TEA Datasheet

DA-XX-12-69-100-XX

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 platfo

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

DA①-XX②-12③- 69④-100⑤-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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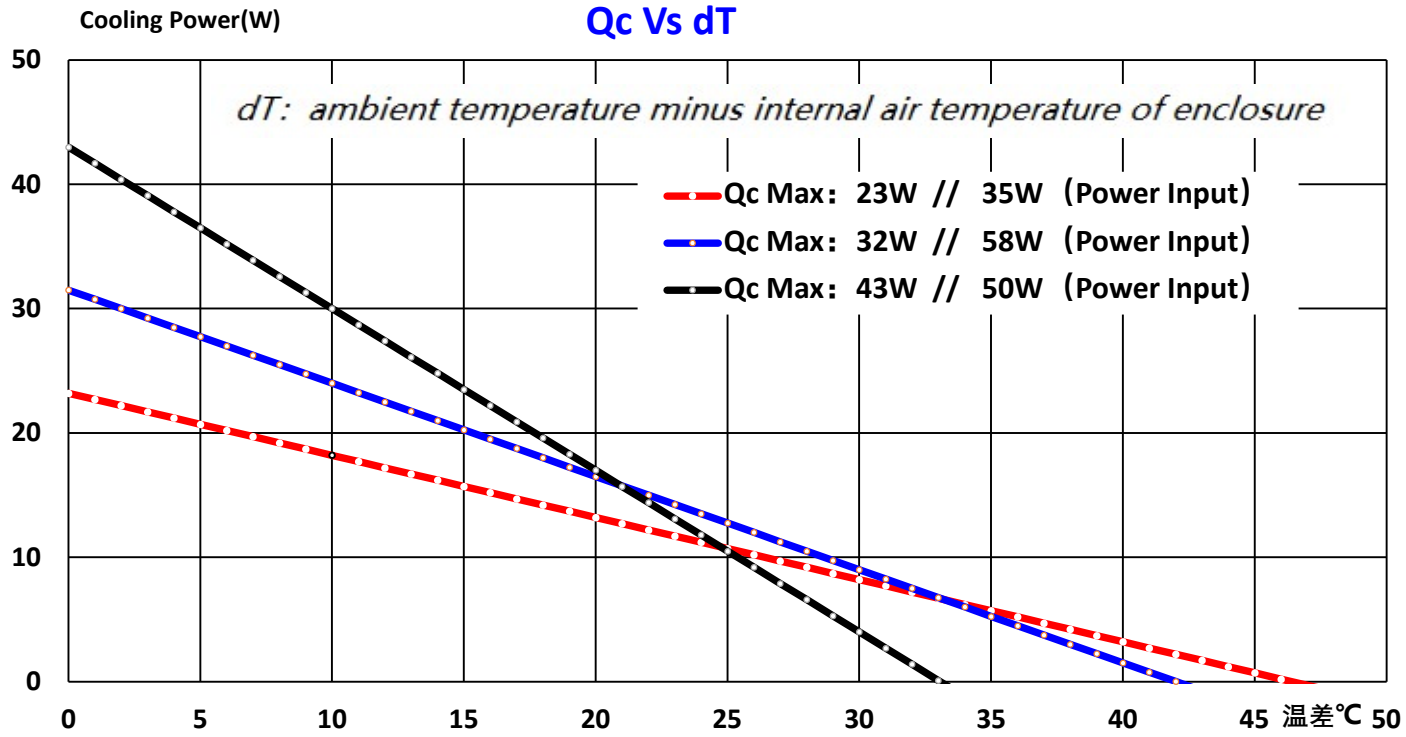
Peformance Specification

Cooler Model	DA-23-12-69-100-35				DA-32-12-69-100-58				DA-43-12-69-100-50			
Cooling power Qcmax(W)	23				32				43			
Nominal Voltage(V)	12											
Max Voltage(V)	14											
Running current(A)	2.9				4.8				4.2			
Lowest tem (RT= 25 ℃)	-16				-14				-6			
Startup 1/2/3/5 min (℃)	5	-4	-9	-14	0	-8	-10	-13	-1	-5	-6	-6
Startup current(A)	3.5				5.8				5.0			
AC adapter 12V	5A				7A				6A			
Power Input(W)	35				58				50			
COP(dT=0)	67%				55%				85%			
MTBF (fans – hrs)(h)	40000											
Dimensions(mm3)	W*L*H	69X100X70mm										
Weight(Kg)	0.5											
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	DA10043171101				DA10041931101				DA10042221101			

