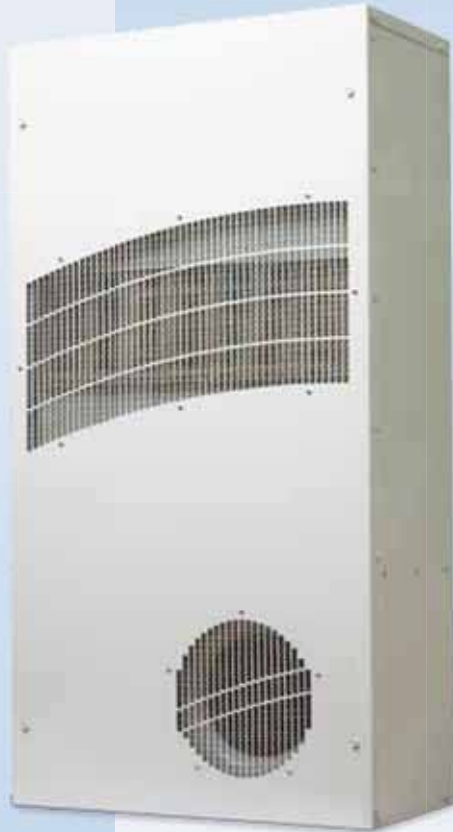


Product Overview

**CLIMAGUARD™
Outdoor Heat Exchangers**



TX23 Model



TX38 Model



TX52 Model

*Lab- and field-tested
to seal out extreme weather*



CLIMAGUARD™ Outdoor Heat Exchangers

PRODUCT OVERVIEW

Put this Type 4 / Telcordia GR-487-capable heat exchanger to the test. You'll find that every unit keeps your outdoor enclosure sealed tight for reliable closed-loop cooling. Works on AC or DC voltage power input.

APPLICATIONS

- Telecommunications cabinets
- Alternative energy
- Outside plant applications
- Other outdoor electronic systems

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Outdoor Heat Exchangers

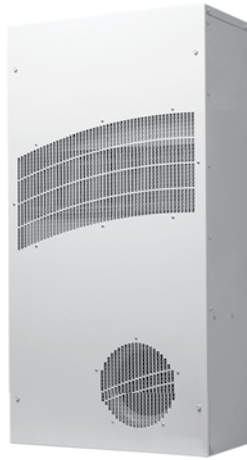
CLIMAGUARD HEX



TX23
 Models
 14 W/°F (25 W/°C)



TX33
 Models
 28 W/°F (50 W/°C)



TX38
 Models
 56 W/°F (100 W/°C)



TX52
 Models
 83 W/°F (150 W/°C)

Industry Standards

UL/cUL Listed or UR/cUR Recognized

- CE
- Telcordia GR-487 capable
- Type 12/3R/4 Standard
- Type 4X stainless steel option available

Application

- Telecom shelters
- Outdoor cabinets
- Equipment buildings
- Instrument enclosures
- And more

Features

- Unique counterflow aluminum core for high efficiency and high performance heat transfer
- Models for 24 VDC, 48 VDC, 115 VAC and 230 VAC power supplies
- UL Listed or Recognized to save customers time and money with agency approvals
- Operating temperature range from -40 F/-40 C to 149 F/65 C
- Variable speed blowers standard on DC powered units for quiet running
- Surface or recessed mount capable
- Low-carbon mild-steel sheet-metal cover for rugged factory environments
- Easy-mount flanges for simple installation

- Mounting hardware, gaskets and user manual furnished with the unit
- Every unit functionally tested before shipping
- Filterless design for low maintenance and easy cleaning
- Engineered for temperature extremes, corrosive environments and wind driven rain

Finish

- RAL 7035 light-gray, semi-textured powder-coat paint standard
- Stainless steel Type 304 or 316 finishes available on Type 4X models
- Other colors and textures available

Options

- Thermostat Package
 - Special Voltage Package
 - Outdoor Package
 - Harsh Environment Package*
 - Stainless Steel Package*
 - Heater Package*
- * Consult the factory for availability and catalog number.

Notes

Visit www.McLeanCoolingTech.com to download 2D and 3D CAD drawings into the overall design of your electronic system

