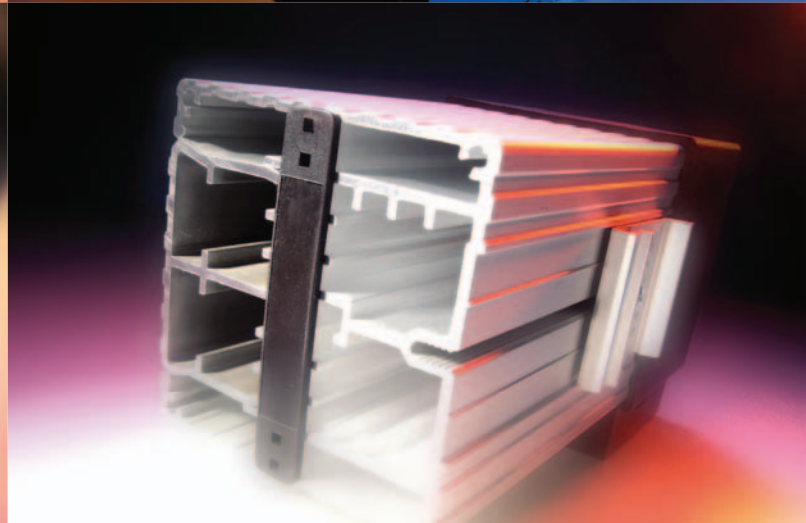
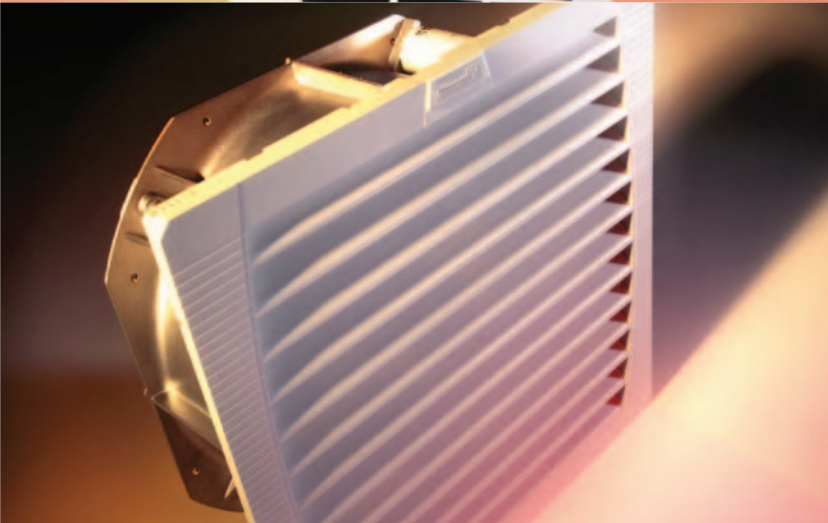


Thermal Management Solutions

Cooling Units • Air/Water Heat Exchangers • Chillers
Filterfans® • Heaters, Thermostats and Hygrostats

Main Catalog • Edition 11



SHARING
COMPETENCE 

Pfannenberg
ELECTRO-TECHNOLOGY FOR INDUSTRY

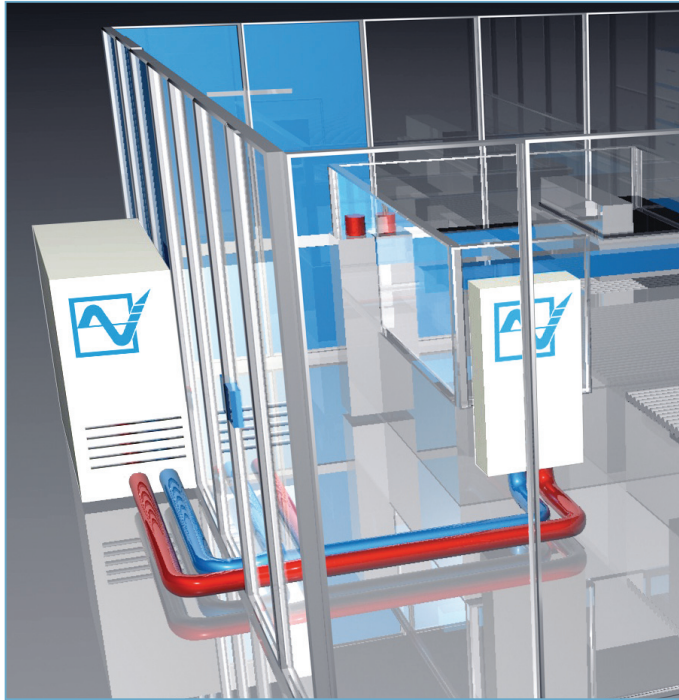


Water can save energy and keep your enclosure cool even under harsh conditions

PWS Series Air/Water Heat Exchangers

Pre-engineered to safely allow the use of water for efficient & reliable enclosure cooling – especially in adverse environments

