

The Need for Environment Control

With wide spread use of micro-electronics in today's control systems, temperature management takes on a new priority in order to ensure steady and reliable performance. The maintenance of a correct operating temperature may combine both cooling and/ or heating inside an enclosure which can protect against costly down time and system failures.

General Selection Considerations

Cooling

Conditions	Solution	Advantages	Disadvantages
Maximum desired enclosure temperature is 10°F or 5°C above maximum outside ambient.	Oversize the enclosure.	Easy to implement, no maintenance. Maintains NEMA rating of the enclosure.	Dissipates small amount of heat. Larger enclosure size takes up more space.
	Install ventilation louvers.	Economical solution, very little maintenance, easy to implement.	Dissipates limited amount of heat. Dirt, oil or fluids could enter the enclosure. NEMA rating is affected.
	Install filter fans.	Less expensive than air/refrigeration systems. Relatively high amount of heat removed, some termperature control by using thermostats.	Must maintain filters. NEMA rating can be affected. Limited use in hostile environments such as chemical applications.
	Use an air/air heat exchanger.	Easy to install, small power consumption, temperature control via thermostat. Maintains NEMA rating of the enclosure.	Must maintain filters.
Maximum desired enclosure temperature lower than maximum outside ambient.	Use an air conditioner.	Easy to install. Temperature control via factory installed thermostat. Removes large amounts of heat. Maintains NEMA rating of enclosure, dehumidifies enclosure air.	Must maintain filter. Generally not to be used when outside temperature is below 59°F (15°) or above 130°F (52°C).

Circulation

Conditions	Solution	Advantages	Disadvantages
Localized heat or 'hot spots'.		Economical solution, no maintenance, easy to install. Maintains NEMA rating of the enclosure.	Dissipates small amount of heat.

Heating

Conditions	Solution	Advantages	Disadvantages
Outside temperature is below minimum allowable equipment operation range.	Heat with radiant heater.	Economical power consumption. Reliable, can be temperature controlled.	Consumes energy, takes up internal panel space.
Condensation occurs.	Heat with radiant heater to maintain temperature above the dewpoint.	Economical power consumption. Reliable, humidity can be controlled.	Consumes energy, takes up internal panel space.

Technical references and CAD downloads available at www.hammondmfg.com

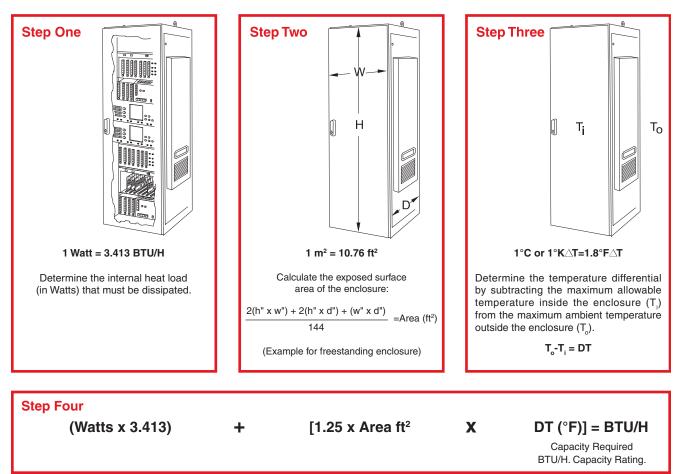


Cooling Products Sizing an Air Conditioner

Sizing an Air Conditioner

The proper selection of an air conditioner is determined by the following steps:

- Step 1) Internal heat load quoted as Watts that must be dissipated.
- Step 2) The exposed surface area of the enclosure.
- Step 3) Temperature differential required between maximum inside temperature and maximum outside ambient.
- Step 4) Final calculation of the above.



The DTS/DTT offering is available in the most popular selection of cooling capacities, sizes, voltages and mounting configurations. Available capacities range from 1,200 to 24,000 BTU/H in both side mounting and top mounting models. All models use powerful radial fans for maximum air circulation inside the enclosure in ambient temperatures of 125°F (+52°C). Models from 2,000 BTU/H capacity are equipped with thermal expansion valves for optimal use of the evaporator heat exchange surface under all operating conditions. For additional protection of the compressor motor, these valves are supplied as standard with Maximum Operating Pressure control devices (MOP). For energy conservation, the use of hot gas bypass valves is limited to the unloaded starting and control of large compressors from 8,000 BTU/H upwards. All air conditioners were developed, designed and subject to final inspections in accordance with international standards.

Technical references and CAD downloads available at www.hammondmfg.com



Side Mounting DTS Series 1200 BTU/H



A A C

Description

- Designed for side mounting where hot spot cooling or low capacity cooling is required.
- Compact design uses minimal surface area.
- Closed loop cooling ensures air is recirculated without ever mixing with contaminated ambient air.

Standards

- Maintains NEMA 12 rating
- IP 54
- UR, cUR and CE

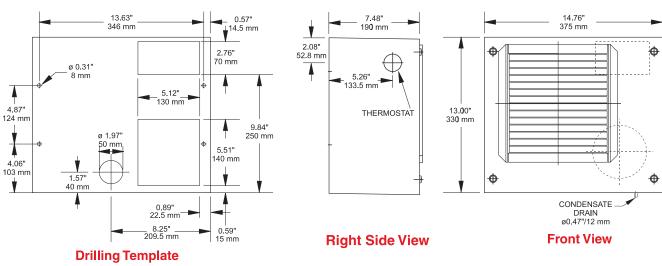
Features

- R134a refrigerant.
- Thermostat control.
- Continuous air circulation from high capacity fans.

- EMI/RFI suppression meets CE.
- Line cord with plug (115 V).
- Washable filter mat protected within an easily removable grill.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Exterior case easily removable for field service.
- Q Mount allows unit to hang in place for easy installation.

Accessories

Gaskets...see page 456



Part Number	Ship Wt. lbs
DTS1200A115LG	42
DTS1200A230LG	42

Technical Data

i commour Data		
Electrical Data	DTS1200A115LG	DTS1200A230LG
Rated Voltage	115 V 60 Hz	230 V 50/60 Hz
	110 V 50 Hz	
Range of Operation	103-127 V	207-253 V
Power Consumption	200 W	200 W
Running Amps	2.2 A	1.3 A
Starting Current	15.7 A	9.5 A
Line Cord	With plug	Without plug

Rated Capacity	1,200 BTU/H (350 Watts)
Type of Refrigerant	R134a
Adjustable Control Range	+77+131 F / +25+45 C Factory Setting +95 F (+35 C)
Max. Ambient Air Temp.	+125°F (+52°C)
Min. Ambient Air Temp.	+46°F (+8°C)
Air Capacity (unrestricted)	Internal Circulation 106 CFM
	External Circulation 230 CFM
Condensate Discharge	Direct via tube
Filter Mat	150 g/m ²
Db Noise Level	≤ 62 dB(A)
Unit Weight	40 lbs (18 kg)
Exterior Case	Galvanized sheet steel
Finish	RAL7035 light grey finish
NEMA Rating	Enclosures IP 54/NEMA 12

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

USA: 716.630.7030 Data Subject to cl

Refrigeration Data





Side Mounting DTS Series 2000 BTU/H



Description

- Compact design for side mounting on any enclosure surface where hot spot cooling or low capacity cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.