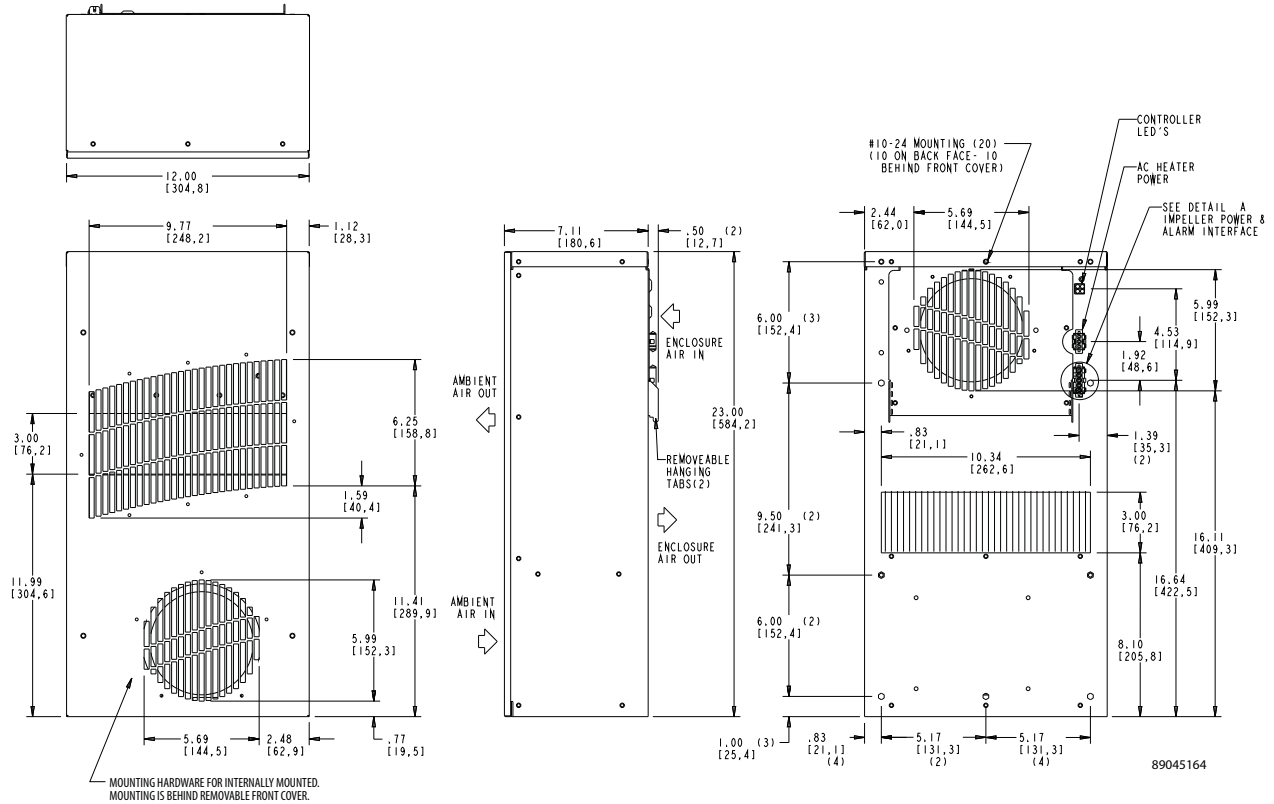
CLIMAGUARD™ Outdoor Heat Exchangers

 Performance Data **TX23 Models 14 W/°F (25 W/°C)**

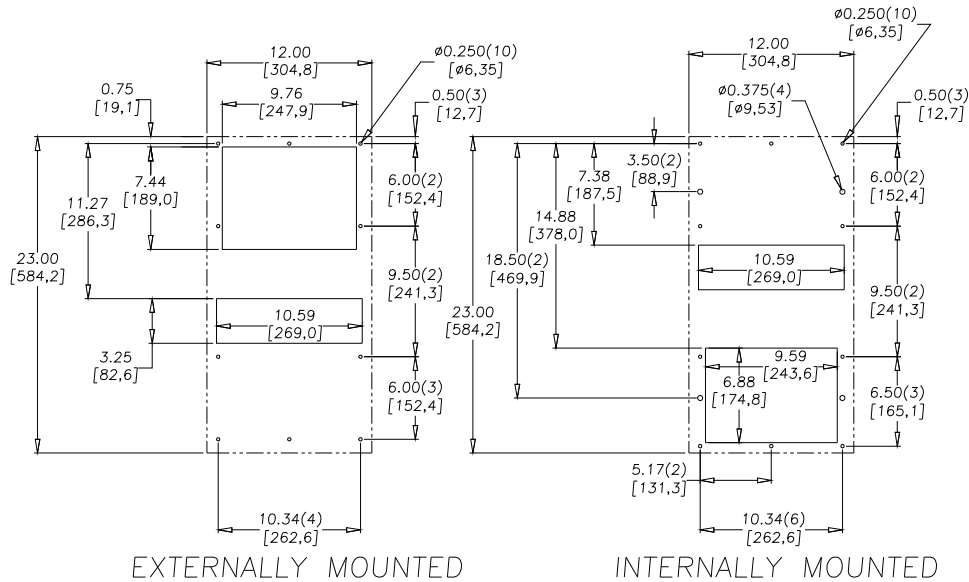
CATALOG NUMBER	TX231416100	TX231426100	TX231424100	TX231448100
COOLING PERFORMANCE				
Nominal:				
W per °F	14	14	14	14
W per °C	25	25	25	25
Refrigerant	N/A	N/A	N/A	N/A
Refrigerant Charge (ounces/grams)	N/A	N/A	N/A	N/A
Operating Temperature Range				
Maximum (°F/°C)	149/65	149/65	149/65	149/65
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:				
Internal loop 50 Hz (CFM / m ³ /hr.)	69/117	69/117	N/A	N/A
External loop 50 Hz (CFM / m ³ /hr.)	58/98	58/98	N/A	N/A
Internal loop 60 Hz (CFM / m ³ /hr.)	84/142	84/142	175/268	175/268
External loop 60 Hz (CFM / m ³ /hr.)	69/117	69/117	158/297	158/297
ELECTRICAL DATA				
Rated Voltage	115 VAC	230 VAC	24 VDC	48 VDC
Frequency (Hz)	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	69	23	82	87
Max. Nominal Current (A at 50/60 Hz)	0.6	0.1	3.4	1.8
Agency Approvals	cUL Listed CE		cUL Listed CE	
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	Terminal block	Terminal block
ENCLOSURE PROTECTION				
UL Type	Type 12/3R/4 standard 4X optional		Type 12/3R/4 standard 4X optional	
SOUND LEVEL				
At 1.5 M	56 dBA		56 dBA	
UNIT CONSTRUCTION				
Material	Mild steel sheet metal standard Stainless steel optional		Mild steel sheet metal standard Stainless steel optional	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		RAL 7035 light-gray, semi-textured powder-coat paint standard	
UNIT DIMENSIONS				
Height (in./mm)	23/584.2	23/584.2	23/584.2	23/584.2
Width (in./mm)	12/304.8	12/304.8	12/304.8	12/304.8
Depth (in./mm)	7.1/180.3	7.1/180.3	7.1/180.3	7.1/180.3
Weight (lb./kg)	30/13.6	30/13.6	30/13.6	30/13.6

TX23 DC Models 14 W/°F (25 W/°C)

CLIMAGUARD HEX



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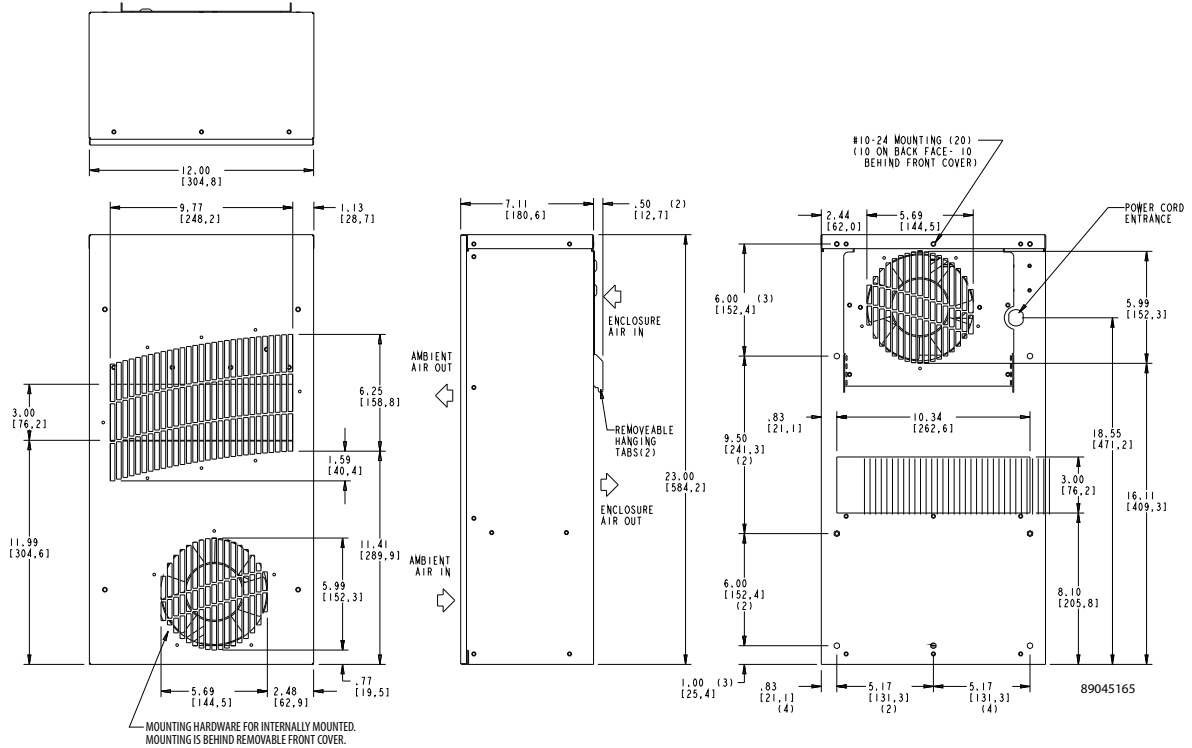


CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

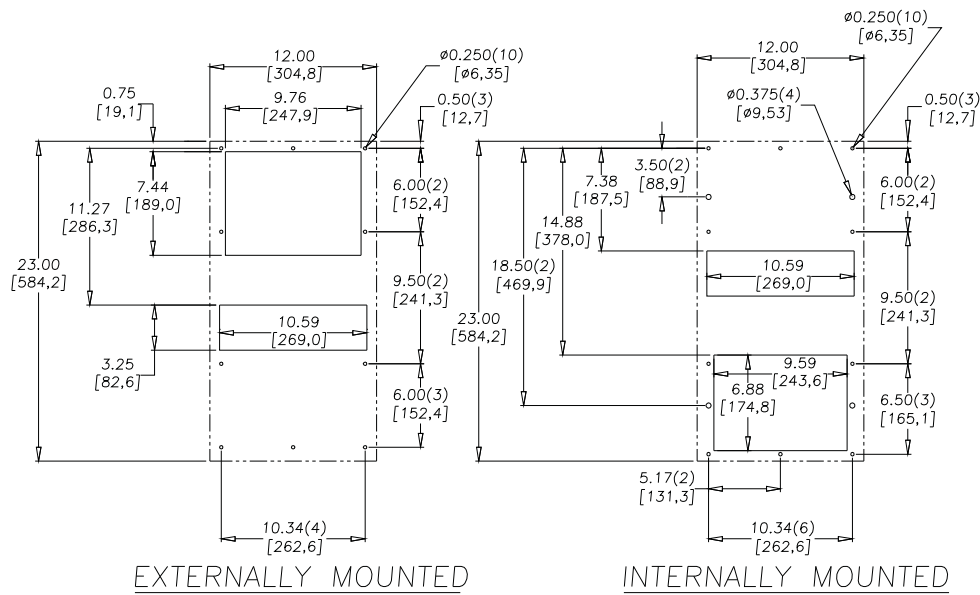
NOTES:
 1. DASHED LINES REPRESENT HEAT EXCHANGER.

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TX23 AC Models 14 W/°F (25 W/°C)



CLIMAGUARD HEX



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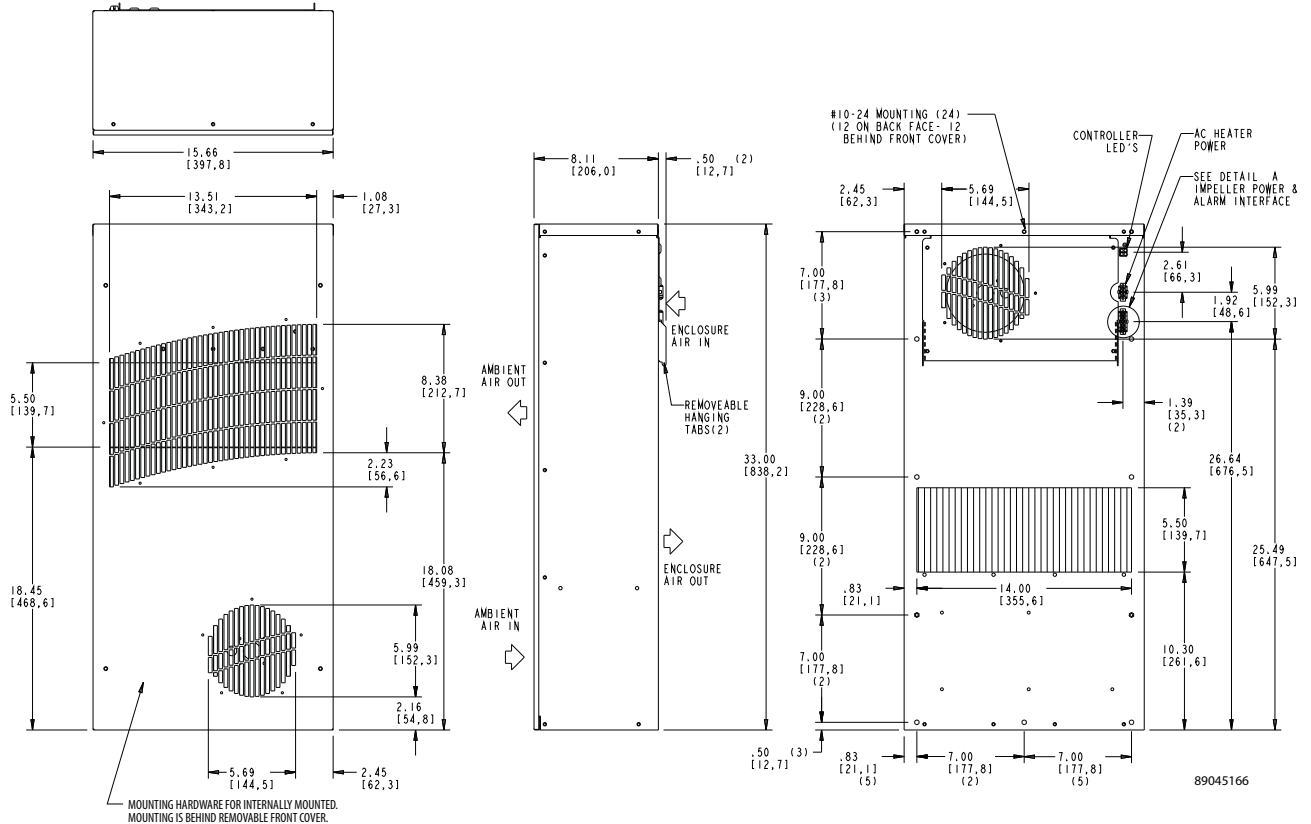
CLIMAGUARD™ Outdoor Heat Exchangers

