



Thermal Edge Inc.TM

TEMPERATURE CONTROL SOLUTIONS FOR ELECTRICAL ENCLOSURES

AIR TO WATER HEAT EXCHANGERS

Closed Loop Design
Available in 115VAC & 230VAC
UL Tested NEMA Types 12, 4 and 4X



MADE IN AMERICA MATTERS...

Hydro

Edge



3,690 BTUH (@ 95°F ENCLOSURE & 50°F WATER TEMPERATURES)

INDOOR/OUTDOOR, UL TYPES 12, 4 & 4X AVAILABLE

When ambient conditions are extreme, Air-to-Water Heat Exchangers by Thermal Edge provide reliable, efficient, and cost-effective solutions. Ideal for high ambient conditions and tough industrial environments, these air-to-water heat exchangers provide contaminant-free cooling while minimizing energy use and maintenance cost.



Key Design Features

- Protection from outdoor contaminants with a closed loop design
- Constant elimination of condensate
- Easy maintenance with a filter free design
- Flexible application with the narrow body style fitting 12" deep enclosures
- Eliminates water and corrosion buildup in washdown applications with a sloped roof design and seam welded shroud
- Ruggedly designed for manufacturing environments in powder coated steel or corrosion resistant stainless steel
- Maintains UL Tested NEMA Type 12, 4, and 4X
- Ambient operating temperature: 34°F - 185°F
- Overall dimensions: 19.7" H x 11.8" W x 5" D

OPTIONS:

- Integrated digital temperature controller
- Solenoid water valve
- Water Leak Detection Switch
- Corrosive environment package
- Open door kill switch
- Aluminum or 316 stainless steel housing
- Enclosure mounted controller
- Dry contact alarm
- Remote monitoring options
- UL power cord

APPLICATIONS

Ideal for food processing plants, agricultural irrigation, waste-water treatment, automotive plants, flour milling and mining operations where water is readily available onsite.

ACCESSORIES:

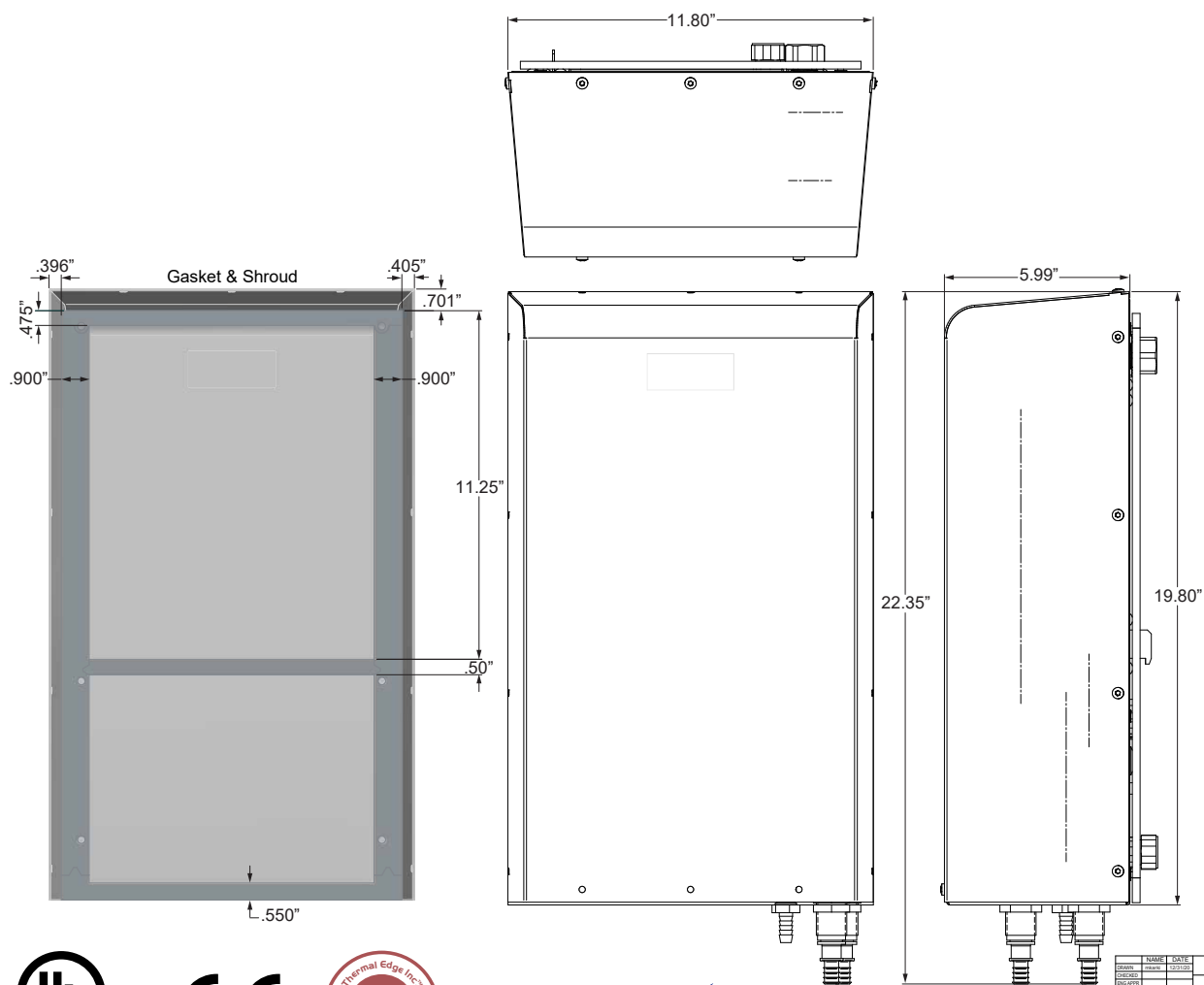
Water supply shutoff valves



Model	UL Type	Material	Voltage/Phase/Hz.	Running Amps	Air Flow Rate (CFM @ 0 Static Pressure)	H x W x D	Weight (lbs.)
A2W301212	12	Powder coated steel	115/1/50-60	0.37	129	19.7" x 11.8" x 5"	21.4
A2W301204	4	Powder coated steel	115/1/50-60	0.37	129	19.7" x 11.8" x 5"	21.4
A2W30124X	4X	Stainless steel	115/1/50-60	0.37	129	19.7" x 11.8" x 5"	21.4
A2W302312	12	Powder coated steel	230/1/50-60	0.23	129	19.7" x 11.8" x 5"	21.4
A2W302304	4	Powder coated steel	230/1/50-60	0.23	129	19.7" x 11.8" x 5"	21.4
A2W30234X	4X	Stainless steel	230/1/50-60	0.23	129	19.7" x 11.8" x 5"	21.4
A2W304812	12	Stainless steel	460/1/50-60	0.12	129	19.7" x 11.8" x 5"	21.4
A2W304804	4	Powder coated steel	460/1/50-60	0.12	129	19.7" x 11.8" x 5"	21.4
A2W30484X	4X	Powder coated steel	460/1/50-60	0.12	129	19.7" x 11.8" x 5"	21.4

The graph illustrates the relationship between Supply Water Temp (°F) on the x-axis and BTUH on the y-axis for three different enclosure temperatures: 105 °F (green), 95 °F (red), and 85 °F (blue). The BTUH values decrease as the supply water temperature increases and as the enclosure temperature decreases. A secondary y-axis on the right indicates the corresponding Water Flow Rate (GPM) for each BTUH level, with values of 1 and 2 GPM marked for each enclosure temperature line.

Supply Water Temp (°F)	BTUH (105 °F)	Water Flow Rate (GPM) (105 °F)	BTUH (95 °F)	Water Flow Rate (GPM) (95 °F)	BTUH (85 °F)	Water Flow Rate (GPM) (85 °F)
45	~4800	~2.5	~4000	~2.0	~3300	~1.5
50	~4400	~2.2	~3600	~1.8	~2900	~1.3
55	~4000	~2.0	~3200	~1.6	~2500	~1.1
60	~3600	~1.8	~2800	~1.4	~2100	~0.9
65	~3200	~1.6	~2400	~1.2	~1700	~0.7
70	~2800	~1.4	~2000	~1.0	~1300	~0.5
75	~2400	~1.2	~1600	~0.8	~900	~0.3
80	~2000	~1.0	~1200	~0.6	~500	~0.1



CC



Thermal Edge Inc.™

	NAME	DATE	 Thermal Edge Inc. A2W030WC Packaging A2W030 P.E.: A2W030 Packaging.dft
DRAWN	mmmm	12/31/00	
CHECKED			
ENG-APPR			
MGR-APPR			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ±1° 1/4" ±0.5° FIN. ±0.015" ±0.001"			

7/17/2025

7,773 BTUH (@ 95°F ENCLOSURE & 50°F WATER TEMPERATURES)

INDOOR/OUTDOOR, UL TYPES 12, 4 & 4X AVAILABLE

When ambient conditions are extreme, Air-to-Water Heat Exchangers by Thermal Edge provide reliable, efficient, and cost-effective solutions. Ideal for high ambient conditions and tough industrial environments, these air-to-water heat exchangers provide contaminant-free cooling while minimizing energy use and maintenance cost.



