



Note: Document originally drafted in the English language.
注释：文件最初用英语起草。

Product Description

The MCS-6074 is a 7.9" (200 mm) 140 kV, 4.7 MJ (6.3 MHU) maximum anode heat content, rotating anode insert. This insert is specifically designed for CT Scanners. The insert features a 7° tungsten-rhenium facing on molybdenum with a graphite backed target and is available with the following nominal focal spots:

Dual Focal Spots:

Small - 0.9 x 0.7
Large - 1.2 x 1.2
IEC 60336

Loading Factor for slit focal:

Small - 75 kV, 100 mA
Large - 75 kV, 200 mA

Maximum Anode Cooling Rate:

10.4 kW (14 kHU/sec)

Continuous Anode Input Power:

10.4 kW (14 kHU/sec)

Nominal CT Anode Input Power:

Small - 24 kW IEC 60613:2010
Large - 53.2 kW IEC 60613:2010

Nominal CT Scan Power Index:

Small - 24 kW IEC 60613:2010
Large - 46 kW IEC 60613:2010

Reference Axis:

Perpendicular to port face.

This insert is intended for use in the Varex Imaging B-580H housing.

产品说明

MCS-6074 是一款具有 7.9" (200 mm) 靶盘, 140 kV, 4.7 MJ (6.3 MHU) 最大阳极热容量 的旋转阳极 X 射线管芯。该管芯专门针对 CT 扫描仪而设计。该管芯的靶盘结构为 7° 靶角, 铼钨钼合金靶材, 并可与下列标称焦点一起使用:

双焦点:

小焦点 - 0.9 x 0.7
大焦点 - 1.2 x 1.2
IEC 60336

狭缝焦点测试条件:

小焦点 - 75 kV, 100 mA
大焦点 - 75 kV, 200 mA

最大阳极冷却速率:

10.4 kW (14 kHU/sec)

连续阳极输入功率:

10.4 kW (14 kHU/sec)

标称CT阳极输入功率:

Small - 24 kW IEC 60613:2010
Large - 53.2 kW IEC 60613:2010

标称CT扫描功率指数

小焦点 - 24 kW IEC 60613:2010
大焦点 - 46 kW IEC 60613:2010

参考轴:

垂直于窗口面。

该管芯适用于 万睿视影像 B-580H 管套。

Focal Spot

焦点 0.9W x 0.7L

7°

3 Ø

8000 RPM

体积扫描 时间 (秒)	最大允许管电流 (mA)为下列启动热容量和管电压的函数								
	启动热容量 = 20 %			启动热容量 = 40 %			启动热容量 = 60 %		
	100 kV	120 kV	130 kV	100 kV	120 kV	130 kV	100 kV	120 kV	130 kV
4	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)
10	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)
20	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)
30	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)
40	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)
50	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	200 (a)	180 (a)
60	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (c)	190 (c)	170 (a)	160 (a)
70	190 (c)	200 (c)	200 (c)	190 (c)	200 (c)	200 (a)	180 (a)	150 (a)	140 (a)
80	190 (c)	200 (c)	200 (c)	190 (c)	190 (a)	180 (a)	160 (a)	130 (a)	120 (a)
90	190 (c)	200 (c)	200 (c)	190 (c)	180 (a)	160 (a)	150 (a)	120 (a)	110 (a)

