

IHP-590

Air Cooled
Internal Mounted
Nema-4, 4X

Internal Mount Air Conditioner/Heat Exchanger

24 VDC
315 BTU/HR

FEATURES

- Compact (only 17.4" X 8" X 7.8")
- Mounts and operates in any orientation, inside enclosure
- Available in two installation styles:
 - **Style A:** Installs from inside of the enclosure
 - **Style B:** Installs from outside of the enclosure
- Low vibration and noise
- No moving parts except fans
- Environmentally safe
- No compressor, fluorocarbons or filters
- Virtually maintenance-free operation
- Stainless steel housing
- Efficient heat exchanger mode (ECO-Mode)
- Weight 16 LBS.

CONTROL TEMPERATURES

| | |
|---------------------------|------------|
| Active Cooling | 35 °C |
| Heat Exchanger (ECO-Mode) | 25 °C |
| Active Heating | 10 °C |
| Typical Hysteresis | 5 °C |
| Operating Ambient | -40/+70 °C |
| Operating Enclosure | -10/+60 °C |

POWER INPUTS

| | |
|-------------------|----------|
| Voltage | 24 VDC |
| Current, Active | 6.9 AMPS |
| Current, ECO-Mode | 0.3 AMPS |

PERFORMANCE RATINGS

| | |
|--------------------------|--------------|
| Cooling (Traditional) | 315 BTU/HR |
| Cooling (Din 3168) | 92 WATTS |
| Cooling COP (at L35 L35) | 0.56 |
| Heating (Traditional) | > 562 BTU/HR |
| Heating (Din 3168) | > 165 WATTS |
| Heating COP | > 1.0 |

INCLUDES

- Temperature controller
- Mounting gasket and hardware
- Power input leads
- Power saving heat exchanger mode (ECO-Mode)



Picture above shows both installation styles
Shown on the left is the **Style A** (installs from inside of the enclosure)
Shown on the right is the **Style B** (installs from outside of the enclosure)

IHP-590

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-4,4X IP 56

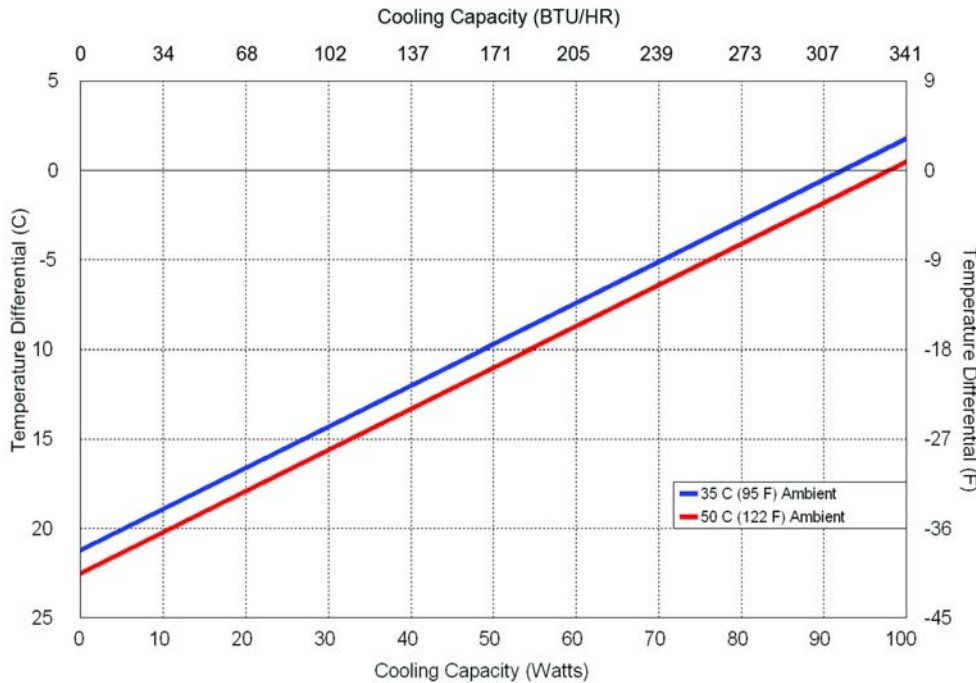
RATING (TRADITIONAL)