Key Design Features

- Protection from outdoor contaminants with a closed loop design
- Constant elimination of condensate
- Easy maintenance with a filter free design
- Flexible application with the narrow body style fitting 12" deep enclosures
- Eliminates water and corrosion buildup in washdown applications with a sloped roof design and seam welded shroud
- Ruggedly designed for manufacturing environments in powder coated steel or corrosion resistant stainless steel
- Maintains UL Tested NEMA Type 12, 4, and 4X
- Ambient operating temperature: 34°F - 185°F
- Overall dimensions: 29" H x 11.8" W x 6" D

OPTIONS:

- Integrated digital temperature controller
- Solenoid water valve
- Water Leak Detection Switch
- Corrosive environment package
- Open door kill switch
- Aluminum or 316 stainless steel housing
- Enclosure mounted controller
- Dry contact alarm
- Remote monitoring options
- UL power cord

APPLICATIONS

Ideal for food processing plants, agricultural irrigation, waste-water treatment, automotive plants, flour milling and mining operations where water is readily available onsite.

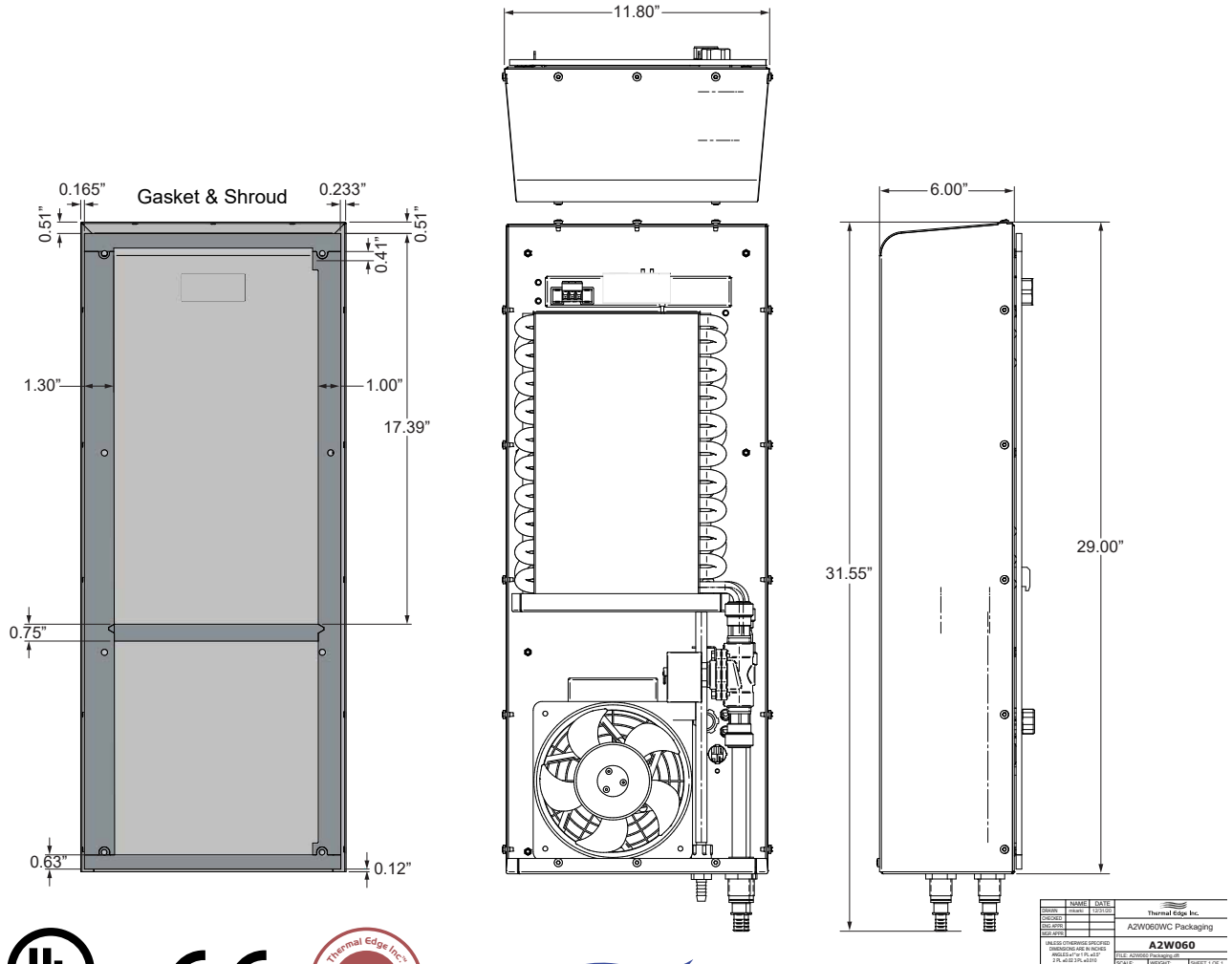
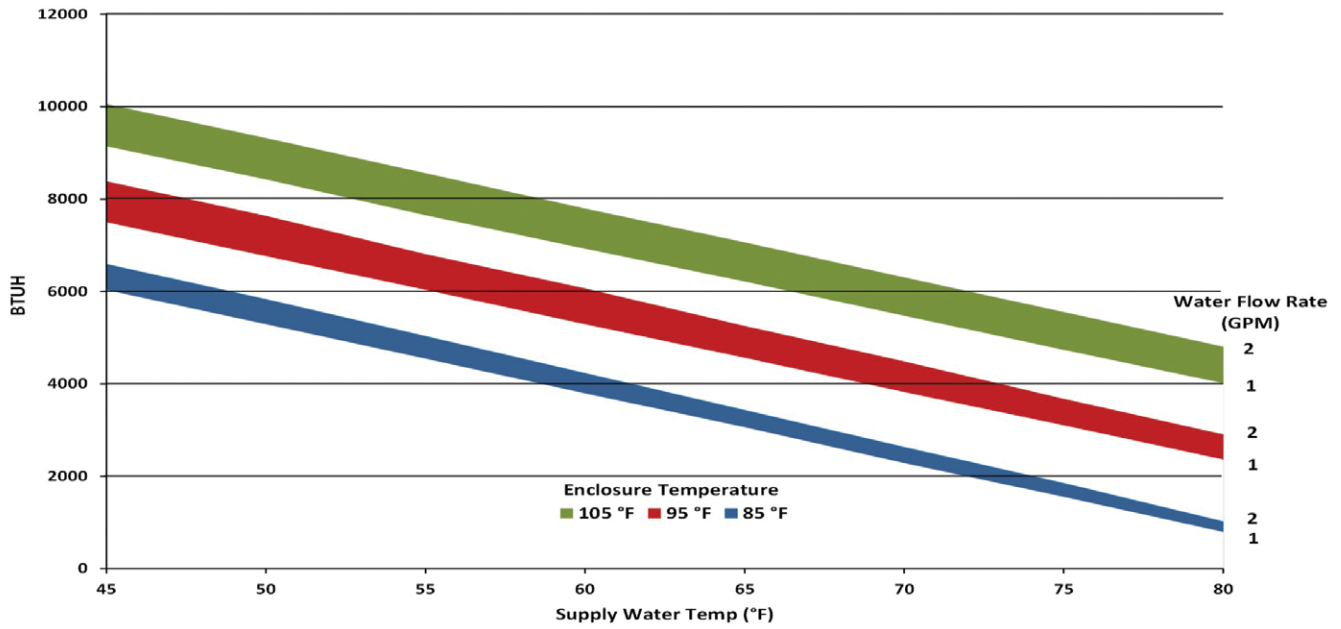
ACCESSORIES:

Water supply shutoff valves



Model	UL Type	Material	Voltage/Phase/Hz.	Running Amps	Air Flow Rate (CFM @ 0 Static Pressure)	H x W x D	Weight (lbs.)
A2W601212	12	Powder coated steel	115/1/50-60	0.59	234	29" x 11.8" x 6"	33.75
A2W601204	4	Powder coated steel	115/1/50-60	0.59	234	29" x 11.8" x 6"	33.75
A2W60124X	4X	Stainless steel	115/1/50-60	0.59	234	29" x 11.8" x 6"	33.75
A2W602312	4X	Powder coated steel	230/1/50-60	0.38	234	29" x 11.8" x 6"	33.75
A2W602304	12	Powder coated steel	230/1/50-60	0.38	234	29" x 11.8" x 6"	33.75
A2W60234X	4	Stainless steel	230/1/50-60	0.38	234	29" x 11.8" x 6"	33.75
A2W604812	4X	Powder coated steel	460/1/50-60	0.19	234	29" x 11.8" x 6"	33.75
A2W604804	12	Powder coated steel	460/1/50-60	0.19	234	29" x 11.8" x 6"	33.75
A2W60484X	4	Stainless steel	460/1/50-60	0.19	234	29" x 11.8" x 6"	33.75

Testing done under controlled conditions. Actual performance may vary.



UL File #33288



NAME	DATE
DESIGNED	10/1/2019
DRAWN	10/1/2019
CHECKED	10/1/2019
DATE	10/1/2019

Thermal Edge Inc.
A2W060WC Packaging
A2W060
10/1/2019 10/1/2019 10/1/2019
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*All information subject to change without notice.