Standards

- Maintains NEMA 12 rating
- IP 54

CE

• UR, cUR and CE

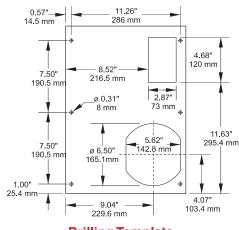
Features

- R134a refrigerant.
- Thermostat control.
- Line cord with plug (115 V).
- Washable filter mat protected within an easily removable grill.

- Expansion valve permits increased efficiency through improved evaporator heat transfer and less frequent compressor operation.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Gasket, mounting kit and template for cutout and drilling are included.
- Condensate drain hose and clamp.
- Exterior case easily removable for field service.
- Q Mount allows unit to hang in place for easy installation.

Accessories

Gaskets...see page 456

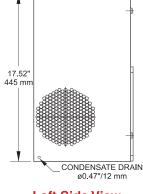


Drilling Templat	е
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Part Number	Ship Wt. Ibs
DTS2000A115LG	54
DTS2000A230LG	54

Technical Data

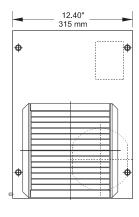
roominour Butu		
Electrical Data	DTS2000A115LG	DTS2000A230LG
Rated Voltage	115 V 60 Hz	230 V 50/60 Hz
	110 V 50 Hz	
Range of Operation	103-127 V	207-253 V
Power Consumption	270 W	230 W
Running Amps	2.9 A	1.3 A
Starting Current	13.8 A	7.4 A
Line Cord	With plug	Without plug



10.04"

255 mm





Front View

Refrigeration Data	
Rated Capacity	2,000 BTU/H (580 Watts)
Type of Refrigerant	R134a
Adjustable Control Range	+77+131 F / +25+45 C
	Factory Setting +95 F (+35 C)
Max. Ambient Air Temp.	+125°F (+52°C)
Min. Ambient Air Temp.	+46°F (+8°C)
Air Capacity (unrestricted)	Internal Circulation 230 CFM
	External Circulation 230 CFM
Condensate Discharge	Condensate evaporator
Filter Mat	150 g/m ²
Db Noise Level	≤ 62 dB(A)
Unit Weight	51 lbs (23 kg)
Exterior Case	Galvanized sheet steel
Finish	RAL7035 light grey finish
NEMA Rating	Enclosures IP 54/NEMA 12

Technical references and CAD downloads available at www.hammondmfg.com



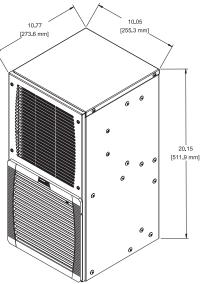


Side Mounting DTS Series 2500 BTU/H



Description

- Compact design for side mounting on any enclosure surface where hot spot or low capacity cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.



Standards

- Maintains enclosure's NEMA 12 rating
- IP 54
- UL, cUL and CE

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.
- Expansion valve increases efficiency with improved evaporator heat transfer and less frequent compressor operation.
- Direct condensate discharge via drain hose.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Door contact for power down when enclosure door is opened.
- Gasket, mounting kit and template for cutout and drilling are included.
- Condensate drain hose and clamp
- Q Mount allows unit to hang in place for easy installation.

Accessories

- Gaskets...see page 456
- Remote door switch...see page 452

Part Number	Ship Wt. lbs
DTS3041A115LG	56
DTS3041A230LG	56

Refrigeration Data	
Rated Capacity	2500 BTU/H (585 Watts)
Type of Refrigerant	R134a
Adjustable Control Range	+77+131 F / +25+45 C Factory Setting +95 F (+35 C)
Max. Ambient Air Temp.	+131°F (+55°C)
Min. Ambient Air Temp.	+59°F (+15°C)
Air Capacity (unrestricted)	Internal Circulation 191 CFM
	External Circulation 88 CFM
Condensate Discharge	Condensate Drain
Filter Mat	Filterless
Db Noise Level	≤ 64 dB(A)
Unit Weight	51 lbs (23 kg)
Exterior Case	Galvanized sheet steel
Finish	RAL7035 light grey finish
NEMA Rating	Enclosures IP 54/NEMA 12

Technical references and CAD downloads available at www.hammondmfg.com

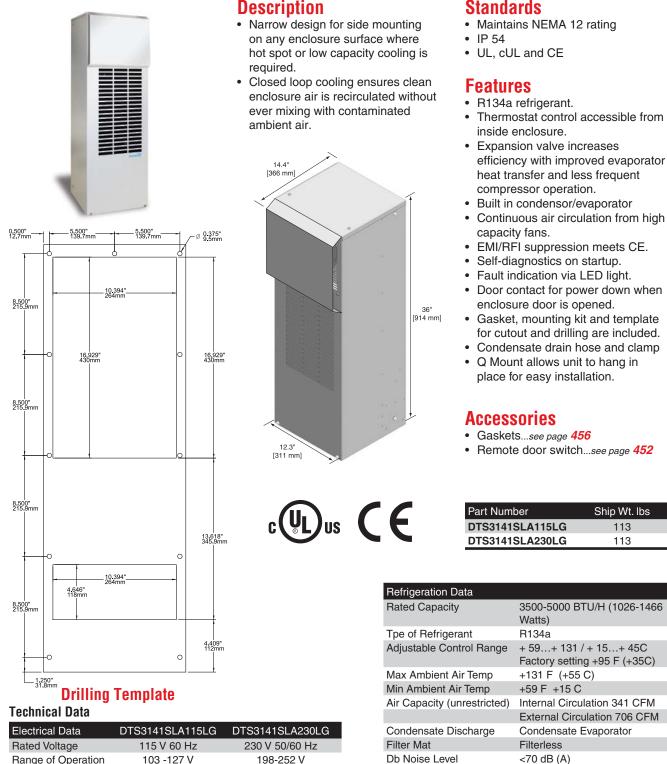
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Technical Data

Electrical Data	DTS3041A115LG	DTS3041A230LG
Rated Voltage	115v 60 Hz	230v 50/60 Hz
	110v 50 Hz	
Range of Operation	103-127v	207-253v
Power Consumption	690 W	663 W
Running Amps	6.0 A	4.1 A
Starting Current	28 A	10.4 A
Line Cord	With Plug	With Plug



Side Mounting DTS Series 3500 BTU/H



Technical references and CAD downloads available at www.hammondmfg.com

Rated Capacity	3500-5000 BTU/H (1026-1466 Watts)
Tpe of Refrigerant	R134a
Adjustable Control Range	+ 59+ 131 / + 15+ 45C Factory setting +95 F (+35C)
Max Ambient Air Temp	+131 F (+55 C)
Min Ambient Air Temp	+59 F +15 C
Air Capacity (unrestricted)	Internal Circulation 341 CFM
	External Circulation 706 CFM
Condensate Discharge	Condensate Evaporator
Filter Mat	Filterless
Db Noise Level	<70 dB (A)
Unit Weight	108 lbs (49 kg)
Exterior Case	Galvanized Sheet Steel
Finish	RAL7035 light gray finish
Nema Rating	Enclosures IP 54/Nema 12

All dimensions in inches unless specified otherwise



Accessories

• Gaskets...see page 456

• Remote door switch...see page 452

Side Mounting DTS Series 4000 & 7500 BTU/H



7500 BTU/H unit shown

Description

- Designed for side mounting on any enclosure surface where high capacity system cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Optimum air circulation with maximum clearance distance between warm inlet and cold outlet for reduced hot spot locations.