- Only cool, dry air makes contact with sensitive electronics - all cooling water and condensate is isolated within the heat exchanger casing.
- High ambient air temperatures are not a factor as all heat is removed through the closed loop water circuit.
- The perfect solution for dusty, dirty and/or oily environments as there are no filters to change or condenser coils to keep clean.
- Ideal for wash-down applications as the sealed casing design is compatible with caustic detergents.
- For explosion-proof applications standard heat exchangers can be mounted inside the enclosure.
- Existing chilled glycol, chilled, tower or process water offer convenient & economical sources of cooling.
- Can also be matched with a Pfannenberg Packaged Water Chiller to provide a pre-engineered, single source cooling solution.



Pfannenberg - The complete solution for recirculating water cooling systems for control enclosures



Features

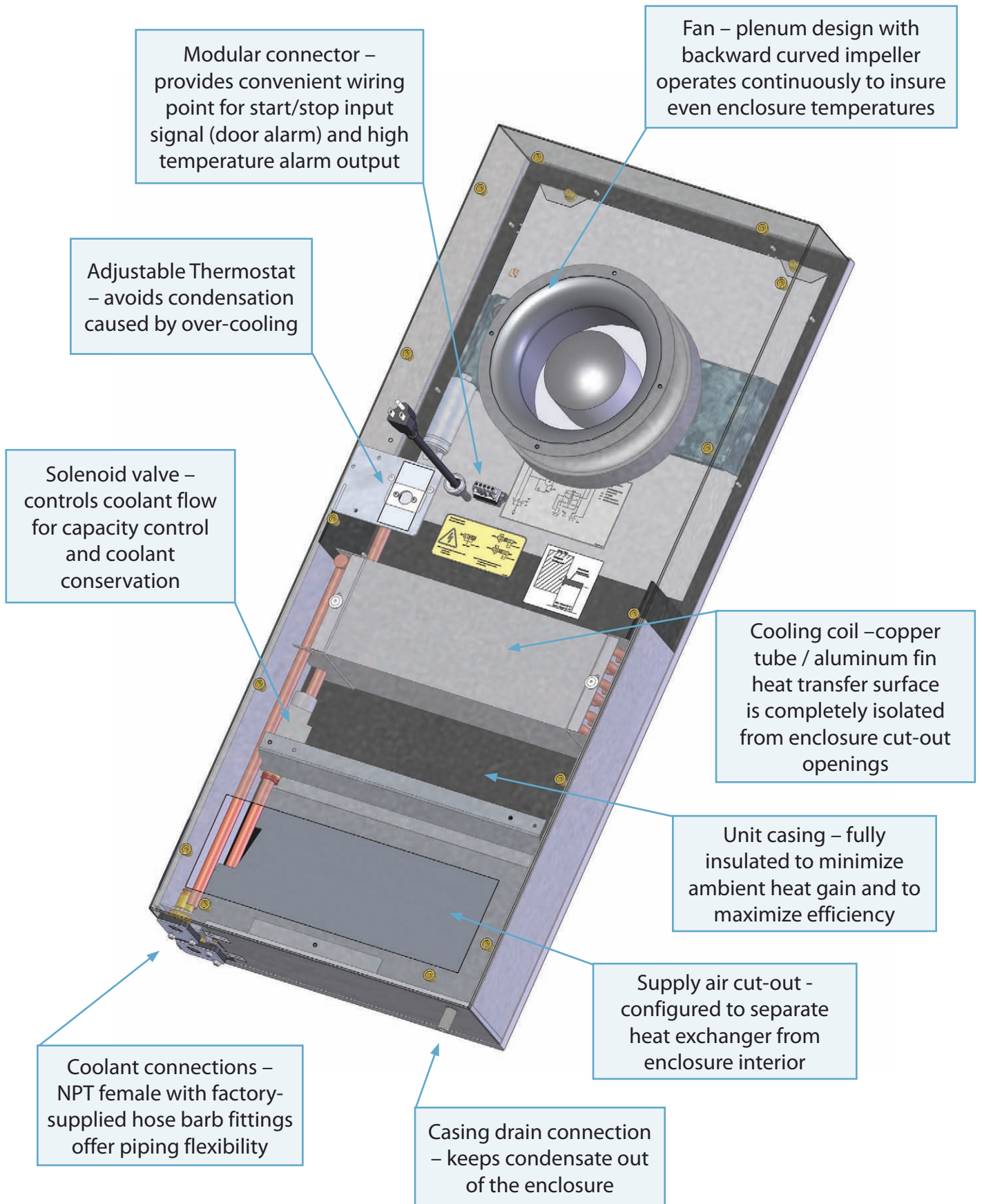
- UL 484 Listed, category ACVS, UL file #SA10300, CE approved for European use
- Maintains a UL Tested NEMA Type 12/3R/4 seal against enclosure (NEMA Type 4X with stainless option)
- Maintenance-free design can be installed internally or externally
- Easy to mount seal, no elaborate reworking of the mounting cut-out
- Integrated thermostat and solenoid valve for temperature control
- Integrated temperature monitoring with alarm contact
- Casing available with powder coat (ANSI 61 or RAL 7035) or stainless steel (with #3 polish)

