IHP-690 Series

Internal Mount Kiosk & Enclosure Temperature Control System

Product Manual

V01-2

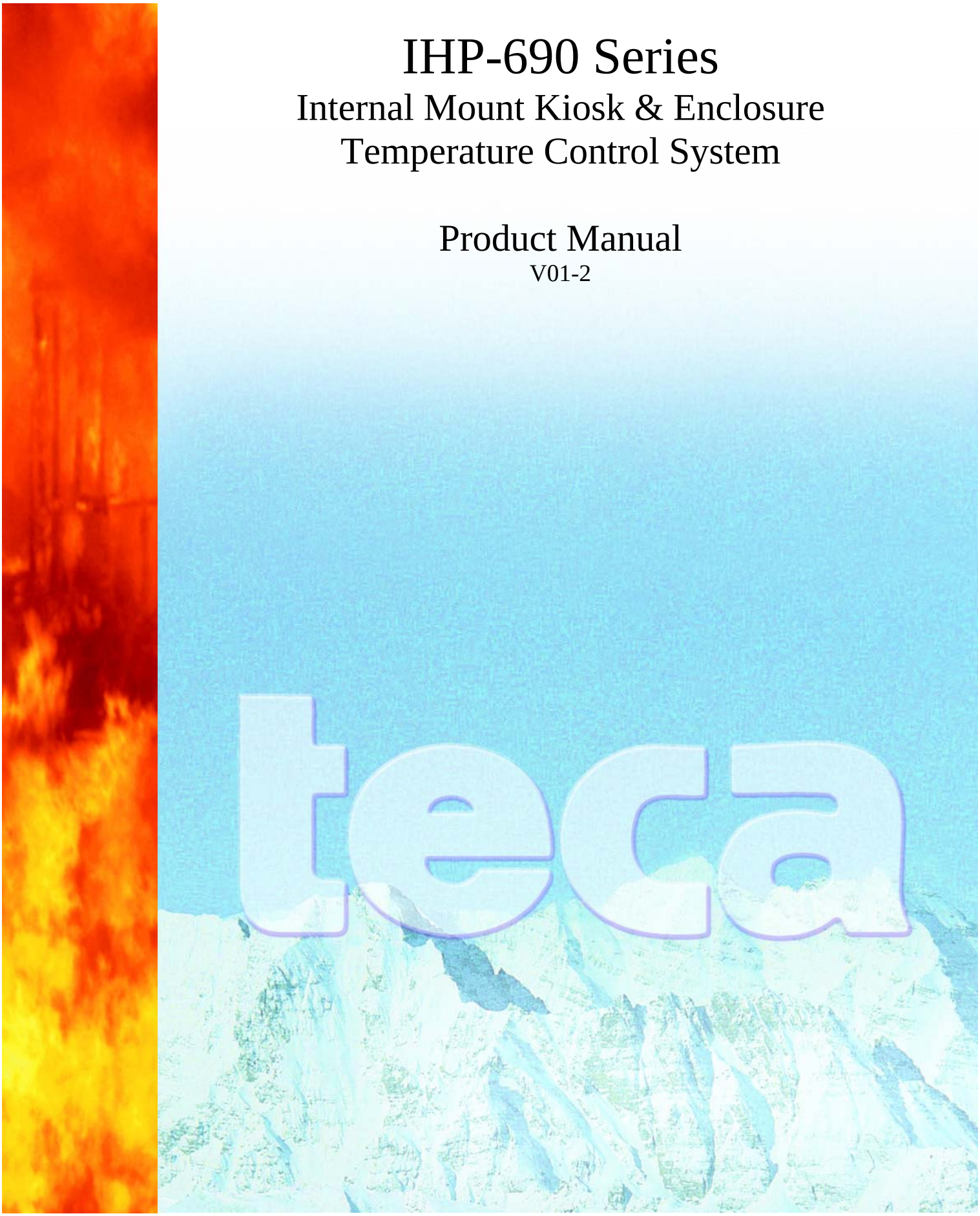


Table of Contents

Page	Description
1	Cover Page
2	Blank Page
3	Table of Contents
4-5	AHP-690 Data Sheet
6-7	Dimensional Drawings
8	Typical Field Mounting (Style A)
9	Typical Field Mounting (Style B)
10	Typical Wiring Diagram and Temperature Controller Information
11	Notes
12	Blank Page