Standards

- Maintains enclosure's NEMA 12
 rating
- IP 54
- UL, cUL and CE

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.
- Hot gas bypass valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Q Mount allows unit to hang in place for easy installation.

	Technical Data
	Electrical Data
Ship Wt. lbs.	

Electrical Data	DTS3141A115LG DTS3141A230LG	DTS3241A115LG DTS3241A230LG
Rated Voltage	115 V 60 Hz/	115 V 60 Hz/
	230 V 50/60 Hz	230 V 50/60 Hz
Range of Operation	103-127 V/198-252 V	103-127 V/198-252 V
Power Consumption	712 W/712 W	1400 W/1400 W
Running Amps	7.2 A/4.2 A	14.6 A/6.3 A
Starting Current	28.0 A/14.8 A	26.8 A/16.5 A
Line Cord	Terminal Block	Terminal Block

Technical references and CAD downloads available at www.hammondmfg.com

99

99

127

127

All dimensions in inches unless specified otherwise

Part Number DTS3141A115LG

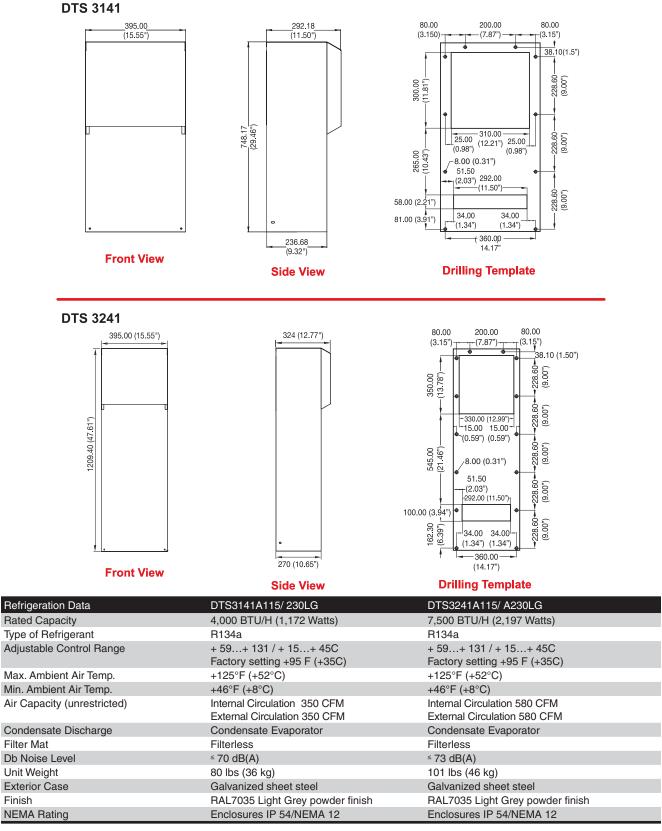
DTS3141A230LG

DTS3241A115LG

DTS3241A230LG



Side Mounting DTS Series 4000 & 7500 BTU/H



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All dimensions in inches unless specified otherwise

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Side Mounting DTS Series 5000 - 7000 & 9000 - 12000 BTU/H



Standards

- Maintains enclosure's NEMA 12 rating
- IP 54
- UL, cUL and CE

Part Number	Ship Wt. lbs.
DTS3145A115LG	113
DTS3145A230LG	113
DTS3245A115LG	155
DTS3245A230LG	155

Technical Data

Climate Control

Description

- Designed for side mounting on any enclosure surface where high capacity system cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Optimum air circulation with maximum clearance distance between warm inlet and cold outlet for reduced hot spot locations.
- Condensor with 3 mm fin spacing, highly effective protection against strongly contaminated and aggressive ambient air

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.
- Hot gas bypass valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- · Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Q Mount allows unit to hang in place for easy installation.

Electrical Data	DTS3145A115LG DTS3145A230LG	DTS3245A115LG DTS3245A230LG
Rated Voltage	115 V 60 Hz	115 V 60 Hz
	230 V 50/60 Hz	230 V 50/60 Hz
Range of Operation	103-127 V /198-252 V	103-127 V /198-252 V
Power Consumption	1000 W /1020 W	1600 W / 1600 W
Running Amps	8.5 A / 4.5 A	13 A / 6.5 A
Starting Current	48 A / 26 A	57 A / 30 A
Line Cord	Terminal Block	Terminal Block

Refrigeration Data	DTS3145A115/ 230LG	DTS3245A115/ 230LG
Rated Capacity	5000-7000 BTU/H (1466-2052 Watts)	9000-12000 BTU/H (2639-3519 Watts)
Type of Refrigerant	134a	134a
Adjustable Control Range	+ 77+ 131 / + 25+ 45C	+ 77+ 131 / + 25+ 45C
	Factory setting +95 F (+35C)	Factory setting +95 F (+35C)
Max. Ambient Air Temp	+131 F (+55 C)	+131 F (+55 C)
Min. Ambient Air Temp	+59 F (+15 C)	+59 F (+15 C)
Air Capacity (unrestricted)	Internal Circulation 365/341 CFM	Internal Circulation
	External Circulation 765/706 CFM	External Circulation
Condonsate Discharge	Condensate Evaporator	Condensate Evaporator
Filter Mat	Filterless	Filterless
Db Noise Level	<70 dB(A)	<73 dB(A)
Unit Weight	108 lbs	150 lbs
Exterior Case	Galvanized Sheet Steel	Galvanized Sheet Steel
Finish	RAL7035 Light Grey Powder Finish	RAL7035 Light Grey Powder Finish
Nema Rating	Enclosures IP 54 / Nema 12	Enclosures IP 54 / Nema 12

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

0.7030 Data Subject to change without notice



Side Mounting DTS Series 5000 - 7000 & 9000 - 12000 BTU/H

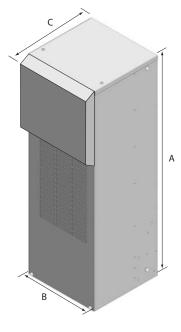
DTS 3145

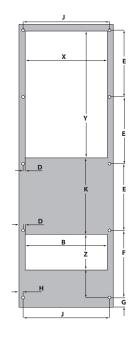
Dimension	inches (mm)		
А	36 (914)		
В	12.25 (311)		
С	14.4 (367)		
D	0.3 (8)		
E	8.5 (216)		
F	8.5 (216)		
G	1.3 (32)		
н	0.5 (13)		
I	3.2 (80)		
J	11 (279)		
К 9 (228)			
Х	10.4 (264)		
Y	17 (430)		
Z	Z 4.7 (118)		
Mounting holes Ø 10 mm For exact cutout information reference			