Focal Spot

焦点 1.2W x 1.2L

7°

3 Ø

8000 RPM

体积扫描 时间 (秒)	最大允许管电流 (mA)为下列启动热容量和管电压的函数								
	启动热容量 = 20 %			启动热容量 = 40 %			启动热容量 = 60 %		
	100 kV	120 kV	130 kV	100 kV	120 kV	130 kV	100 kV	120 kV	130 kV
4	580	480	440	580	480	440	580	480	440
10	480 (b)	400 (b)	360 (b)	480 (b)	400 (b)	360 (b)	480 (b)	400 (b)	360 (b)
20	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)
30	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)
40	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)	290 (a)	240 (a)	220 (a)
50	360 (b)	300 (b)	270 (b)	360 (b)	300 (b)	270 (b)	240 (a)	200 (a)	180 (a)
60	360 (b)	300 (b)	270 (b)	300 (a)	250 (a)	230 (a)	200 (a)	170 (a)	160 (a)
70	350 (a)	290 (a)	270 (a)	260 (a)	220 (a)	200 (a)	180 (a)	150 (a)	140 (a)
80	310 (a)	260 (a)	240 (a)	230 (a)	190 (a)	180 (a)	160 (a)	130 (a)	120 (a)
90	280 (a)	230 (a)	210 (a)	210 (a)	180 (a)	160 (a)	150 (a)	120 (a)	110 (a)

Note:

- Limits are based on maximum track rating except for the following codes:
 a - Limited by available heat storage.
 b - Limited by window heating.
 c - Limited by filament emission.
- H.S. = Heat Storage
 kV = Tube Voltage