IHP-690 | Internal Mount Air Conditioner/Heat Exchanger

Air Cooled
Internal Mounted
Nema-12, 4, 4X

24 VDC
390 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 17 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

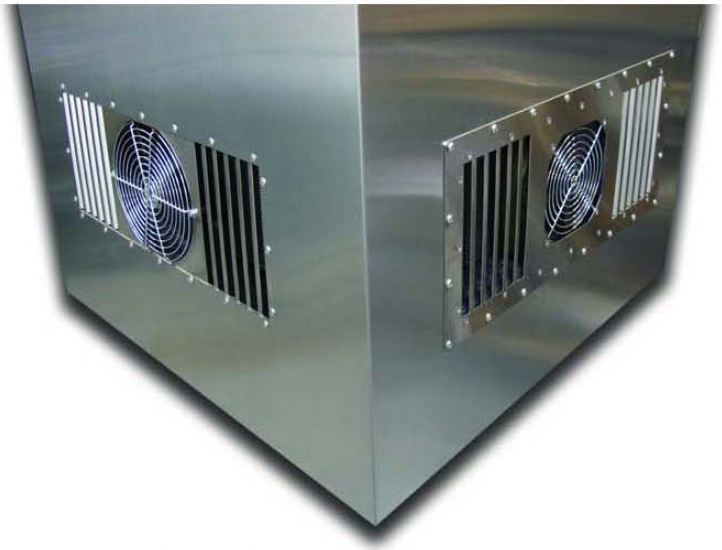
Voltage	24 VDC
Current, Active	15 AMPS
Current, ECO-Mode	0.5 AMPS

PERFORMANCE RATINGS

Cooling (Traditional)	392 BTU/HR
Cooling (Din 3168)	115 WATTS
Cooling COP (at L35 L35)	0.44
Heating (Traditional)	> 900 BTU/HR
Heating (Din 3168)	> 264 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)

Air Conditioner - Air Cooled

IHP-690

MOUNTING STYLE

Internal Mounted

ENVIRONMENTS SERVED

NEMA-12 IP 52

NEMA-4 IP 56

RATING (TRADITIONAL)

392 BTU/hr @ 0 °F ΔT

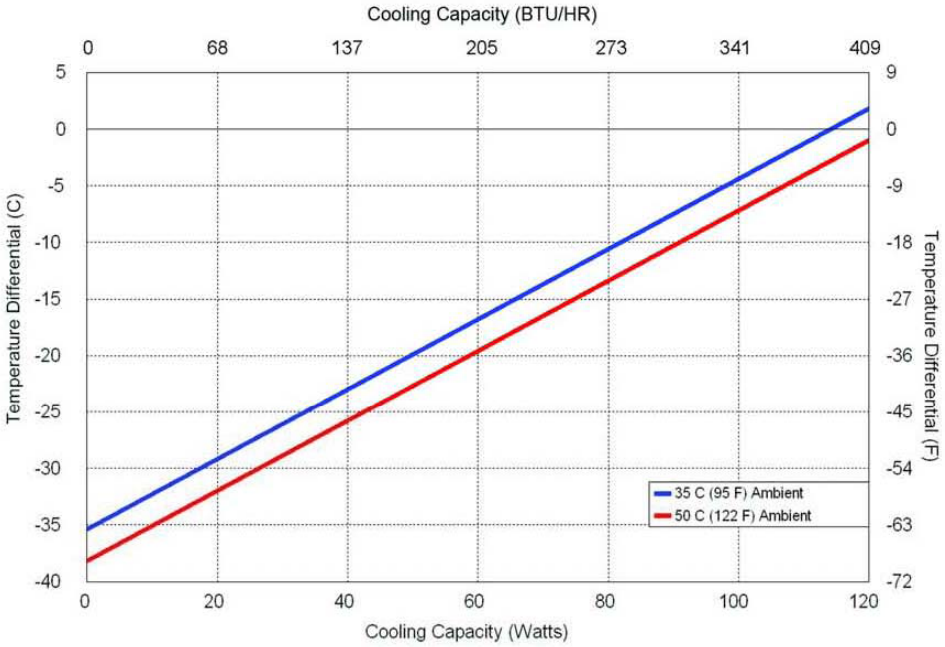
511 BTU/hr @ +20 °F ΔT

RATING (DIN 3168)