315 BTU/hr @ 0 °F ΔT
479 BTU/hr @ +20 °F ΔT

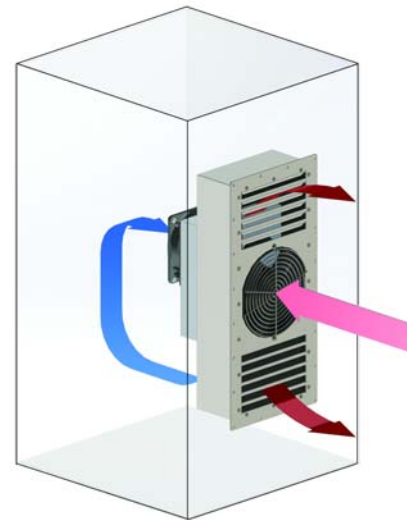
RATING (DIN 3168)

92 Watts L35 L35
32 Watts L35 L50

PERFORMANCE CURVE



| Equation of Line: $y = \Delta T(^{\circ}C)$ $x = \text{Capacity (Watts)}$ | | |
|---|-------------------|-------------------|
| Ambient Temp | 35°C | 50°C |
| IHP-590 | $y = .23x - 21.2$ | $y = .23x - 22.5$ |



Air Flow Pattern

CONFIGURATIONS

| MODEL | PART NUMBER | NOTES | INSTALLATION STYLE | TEMPERATURE CONTROL | ENVIRONMENT |
|-------------|--------------|------------------------------------|--------------------|---------------------|----------------------|
| IHP-590XE | B-G0J5-4-001 | Cool only, sealed hot side fan | A | TC-4F | NEMA-4/4X, IP 56 |
| IHP-590XEHC | B-G095-5-001 | Heat/Cool, sealed hot side fan | A | None* | NEMA-4/4X, IP 56 |
| IHP-590XEHC | B-G0I5-5-001 | Heat/Cool, sealed hot side fan | A | TC-7F | NEMA-4/4X, IP 56 |
| IHP-590X | B-G0J5-2-001 | Cool only, Mil. grade hot side fan | A | TC-4F | NEMA-4X/Harsh, IP 56 |
| IHP-590XHC | B-G095-3-001 | Heat/Cool, Mil. grade hot side fan | A | None* | NEMA-4X/Harsh, IP 56 |
| IHP-590XHC | B-G0I5-3-001 | Heat/Cool, Mil. grade hot side fan | A | TC-7F | NEMA-4X/Harsh, IP 56 |
| IHP-590XE | B-G0J5-4-101 | Heat/Cool, sealed hot side fan | B | TC-4F | NEMA-4/4X, IP 56 |
| IHP-590XEHC | B-G095-5-101 | Heat/Cool, sealed hot side fan | B | None* | NEMA-4/4X, IP 56 |
| IHP-590XEHC | B-G0I5-5-101 | Heat/Cool, sealed hot side fan | B | TC-7F | NEMA-4/4X, IP 56 |
| IHP-590X | B-G0J5-2-101 | Cool only, Mil. grade hot side fan | B | TC-4F | NEMA-4X/Harsh, IP 56 |
| IHP-590XHC | B-G095-3-101 | Heat/Cool, Mil. grade hot side fan | B | None* | NEMA-4X/Harsh, IP 56 |
| IHP-590XHC | B-G0I5-3-101 | Heat/Cool, Mil. grade hot side fan | B | TC-7F | NEMA-4X/Harsh, IP 56 |

* For controller options contact TECA; Heating function via reverse polarity (controller dependent)