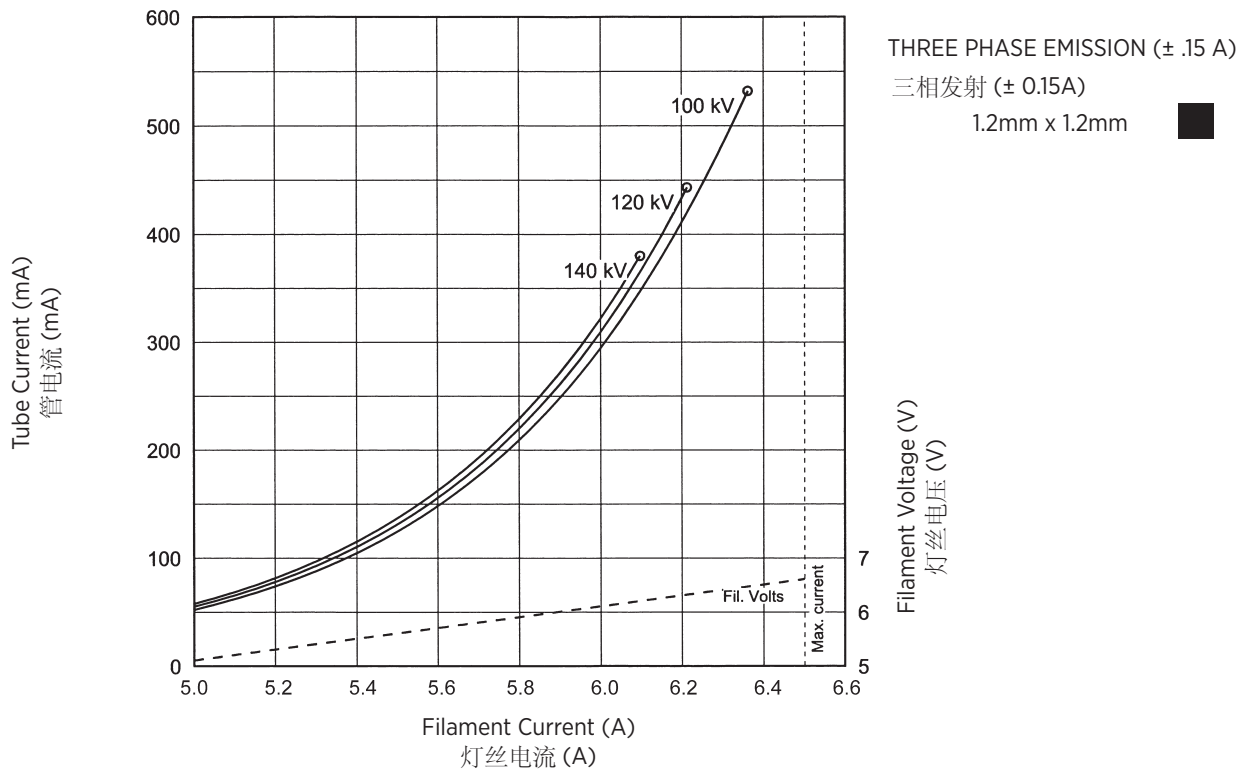
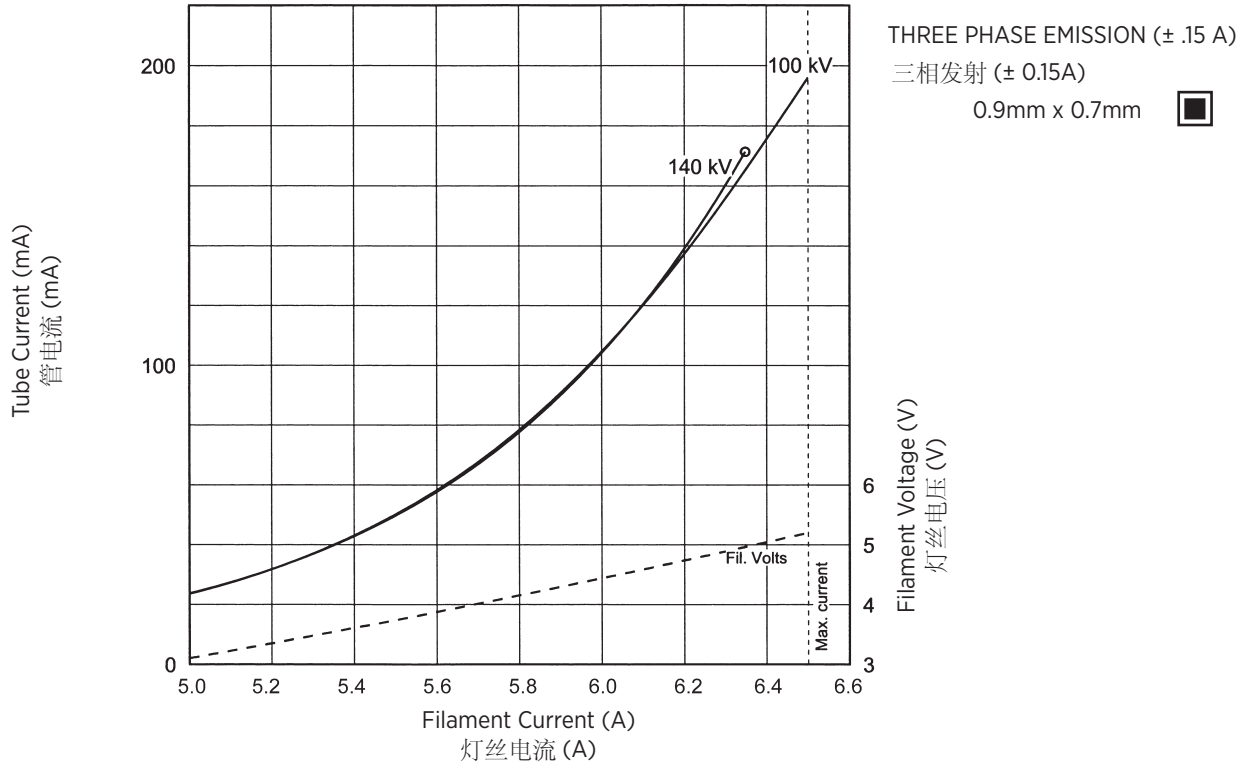
Rating charts reflect maximum tube performance. Tube operation is ultimately limited by system software.

