PowerCool Series Thermoelectric Cooler Assembly

The DA-034-24-02 is a Direct-to-Air Thermoelectric Assembly (TEA) that uses impingement flow to transfer heat. It offers dependable, compact performance by cooling objects via conduction. Heat is absorbed through a cold plate and dissipated through a high density heat exchanger equipped with an air ducted shroud and brand name fan. It has a maximum Qc of 31.3 Watts when ΔT = 0 and a maximum ΔT of 42 °C at Qc = 0.

Features
- Compact design
- Precise temperature control
- Reliable solid-state operation
- Low noise
- RoHS-compliant

Applications
- Medical Diagnostic and Analytical Instrumentation
- Thermoelectric Coolers and Assemblies for Medical Applications
- Liquid Cooling Options for PET and SPECT Scanners
- Cooling for Centrifuges
- High-Performance Liquid Chromatography (HPLC)

ELECTRICAL AND THERMAL PERFORMANCE

Heat Pumped at Cold Side (Qc)
Tambient = 35°C | Tcontrol = 20°C

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SPECIFICATIONS

Operating Temperature Range
-10 °C to 46°C

Supply Voltage
24.0 VDC nominal / 27.0 VDC maximum

Current Draw
1.9 A running / 2.6 A startup

Power Supply
46.0 Watts

Performance Tolerance
10%

Fan MTBF
50,000 hours

Weight
0.45 kg

MOUNTING HOLE LOCATION

WIRING SCHEMATIC

Electrical Connections:
- TEM+: Pink
- TEM-: Green
- FAN+: Purple
- FAN: Blue

Warning: Single supply not applicable in heating mode or with PWM-regulation.

NOTES

1 For indoor use only
2 Thermal grease included

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