Performance Curves



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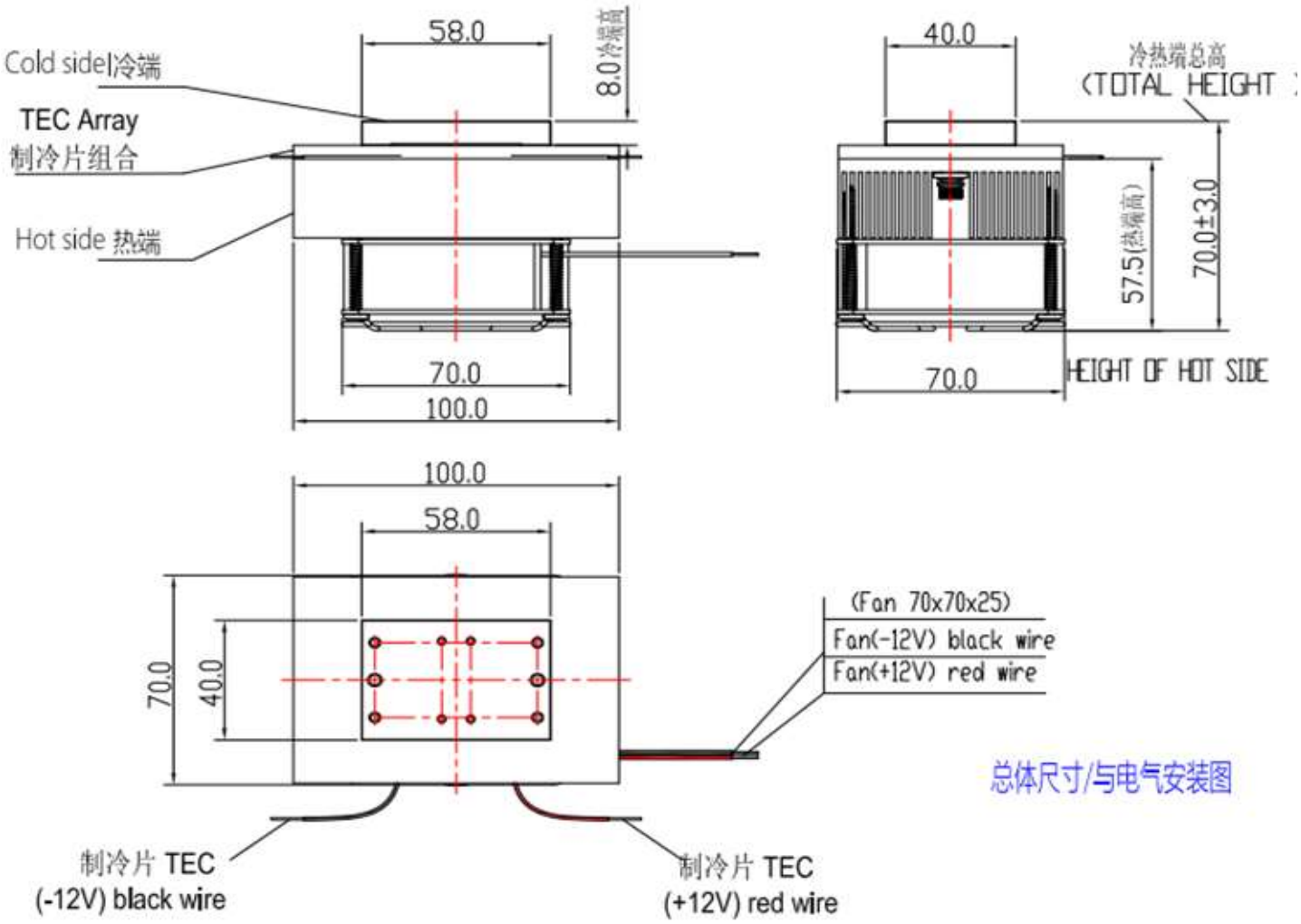
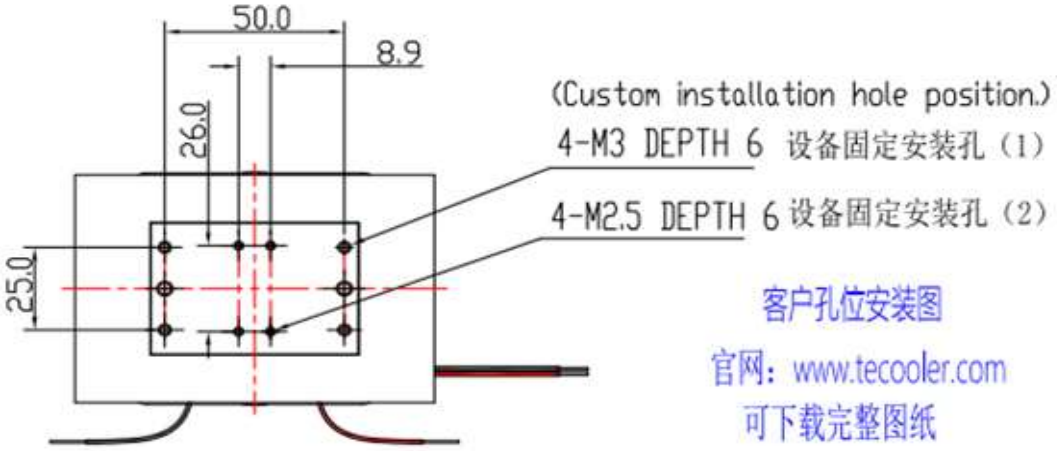
Dimensions and Installation drawing





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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

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