Mechanical characteristics

Operating position	vertical
Weight	18 kg
Dimensions	215 x 312 mm

### Cooling characteristics (air-cooling)

Typ. air temperature at tube inlet	25 °C
Min. air flow cooling (for Pa=30 kW)	18 m <sup>3</sup> /min
Corresponding air pressure drop	9 mbar
Max. T° at any point on the tube envelop	220 °C

For more technical information regarding this tube, feel free to ask our distributor Richardson Electronics - [www.rell.com](http://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](mailto:rfms.marketing@thalesgroup.com)

### RICHARDSON ELECTRONICS, Ltd

40W267 Keslinger Road  
LaFox, IL 60147-0393 - USA

Phone: +1 630 208 2200  
Email: [edg@rell.com](mailto:edg@rell.com)