

# Air to Air Thermoelectric Assembly



## ATS PART# ATS-WFF-150W-12-C

ATS' air to air thermoelectric assemblies are heat exchangers that remove heat from an enclosure and are designed for temperature regulation of small electronic cabinets or enclosures. They are often used when it is better to circulate cooled air rather than use direct contact with a cold plate.



For Illustration Purposes ONLY.

### FEATURES & BENEFITS

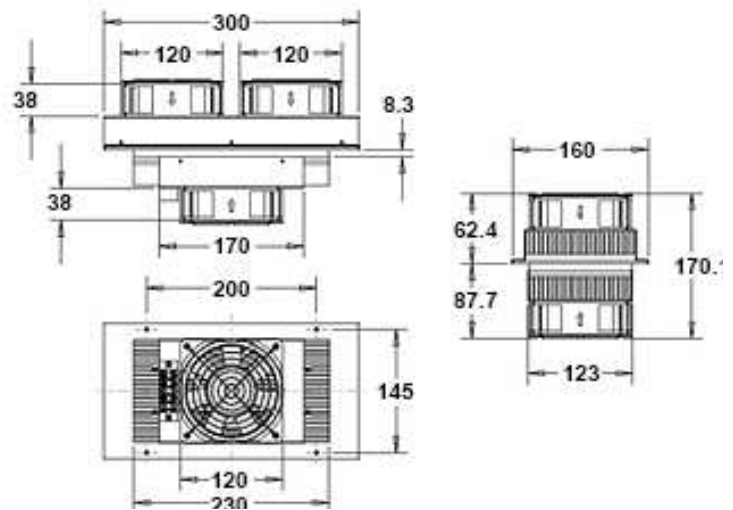
- » Compact and lightweight
- » Can be mounted in any orientation
- » No compressor
- » Virtually maintenance free
- » Simple quick installation
- » Air to air heat exchanger
- » Quiet operation
- » Uses thermoelectrics

### SPECIFICATION

|                   |                             |
|-------------------|-----------------------------|
| Max Cooling power | 83W @ $\Delta T = 0^\circ$  |
| TEC Voltage       | 12 VDC                      |
| TEC Current       | Start 19 A / Working 16.4 A |
| Fan Voltage       | 12 VDC                      |

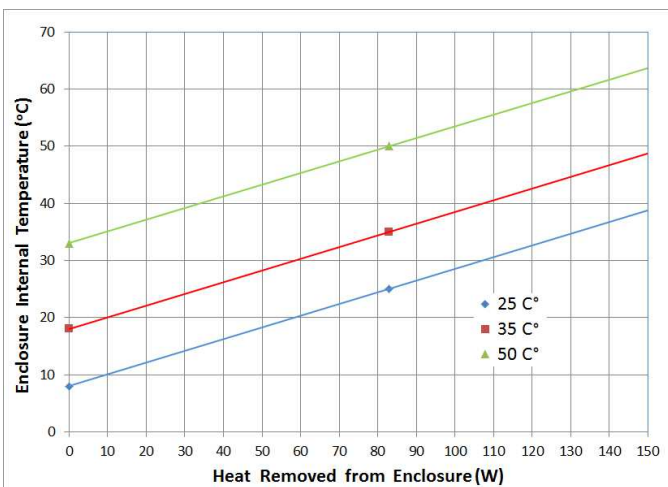
### APPLICATIONS

- » Enclosure or cabinet cooling
- » Electronics cooling
- » Medical, surgical and biological process cooling
- » Thermal management
- » Medical equipment
- » Refrigerators and water coolers
- » Industrial storage and food transportation



### Product Detail

| Max Cooling Power | TEC Voltage | TEC Current | Hot Side Fan              | Cold Side Fan             | Operating Temperature | Dimensions (mm) | Mounting Holes (mm) | Weight  |
|-------------------|-------------|-------------|---------------------------|---------------------------|-----------------------|-----------------|---------------------|---------|
| 83W               | 12V         | 16.5A       | 120x120x38 mm<br>12V 0.5A | 120x120x38 mm<br>12V 0.5A | 0° – 70°              | 300x160x170.1   | 200x145             | 4.5 Kgs |



### NOTES:

- Please use the 12 VDC power with the ripple less than 10%
- Please do not drop, otherwise component can crack and damage the TECs.
- Please keep 10cm distance from walls for proper ventilation when mounting.
- Please do not use it when the temperature of the assembly or environment is higher than 70°C.
- Graph shows an example of when cabinet temperature is 50°C and the environment temp is 50°C, the cooler can transfer 83W from the cabinet to the ambient.
- $\Delta T = T_{\text{enclosure}} - T_{\text{ambient}}$



**ATS** ADVANCED THERMAL SOLUTIONS, INC.  
Innovations in Thermal Management®