**Rugged & reliable, Pfannenberg
Air / Water Heat Exchangers are
designed to meet the unique
requirements of industrial
enclosure cooling applications**

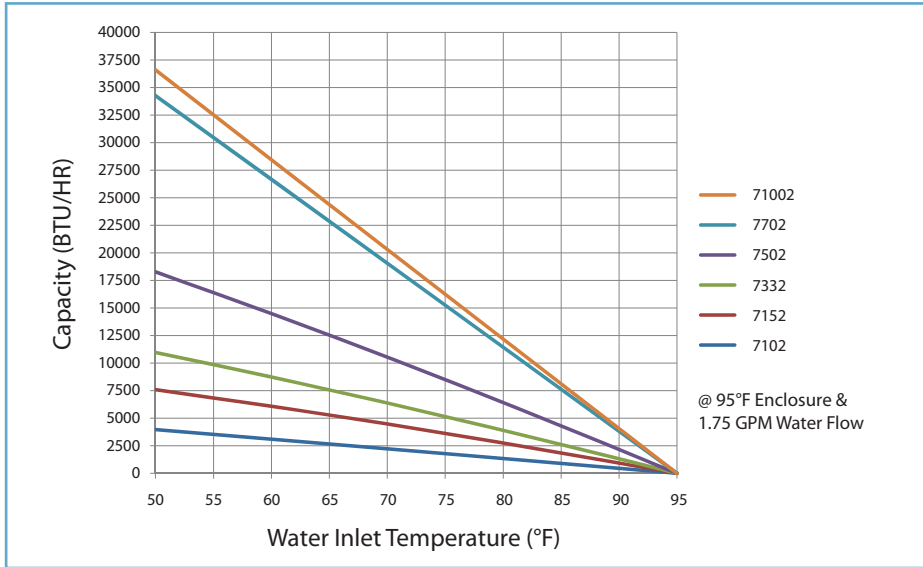


PWS Series Air/Water Heat Exchangers

Specifically engineered to allow safe, efficient use of liquid coolant for control enclosure cooling



Quick Selection Guide



For higher water temperatures, see water cooled cooling units on page 107.

Models

Type	Cooling capacity Btu/h / W*	Rated voltage	Dimensions inches / mm			Approvals					Page
			H	W	D	UL	cUL	GOST	CSA	CE	
PWS 7102	3,242 / 950	115 V / 230 V	19.68 500	7.87 200	5.91 150	●	●	●		●	115
PWS 7152	5,118 / 1,500	115 V / 230 V	37.40 950	15.75 400	4.53 115	●	●	●		●	116
PWS 7332	10,748 / 3,150	115 V / 230 V	37.50 950	15.75 400	7.48 190	●	●	●		●	116
PWS 7332 L	10,748 / 3,150	115 V / 230 V	53.15 1350	15.75 400	7.48 190	●	●	●		●	117
PWS 7502	17,743 / 5,200	115 V / 230 V	55.12 1400	18.11 460	9.25 235	●	●	●		●	118
PWS 7702 SL	23,885 / 7,000	230 / 460 V	70.87 1800	18.11 460	10.04 255	●	●	○		●	119
PWS 71002	34,121 / 10,000	230/460 V	70.87 1800	23.62 600	12.40 315	●	●	●		●	120