注释

- 除如下所列规则外，限制均以最大轨道额定值为依据：
 a - 受有效热容量限制。
 b - 受窗口加热限制。
 c - 受灯丝放射限制。
- H.S. = 热容量
 kV = 管电压

额定值表反映最大管性能。管的工作状况最终受系统软件的限制。

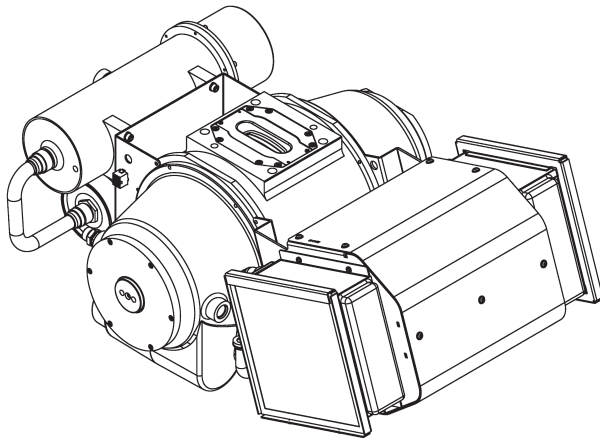
3 Ø ≡



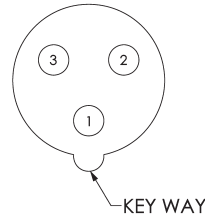
Maximum Peak Voltage	140 kV
Anode to Ground	70 kV
Cathode to Ground	70 kV
Maximum X-ray Tube Assembly Heat Content	4.0 MJ (5.5 MHU)
Nominal Continuous Input Power	3.7 kW (5.0 kHU/sec) IEC 60613:2010
Maximum Housing Temperature	78°C
Focal Point Position (Central Ray) Within 1mm (X, Y Direction from the center of radiation port.)	
X-Ray Tube Assembly	
Permanent filtration	0.32 mm Al @ 75 kV IEC 60522/1999
with Gantry Plate	4.5 mm Al @ 75 kV IEC 60522/1999
Loading Factors for Leakage Radiation	140 kV, 26.4 mA
Ambient Air Temperature Limits for Operation	5°C to 35°C
Temperature Limits for Storage and Transport	-34°C to +60°C
Humidity	10% to 90%
Atmospheric Pressure Range	70 kPa to 106 kPa
Weight - Tube and Housing	84 kg (185 lbs)
IEC Classification	Class 1
Safety Devices - Thermal Switch	
Normally Closed Contact	Opening at 77°C ±3°C
Pressure Switch	Normally Closed Contact Contact opens at 5 PSIG (±1 PSIG)
X-Ray Tube Assembly (complies to	IEC 60601-2-28
Tube assembly consists of housing, stator coil, X-ray tube (including anode, cathode), insulating oil and attached heat exchanger.	

最大峰值电压	140 kV
阳极到地	70 kV
阴极到地	70 kV
最大 X 射线管组件热含量	4.0 MJ (5.5 MHU)
标称连续输入功率	3.7 kW (5.0 kHU/sec) IEC 60613:2010
最大管套温度	78°C
焦点位置（中心射线）在 1 mm 内 （源于辐射端口中心的 X, Y 方向）	
X 射线管组件	
固有滤过	0.32 mm Al @ 75 kV IEC 60522/1999
带机架金属板	4.5 mm Al @ 75 kV IEC 60522/1999
泄漏辐射测试条件	140 kV, 26.4 mA
环境气温工作限值	5°C 到 35°C
存储与运输温度限值	-34°C 到 +60°C
湿度	10% 到 90%
大气压范围	70 kPa 到 106 kPa
重量：管芯和管套	84 kg (185 lbs)
IEC 分级	1 类
安全性装置：热控开关	
常闭接点	开启温度 77°C ±3°C
压力开关	正常情况下为闭合接点 在 5 PSIG (±1 PSIG) 时打开
X 射线管组件（符合）	IEC 60601-2-28
管组件由 X 射线球管及壳体组成，X 射线球管由阴极组件，连同转子的旋转阳极靶盘及管套组成，壳体由球管支持固定装置，定子线圈绕组，组件的 X 射线窗口，高压接插件和油膨胀器组成。	