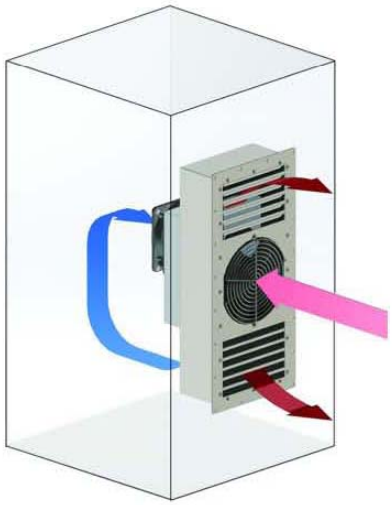
115 Watts L35 L35

75 Watts L35 L50

PERFORMANCE CURVE



Equation of Line: y=ΔT(°C) x=Capacity (Watts)		
Ambient Temp	35°C	50°C
IHP-690	y=.31x-35.4	y=.31x-38.2

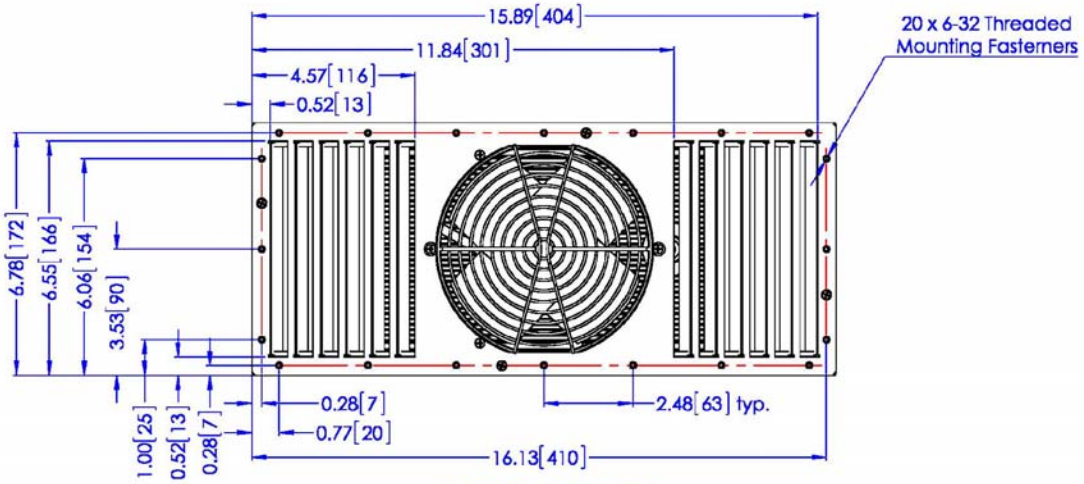


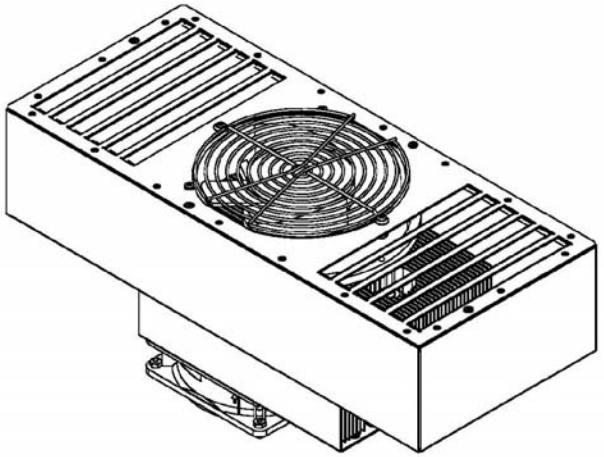
Air Flow Pattern

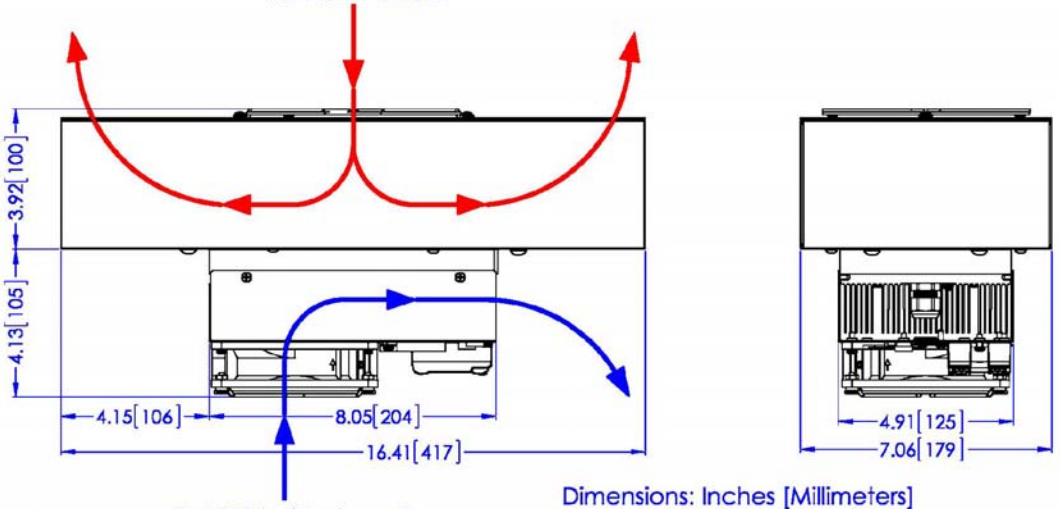
SPECIFICATIONS

MODEL	PART NUMBER	NOTES	INSTALLATION STYLE	TEMPERATURE CONTROL	ENVIRONMENT
IHP-690	B-M0J5-0-000	Cool only, industrial fans	A	TC-4F	NEMA-12, IP 52
IHP-690HC	B-M095-1-000	Heat/Cool, industrial fans	A	None*	NEMA-12, IP 52
IHP-690HC	B-M0I5-1-000	Heat/Cool, industrial fans	A	TC-7F	NEMA-12, IP 52
IHP-690XE	B-M0J5-4-000	Cool only, sealed hot side fan	A	TC-4F	NEMA-4, IP 56
IHP-690XEHC	B-M095-5-000	Heat/Cool, sealed hot side fan	A	None*	NEMA-4, IP 56
IHP-690XEHC	B-M0I5-5-000	Heat/Cool, sealed hot side fan	A	TC-7F	NEMA-4, IP 56
IHP-690	B-M0J5-0-100	Cool only, industrial fans	B	TC-4F	NEMA-12, IP 52
IHP-690HC	B-M095-1-100	Heat/Cool, industrial fans	B	None*	NEMA-12, IP 52
IHP-690HC	B-M0I5-1-100	Heat/Cool, industrial fans	B	TC-7F	NEMA-12, IP 52
IHP-690XE	B-M0J5-4-100	Cool only, sealed hot side fan	B	TC-4F	NEMA-4, IP 56
IHP-690XEHC	B-M095-5-100	Heat/Cool, sealed hot side fan	B	None*	NEMA-4, IP 56
IHP-690XEHC	B-M0I5-5-100	Heat/Cool, sealed hot side fan	B	TC-7F	NEMA-4, IP 56

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







Dimensions: Inches [Millimeters]

