

CPV Cascade Accessories

Cascades Extended Temperature Range

LOW TEMPERATURE CASCADES

One thermoelectric stacked on top of another with the goal of increasing the maximum temperature differential is a "cascade". These cascade assemblies are made to be mounted to either the air cooled model **AHP-1200CAS Part # 9-35KB-1-CAS** or the liquid cooled model **LHP-1200CAS Part # 3-35KB-1-CAS** cold plates to create 2 and 3 stage cascades.

For plate temperature above 90 °C use with **9-35KB-6-CAS** or **3-35KB-6-CAS**.

The performance curves shown are actual tests run under very well insulated conditions.

The performance will vary with the degree of insulation, with the amount of the active load and with the ambient temperature.

INCLUDED WITH AHP-1200CAS

- All the features of AHP-1200CPV series
- Tap pattern for installation of cascades
- Rear panel controlled power output for cascades
- Clear acrylic hinged cover

INCLUDED WITH CASCADES

- Mounting hardware
- Power input leads
- Thermally conductive substrate pad
- Precision machined cold plate surfaces
- Embedded RTD sensor and connector for use with **AHP-1200CAS** or **LHP-1200CAS**



CCP-31 3 Stage Cascade shown with AHP-1200CAS



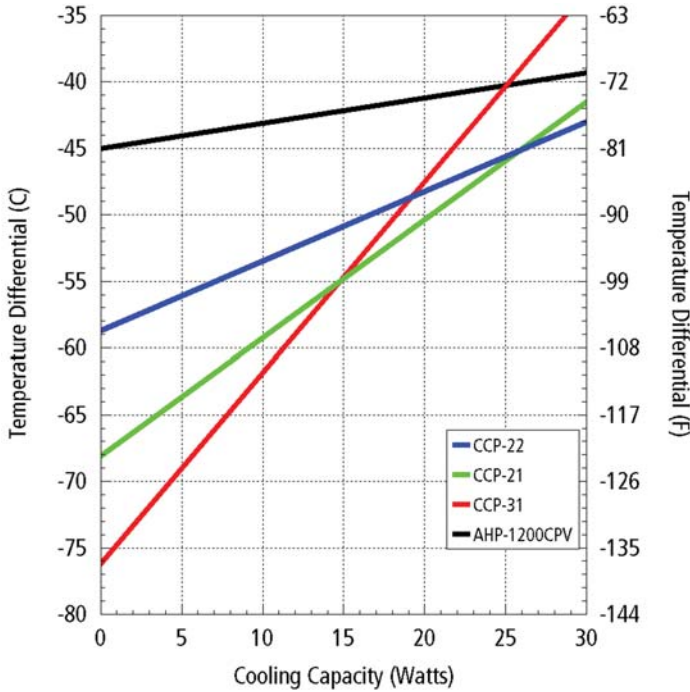
CCP-21 shown with AHP-1200CAS (rear view)

SPECIFICATIONS AHP-300CP

PART NUMBER	TOP SURFACE AREA INCHES	VOLTAGE VDC	CURRENT AMPS	TEMP. CONTROL	MAX DELTA T AT 25°C AMB. °C	OPERATING AMBIENT RANGE °C	COLD PLATE TEMPERATURE RANGE °C	CASCADE STAGES
CCP-22	8.8 x 4.5	24	4.6	AHP-1200CAS	-59	-10 / +70	-30 / +90	2
CCP-21	6.0 x 3.0	24	2.5	AHP-1200CAS	-68	-10 / +70	-40 / +90	2
CCP-31	6.0 x 3.0	24 & 12	4.6 & 1.8	AHP-1200CAS	-76	-10 / +70	-50 / +90	3
CCP-22H	8.8 x 4.5	24	4.6	AHP-1200CAS	-59	-10 / +70	-30 / +150	2
CCP-21H	6.0 x 3.0	24	2.5	AHP-1200CAS	-68	-10 / +70	-40 / +150	2
CCP-31H	6.0 x 3.0	24 & 12	4.6 & 1.8	AHP-1200CAS	-76	-10 / +70	-50 / +150	3