Dimensions are for Reference only
维度是供仅参考

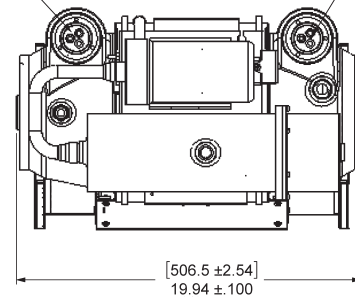


Anode Receptacle
阳极



ANODE RECEPTACLE
Anode
阳极

CATHODE RECEPTACLE
Cathode
阴极



HE/PUMP RECEPTACLE
热/泵出油口

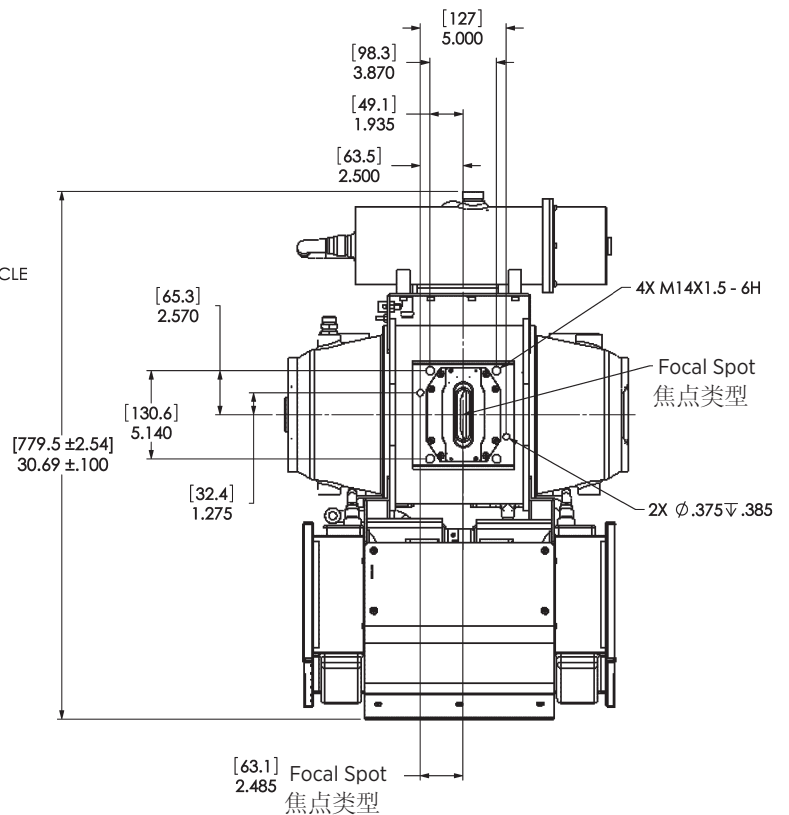
GROUND
套接地

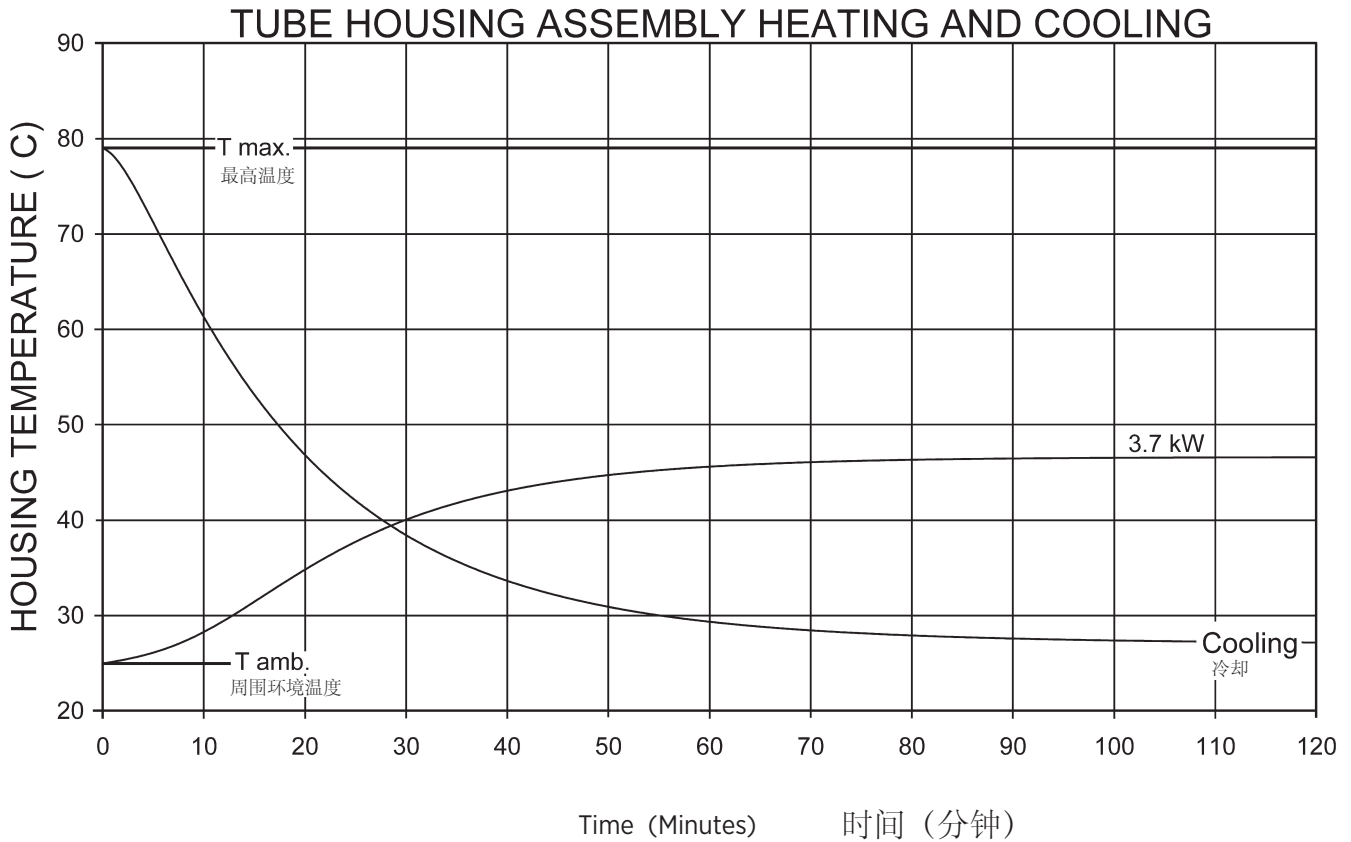
TEMP/FLOW RECEPTACLE