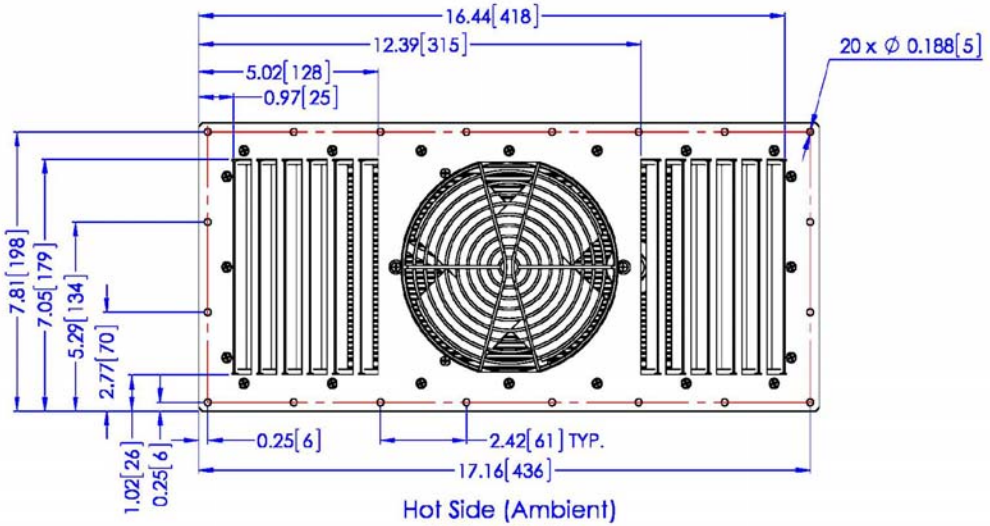
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DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	AA	11/18/15
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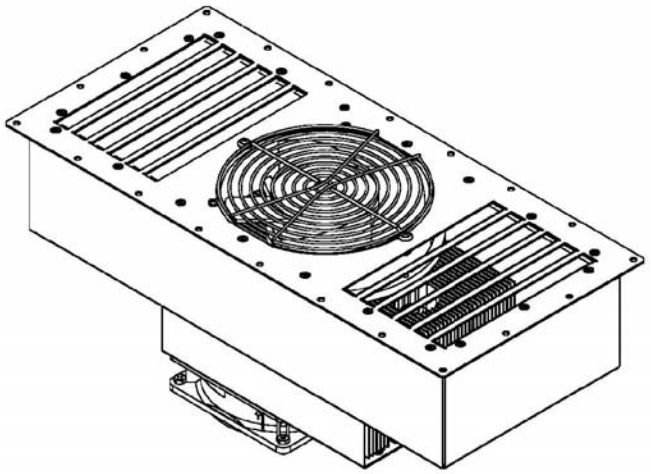
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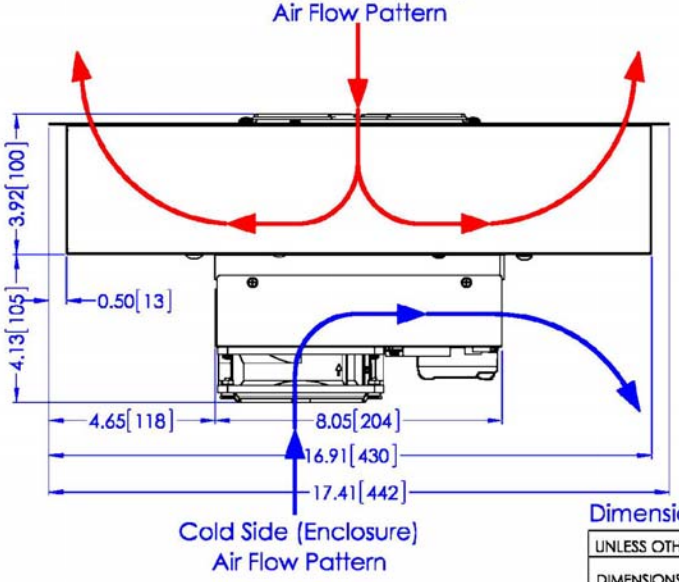
IHP-690 SERIES
ASSEMBLY (INSTALLATION STYLE A)

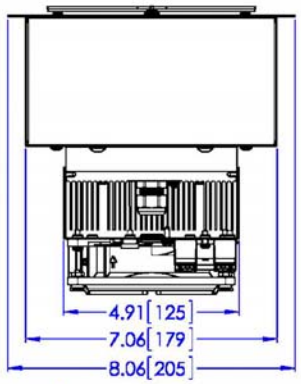
SIZE	DWG. NO.	REV
A	SK151149	

S0417 SHEET 1 OF 1









Dimensions: Inches [Millimeters]