 Performance Data **TX33 Models 28 W/°F (50 W/°C)**

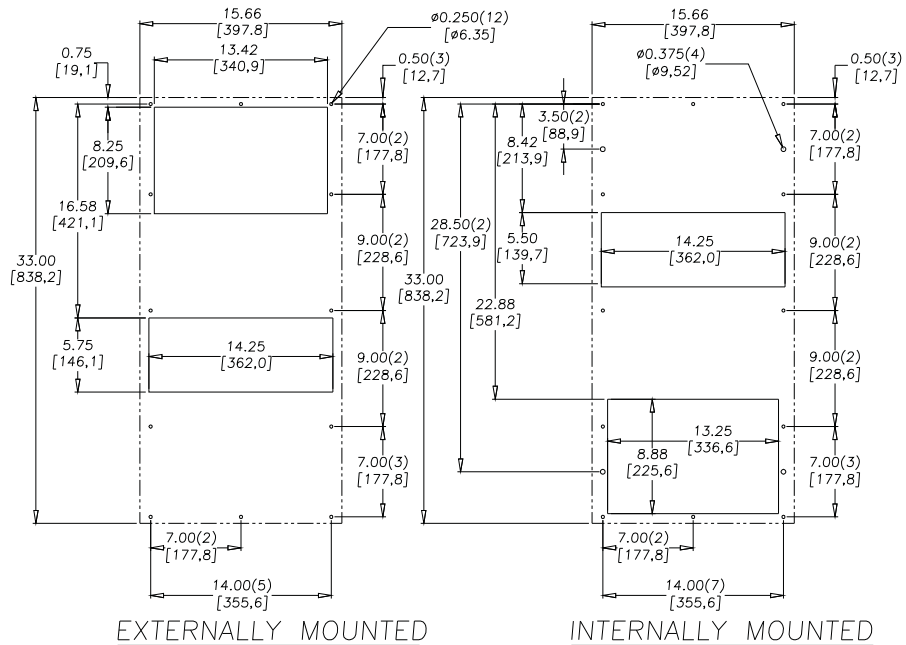
CATALOG NUMBER	TX332816100	TX332826100	TX332824100	TX332848100
COOLING PERFORMANCE				
Nominal:				
W per °F	28	28	28	28
W per °C	50	50	50	50
Refrigerant	N/A	N/A	N/A	N/A
Refrigerant Charge (ounces/grams)	N/A	N/A	N/A	N/A
Operating Temperature Range:				
Maximum (°F/°C)	149/65	149/65	149/65	149/65
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:				
Internal loop 50 Hz (CFM / m ³ /hr.)	212/360	212/360	N/A	N/A
External loop 50 Hz (CFM / m ³ /hr.)	238/404	238/404	N/A	N/A
Internal loop 60 Hz (CFM / m ³ /hr.)	228/387	228/387	228/387	228/387
External loop 60 Hz (CFM / m ³ /hr.)	263/447	263/447	166/282	166/282
ELECTRICAL DATA				
Rated Voltage	115 VAC	230 VAC	24 VDC	48 VDC
Frequency (Hz)	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	161	92	82	87
Max. Nominal Current (A at 50/60 Hz)	1.4	0.4	3.4	1.8
Agency Approvals	cUL Listed CE		cUL Listed CE	
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	Terminal block	Terminal block
ENCLOSURE PROTECTION				
UL Type	Type 12/3R/4 standard 4X optional		Type 12/3R/4 standard 4X optional	
SOUND LEVEL				
At 1.5 M	56 dBA		56 dBA	
UNIT CONSTRUCTION				
Material	Mild steel sheet metal standard Stainless steel optional		Mild steel sheet metal standard Stainless steel optional	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		RAL 7035 light-gray, semi-textured powder-coat paint standard	
UNIT DIMENSIONS				
Height (in./mm)	33/838.2	33/838.2	33/838.2	33/838.2
Width (in./mm)	15.7/398.8	15.7/398.8	15.7/398.8	15.7/398.8
Depth (in./mm)	8.1/205.7	8.1/205.7	8.1/205.7	8.1/205.7
Weight (lb./kg)	45/20.4	45/20.4	45/20.4	45/20.4

CLIMAGUARD HEX

TX33 DC Models 28 W/°F (50 W/°C)



CLIMAGUARD HEX



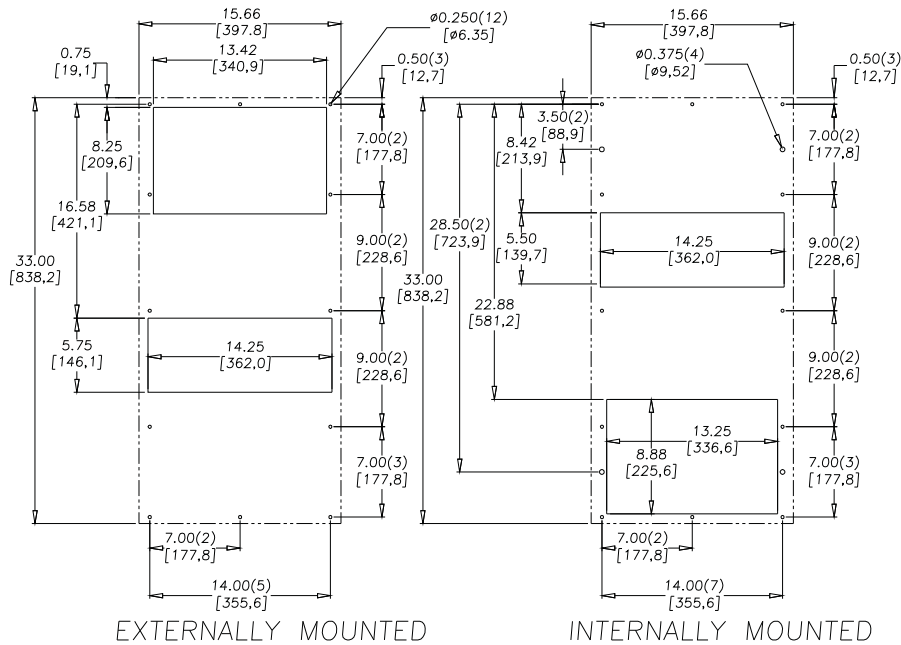
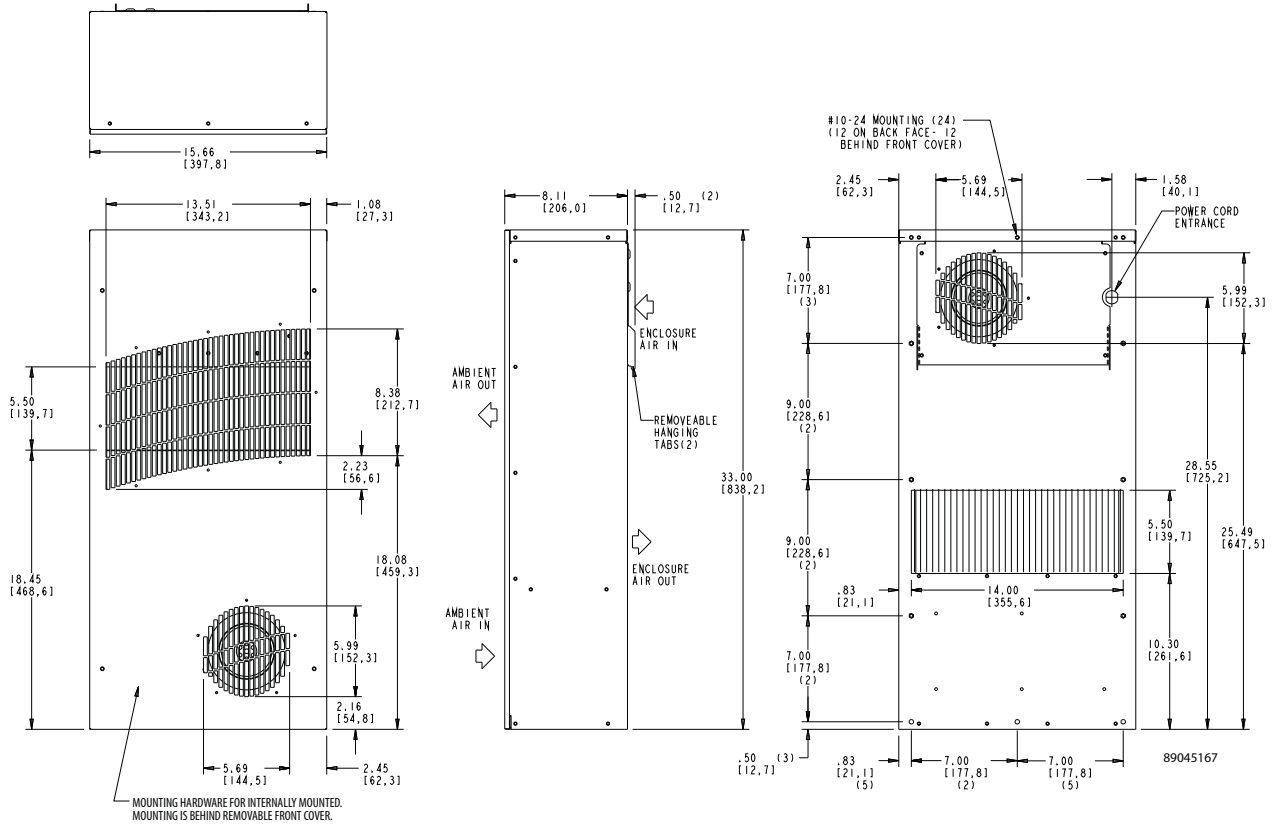
CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