温度/流量插座

Focal Spot
焦点类型

[60.4] Focal Spot
2.379 F 焦点类型

[35.6 ± 2.54]
1.40 ± 1.00



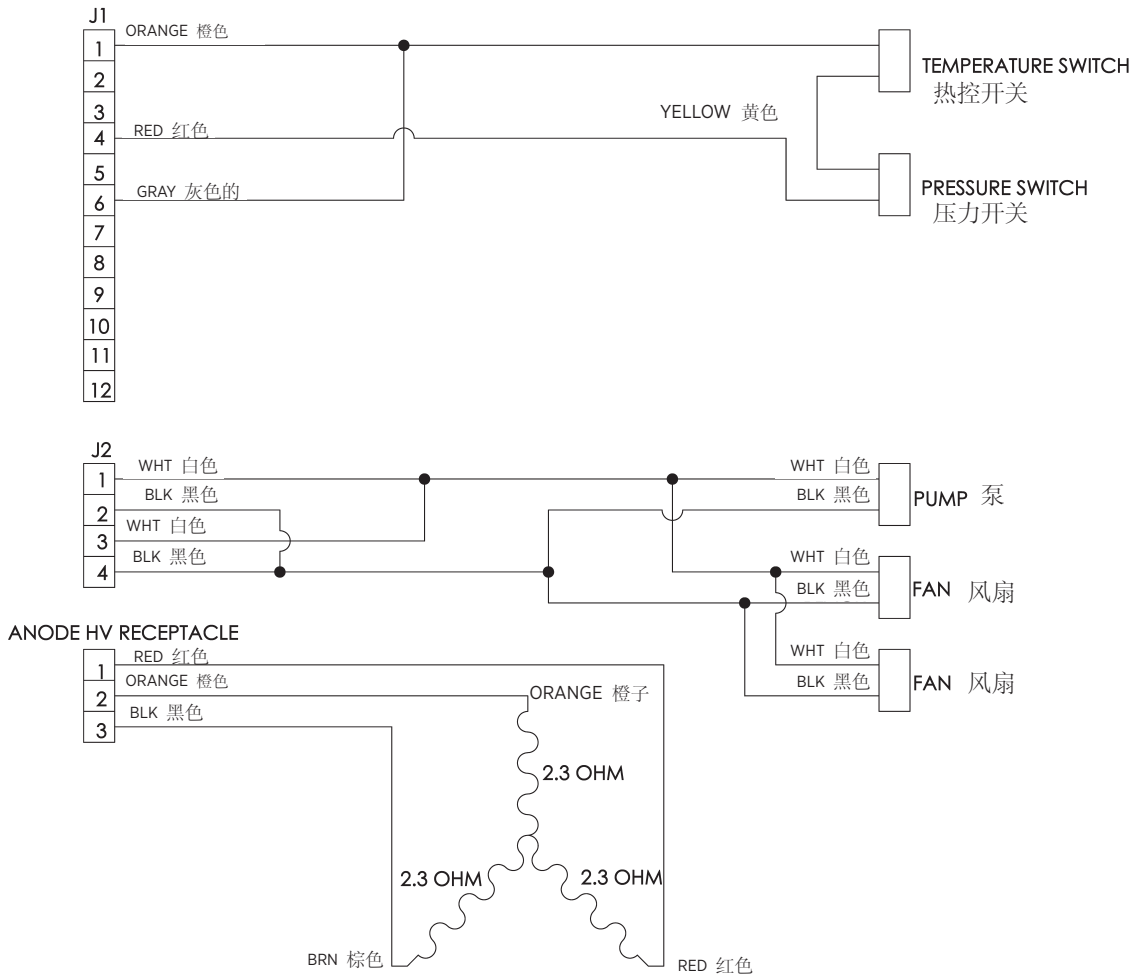

Note:

- Heat input into housing includes all power sources; tube, filament, stator and circulating pump.
- Heating curves based on no restrictions to air flow through heat exchanger, or natural convection around tube housing assembly.
- Heating and cooling curves reflect maximum tube performance. Tube operation is ultimately limited by system software control.

注释:

- 输入外壳的热量包括所有电源;管,灯丝,定子和循环泵。
- 加热曲线基于对通过热交换器的空气流动没有限制,或管壳体组件周围的自然对流。
- 加热与冷却曲线反映了管的最高性能。管的工作状况最终受系统软件控制的限制。