● available
○ pending

Accessories



Internal enclosure and panel fans

Distribution of cold air inside the control cabinet

Product	Part number
PFP 100 4" panel fan 115 V	18103000000
PFP 100 4" panel fan 230 V	18103000001
PFP 200 6" panel fan 115 V	18103000002
PFP 200 6" panel fan 230 V	18103000003



External condensate evaporation system- KV PTC

External condensate evaporator for the accumulated condensed water

Suitable for ...	Part number
115 - 230 V 50 / 60 Hz	18314000001



Condensate bottle

External container for collecting the accumulating condensed water

Suitable for ...	Part number
all units	18314000100

PWS 7102

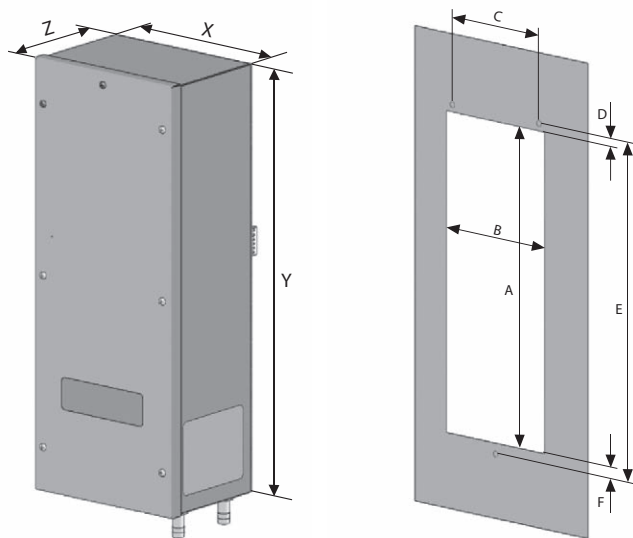
Air/Water Heat Exchanger

Cooling capacity 950 W (3,242 Btu/h)

Data		PWS 7102		Unit
Part number	Ansi 61 (Gray)	123 5102 0001	123 5101 0001	
	RAL 7035 (Lt. Gray)	123 5102 0005	123 5101 0005	
	304 Stainless Steel	123 5102 0008	123 5101 0008	
Electrics		230 / 1 / 50-60	115 / 1 / 60	V / Ph / Hz
Power consumption		84	95	W
Current consumption		.52	0.80	A
Starting current		1.80	1.40	
Actual available airflow	internal	130		CFM
Fuse (Recommended)		4		A
Connection	power	6' cord with plug		
	control	connector with plug		
	fluid	3/8" NPTF w/ 1/2" barb		
Noise level @ 1 m (EN ISO 3741)		≤ 48		dB(A)
Weight (without packaging)		16.5	16.6	lb
Ambient air temperature range		34 - 158		°F
Water temperature range		34 - 100		
Control temperature range (adjustable)		50 - 120		
Control temperature setting (factory)		95		
Maximum water pressure		150		PSIG
Duty cycle		100 %		
NEMA Type rating		NEMA Type 12/3R/4 (4x S/S)		
Construction - housing		galv. steel w/polyester powder coat (304 Polish #3 stainless steel)		
Construction - heat exchanger		copper pipe / aluminum fin		

Dimensions	
Dimension	PWS 7102
	inches (mm)
X	7.87 (200)
Y	19.68 (500)
Z	5.91 (150)
A	17.32 (440)
B	6.69 (170)
C	5.91 (150)
D	.39 (10)
E	18.31 (465)
F	.59 (15)

Mounting holes Ø 8 mm



PWS 7152 / PWS 7332

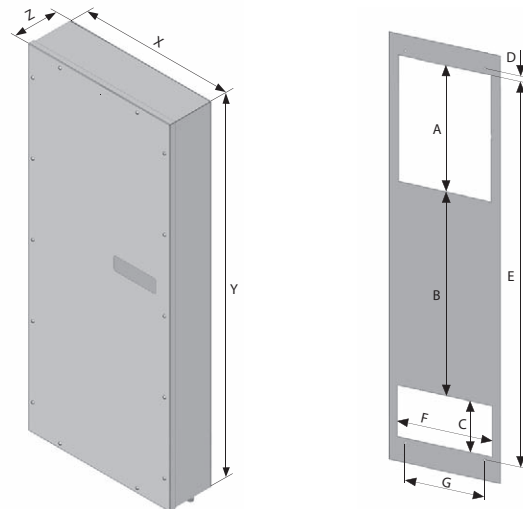
Air/Water Heat Exchanger

Cooling capacity 1500 W (5,118 Btu/h)/ 3150 W (10,748 Btu/h)