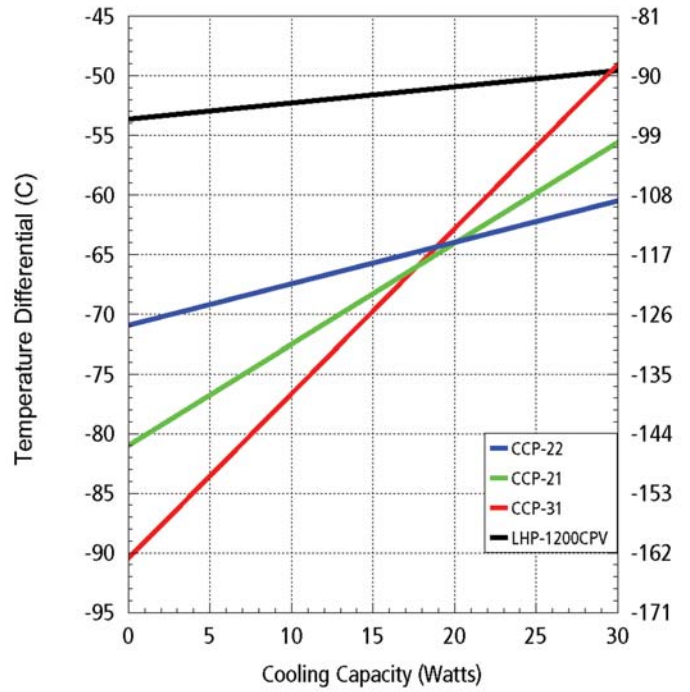
PERFORMANCE CURVE

Cascades with AHP-1200CPV



Curves represent cascades used with AHP-1200CAS in 25 °C ambient with well insulated cold plate surface

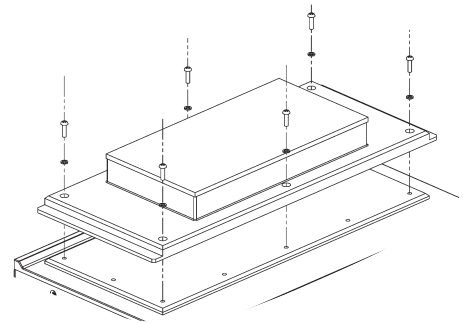
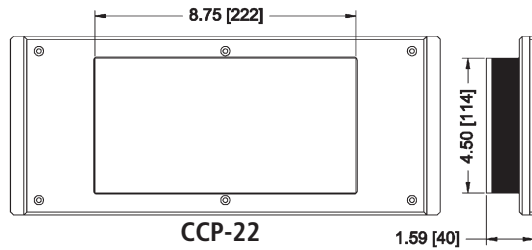
Cascades with LHP-1200CPV



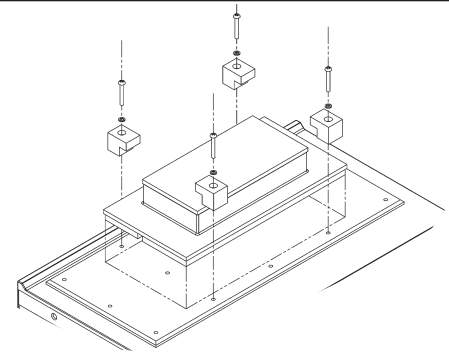
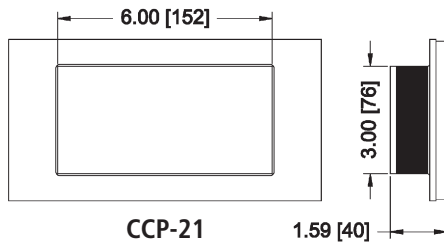
Curves represent cascades used with LHP-1200CAS with 25 °C coolant flow @ 2 L/Min and well insulated cold plate surface

DIMENSIONS

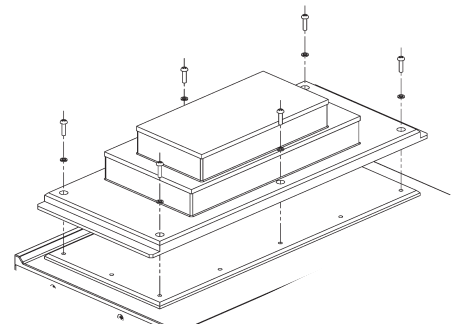
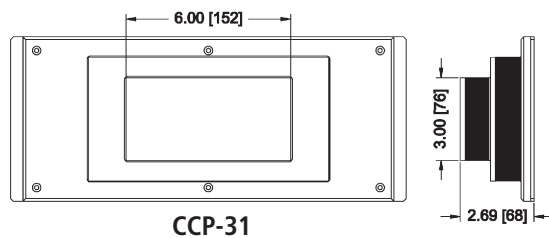
TWO STAGE - LARGE PLATE



TWO STAGE - SMALL PLATE



THREE STAGE



Dimensions: Inches [Millimeters]