NOTES:
 1. DASHED LINES REPRESENT HEAT EXCHANGER.

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TX33 AC Models 28 W/°F (50 W/°C)

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CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

NOTES:
 1. DASHED LINES REPRESENT HEAT EXCHANGER.

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CLIMAGUARD™ Outdoor Heat Exchangers

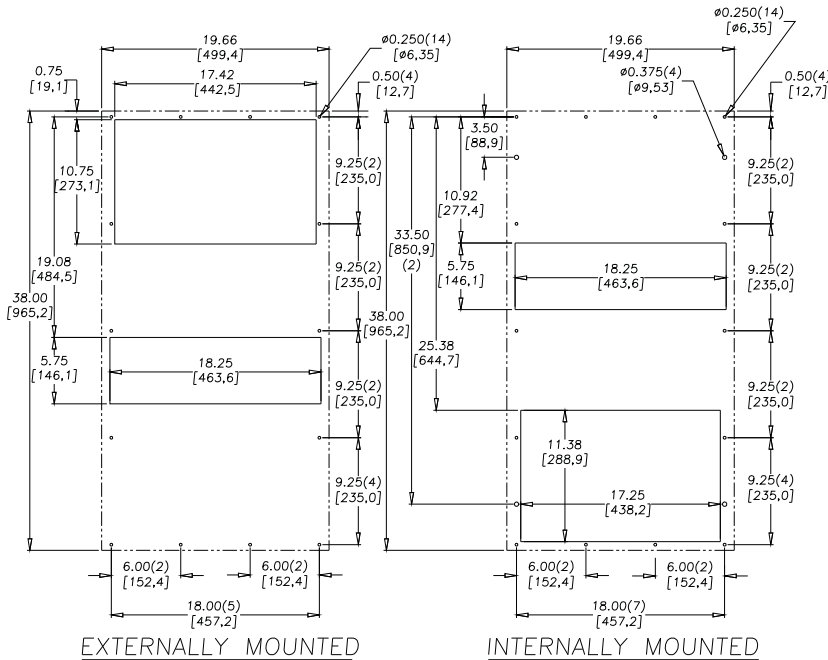
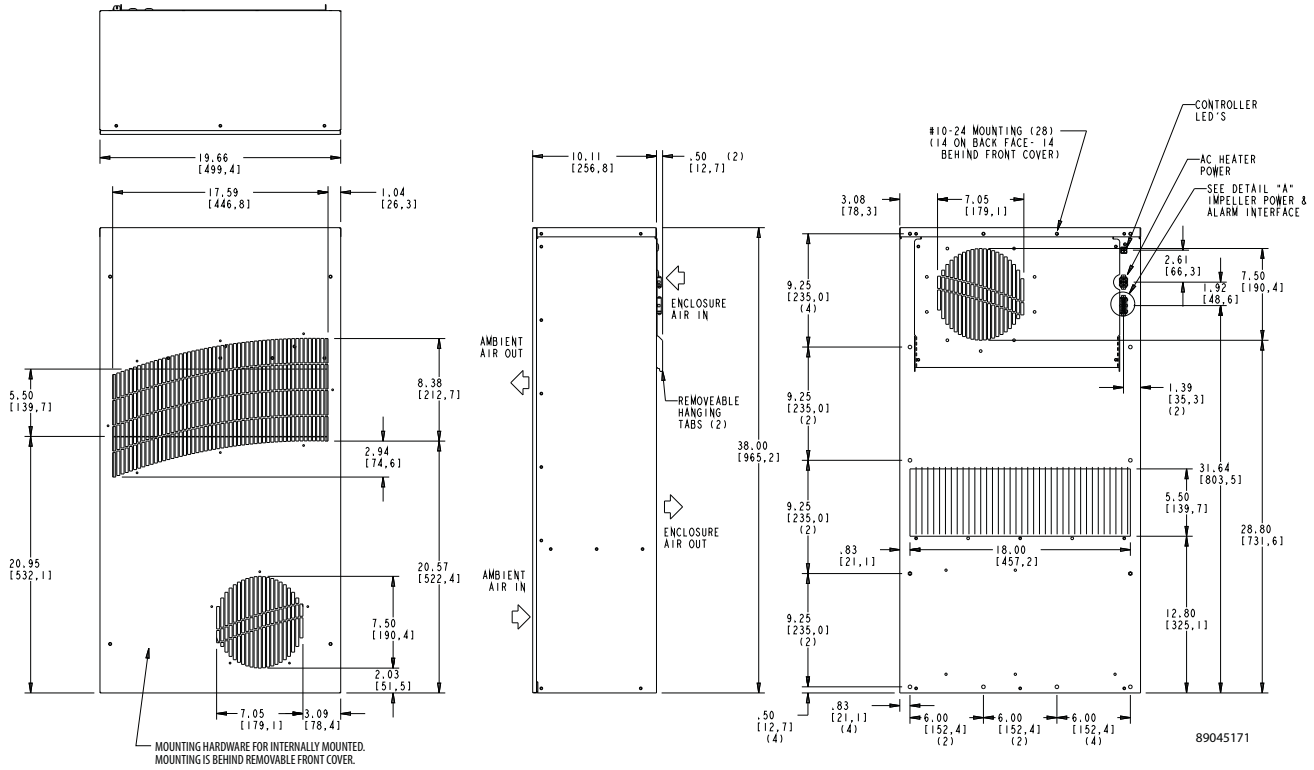
 Performance Data **TX38 Models 56 W/°F (100 W/°C)**