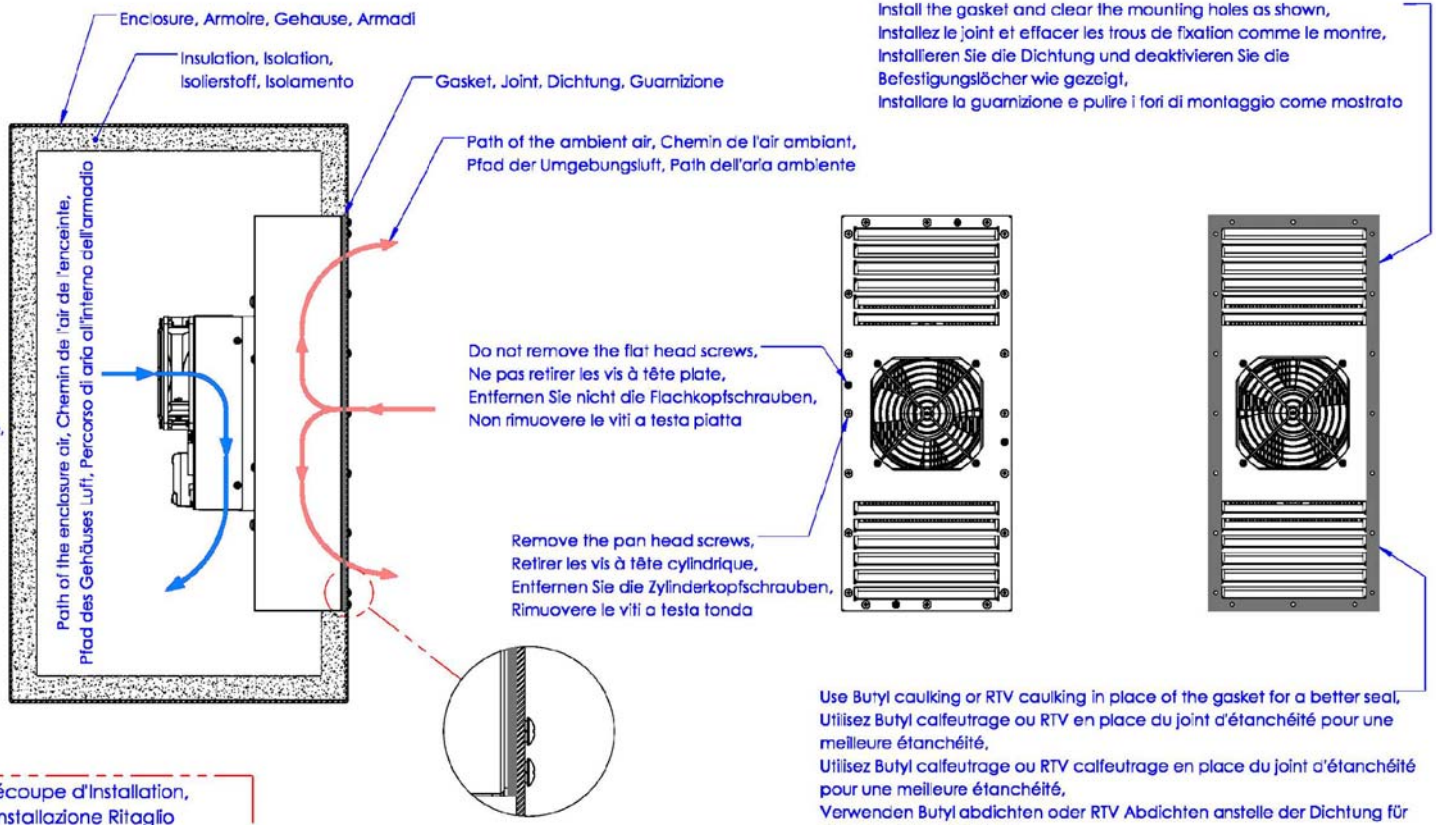
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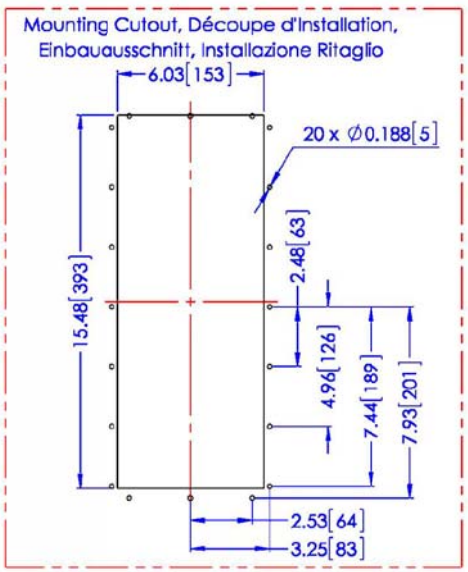
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IHP-690 SERIES
ASSEMBLY (INSTALLATION STYLE B)

SIZE	DWG. NO.	REV
A	SK151150	

S0418 SHEET 1 OF 1





English, Francais, Deutsch, Italiano
Dimensions: Inches [Millimeters]