17,330 BTUH (@ 95°F ENCLOSURE & 50°F WATER TEMPERATURES)

INDOOR/OUTDOOR, UL TYPES 12, 4 & 4X AVAILABLE

When ambient conditions are extreme, Air-to-Water Heat Exchangers by Thermal Edge provide reliable, efficient, and cost-effective solutions. Ideal for high ambient conditions and tough industrial environments, these air-to-water heat exchangers provide contaminant-free cooling while minimizing energy use and maintenance cost.



Key Design Features

- Protection from outdoor contaminants with a closed loop design
- Constant elimination of condensate
- Easy maintenance with a filter free design
- Flexible application with the narrow body style fitting 16" deep enclosures
- Eliminates water and corrosion buildup in washdown applications with a sloped roof design and seam welded shroud
- Ruggedly designed for manufacturing environments in powder coated steel or corrosion resistant stainless steel
- Maintains UL Tested NEMA Type 12, 4, and 4X
- Ambient operating temperature: 34°F - 185°F
- Overall dimensions: 40.7" H x 15.8" W x 8.1" D

OPTIONS:

- Integrated digital temperature controller
- Solenoid water valve
- Water Leak Detection Switch
- Corrosive environment package
- Open door kill switch
- Aluminum or 316 stainless steel housing
- Enclosure mounted controller
- Dry contact alarm
- Remote monitoring options
- UL power cord

APPLICATIONS

Ideal for food processing plants, agricultural irrigation, waste-water treatment, automotive plants, flour milling and mining operations where water is readily available onsite.