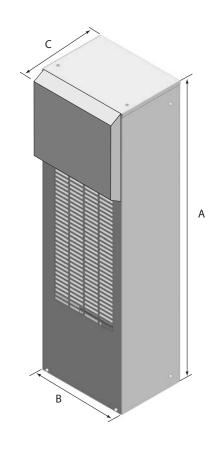
For exact cutout information reference drilling template at pfannenbergusa. com

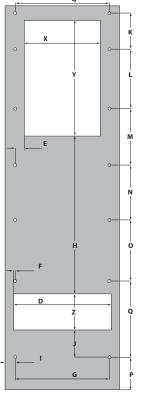
DTS 3245

Dimension	inches (mm)			
А	53 (1347)			
В	16 (406)			
С	14.4 (367)			
D	13.7 (348)			
E	0 .98 (25)			
F	0 .35 (9)			
G	13 (330)			
н	21.1 (537)			
I	1.4 (35)			
J	3.6 (92)			
К	5.0 (126)			
L	8.2 (209)			
М	7.8 (198)			
N	7.6 (192)			
0	8.4 (214)			
Р	4.5 (114)			
Q	10.5 (267)			
х	11 (280)			
Y	16.8 (427)			
Z	Z 5.3 (135)			
Mounting holes Ø 8 mm				
For exact cutout information reference drilling template at pfannenbergusa. com				











Top Mounting DTT Series 1200 - 14000 BTU/H



Description

- Designed for top mounting where space limitations do not allow side mounting on the enclosure surface.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Excellent security level due to patented condensate management system, which prevents condensate from penetrating the enclosure.
- High reliability and long maintenance intervals
- Quick release mounting frame

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.
- Hot gas bypass valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.



Standards

- Maintains NEMA 12 rating
- IP 54
- UR, cUR and CE

Accessories

- Remote door switch...see page 452
- Quick installation frame ...see next page

	DTT6101A115LG	DTT6101A230LG	DTT6201A115LG	DTT6201A230LG	DTT6201A460LG
Cooling Capacity (BTU)	1700	1700	3500	3500	3500
Rated Voltage +/- 10%	115	230	115	230	400/460
Frequency	50/60 Hz				
Power Consumption (W)	569	458/532	877	663/805	706/845
Running Amps	5.2	2.2/2.4	8.05	3.39/3.83	1.5/1.8
Starting Current (A)	2	3		8.5/9.3	

	DTT6301A115LG	DTT6301A230LG	DTT6301A460LG	DTT6401A115LG	DTT6401A230LG	DTT6401A460LG
Cooling Capacity (BTU)	5100	5100	5100	6800	6800	6800
Rated Voltage +/- 10%	115	230	400/460	115	230	400/460
Frequency	50/60 Hz					
Power Consumption (W)	1027	980/1140	962/1150	1894	1049/1275	1300/1598
Running Amps	10.8	6.3/6.4	3.1/3.2	15.5	5.1/5.5	2.3/2.4
Starting Current (A)	32	19.7	9.8	34	16.8	10/12

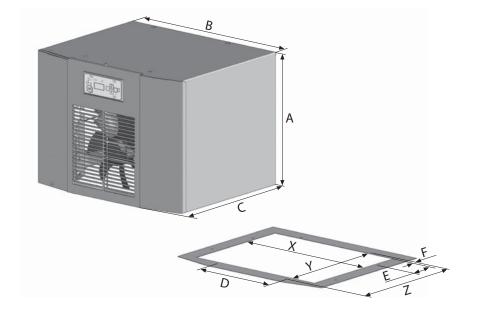
	DTT6601A460LG	DTT6801A460LG
Cooling Capacity (BTU)	10,000	13,600
Rated Voltage +/- 10%	400/460	400/460
Frequency	50/60 Hz	50/60 Hz
Power Consumption (W)	1700/2100	1618/2050
Running Amps	2.45/2.49	3.4/3.5
Starting Current (A)	8.9/9.9	17.1/19.5

All Models	
Electrical Connection	Terminal Block with Plug
Min/Max Ambient Temp	+59+131 F / +15+55 C
Exterior Case	Galvanized Sheet Steel Color RAL 7035 Powder Finish

Technical references and CAD downloads available at www.hammondmfg.com



Top Mounting DTT Series 1200 - 14000 BTU/H



					inches (mm)				Ship Wt.
Part Number	А	В	С	D	E	F	Х	Y	Z	Lbs.
DTT6101A115LG	17.0 (434)	23.4 (595)	15.6 (395)	11.5 (292)	3.3 (85)	.55 (14)	18.7 (475)	10.2 (270)	11.9 (303)	80
DTT6101A230LG	17.0 (434)	23.4 (595)	15.6 (395)	11.5 (292)	3.3 (85)	.55 (14)	18.7 (475)	10.2 (270)	11.9 (303)	80
DTT6201A115LG	17.0 (434)	23.4 (595)	15.6 (395)	11.5 (292)	3.3 (85)	.55 (14)	18.7 (475)	10.2 (270)	11.9 (303)	85
DTT6201A230LG	17.0 (434)	23.4 (595)	15.6 (395)	11.5 (292)	3.3 (85)	.55 (14)	18.7 (475)	10.2 (270)	11.9 (303)	85
DTT6201A460LG	17.0 (434)	23.4 (595)	15.6 (395)	11.5 (292)	3.3 (85)	.55 (14)	18.7 (475)	10.2 (270)	11.9 (303)	99
DTT6301A115LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	97
DTT6301A230LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	109
DTT6301A460LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	122
DTT6401A115LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	107
DTT6401A230LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	111
DTT6401A460LG	17.1 (435)	23.4 (595)	19.5 (495)	11.5 (292)	10.1 (256)	.45 (11.5)	19.5 (495)	15.6 (395)	16.5 (418)	123
DTT6601A460LG	19.1 (485)	31.3 (795)	22.6 (575)	13.4 (340)	7.9 (200)	.55 (14)	27.2 (692)	15.4 (392)	16.5 (420)	182
DTT6801A460LG	19.1 (485)	31.3 (795)	22.6 (575)	13.4 (340)	7.9 (200)	.55 (14)	27.2 (692)	15.4 (392)	16.5 (420)	187

Mounting holes Ø 8 mm

For exact cutout information reference drilling template.

Quick Installation Frame

- Simple install and removal of AC for transport
- Maintains NEMA 12 Seal & Enclosure

Frame Part Number	Use with Models	Ship Wt. (lbs)
DTT61016202LG	DTT 6101 / DTT6201	14
DTT63016401LG	DTT 6301 / DTT 6401	14
DTT66016801LG	DTT 6601 / DTT 6801	18



Technical references and CAD downloads available at www.hammondmfg.com



Side Mounting DTS Series - NEMA 3R, 4, 4X 2500 BTU/H - Stainless Steel



Description

- Compact design for side mounting on any enclosure surface where spot cooling or low capacity cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Ideal for outdoor or very wet conditions.

