

# **TEA** Datasheet

#### LA-XX-24-152-306-XX-010

**Application** 

Medical diagnostics

Analytical instrumentation

Industrial instrumentation

Photonics laser systems

Food and beverage cooling

### Discription

LA (Liquid to Air) Series Coolers, also known as Liquid Coolers. The hot end is a heat dissipation method of a radiator and a fan, and the cold end is usually a metal water plate with an additional pump to allow the liquid (water) to flow and transfer heat.

LA coolers excel at delivering cooling to concentrated heat sources such as laser diodes and for delivering cooled fluid into remote or compact locations where the cooling assembly itself cannot be located.

When using LA Coolers, the cold end (cold water plate) and water pipes should be well insulated to reduce heat exchange with the environment.

#### Feature

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

### Naming rules

# LA<sub>1</sub>-XX<sub>2</sub>-24<sub>3</sub>- 152<sub>4</sub>-306<sub>5</sub>-XX<sub>6</sub>-010<sub>7</sub>

①Product type
②Cooling capacity at 0°C temperature difference.
③working voltage
④The width of the Cooler
⑤The length of the Cooler
⑦Internal code

### **Physical figure**





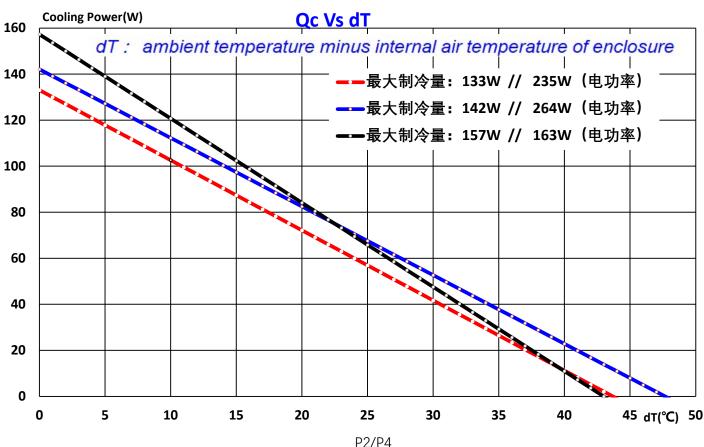
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#### **Peformance Specification**

Cooler Model	LA-133-24-152-306-235	LA-142-24-152-306-264	LA-157-24-152-306-163
Cooling power Qcmax(W)	133	142	157
Nominal Voltage(V)	24		
Max Voltage(V)	26		
Running current(A)	9.8	11	6.8
Startup current(A)	11.8	13.2	8.2
AC adapter 12V	13A	17A	10A
Power Input(W)	235	264	163
COP(dT=0)	57%	54%	96%
MTBF (fans – hrs)(h)	40000		
Dimensions(mm3)	W*L*H 120X210X85 Additional insulation layer 12mm		
Weight(Kg)	1.6		
Performance tolerance	±10%		
Operating tem(°C)	-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 °C and good ventilation at the hot end.			
Internal code	LA30643172301	LA30661862201	LA30661173101

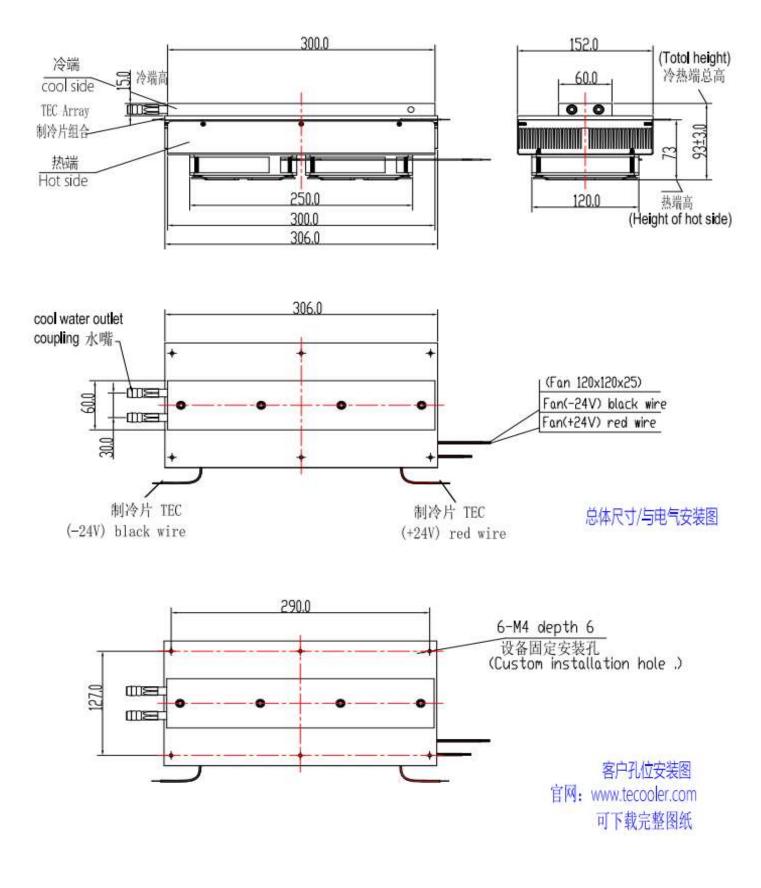
#### **Performance Curves**





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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.
- When using the LA component, heat preservation should be ensured at the cooling end (watercooling plate) and the water pipe to reduce the heat exchange with the environment.
- Liquid solidification should be paid attention to in the environment with a low temperature.

#### 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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