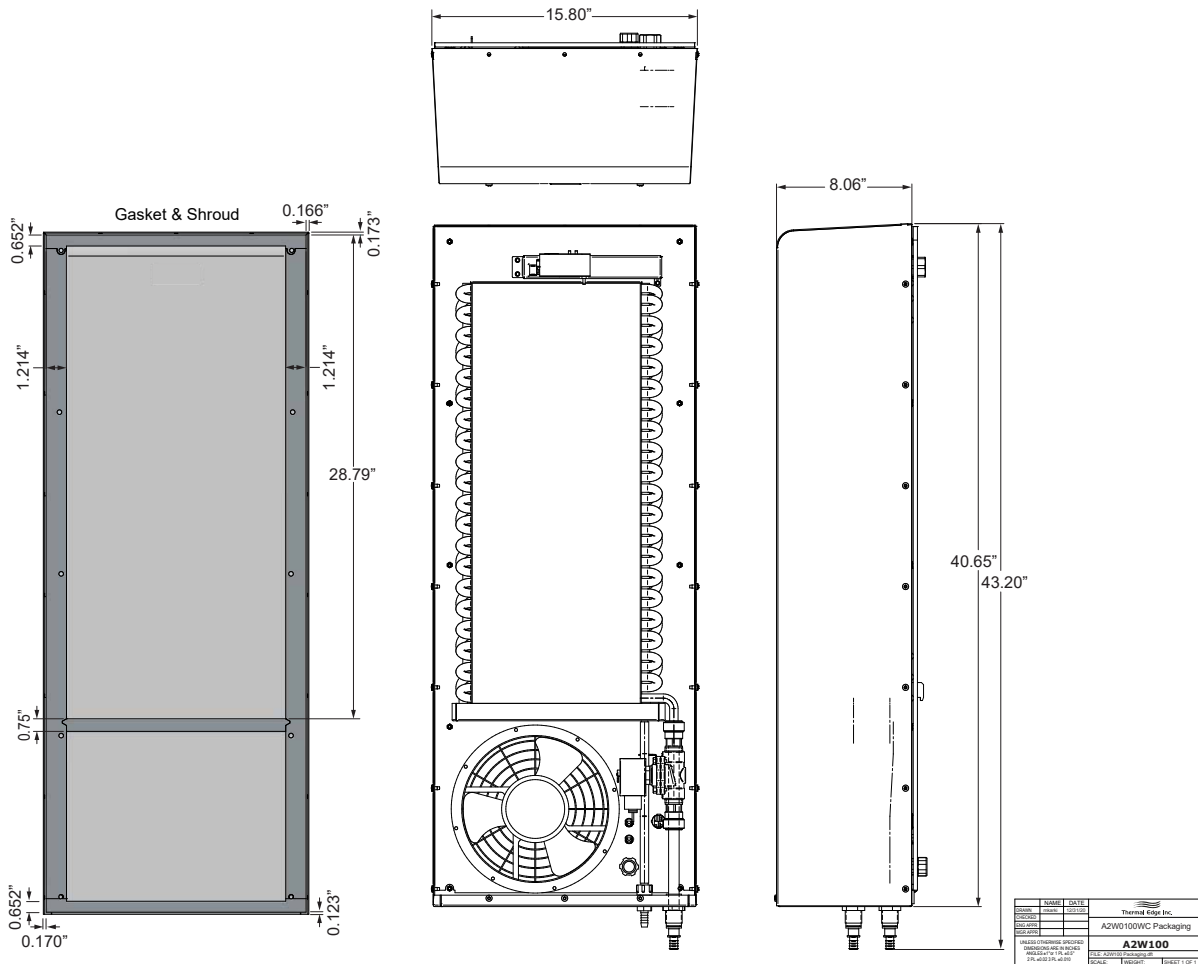
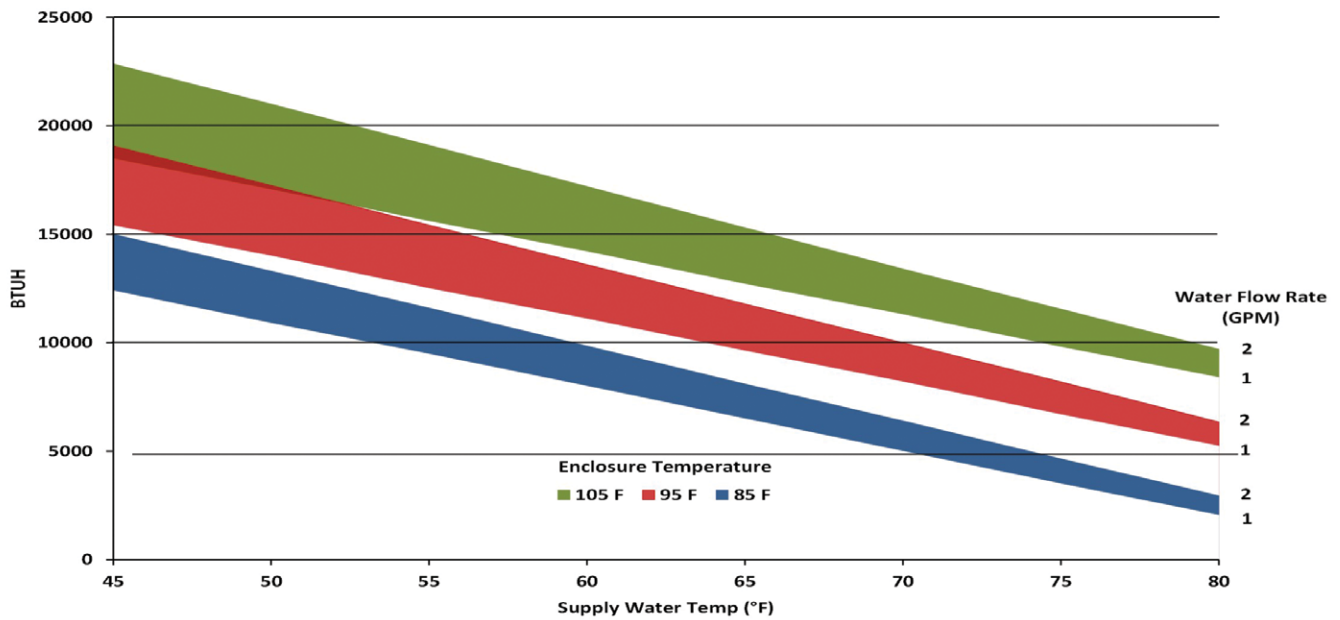
ACCESSORIES:

Water supply shutoff valves



Model	UL Type	Material	Voltage/Phase/Hz.	Running Amps	Air Flow Rate (CFM @ 0 Static Pressure)	H x W x D	Weight (lbs.)
A2W1001212	12	Powder coated steel	115/1/50-60	1.11	516	40.7" x 15.8" x 8.1"	55
A2W1001204	4	Powder coated steel	115/1/50-60	1.11	516	40.7" x 15.8" x 8.1"	55
A2W100124X	4X	Stainless steel	115/1/50-60	1.11	516	40.7" x 15.8" x 8.1"	55
A2W1002312	12	Powder coated steel	230/1/50-60	0.60	516	40.7" x 15.8" x 8.1"	55
A2W1002304	4	Powder coated steel	230/1/50-60	0.60	516	40.7" x 15.8" x 8.1"	55
A2W100234X	4X	Stainless steel	230/1/50-60	0.60	516	40.7" x 15.8" x 8.1"	55
A2W1002312	12	Powder coated steel	460/1/50-60	0.30	516	40.7" x 15.8" x 8.1"	55
A2W1002304	4	Powder coated steel	460/1/50-60	0.30	516	40.7" x 15.8" x 8.1"	55
A2W100234X	4X	Stainless steel	460/1/50-60	0.30	516	40.7" x 15.8" x 8.1"	55

Testing done under controlled conditions. Actual performance may vary.