Standards

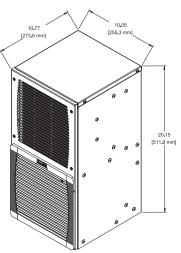
- UL, cUL, and CE
- Complies with
- NEMA 3R, 4, 4X

CUS	

Part Number	Ship Wt. lbs.
DTS3081A115N4SS	60
DTS3081A230N4SS	60

Features

- Stainless steel body.
- R134a refrigerant.
- Thermostat control.
- Line cord with plug (115 V).
- Expansion valve permits increased efficiency through improved evaporator heat transfer and less frequent compressor operation.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE standard.
- Gasket, mounting kit, and template for cutout and drilling are included.
- Direct condensate discharge, drain hose and clamp.
- Q Mount allows unit to hang in place for easy installation.



Dimensional Drawing Only

Refrigeration Data	
Rated Capacity	2,500 BTU/H (732 Watts)
Type of Refrigerant	R134a
Refrigerant Charge	400 g
Adjustable Control Range	+77+131 F / +25+45 C Factory Setting +95 F (+35 C)
Max. Ambient Air Temp.	+131°F (+55°C)
Min. Ambient Air Temp.	+46°F (+8°C)
Air Capacity (unrestricted)	Internal Circulation 191 CFM
	External Circulation 88 CFM
Condensate Discharge	Condensate drain
Filter Mat	Filterless
Db Noise Level	≤ 64 dB(A)
Unit Weight	55 lbs (25 kg)
Exterior Case	304 Stainless steel
Finish	Polish #3
NEMA Rating	3R, 4, 4X

Technical references and CAD downloads available at www.hammondmfg.com

DTS3081A115N4SS DTS3081A230N4SS

230 V 50/60 Hz

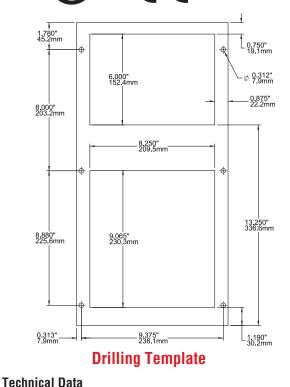
198-253 V

724 W

3.3 A

14.4 A

With plug



115 V 60 Hz

110 V 50 Hz

103-127 V

With plug

690 W

6.0 A

28 A

Line Cord

Electrical Data

Rated Voltage

Running Amps

Starting Current

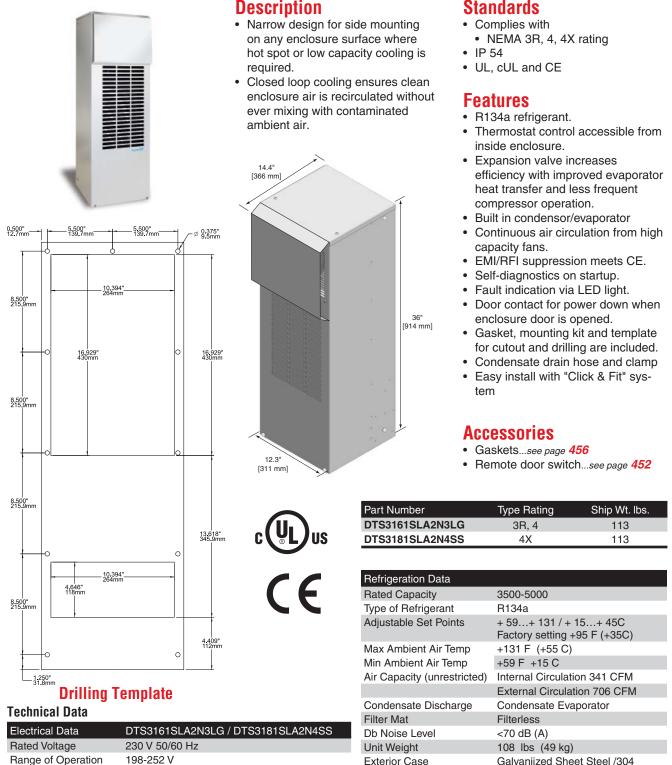
Range of Operation

Power Consumption



Side Mounting DTS Series - NEMA 3R, 4, 4X

3500 BTU/H - Stainless Steel



Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

RAL7035 light gray finish / #4

Enclosures IP 54/Nema 3R, 4, 4X

Stainless Steel

Brush Finish SS

Canada: 519.822.2960 or 905.456.3770 USA: 716.630.7030

Finish

Nema Rating



Side Mounting DTS Series - NEMA 3R, 4 4000 & 7500 BTU/H



4000 BTU/H Shown

Description

- Designed for side mounting on any enclosure surface where high capacity system cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Optimum air circulation with maximum clearance distance between warm inlet and cold outlet for reduced hot spot locations.

Standards

- UL, cUL, CE
- Complies with
 NEMA 3R, 4

Features R134a refrigerant. Thermostat control

- Thermostat control accessible from inside enclosure.
- Expansion valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Q Mount allows unit to hang in place for easy installation.
- Nema 3R/4 exterior galvanized sheet steel with powdercoat finish.

Accessories

- Gaskets...see page 456
- Remote door switch...see page 452

Technical Data

Part Number

DTS3161A115N3LG

DTS3161A230N3LG

DTS3261A115N3LG

DTS3261A230N3LG

Electrical Data	DTS3161A115N3LG	DTS3161A230N3LG	DTS3261A115N3LG	DTS3261A230N3LG
Rated Voltage	115 V 60 Hz	230 V 50/60 Hz	115 V 60 Hz	230 V 50/60 Hz
Range of Operation	103-127 V	198-252 V	103-127 V	198-252 V
Power Consumption	950 W	860 W	1800 W	1800 W
Running Amps	7.2 A	4 A	14.6 A	6.3 A
Starting Current	17.1 A	9.3 A	26.8 A	16.5 A
Line Cord	Terminal Block	Terminal Block	Terminal Block	Terminal Block

Technical references and CAD downloads available at www.hammondmfg.com

Ship Wt. lbs.