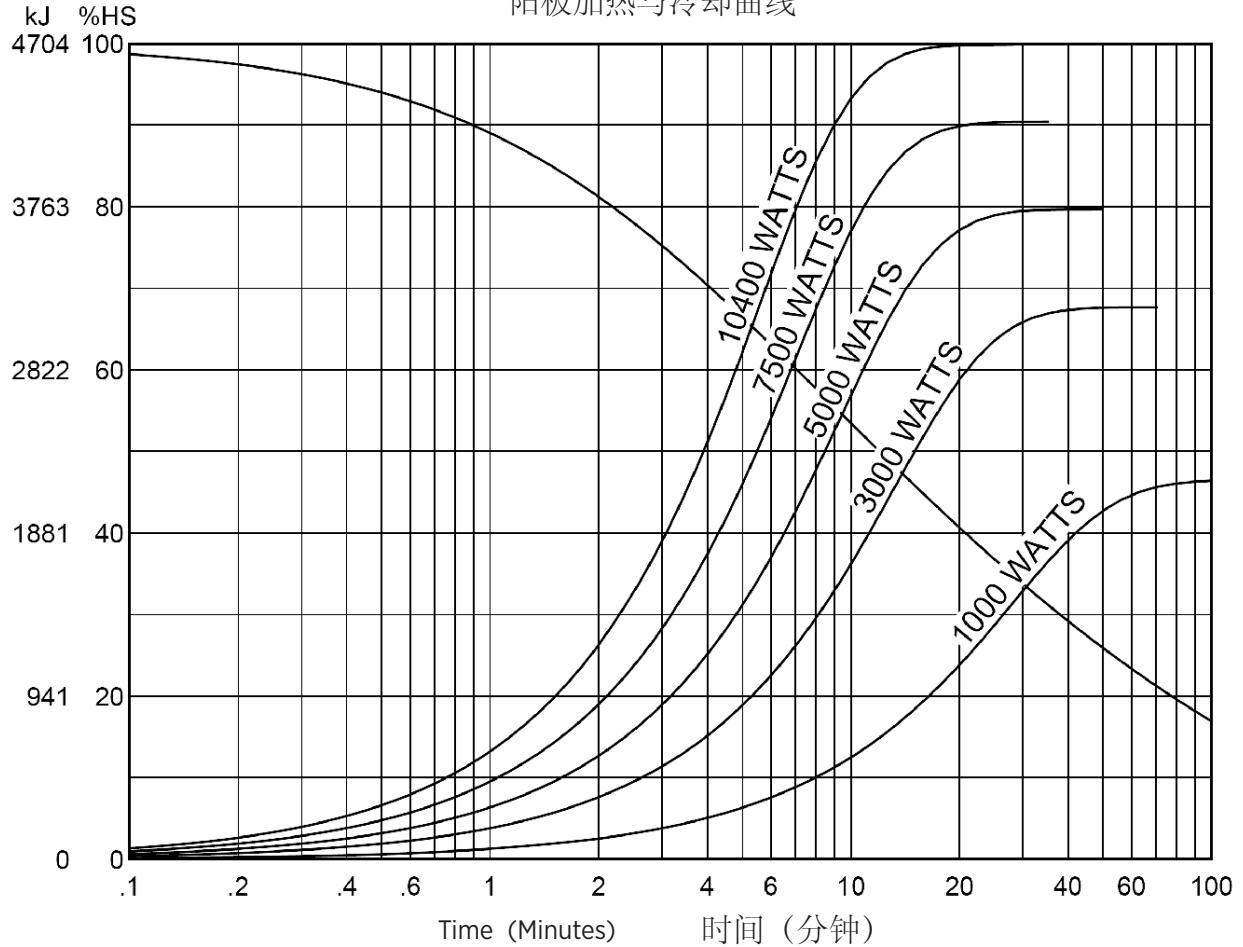
Terminal / Wire Color Chart
终端 / 导线颜色图



Stator Type 定子的类型	1 to 2	2 to 3	3 to 1
4 pole, 3 phase	2.2 - 2.5 W	2.2 - 2.5 W	2.2 - 2.5 W

Stator Drive Frequency 定子驱动频率	RPM
140 Hz	8000 RPM ±10%

Anode Heating and Cooling Curves
阳极加热与冷却曲线



Note:
Heating and cooling curves reflect maximum tube performance. Tube operation is ultimately limited by system software control.

注释:
加热与冷却曲线反映了管的最高性能。管的工作状况最终受系统软件控制的限制。