UL File #33288



*All information subject to change without notice.

18,930 BTUH (@ 95°F ENCLOSURE & 50°F WATER TEMPERATURES)

INDOOR/OUTDOOR, UL TYPES 12, 4 & 4X AVAILABLE

When ambient conditions are extreme, Air-to-Water Heat Exchangers by Thermal Edge provide reliable, efficient, and cost-effective solutions. Ideal for high ambient conditions and tough industrial environments, these air-to-water heat exchangers provide contaminant-free cooling while minimizing energy use and maintenance cost.



Key Design Features

- Protection from outdoor contaminants with a closed loop design
- Constant elimination of condensate
- Easy maintenance with a filter free design
- Flexible application with the narrow body style fitting 16" deep enclosures
- Eliminates water and corrosion buildup in washdown applications with a sloped roof design and seam welded shroud
- Ruggedly designed for manufacturing environments in powder coated steel or corrosion resistant stainless steel
- Maintains UL Tested NEMA Type 12, 4, and 4X
- Ambient operating temperature: 34°F - 185°F
- Overall dimensions: 50" H x 15.8" W x 8.5" D

OPTIONS:

- Integrated digital temperature controller
- Solenoid water valve
- Water Leak Detection Switch
- Corrosive environment package
- Open door kill switch
- Aluminum or 316 stainless steel housing
- Enclosure mounted controller
- Dry contact alarm
- Remote monitoring options
- UL power cord

APPLICATIONS

Ideal for food processing plants, agricultural irrigation, waste-water treatment, automotive plants, flour milling and mining operations where water is readily available onsite.

ACCESSORIES:

Water supply shutoff valves

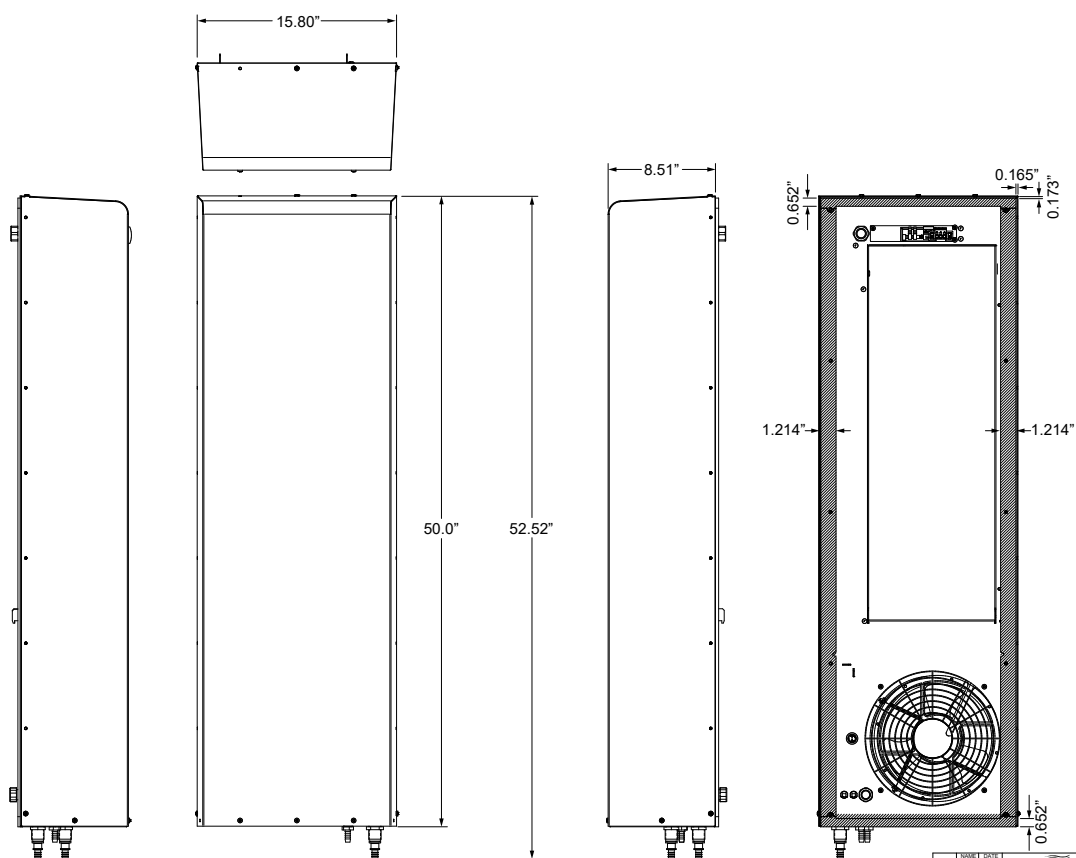


Model	UL Type	Material	Voltage/Phase/Hz.	Running Amps	Air Flow Rate (CFM @ 0 Static Pressure)	H x W x D	Weight (lbs.)
A2W2001212	12	Powder coated steel	115/1/50-60	2.51	670	50" x 15.8" x 8.5"	70
A2W2001204	4	Powder coated steel	115/1/50-60	2.51	670	50" x 15.8" x 8.5"	70
A2W200124X	4X	Stainless steel	115/1/50-60	2.51	670	50" x 15.8" x 8.5"	70
A2W2002312	12	Powder coated steel	230/1/50-60	1.26	670	50" x 15.8" x 8.5"	70
A2W2002304	4	Powder coated steel	230/1/50-60	1.26	670	50" x 15.8" x 8.5"	70
A2W200234X	4X	Stainless steel	230/1/50-60	1.26	670	50" x 15.8" x 8.5"	70
A2W2002312	12	Powder coated steel	460/1/50-60	0.63	670	50" x 15.8" x 8.5"	70
A2W2002304	4	Powder coated steel	460/1/50-60	0.63	670	50" x 15.8" x 8.5"	70
A2W200234X	4X	Stainless steel	460/1/50-60	0.63	670	50" x 15.8" x 8.5"	70

Figure 10: Cooling Capacity vs. Supply Water Temperature

The graph plots BTUH (Y-axis, 0 to 35,000) against Supply Water Temp (°F) (X-axis, 45 to 65). The legend indicates three enclosure temperatures: 105 °F (green), 95 °F (red), and 85 °F (blue). The right Y-axis indicates Water Flow Rate (GPM) with markers for 3 and 6 GPM.

Supply Water Temp (°F)	Enclosure Temp (°F)	Flow Rate (GPM)	BTUH (Approx.)
45	105	6	30,000
45	105	3	26,000
45	95	6	26,000
45	95	3	23,000
45	85	6	21,000
45	85	3	18,000
50	105	6	27,000
50	105	3	24,000
50	95	6	23,000
50	95	3	20,000
50	85	6	18,000
50	85	3	16,000
55	105	6	24,000
55	105	3	22,000
55	95	6	20,000
55	95	3	17,000
55	85	6	15,000
55	85	3	13,000
60	105	6	21,000
60	105	3	20,000
60	95	6	17,000
60	95	3	16,000
60	85	6	13,000
60	85	3	12,000
65	105	6	19,000
65	105	3	18,000
65	95	6	16,000
65	95	3	14,000
65	85	6	11,000
65	85	3	10,000



	NAME	DATE	 Thermal Edge Inc. A2W0200WC Packaging A2W200 F.I.E. A2W0200 Packaging, Inc.
JOHN	JOHN	12/15/02	
CHUCK			
ENG APPR			
WGR APPR			
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ANGLES ±1°/1 PL ±0.5°			

**All information subject to change without notice.*

EFFICIENT AND COST EFFECTIVE COOLING FOR EXTREME AMBIENT CONDITIONS

OPTIONAL INTELLIGENT SYSTEM CONTROL AND MONITORING

An optional integrated digital temperature controller and optional solenoid water valve which regulates temperature control and monitors the system status.

PROTECTION FROM OUTDOOR CONTAMINANTS...

with its closed loop design.

CONSTANT ELIMINATION OF CONDENSATE...

ensures reliable and efficient condensation management.

FLEXIBLE APPLICATION WITH A NARROW BODY STYLE...

fits 12" deep enclosures.

ELIMINATES WATER AND CORROSION BUILDUP in washdown applications with its sloped roof design and seam welded shroud.

RUGGEDLY DESIGNED for manufacturing environments in powder coated steel or corrosion resistant stainless steel.



Shown with optional digital temperature controller and optional solenoid water valve



FOR A WIDE RANGE OF APPLICATIONS

With cooling capacities up to 20,000 BTUH, these units provide liquid cooling for a wide range of cabinet cooling applications.



DESIGNED FOR EXTREME CONDITIONS

Ruggedly designed for manufacturing environments susceptible to extreme ambient or aggressive conditions.



ENERGY EFFICIENT OPERATION

With efficient heat transfer capabilities, a water source absorbs and transfers electrical heat from the enclosure.



CONSISTENT TEMPERATURE CONTROL

Precise temperature control of the electrical enclosure with the ability to regulate coolant flow.

