Model MAA600T-24

MAA640T-48
MAA600T-12/24

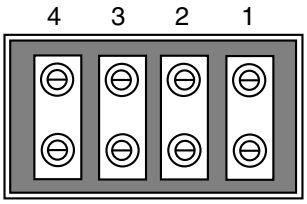
The MAA640T-48 and the MAA600T-12/24 Thermoelectric air conditioners are designed for electronic cabinets, refrigeration and environmental chambers. They can cool to 78˚F below ambient or maintain ambient temperature while removing up to 640 BTU/Hr (@ 77˚F ambient). These units offer increased capacity within a compact design, making them ideal where space is limited. Because there is no air exchanged between the cabinet and the ambient, the MAA640T-48 and MAA600T-12/24 are ideal for NEMA 12 environments. Optionally, a harsh environment version of this series, suitable for maintaining NEMA 4X or IP54 ratings is available. These air conditioners are virtually maintenance-free, with no filter to change, and can be mounted in any orientation, offering design flexibility with solid-state reliability.

Model Number Nomenclature

M A A ___ T - ___ ___

- MELCOR
- Cabinet Side (Air)
- Ambient Side (Air)
- Capacity (BTU/Hr): 640 (48 VDC); 600 (12/24 VDC)
- Thru Mount
- Voltage: 12 = 12 VDC; 24 = 24 VDC; 48 = 48 VDC
- X = Maintains NEMA 4X and IP54 ratings. Leave blank for standard NEMA12

Wiring Schematic (Power Connector)



Position	Description
1	TEC +
2	TEC -
3	FAN +
4	FAN -

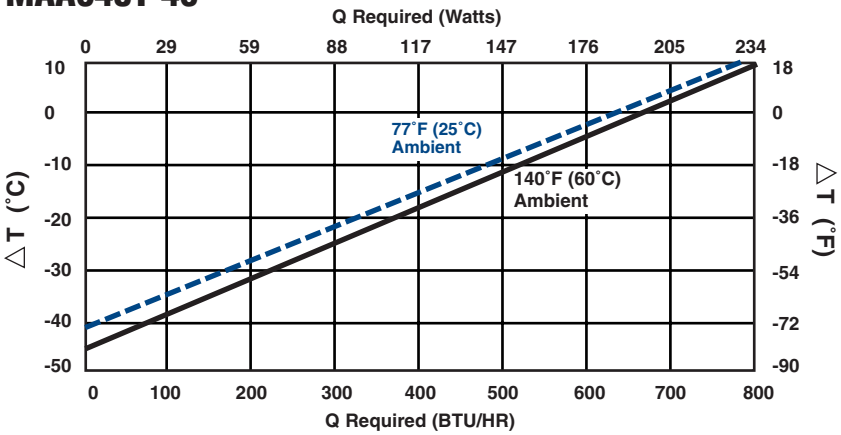
Specifications:			
Model:	MAA600T-12	MAA600T-24	MAA640T-48
Capacity	600 BTU/Hr (176 Watts)	600 BTU/Hr (176 Watts)	640 BTU/Hr (188 Watts)
Input Voltage	12 VDC	24 VDC	48 VDC
Max. Ambient Temp.**	140˚F / 60˚C	140˚F / 60˚C	140˚F / 60˚C
Current (Running)	29.0 amps	14.5 amps	9.0 amps
Weight	16.3 lbs. (7.4 kg)	16.3 lbs. (7.4 kg)	16.3 lbs. (7.4 kg)
Rating Maintained	NEMA 12 or 4X / IP54	NEMA 12 or 4X / IP54	NEMA 12 or 4X / IP54
Overall Dimensions	10” H x 7” W x 9.6” D 254mm x 178mm x 244mm	10” H x 7” W x 9.6” D 254mm x 178mm x 244mm	10” H x 7” W x 9.6” D 254mm x 178mm x 244mm

** Consult MELCOR for higher ambient temperature.

1040 Spruce Street • Trenton, NJ 08648 • TEL: 609-393-4178 • FAX: 609-393-9461 • WEB: www.melcor.com • E-Mail: tecooler@melcor.com

Performance Curves:

MAA640T-48

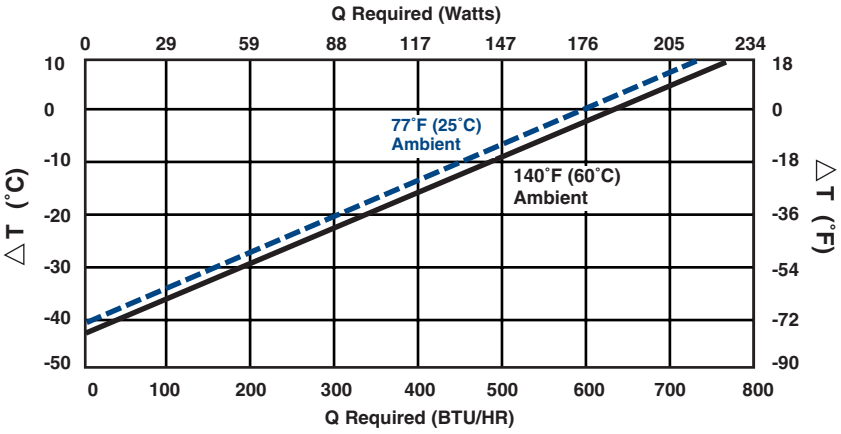


Important:

The air conditioner performance curves are dependent upon active and passive heat loads. To calculate passive cabinet heat gain, see the instructions on pages 6 and 7.

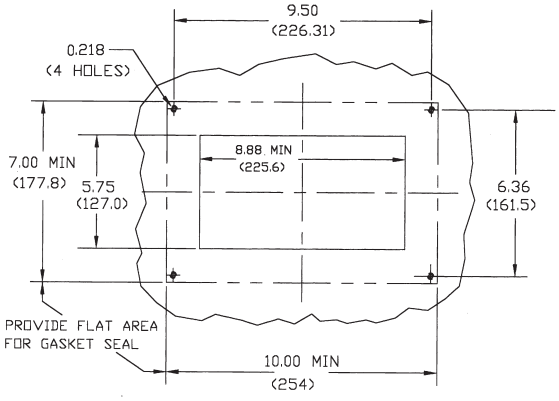
For assistance contact MELCOR.

MAA600T-12/24



△T = Tmax Cabinet - Tmax Ambient

Installation Cutout



Dimensional Drawing

Inches (mm)