Data		PWS 7152		PWS 7332		Unit
Part number	Ansi 61 (Gray)	123 5152 0001	123 5151 0001	123 5302 0001	123 5301 0001	
	RAL 7035 (Lt. Gray)	123 5152 0005	123 5151 0005	123 5302 0005	123 5301 0005	
	304 Stainless Steel	123 5152 0008	123 5151 0008	123 5302 0008	123 5301 0008	
Electrics		230 / 1 / 50-60	115V / 1 / 60	230 / 1 / 50-60	115V / 1 / 60	V / Ph / Hz
Power consumption		182	186	385	453	W
Current consumption		.79	1.70	1.95	2.80	A
Starting current		2.00	3.90	6.60	8.62	A
Actual available airflow	internal	350		576		CFM
Fuse (Recommended)		6		16	6	A
Connection	power	6' cord with plug				
	control	connector with plug				
	fluid	3/8" NPTF w/ 1/2" barb				
Noise level @ 1 m (EN ISO 3741)		53		54		dB(A)
Weight (without packaging)		46		51		lb
Ambient air temperature range		34 - 158				°F
Water temperature range		34 - 100				
Control temperature range (adjustable)		52 - 120	53 - 120	54 - 120	55 - 120	
Control temperature setting (factory)		95				
Maximum water pressure		150				PSIG
Duty cycle		100 %				
NEMA Type rating		NEMA Type 12/3R/4 (4x S/S)				
Construction - housing		galv. steel w/polyester powder coat (304 Polish #3 stainless steel)				
Construction - heat exchanger		copper pipe / aluminum fin				

Dimensions		
Dimension	PWS 7152	PWS 7332
	inches (mm)	inches (mm)
X	15.75 (400)	
Y	37.40 (950)	
Z	4.53 (115)	7.48 (190)
A	11.02 (280)	
B	18.23 (463)	
C	4.41 (112)	
D	1.46 (37)	
E	35.59 (904)	
F	13.39 (340)	
G	11.02 (280)	

Mounting holes Ø 8 mm



PWS 7332 L

Air/Water Heat Exchanger

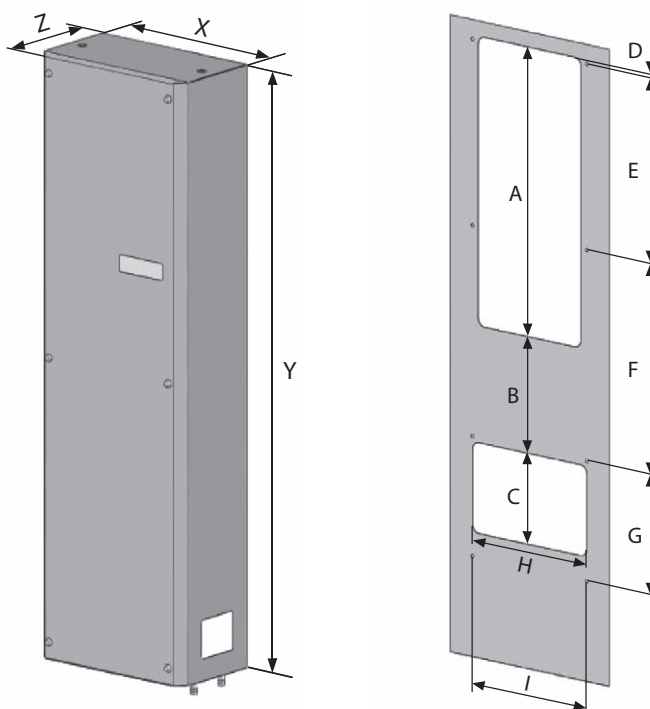
Cooling capacity 3150 W (10,748 Btu/h)