104

104

129

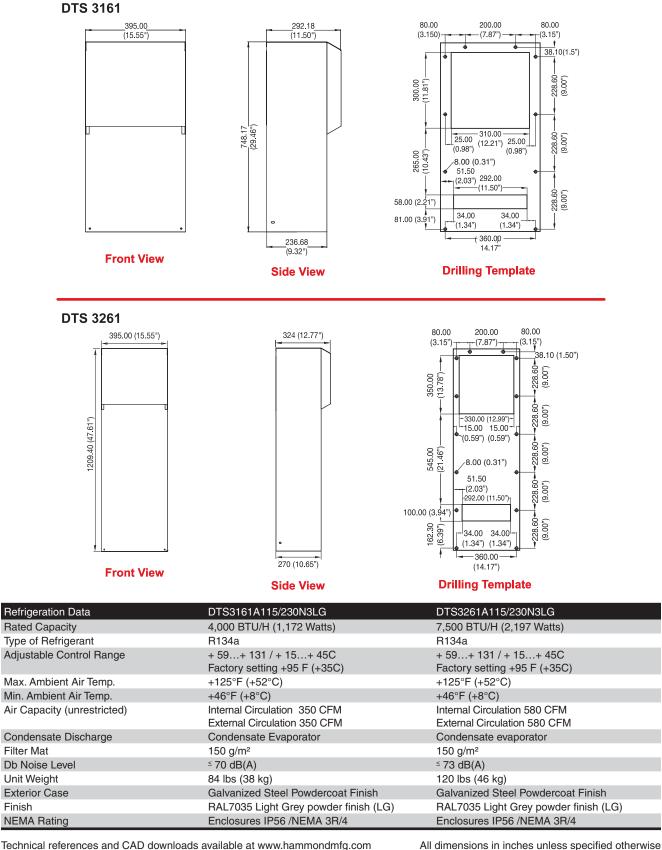
129

All dimensions in inches unless specified otherwise

Climate Control



Side Mounting DTS Series - NEMA 3R, 4 4000 & 7500 BTU/H



Technical references and CAD downloads available at www.hammondmfg.com



Side Mounting DTS Series - NEMA 3R, 4, 4X 4000 & 7500 BTU/H - Stainless Steel



Description

- Designed for side mounting on any enclosure surface where high capacity system cooling is required.
- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Optimum air circulation with maximum clearance distance between warm inlet and cold outlet for reduced hot spot locations.

Standards

- UL, cUL, CE
- Complies with
- NEMA 3R, 4, 4X

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.

UL)US

- Expansion valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Q Mount allows unit to hang in place for easy installation.
- Nema 4/4x exterior 304 stainless steel.

Accessories

- Gaskets...see page 456
- Remote door switch...see page 452

Part Number	Ship Wt. lbs.
DTS3181A115N4SS	107
DTS3181A230N4SS	107
DTS3281A115N4SS	144
DTS3281A230N4SS	144

Technical Data

Technical Data				
Electrical Data	DTS3181A115N4SS	DTS3181A230N4SS	DTS3281A115N4SS	DTS3281A230N4SS
Rated Voltage	115 V 60 Hz	230 V 50/60 Hz	115 V 60 Hz	230 V 50/60 Hz
Range of Operation	103-127 V	198-252 V	103-127 V	198-252 V
Power Consumption	950 W	860 W	1800 W	1800 W
Running Amps	7.2 A	4 A	14.6 A	6.3 A
Starting Current	17.1 A	9.3 A	26.8 A	16.5 A
Line Cord	Terminal Block	Terminal Block	Terminal Block	Terminal Block

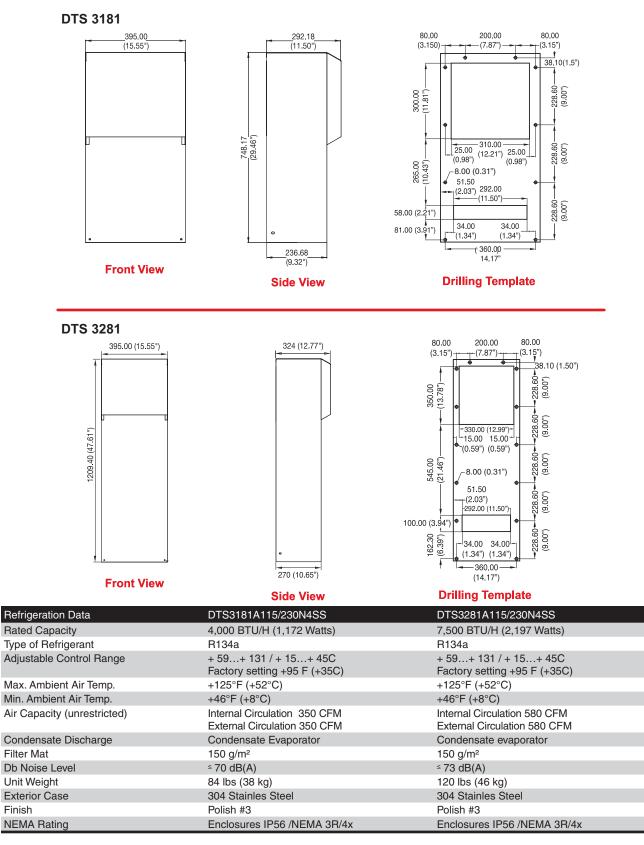
Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise



Side Mounting DTS Series - NEMA 3R, 4, 4X

4000 & 7500 BTU/H - Stainless Steel



Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise

364





Side Mounting DTS Series - NEMA 3R, 4, 4X 5000 - 7000 & 9000 - 12000 BTU/H - Galvanized Sheet Steel & Stainless Steel



Description

 Designed for side mounting on any enclosure surface where high capacity system cooling is required.

- Closed loop cooling ensures clean enclosure air is recirculated without ever mixing with contaminated ambient air.
- Optimum air circulation with maximum clearance distance between warm inlet and cold outlet for reduced hot spot locations.
- Condensor with 3 mm fin spacing, highly effective protection against strongly contaminated and aggressive ambient air

Standards

Ship Wt.

lbs.

113

113

113

113

155

155

155

155

Туре

Rating

3R, 4

3R, 4

4X

4X

3R, 4

3R, 4

4X

4X

- UL, cUL, and CE
- Complies with
- NEMA 3R, 4, 4X

Features

- R134a refrigerant.
- Thermostat control accessible from inside enclosure.
- Hot gas bypass valve prevents evaporator freeze up while minimizing heavy inrush currents on large BTU/H units.
- Built in condensate evaporator.
- Continuous air circulation from high capacity fans.
- EMI/RFI suppression meets CE.
- Self-diagnostics on startup.
- Fault indication via LED light.
- Provision for door contact allowing power down when enclosure door is opened.
- Gasket, mounting kit and template for enclosure cutout and drilling are included.
- Condensate drain hose and clamp provided.
- Q Mount allows unit to hang in place for easy installation.

Accessories

- Gaskets...see page 456
- Remote door switch...see page **452**

Technical Data

Part Number

DTS3165A115N3LG

DTS3165A230N3LG

DTS3185A115N4SS

DTS3185A230N4SS

DTS3265A115N3LG

DTS3265A230N3LG

DTS3285A115N4SS

DTS3285A230N4SS

Electrical Data	DTS3165A115N3LG / DTS3185A115N4SS DTS3165A230N3LG / DTS3185A230N4SS	DTS3265A115N3LG / DTS3285A115N4SS DTS3265A230N3LG / DTS3285A230N4SS
Rated Voltage	115 V 60 Hz 230 V 50/60 Hz	115 V 60 Hz 230 V 50/60 Hz
Range of Operation	103-127 V /198-252 V	103-127 V /198-252 V
Power Consumption	1000 W /1020 W	1600 W / 1600 W
Running Amps	8.5 A / 4.5 A	13 A / 6.5 A
Starting Current	48 A / 26 A	57 A / 30 A
Line Cord	Terminal Block	Terminal Block

