TEA Datasheet

AA-XX-12-80-150-XX

Discription

AA(Air-to-air) series Coolers,also known as air Coolers. Both the cold end and the hot end are heat dissipations method using radiators and fans.
Air Coolers are the best choice for cooling electrical enclosures and refrigerated cabinets containing objects that can not be easily cooled by direct contact to a cold plate. There may be irregularly shaped components, parts that need freedom to move, or objects that do not have any one good surface from which to remove heat. While not as efficient as the direct contact of a cold plate, AA coolers are ideal in these cases because the cooled air adapts to any and all shapes within the cabinet.

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
- Food and beverage cooling

Naming rules

AA①-XX②-12③- 80④-150⑤-XX⑥-010⑦

①Product type ②Cooling capacity at 0℃ 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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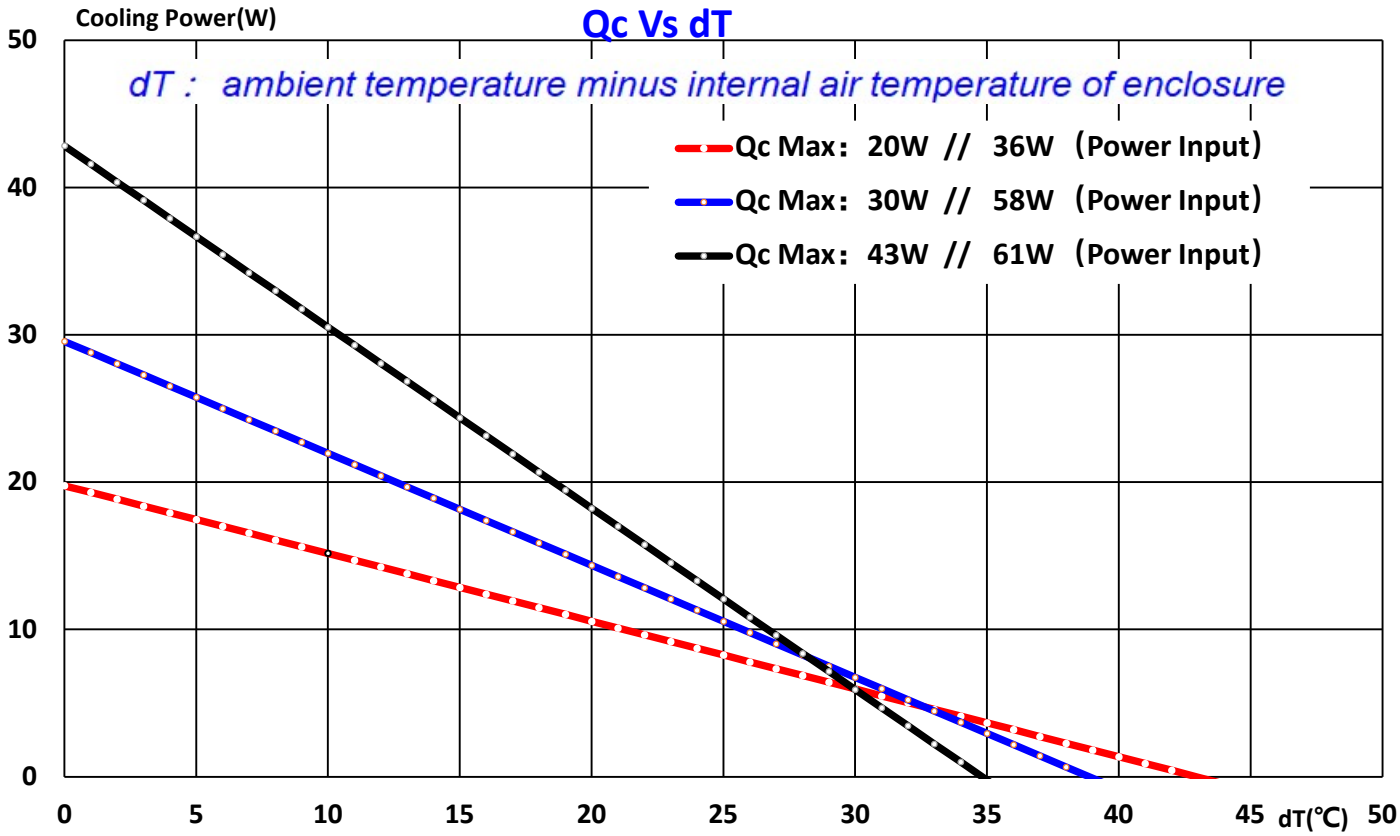
Peformance Specification