Data		PWS 7332 L		Unit
Part number	Ansi 61 (Gray)	123 5312 0001	123 5311 0001	
	RAL 7035 (Lt. Gray)	123 5312 0005	123 5311 0005	
	304 Stainless Steel	123 5312 0008	123 5311 0008	
Electrics		230 / 1 / 50-60	115 / 1 / 60	V / Ph / Hz
Power consumption		385	453	W
Current consumption		1.70	2.80	A
Starting current		6.60	8.62	
Actual available airflow	internal	576		CFM
Fuse (Recommended)		16	6	A
Connection	power	6' cord with plug		
	control	connector with plug		
	fluid	3/8" NPTF w/ 1/2" barb		
Noise level @ 1 m (EN ISO 3741)		54		dB(A)
Weight (without packaging)		77		lb
Ambient air temperature range		34 - 158		°F
Water temperature range		34 - 100		
Control temperature range (adjustable)		56 - 120	57 - 120	
Control temperature setting (factory)		95		
Maximum water pressure		150		PSIG
Duty cycle		100 %		
NEMA Type rating		NEMA Type 12/3R/4 (4x S/S)		
Construction - housing		galv. steel w/polyester powder coat (304 Polish #3 stainless steel)		
Construction - heat exchanger		copper pipe / aluminum fin		

Dimensions	
Dimension	PWS 7332L
	inches (mm)
X	15.75 (400)
Y	52 (1320)
Z	7.48 (190)
A	27.56 (700)
B	12.40 (315)
C	8.26 (210)
D	12.40 (315)
E	17.72 (450)
F	20.08 (510)
G	11.42 (290)
H	13.38 (340)

Mounting holes Ø 8 mm and cut-out radii R20

** Similar cut-out as DTS 32x5 cooling units



PWS 7502

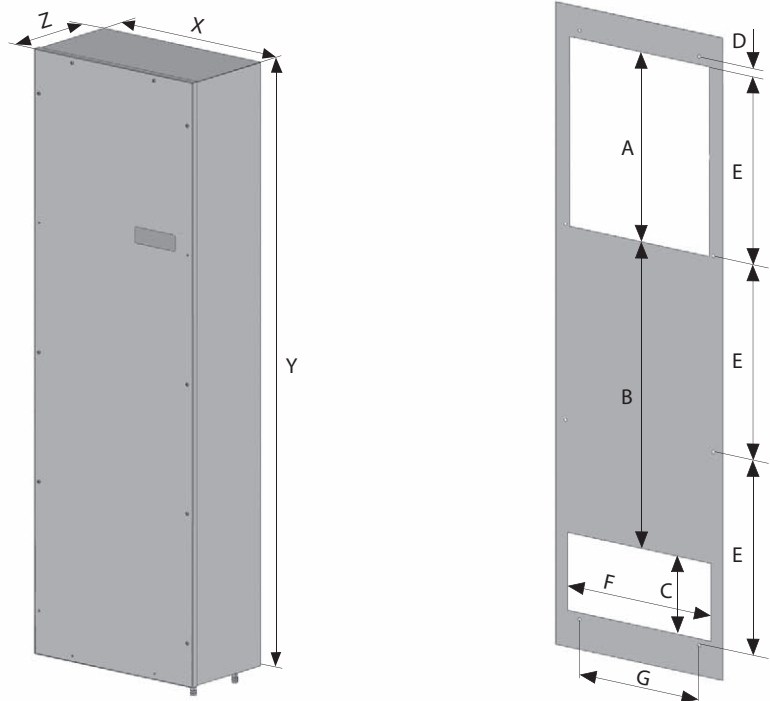
Air/Water Heat Exchanger

Cooling capacity 5200 W (17,743 Btu/h)

Data	PWS 7502		Unit	
Part number	Ansi 61 (Gray)	123 5502 0001	123 5501 0001	
	RAL 7035 (Lt. Gray)	123 5502 0005	123 5501 0005	
	304 Stainless Steel	123 5502 0008	123 5501 0008	
Electrics	230 / 1 / 50-60		115 / 1 / 60	V / Ph / Hz
Power consumption	385		384	W
Current consumption	1.95		3.45	A
Starting current	6.60		8.33	
Actual available airflow	internal	576		CFM
Fuse (Recommended)	6		6	A
Connection	power	6' cord with plug		
	control	connector with plug		
	fluid	3/8" NPTF w/ 1/2" barb		
Noise level @ 1 m (EN ISO 3741)	57			dB(A)
Weight (without packaging)	86			lb
Ambient air temperature range	34 - 158			°F
Water temperature range	34 - 100			
Control temperature range (adjustable)	58 - 120	59 - 120		
Control temperature setting (factory)	95			
Maximum water pressure	150			PSIG
Duty cycle	100 %			
NEMA Type rating	NEMA Type 12/3R/4 (4x S/S)			
Construction - housing	galv. steel w/polyester powder coat (304 Polish #3 stainless steel)			
Construction - heat exchanger	copper pipe / aluminum fin			