Refrigeration Data	DTS3165A115N3LG / DTS3185A115N4SS DTS3165A230N3LG / DTS3185A230N4SS	DTS3265A115N3LG / DTS3285A115N4SS DTS3265A230N3LG / DTS3285A230N4SS
Rated Capacity	5000-7000 BTU/H (1466-2052 Watts)	9000-12000 BTU/H (2639-3519 Watts)
Type of Refrigerant	134a	134a
Adjustable Control Range	+ 59+ 131 / + 15+ 45C Factory setting +95 F (+35C)	+ 59+ 131 / + 15+ 45C Factory setting +95 F (+35C)
Max. Ambient Air Temp	+131 F (+55 C)	+131 F (+55 C)
Min. Ambient Air Temp	+59 F (+15 C)	+59 F (+15 C)
Air Capacity (unrestricted)	Internal Circulation 365/341 CFM External Circulation 765/706 CFM	Internal Circulation External Circulation
Condonsate Discharge	Condensate Evaporator	Condensate Evaporator
Filter Mat	Filterless	Filterless
Db Noise Level	<70 dB(A)	<70 dB(A)
Unit Weight	108 lbs	150 lbs
Exterior Case	Galvanized Sheet Steel / 304 Stainless Steel	Galvanized Sheet Steel / 304 Stainless Steel
Finish (LG)	RAL7035 Light Grey Powder Finish	RAL7035 Light Grey Powder Finish
Finish (SS)	Polish #3	Polish #3

Technical references and CAD downloads available at www.hammondmfg.com

All dimensions in inches unless specified otherwise



Side Mounting DTS Series - NEMA 3R, 4, 4X 5000 - 7000 & 9000 - 12000 BTU/H - Galvanized Sheet Steel & Stainless Steel

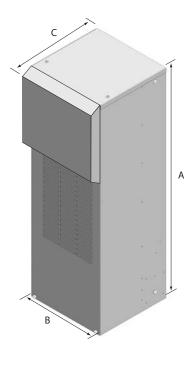
DTS 3165 & DTS 3185

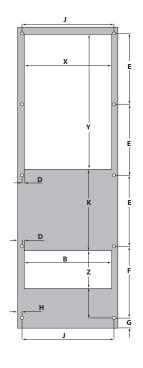
Dimension	inches (mm)		
A	36 (914)		
В	12.25 (311)		
C	14.4 (367)		
D	0.3 (8)		
E	8.5 (216)		
F	8.5 (216)		
G	1.3 (32)		
H 0.5 (13)			
I 3.2 (80)			
J 11 (279)			
к	9 (228)		
X	10.4 (264)		
Y	17 (430)		
Z	Z 4.7 (118)		
Mounting holes Ø 10 mm			
For exact cutout information			

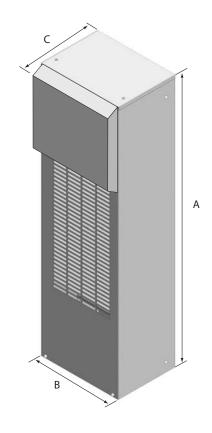
reference drilling template at pfannenbergusa.com

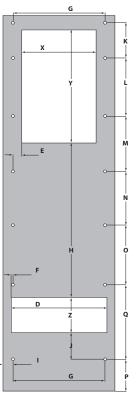
DTS 3265 & DTS 3285

Dimension	inches (mm)	
A	53 (1347)	
В	16 (406)	
С	14.4 (367)	
D	13.7 (348)	
E	0 .98 (25)	
F	0.35 (9)	
G	13 (330)	
Н	21.1 (537)	
I	1.4 (35)	
J	3.6 (92)	
К	5.0 (126)	
L	8.2 (209)	
М	7.8 (198)	
N	7.6 (192)	
0	8.4 (214)	
Р	4.5 (114)	
Q	10.5 (267)	
Х	11 (280)	
Y	16.8 (427)	
Z 5.3 (135)		
Mounting holes Ø 8 mm		
For exact cutout information reference drilling template at pfannenbergusa.com		









Technical references and CAD downloads available at www.hammondmfg.com



Side Mounting DTS Series - Large Capacity







NEMA Type 12 Indoor - Side Mount:

	DTS3341A230LG	DTS3541A230LG	DTS3641A230LG
	DTS3341A460LG	DTS3541A460LG	DTS3641A460LG
Cooling Capacity (Btu/h*)	12-14000	16-18000	20-24000
External Airflow (CFM)	991	1480	1612
Internal Airflow (CFM)	788	788	1612
NEMA Type Rating	Type 12	Type 12	Type 12
UL Listed or Recognized	Listed	Listed	Listed
Connection Type	Permanent	Permanent	Permanent

Features

Features

enclosure

cool air below

match machine

design of unit

•

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- Maintains a UL Tested NEMA Type 12 seal against enclosure
- UL Listed to UL 484, UL File #SA10300, CE approved
- Long internal airpath captures heat above components and provides cool air below
- Powder coated steel cover for rugged environments, easily painted to match machine
- Uses Standard Control logic board
- Condensate Management built into design of unit

 Maintains a UL Tested NEMA Type 3R/4 or 4/4X seal against

 UL Listed to UL 484, UL File #SA10300, CE approved

Long internal airpath captures heat

above components and provides

· Powder coated steel cover for rug-

ged environments, easily painted to

Uses Standard Control logic board

Options: Low ambient package,

and sump heater standard Condensate Management built into

Built-In enclosure heater



NEMA Type 3R/4 Outdoor:

		DTS3561A230N3LG DTS3561A460N3LG	DTS3661A230N3LG DTS3661A460N3LG
Cooling Capacity (Btu/h*)	12-14000	16-18000	22-24000
External Airflow (CFM)	991	1480	1612
Internal Airflow (CFM)	788	788	1612
NEMA Type Rating	Type 3R/4	Type 3R/4	Type 3R/4
UL Listed or Recognized	Listed	Listed	Listed
Connection Type	Permanent	Permanent	Permanent

NEMA Type 4/4X Stainless Steel Outdoor/Washdown:

71			
	DTS3381A230N4SS	DTS3581A230N4SS	DTS3681A230N4SS
	DTS3381A460N4SS	DTS3581A460N4SS	DTS3681A460N4SS
Cooling Capacity (Btu/h*)	12-14000	16-18000	20-24000
External Airflow (CFM)	991	1480	1612
Internal Airflow (CFM)	788	788	1612
NEMA Type Rating	Type 4/4X	Type 4/4X	Type 4/4X
UL Listed or Recognized	Listed	Listed	Listed
Connection Type	Permanent	Permanent	Permanent

Technical references and CAD downloads available at www.hammondmfg.com



Air/Water Heat Exchanger PWS Series - NEMA 12, 3R, 4



Description

· Designed to use various water sources to cool enclosures where ambient conditions involve high temperatures, harsh conditions or are subject to frequent wash-down.