CATALOG NUMBER	TX385616100	TX385626100	TX385624-00	TX385648100
COOLING PERFORMANCE				
Nominal:				
W per °F	56	56	56	56
W per °C	100	100	100	100
Refrigerant	N/A	N/A	N/A	N/A
Refrigerant Charge (ounces/grams)	N/A	N/A	N/A	N/A
Operating Temperature Range:				
Maximum (°F/°C)	149/65	149/65	149/65	149/65
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:				
Internal loop 50 Hz (CFM / m ³ /hr.)	425/722	425/722	N/A	N/A
External loop 50 Hz (CFM / m ³ /hr.)	461/738	461/738	N/A	N/A
Internal loop 60 Hz (CFM / m ³ /hr.)	477/810	477/810	368/625	368/625
External loop 60 Hz (CFM / m ³ /hr.)	517/878	517/878	422/717	422/717
ELECTRICAL DATA				
Rated Voltage	115 VAC	230 VAC	24 VDC	48 VDC
Frequency (Hz)	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	368	276	207	279
Max. Nominal Current (A at 50/60 Hz)	2.3/3.2	0.7/1.2	8.6	5.8
Agency Approvals	cUL Listed CE		cUL Listed CE	
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	Terminal block	Terminal block
ENCLOSURE PROTECTION				
UL Type	Type 12/3R/4 standard 4X optional		Type 12/3R/4 standard 4X optional	
SOUND LEVEL				
At 1.5 M	64 dBA		64 dBA	
UNIT CONSTRUCTION				
Material	Mild Mild steel sheet metal standard		Mild Mild steel sheet metal standard	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		RAL 7035 light-gray, semi-textured powder-coat paint standard	
UNIT DIMENSIONS				
Height (in./mm)	38/965.2	38/965.2	38/965.2	38/965.2
Width (in./mm)	19.7/500.4	19.7/500.4	19.7/500.4	19.7/500.4
Depth (in./mm)	10.1/256.5	10.1/256.5	10.1/256.5	10.1/256.5
Weight (lb./kg)	66/30	66/30	66/30	66/30

CLIMAGUARD HEX

TX38 DC Models 56 W/°F (100 W/°C)

CLIMAGUARD HEX

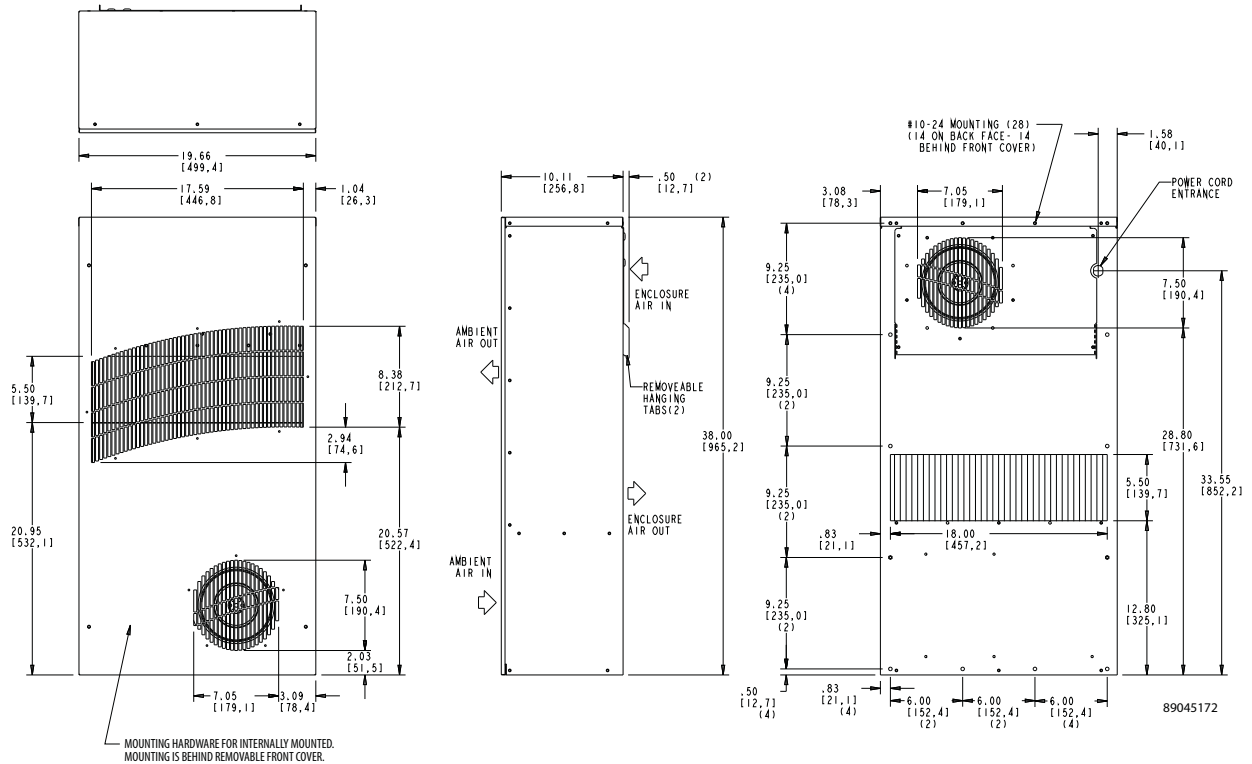


CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

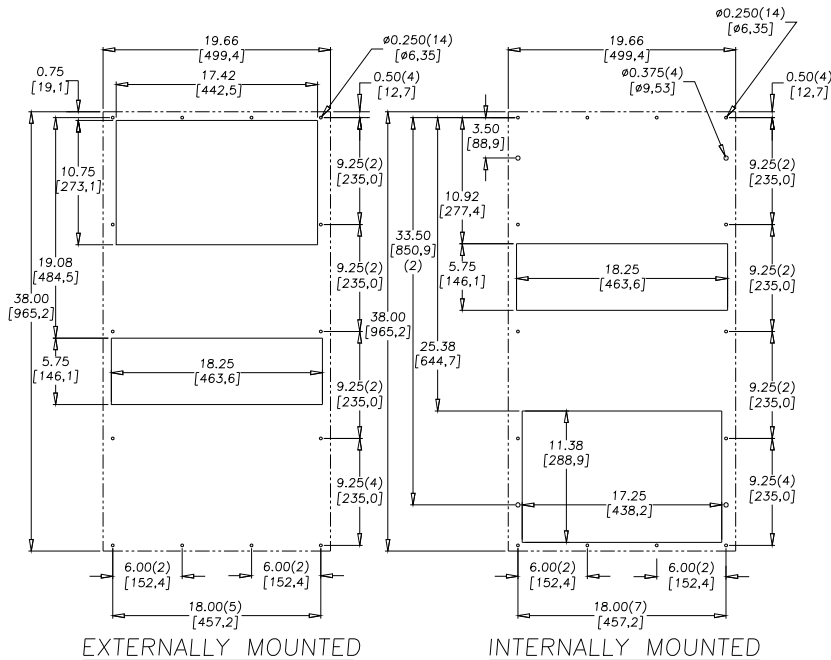
NOTES:
 1. DASHED LINES REPRESENT HEAT EXCHANGER.

