



# TEA Datasheet

## DA-XX-24-120-210-140

## Discription

- DA(Direct to Air) Series Cooler, also called Cold plate coolers, The cold end is a metal plate (usually aluminum plate), which the object can be attached directly to the cold plate. The hot end is a heat dissipation method using a radiator and fan.
- The direct contact allows the heat to be efficiently conducted to the thermoelectric (Peltier) modules. This keeps the system operating as efficiently as possible and improves the stability and accuracy of temperature control.
- DA Coolers are used to cool equipments, and also to provide low-temperature platform

## Feature

- High reliability design
- Compact design, easy to installation
- DC operation
- High cooling efficiency
- Support customization

## Application

- Medical diagnostics
- Analytical instrumentation
- Industrial instrumentation
- Photonics laser systems
- Environmental Protection Equipment

## Naming rules

**DA<sup>①</sup>-XX<sup>②</sup>- 24<sup>③</sup>- 120<sup>④</sup>-210<sup>⑤</sup>-XX<sup>⑥</sup>-140<sup>⑦</sup>**

①Product type

②Cooling capacity at 0°C temperature difference.

③working voltage

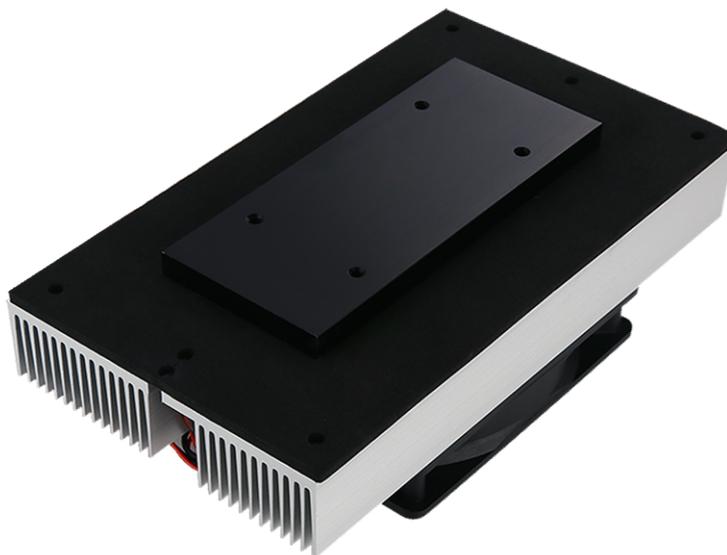
④The width of the Cooler

⑤The length of the Cooler

⑥electric power of the Cooler

⑦Internal code

## Physical figure



*picture fo reference only*



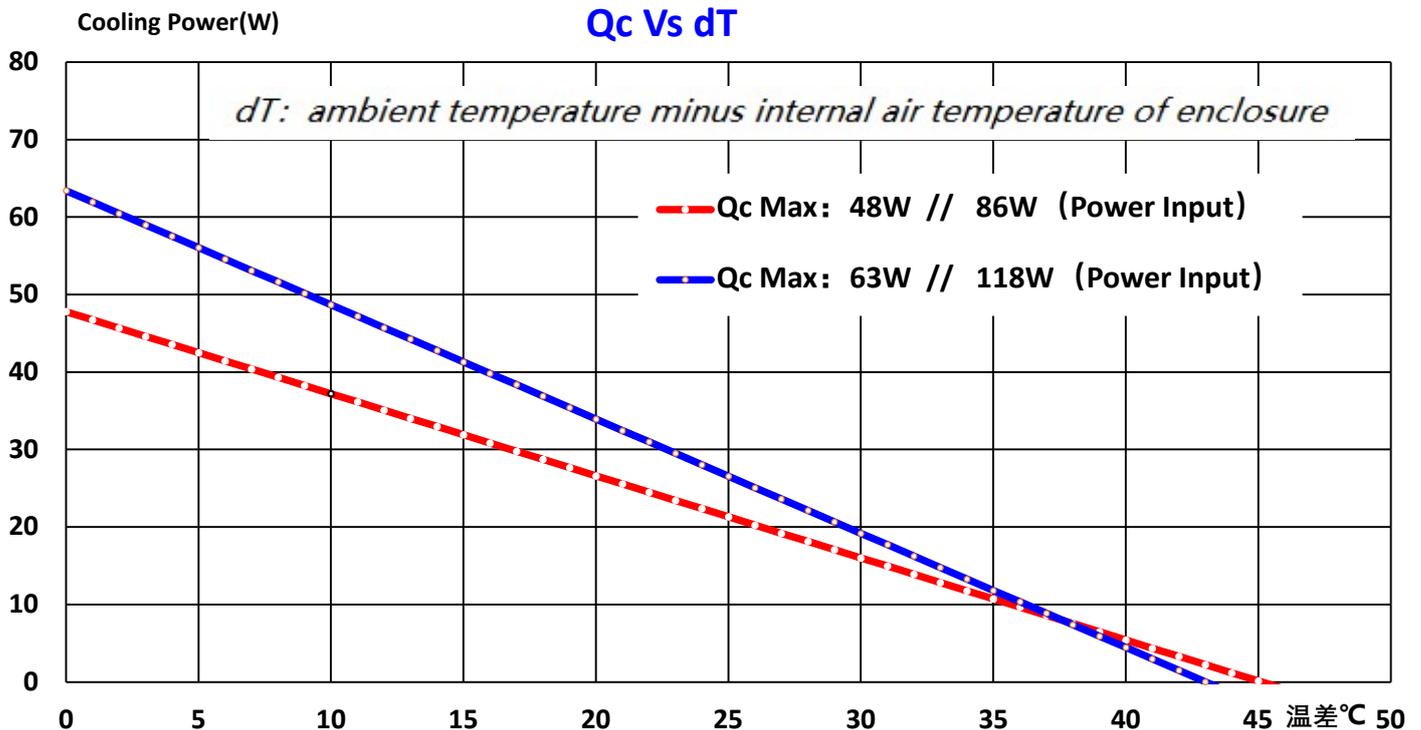
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### Performance Specification