Standards

- UL, cUL, and CE
- · Complies with
 - NEMA 12, 3R, 4

Features

- · Compatible with chilled water/glycol, tower water and other circulated coolants
- Integrated thermostat & solenoid value with alarm contact provides automatic temperature control
- Rugged (10 bar) copper tube / aluminum fin heat exchanger w 0.5" NPTF connection
- Side, door or internal mounting provides complete installation flexibility
- Low noise, maintenance-free design Exterior case, galvanized steel con-٠ struction finish RAL7035 Light Gray
- Weight (without Part Number Dimensions (H x W x D) packaging) PWS7102A115N4LG 19.68 x 7.87 x 5.91 inches 16 lbs PWS7102A230N4LG 500 x 200 x 150 mm 7.7 Kg PWS7152A115N4LG 37.40 x 15.75 x 4.53 inches 46 lbs PWS7152A230N4LG 950 x 400 x 115 mm 21 Kg PWS7332A115N4LG 37.50 x 15.75 x 7.48 inches 77 lbs PWS7332A230N4LG 950 x 400 x 190 mm 35 Kg PWS7502A115N4LG 55.12 x 18.11 x 9.25 inches 86 lbs PWS7502A230N4LG 1400 x 460 x 235 mm 39 Kg PWS7702A230N4LG 70.87 x 23.62 x 12.4 inches 127 lbs PWS71002A23N4LG 1800 x 600 x 315 mm 57 Kg

Technical Data

Part Number	Cooling Performace * 200 liters/hr (.88gpm)	Adjustable Control Range	Voltage AC	Power Consumption Watts
PWS7102A115N4LG	3241 Btu/h (950 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	115 v 60Hz	95
PWS7102A230N4LG	3241 Btu/h (950 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	84
PWS7152A115N4LG	5118 Btu/h (1500 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	115 v 60Hz	186
PWS7152A230N4LG	5118 Btu/h (1500 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	182
PWS7332A115N4LG	10750 Btu/h (3150 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	115 v 60Hz	453
PWS7332A230N4LG	10750 Btu/h (3150 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	385
PWS7502A115N4LG	17745 Btu/h (5200 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	115 v 60Hz	384
PWS7502A230N4LG	17745 Btu/h (5200 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	385
PWS7702A230N4LG	34215 Btu/h (7,000 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	680
PWS71002A23N4LG	34215 Btu/h (10,000 Watts)	+47+122 F / +8+70 C (Factory setting +95/+35)	230 v 50/60Hz	1200

* Note: Water temperature + 10 C (+50F) with Enclosure ambient +35 C (+95F)

Technical references and CAD downloads available at www.hammondmfg.com



Water Chillers



EB Series



Rack Series

Description

• Designed to provide recirculated coolant for most industrial applications air/water heat exhangers, process cooling, machine hydraulics or motor cooling.

Standards

- Rack Series UL,cUL, CE
- EB30-50 -UL, cUL (ETL), CE
- EB190-400 UL, cUL CE

Features

- Pre-engineered, packaged design includes refrigeration, cooling tank & pump and operating controls for "plug and play" operation
- · Rack Series provides reliable cooling for indoor applications with heat loads less than 1 Ton
- · EB Series allows outoor installations & many options with capacities to 20 Tons
- · Larger sizes available
- Exterior case, galvanized steel con-• struction finish RAL7035 Light Gray

Part Number	Cooling Capacity * BTU/h (watts)	Adjustable Control Range	Voltage AC	Pump Flow Rate GPM (l/ min)	Dimensions Height x Width x Depth
RACK1100	4610 BTU/h (1350 W)	+50+95 F / '+10+35 C	230 V 50/60 Hz	3.2 (12)	15.55 x 17.72 x 18.90 inches (395 x 450 x 480 mm)
RACK1700	7001 BTU/h (2050 W)	+50+95 F / '+10+35 C	230 V 50/60 Hz	3.2 (12)	15.55 x 17.72 x 18.90 inches (395 x 450 x 480 mm)
RACK2400	9220 BTU/h (2700 W)	+50+95 F / '+10+35 C	230 V 50/60 Hz	3.7 (14)	19.68 x 22.83 x 22.83 inches (500 x 580 x 580 mm)
EB30WT	16051 BTU/h (4700 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	3.7 (14)	37.60 x 21.65 x 42.02 inches (955 x 550 x 610 mm)
EB60WT	22199 BTU/h (6500 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	5.3 (20)	37.60 x 21.65 x 42.02 inches (955 x 550 x 610 mm)
EP90WT	34152 BTU/h (10000 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	9.25 (35)	50.79 x 27.76 x 30.12 inches (1290 x 705 x 765 mm)
EB150WT	54643 BTU/h (16660 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	9.25 (35)	50.79 x 27.76 x 30.12 inches (1290 x 705 x 765 mm)
EB190WT	71719 BTU/h (21000 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	13.2 (50)	55.51 x 48.43 x 31.10 inches (1410 x 1230 x 790 mm)
EB250WT	94600 BTU/h (27700 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	13.2 (50)	55.51 x 48.43 x 31.10 inches (1410 x 1230 x 790 mm)
EB300WT	112018 BTU/h (32800 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	21.1 (80)	55.51 x 6614 x 31.10 inches (1410 x 1680 x 790 mm)
EB350WT	130801 BTU/h (38300 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	21.1 (80)	55.51 x 6614 x 31.10 inches (1410 x 1680 x 790 mm)
EB400WT	151634 BTU/h (44400 W)	+59+104 F / '+15+40 C	400 /460 V 3 Phase 50/60 Hz	21.1 (80)	55.51 x 6614 x 31.10 inches (1410 x 1680 x 790 mm)

Note: Cooling capacity including power loss in pump, water outlet temperature +64F (18C), ambient temperature +90 F (+32C)

Technical references and CAD downloads available at www.hammondmfg.com



Air Conditioner Accessories

Filter Kits for DTS3XXX Series



- Field install kit for Condenser Fan intake
- Washable Aluminum mesh

Part Number	Description
815065000	Filter kit for DTS30xx series
18881500000	Filter kit for DTS31xx series
18881500006	Filter kit for DTS31x 1SL/31x5 series
18881500001	Filter kit for DTS32xx series
18881500007	Filter kit for DTS32x5 series
18881500002	Filter kit for DTS33 xx series
18881500003	Filter kit for DTS35xx series
18881500004	Filter kit for DTS36xx series

Water Condensate Evaporator



- High performance evaporation kit
- Easy to retrofit on any cooling unit

Technical Data	
Max. Water Volume	13.5 oz (400 ml)
Evaporation Rate	3.4 oz/hr (100 ml/hr)
Electrical Data	
Voltage(s)	230v /115v
Frequency	50/60 Hz
Voltage Range	100-240v
Max. Power	125 W
Power Range	20-110 W
Nominal Current	0.5 A (230v) / 0.8 A (115v)
Starting Current	1.3 A
Zero Water Current	0.09 A (230v) / 0.18 A (115v)
Mechanical Data	
Height x Width x Depth	3.35" x 10.35" x 4.00"
	(85 x 263 x 102 mm)
Finish	Stainless Steel
Weight	2.6 lbs (1.175 Kg)

Technical references and CAD downloads available at www.hammondmfg.com

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Hammond: LL8 AFF1 DTSF3150