Cooler Model	AA-20-12-80-150-36	AA-30-12-80-150-58	AA-43-12-80-150-61
Cooling power Qcmax(W)	**20**	**30**	**43**
Nominal Voltage(V)	**12**		
Max Voltage(V)	**14**		
Running current(A)	**3.0**	**4.8**	**5.1**
Startup current(A)	**3.6**	**5.8**	**6.1**
AC adapter 12V	**5A**	**7A**	**8A**
Power Input(W)	**36**	**58**	**61**
COP(dT=0)	**55%**	**51%**	**70%**
MTBF (fans – hrs)(h)	40000		
Dimensions(mm3)	W*L*H	80X150X118	
Weight(Kg)	0.8		
Performance tolerance	±10%		
Operating tem(℃)	-10 to 50 ℃		
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 ℃ and good ventilation at the hot end.			
Internal code	**AA15043171101**	**AA15041931101**	**AA15041751101**

Performance Curves



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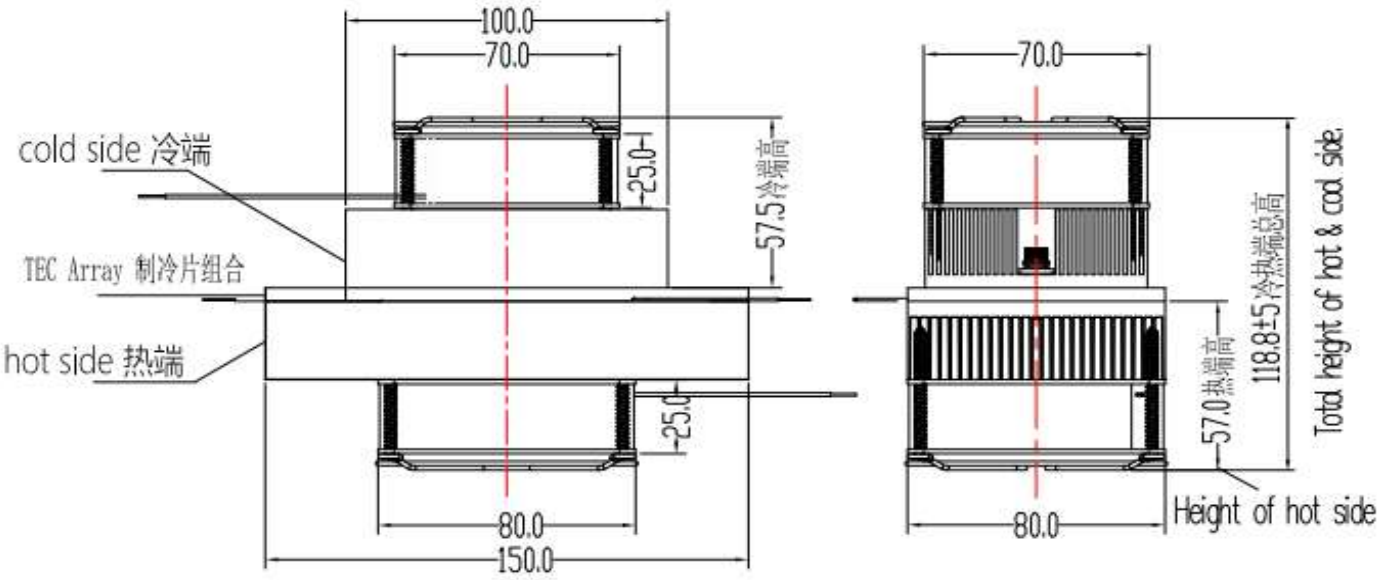
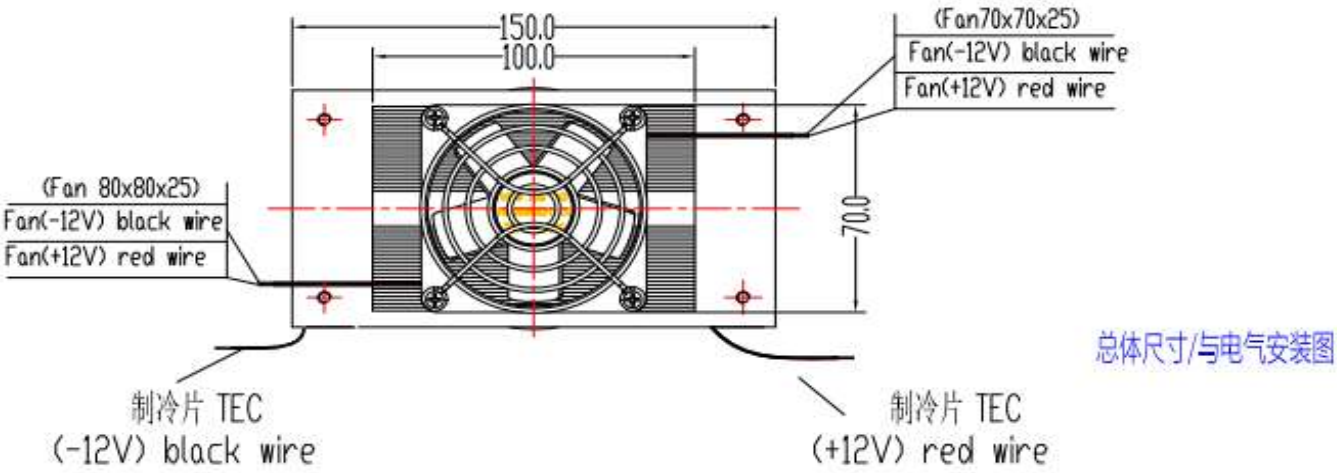
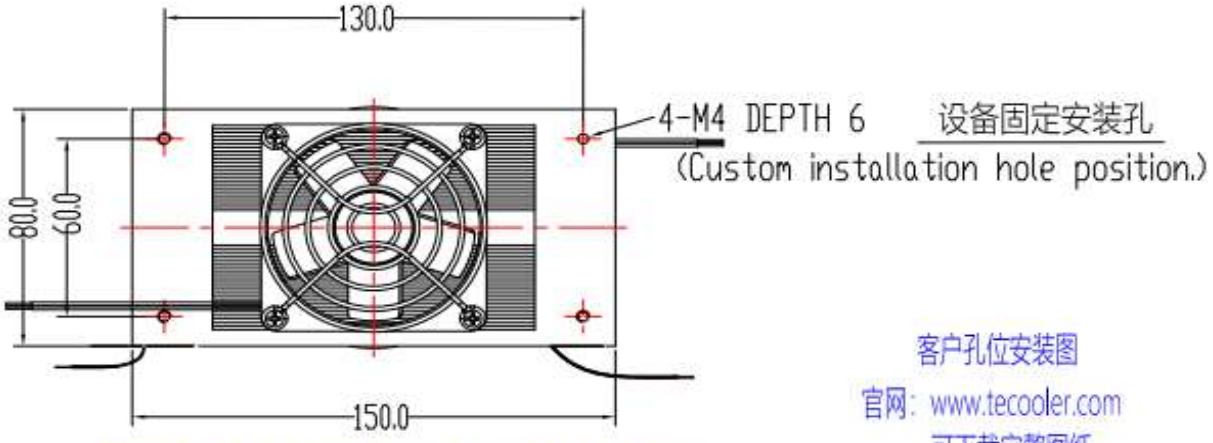
Dimensions and Installation drawing





总体尺寸与电气安装图



客户孔位安装图

官网：www.tecooler.com

可下载完整图纸

安装方法：开一个略比70X100mm稍大的槽及4个圆孔,把冷端放进去，用M4螺丝固定

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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
- Condensate water connection tray and water pipe, etc
- Temperature controller

Contact information

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

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