Typical field mounting IHP series installation style A (installation from inside the enclosure),
Montage typique IHP série Style A Installation (installation à partir de l'intérieur de l'enceinte),
Typische montage IHP-Serie Installations Style A (montage von der Innenseite des Gehäuses),
Tipico di montaggio IHP Serie Stile Installazione A (installazione all'interno dell'armadio)

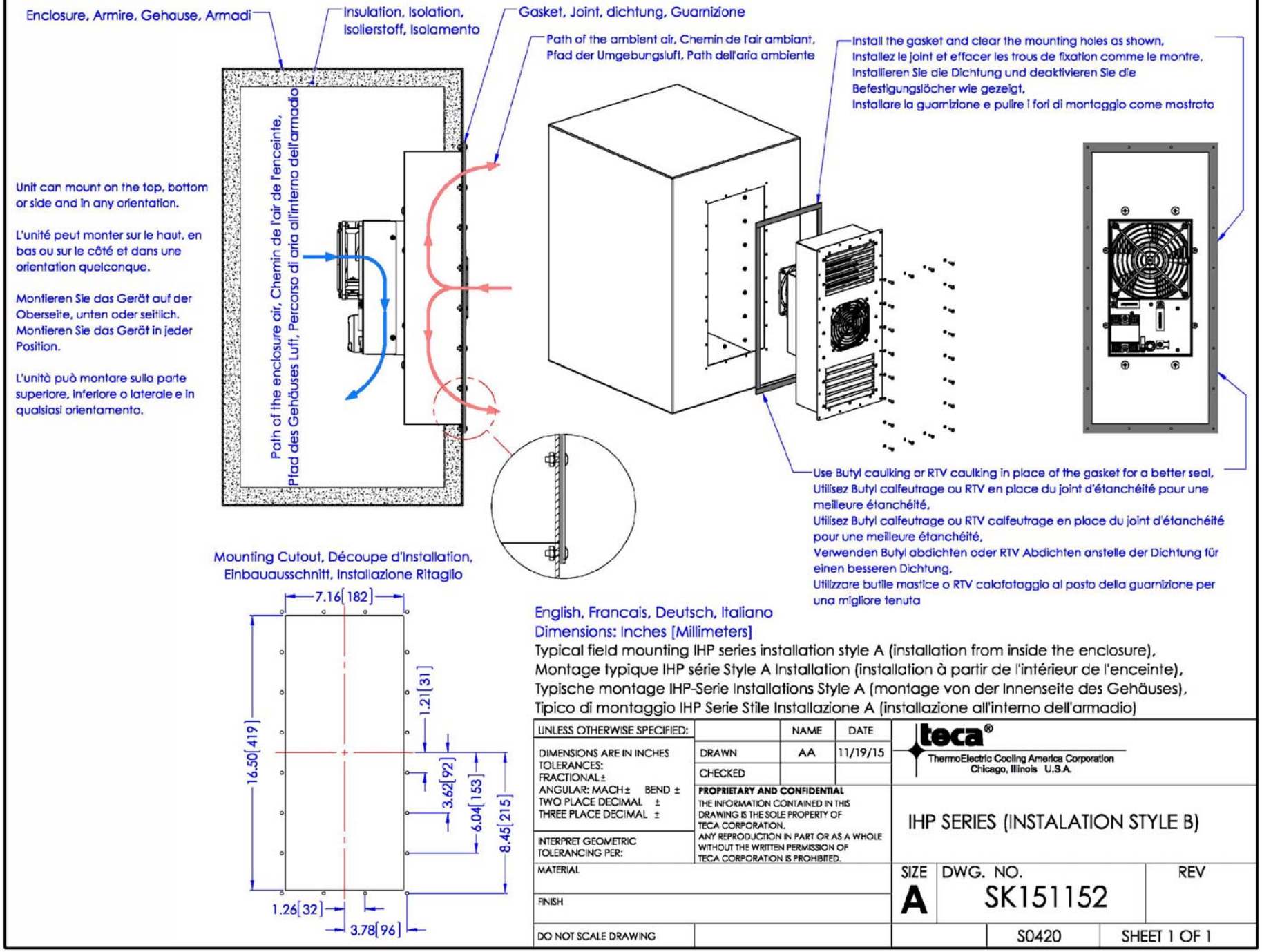
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DIMENSIONS ARE IN INCHES TOLERANCES: FRACTIONAL ± ANGULAR: MACH ± BEND ± TWO PLACE DECIMAL ± THREE PLACE DECIMAL ±	DRAWN	AA	11/18/15
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MATERIAL			
FINISH			
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IHP SERIES (INSTALLATION STYLE A)