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TX38 AC Models 56 W/°F (100 W/°C)



CLIMAGUARD HEX



CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

NOTES:
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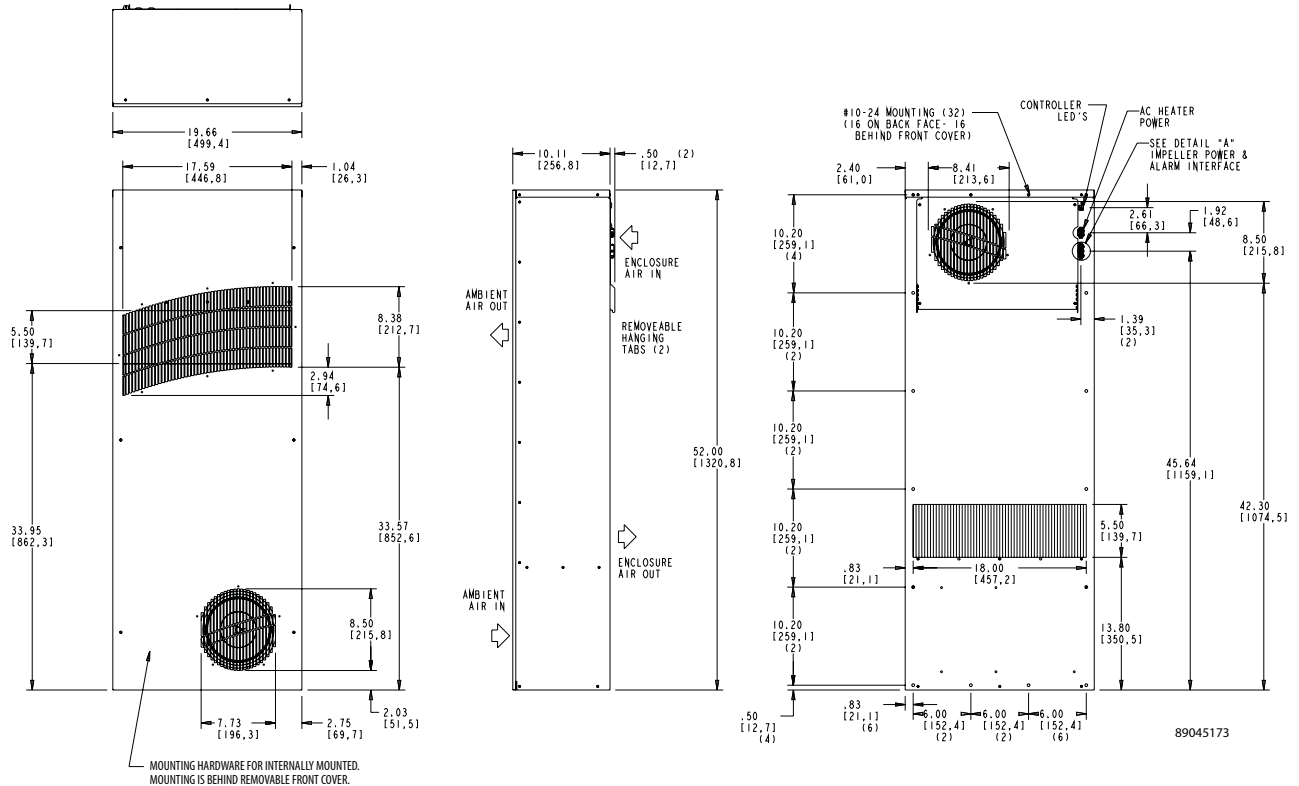
CLIMAGUARD™ Outdoor Heat Exchangers

 Performance Data **TX52 Models 83 W/°F (150 W/°C)**

CATALOG NUMBER	TX528316100	TX528326100	TX528324100	TX528348100
COOLING PERFORMANCE				
Nominal:				
W per °F	83	83	83	83
W per °C	150	150	150	150
Refrigerant	N/A	N/A	N/A	N/A
Refrigerant Charge (ounces/grams)	N/A	N/A	N/A	N/A
Operating Temperature Range:				
Maximum (°F/°C)	149/65	149/65	149/65	149/65
Minimum (°F/°C)	-40/-40	-40/-40	-40/-40	-40/-40
Airflow at 0 Static Pressure:				
Internal loop 50 Hz (CFM / m ³ /hr.)	495/841	495/841	N/A	N/A
External loop 50 Hz (CFM / m ³ /hr.)	540/917	540/917	N/A	N/A
Internal loop 60 Hz (CFM / m ³ /hr.)	533/905	533/905	466/792	466/792
External loop 60 Hz (CFM / m ³ /hr.)	605/1028	605/1028	547/929	547/929
ELECTRICAL DATA				
Rated Voltage	115 VAC	230 VAC	24 VDC	48 VDC
Frequency (Hz)	50/60	50/60	50/60	50/60
Operating Range	+/- 10%	+/- 10%	+/- 10%	+/- 10%
Max. Power Consumption (W at 50/60 Hz)	782	771	507	375
Max. Nominal Current (A at 50/60 Hz)	4.3/6.7	2.2/3.4	21.1	7.8
Agency Approvals	cUL Listed CE		cUL Listed CE	
Power Input Description	6-ft. cord with NEMA 5-15 plug	6-ft. cord with NEMA 6-15 plug	Terminal block	Terminal block
ENCLOSURE PROTECTION				
UL Type	Type 12/3R/4 standard 4X optional		Type 12/3R/4 standard 4X optional	
SOUND LEVEL				
At 1.5 M	68 dBA		68 dBA	
UNIT CONSTRUCTION				
Material	Mild steel sheet metal standard Stainless steel optional		Mild steel sheet metal standard Stainless steel optional	
Finish	RAL 7035 light-gray, semi-textured powder-coat paint standard		RAL 7035 light-gray, semi-textured powder-coat paint standard	
UNIT DIMENSIONS				
Height (in./mm)	52/1320.8	52/1320.8	52/1320.8	52/1320.8
Width (in./mm)	19.7/500.4	19.7/500.4	19.7/500.4	19.7/500.4
Depth (in./mm)	10.1/256.5	10.1/256.5	10.1/256.5	10.1/256.5
Weight (lb./kg)	100/45.3	100/45.3	100/45.3	100/45.3