Dimensions	
Dimension	PWS 7502
	inches (mm)
X	18.11 (460)
Y	55.12 (1400)
Z	9.25 (235)
A	17.32 (440)
B	28.01 (711.5)
C	7.09 (180)
D	.79 (20)
E	17.91 (455)
F	16.54 (420)
G	13.78 (350)

Mounting holes Ø 8 mm



PWS 7702 SL

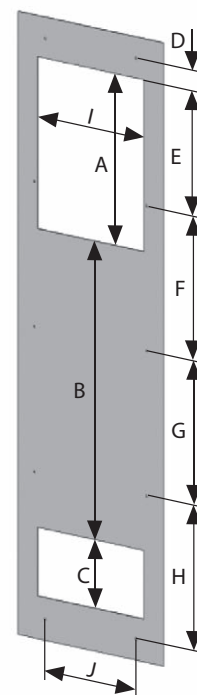
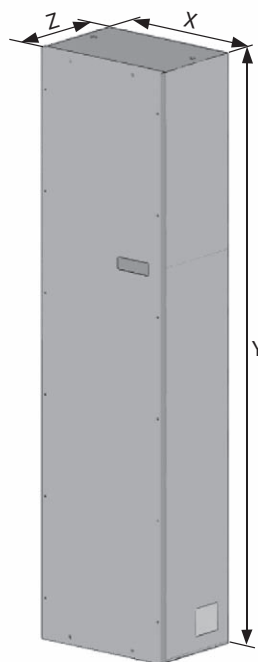
Slim Line Air/Water Heat Exchanger

Cooling capacity 7000 W (23,885 Btu/h)

Data		PWS 7332 L		Unit
Part number	Ansi 61 (Gray)	123 5773 0001	123 5772 0001	
	RAL 7035 (Lt. Gray)	123 5773 0005	123 5772 0005	
	304 Stainless Steel	123 5773 0008	123 5772 0008	
Electrics		400-460 / 1 / 50-60	230 / 1 / 50-60	V / Ph / Hz
Power consumption		680		W
Current consumption		1.50	3.50	A
Starting current		5.14	12.00	
Actual available airflow	internal	2650		CFM
Fuse (Recommended)		10		A
Connection	power	6' cord with plug		
	control	connector with plug		
	fluid	3/8" NPTF w/ 1/2" barb		
Noise level @ 1 m (EN ISO 3741)		63		dB(A)
Weight (without packaging)		126		lb
Ambient air temperature range		34 - 158		°F
Water temperature range		34 - 100		
Control temperature range (adjustable)		60 - 120	61 - 120	
Control temperature setting (factory)		95		
Maximum water pressure		150		PSIG
Duty cycle		100 %		
NEMA Type rating		NEMA Type 12/3R/4 (4x S/S)		
Construction - housing		galv. steel w/polyester powder coat (304 Polish #3 stainless steel)		
Construction - heat exchanger		copper pipe / aluminum fin		

Dimensions	
Dimension	PWS 7702 SL
	inches (mm)
X	18.11 (460)
Y	70.87 (1800)
Z	10.04 (255)
A	20.87 (530)
B	35.06 (865)
C	9.06 (230)
D	.59 (15)
E	17.42 (442.5)
F	17.42 (442.5)
G	17.42 (442.5)
H	17.42 (442.5)
I	16.42 (417)
J	13.78 (350)

Mounting holes \varnothing 8 mm



PWS 71002

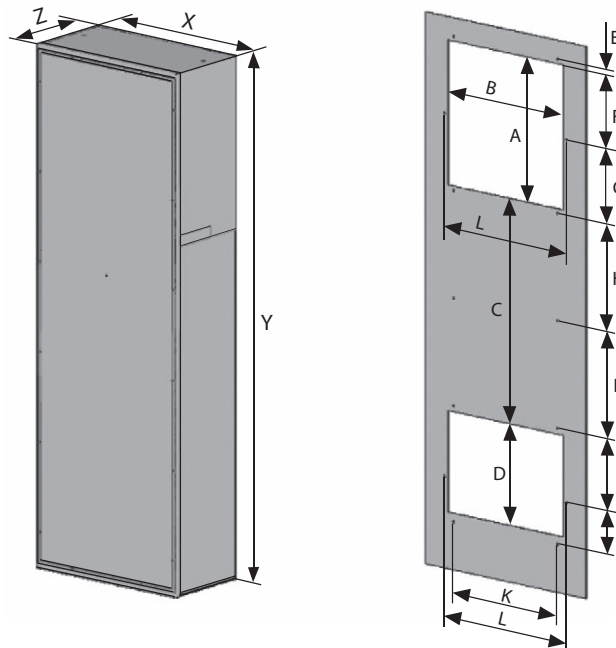
Air/Water Heat Exchanger

Cooling capacity 10000 W (34,121 Btu/h)