SIZE	DWG. NO.	REV
A	SK151151	

S0419 SHEET 1 OF 1



English, Francais, Deutsch, Italiano

Dimensions: Inches [Millimeters]

Typical field mounting IHP series installation style A (installation from inside the enclosure),
Montage typique IHP série Style A Installation (installation à partir de l'intérieur de l'enceinte),
Typische montage IHP-Serie Installations Style A (montage von der Innenseite des Gehäuses),
Tipico di montaggio IHP Serie Stile Installazione A (installazione all'interno dell'armadio)

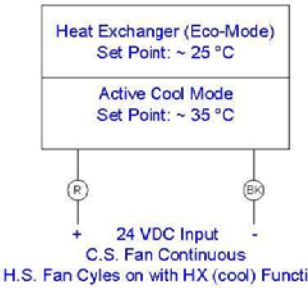
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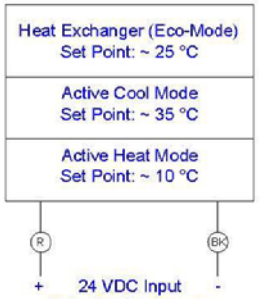
IHP SERIES (INSTALATION STYLE B)

SIZE	DWG. NO.	REV
A	SK151152	
	S0420	SHEET 1 OF 1

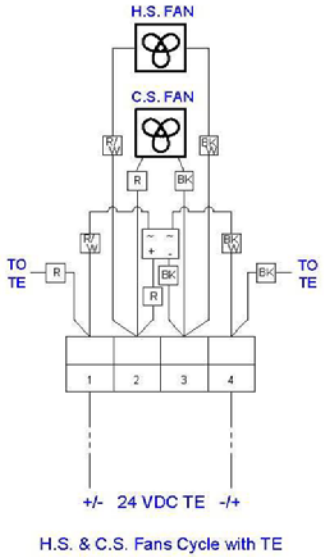
IHP Series typical wiring
Cool only with TC-4F control



IHP Series typical wiring
Heat/Cool with TC-7F control

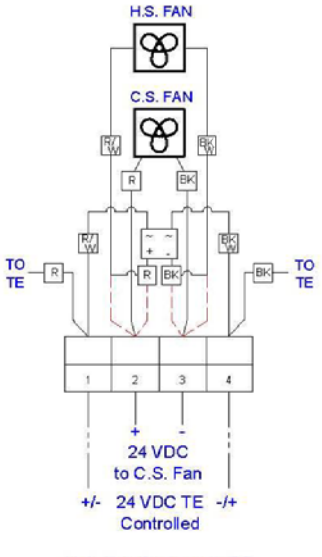


IHP Series factory wiring
Controller: None or customer supplied



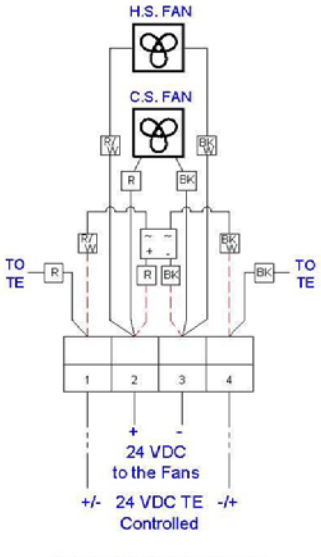
H.S. & C.S. Fans Cycle with TE

IHP Series modified wiring
Controller: None or customer supplied



H.S. Fan Cycles with TE

IHP Series modified wiring
Controller: None or customer supplied



C.S. & H.S. Fan Continuous

- - - - - Indicates wires to be disconnected

REV	DESCRIPTION	Date	APPROVED

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MATERIAL:

THERMOELECTRIC COOLING AMERICA CORP.

IHP SERIES
TYPICAL WIRING DIAGRAM AND
TEMPERATURE CONTROL INFORMATION

DRAWN BY:	DRAWING #	REV LEVEL
AA	SK151153	
DATE: 11/23/15		
S0421	SCALE	MASTER: MASTER / SHEET

Notes