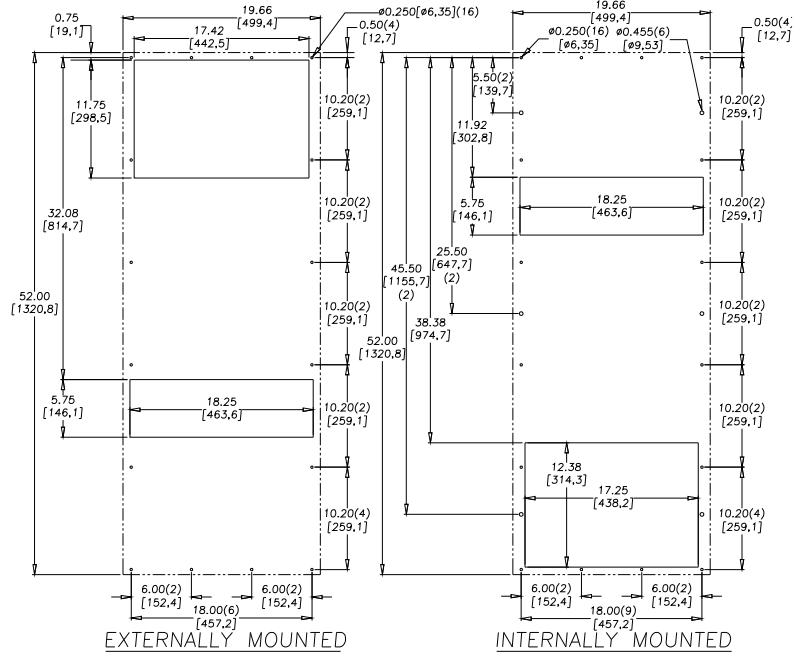
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TX52 DC Models 83 W/°F (150 W/°C)



CLIMAGUARD HEX

MOUNTING HARDWARE FOR INTERNALLY MOUNTED.
 MOUNTING IS BEHIND REMOVABLE FRONT COVER.



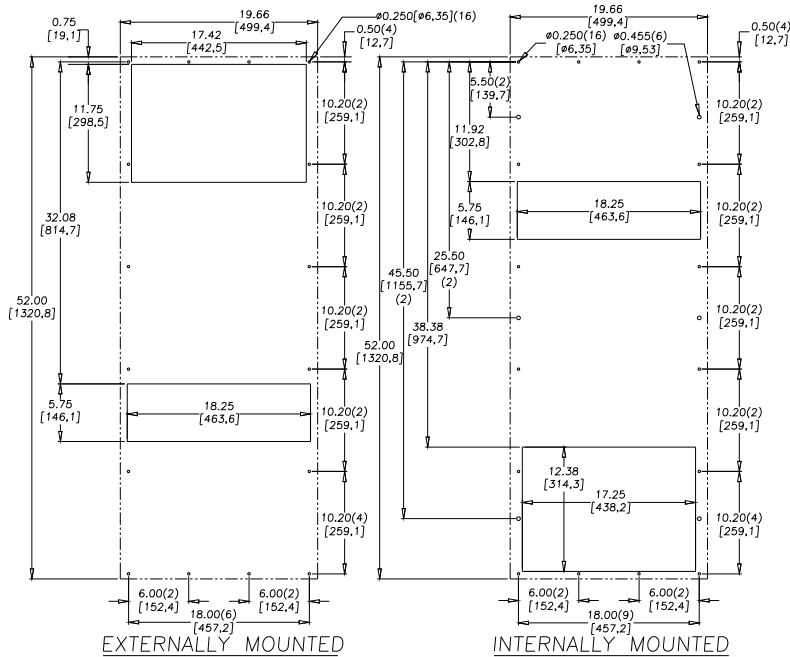
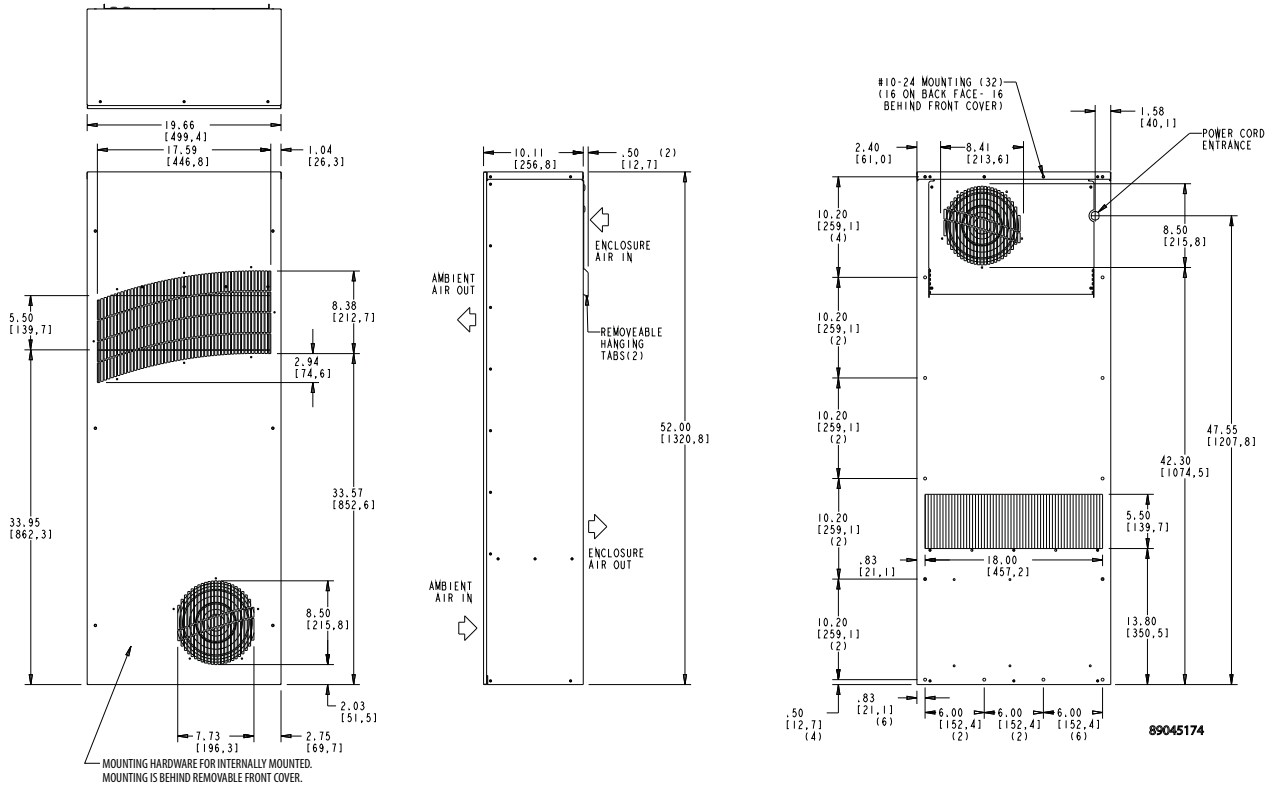
CUTOUT INSTRUCTIONS
 (AS VIEWED FROM OUTSIDE OF ENCLOSURE)

NOTES:
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TX52 AC Models 83 W/°F (150 W/°C)

CLIMAGUARD HEX



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Notes