Cooler Model	DA-48-24-120-210-79	DA-63-24-120-210-118-010						
Cooling power Q <sub>cmax</sub> (W)	48		63					
Nominal Voltage(V)	24							
Max Voltage(V)	26							
Running current(A)	3.3		4.9					
Lowest tem (RT= 25 °C)	-15		-13					
Startup 1/2/3/5 min (°C)	13	6	1	-10	10	2	-3	-8
Startup current(A)	4.0		5.9					
AC adapter 24V	5A		7A					
Power Input(W)	79		118					
COP(dT=0)	60%		54%					
MTBF (fans – hrs)(h)	40000							
Dimensions(mm3 )	W*L*H		120X210X80					
Weight(Kg)	1.5							
Performance tolerance	±10%							
Operating tem(°C)	-10 to 50 °C							
Please refer to the performance curves below for the cooling capacity under different temperature differences.								
All performance indicators are tested under conditions of ambient temperature of 25 °C and good ventilation at the hot end.								
Internal code	DA21043172101	DA21041932101						

### Performance Curves

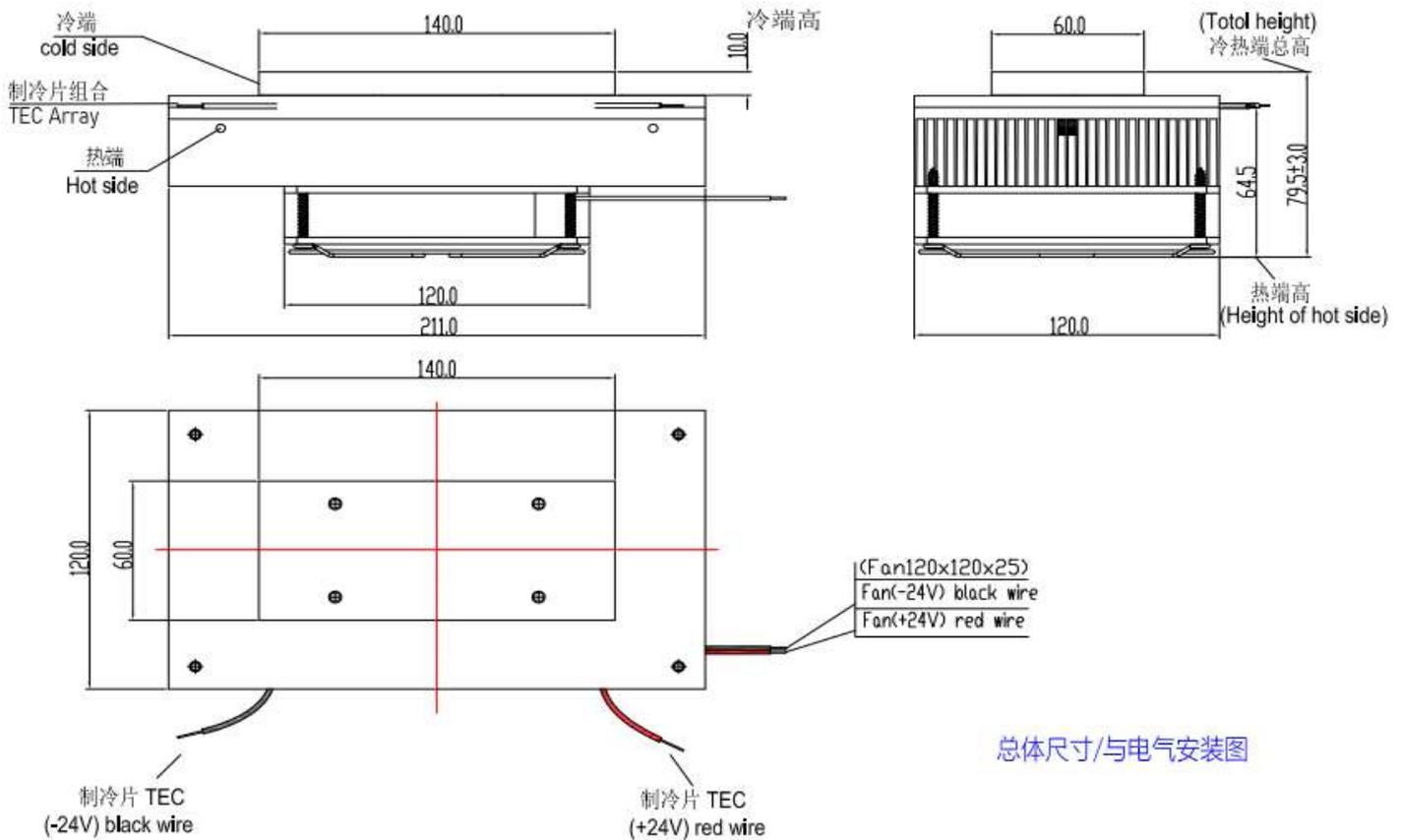




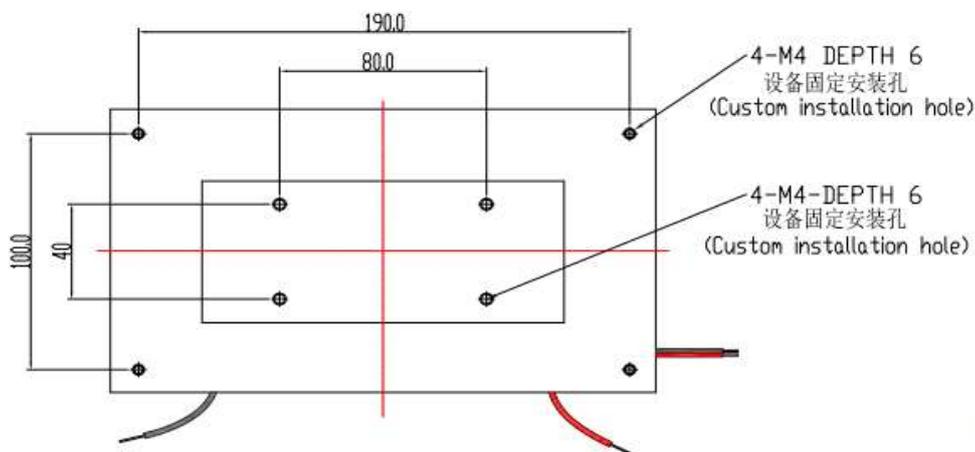
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## DA-XX-24-120-210-140

### Dimensions and Installation drawing



总体尺寸/与电气安装图



客户孔位安装图  
官网: [www.tecooler.com](http://www.tecooler.com)  
可下载完整图纸



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## Notices of installation and operation

- Please make sure that no collision or oscillation will happen during the process of transportation and operation to avoid the damages to the components.
- The product must be installed in the environment with good ventilation. It is suggested that the equipment should normally operate for 30 minutes before the formal use.
- The standard product should only be used indoors. Please contact the sales staffs of our company if you need to use it outdoors.
- Please make sure that the input voltage should not exceed the maximum voltage specified in the column of performance parameters.
- It is suggested that the function of thermoelectric cooler shutdown in the case of fan damages should be added to the circuit.
- It is suggested that the fan should be cleaned and maintained on an annual basis. Please cut off the power before any abnormal operations.
- Please do not touch the product when the Cooler is working. The cooling end may result in freezing injuries, and the heating end may lead to scalds in some cases.
- The product, the fan and the thermoelectric cooler adopt the same voltage when all red wires are connected to the positive pole and all black wires are connected to the negative pole.
- All performance indicators are tested in the environment with good ventilation at the heating end. If the ventilation at the heating end is not ideal, the performance may be influenced.

## Related accessories (to be purchased separately)

- DC switching power supply
- Temperature controller

## Contact information

Website : <http://www.tecooler.com/en/index.html>

E-mail: [13631671636@163.com](mailto:13631671636@163.com)