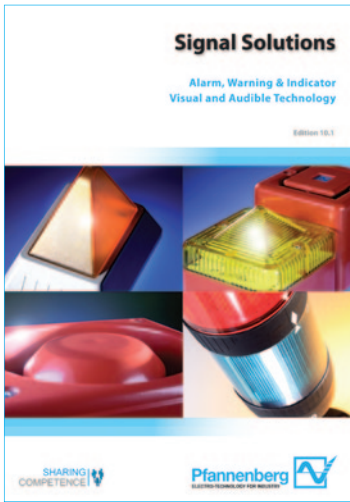
Data	PWS 7332 L		Unit	
Part number	Ansi 61 (Gray)	123 5783 0001	123 5782 0001	
	RAL 7035 (Lt. Gray)	123 5783 0005	123 5782 0005	
	304 Stainless Steel	123 5783 0008	123 5782 0008	
Electrics		400-460 / 1 / 50-60	230 / 1 / 50-60	V / Ph / Hz
Power consumption		1200		W
Current consumption		2.60	5.20	A
Starting current		9.10	18.80	
Actual available airflow	internal	3600		CFM
Fuse (Recommended)		10		A
Connection	power	6' cord with plug		
	control	connector with plug		
	fluid	3/8" NPTF w/ 1/2" barb		
Noise level @ 1 m (EN ISO 3741)		66		dB(A)
Weight (without packaging)		161	165	lb
Ambient air temperature range		34 - 158		°F
Water temperature range		34 - 100		
Control temperature range (adjustable)		62 - 120	63 - 120	
Control temperature setting (factory)		95		
Maximum water pressure		150		PSIG
Duty cycle		100 %		
NEMA Type rating		NEMA Type 12/3R/4 (4x 5/5)		
Construction - housing		galv. steel w/polyester powder coat (304 Polish #3 stainless steel)		
Construction - heat exchanger		copper pipe / aluminum fin		

Dimensions	
Dimension	PWS 71002
	inches (mm)
X	23.62 (600)
Y	70.87 (1800)
Z	12.40 (315)
A	19.68 (500)
B	19.68 (500)
C	30.51 (775)
D	13.78 (350)
E	.59 (15)
F	10.63 (270)
G	10.24 (260)
H	14.57 (370)
I	9.84 (250)
J	5.91 (150)
K	17.72 (450)
L	20.87 (530)

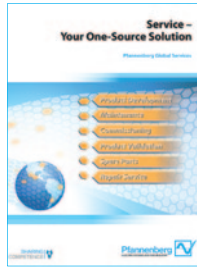
Mounting holes Ø 8 mm



Other products and literature available from Pfannenberg...



Signal Solutions Guide



Global Service Guide



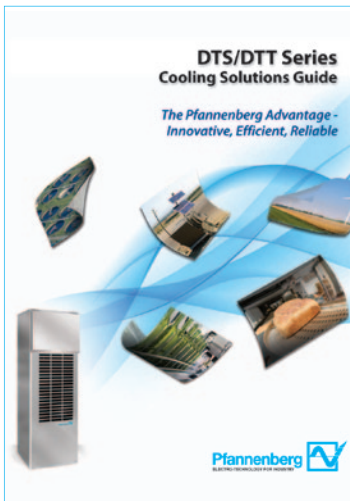
DTT Series Cooling Units



Wind Energy Solutions Guide



Food & Beverage Thermal Management Solutions



Cooling Solutions Guide

A Bright Idea!
Building, Landmark & Art Illumination by Pfannenberg

Durable weather-resistant design and long service life make Pfannenberg lighting systems the optimal choice.

Call today for more information!

TV Tower & Trinity Bridge, St. Petersburg, Russia

Eiffel Tower, Paris, France



Pfannenberg Incorporated
68 Ward Road
Lancaster, New York 14086 USA
Phone: 716-685-6866
Fax: 716-681-1521

info@pfannenbergusa.com
www.pfannenbergusa.com



Subject to technical amendments and misprints.