

DTS 31X1SL | COOLING UNITS

3000 - 5000 Btu/h

The DTS 31X1SL series cooling units are designed to fit shallow enclosures vs 31X1 standard model. Available in 3 models; **DTS 3141 SL (NEMA Type 12)** for indoor use, **DTS 3161 SL (NEMA Type 3R/4)** designed for outdoor use, and the stainless steel **DTS 3181 SL (NEMA Type 4/4x)** designed for washdown applications.

Closed Loop Design

Designed to isolate the external ambient air from the internally conditioned air eliminating the risk of contaminants entering the cabinet.

High Ambient Performance

The DTS 3000 Series Cooling Units were designed utilizing high temperature compressors and larger condensers. Both the indoor NEMA Type 12 units and outdoor units perform very well in environments that require cooling where the maximum ambient temperature is 131° F.

Thermal Expansion Valve

Regulates the flow of refrigerant based on thermal demand for efficient performance over the entire operating temperature range.

Thermal Overload Protection

Compressor and fan motors are outfitted with integral temperature switches to shut down the unit in the event of excessive temperature. This increases the operating life of the compressor by preventing thermal overload trips.

Pressure Overload Protection

High pressure cutout switch ensures safety by shutting off the compressor in the event of excessive pressure appearing in the refrigeration circuit.

Active Condensate Management

Condensation is a natural by-product of refrigeration. The heated condensate collection pan boils this off thereby eliminating the need for drain tubes and buckets. To conserve power, this heater only activates when necessary.

Hermetically Sealed Compressor

The absence of any refrigerant fill valves eliminates leak paths. Recharging is never needed. 100% cooling capacity efficiency is ensured.

High Airflow Backward Curve Impeller Fan

Provides high airflow in a long lasting, single bearing design. Outperforms typical two-bearing blowers with nearly twice the lifespan.

ERP Efficiency Certified

As a component of the Kyoto Protocol to reduce carbon monoxide emissions, the European Energy Related Products (ERP) Directive includes an efficiency rating for fans. Pfannenberg proudly utilizes components which adhere to these requirements.

Rugged Design

Powder coated steel or stainless steel cover designed for manufacturing environments. Easily painted to match enclosure or machine.

Maintenance Free, Filterless Design

The wide fin spacing is less susceptible to clogging from dirt buildup which can cause the unit to work harder and hamper efficiency.

Corrosion Protection

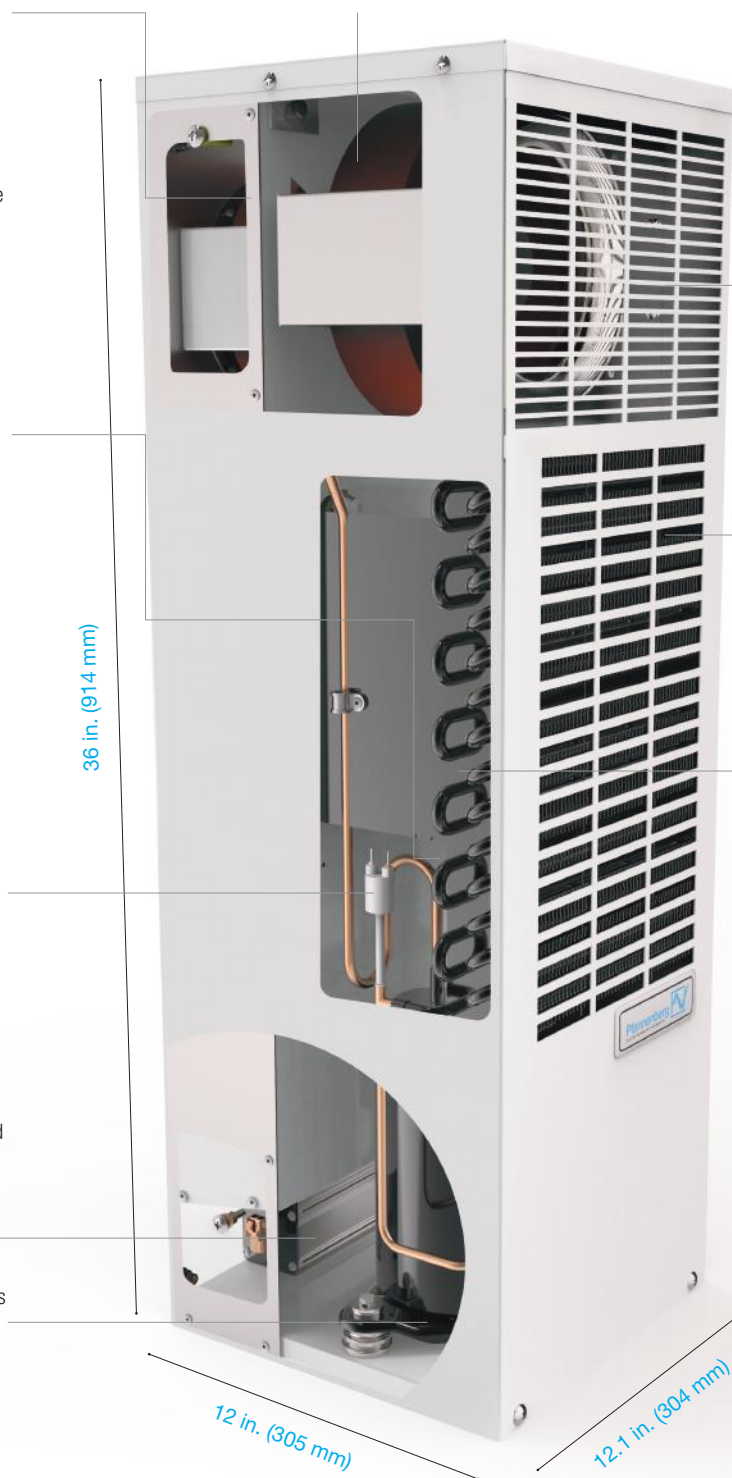
Outdoor and washdown units have a special coating on pipes and coils on the ambient side of the unit to provide maximum protection from saltwater, sour gas, and other corrosive substances.

Environmentally Friendly

Utilizes HFC-free R134a refrigerant versus a blended refrigerant for easier service and minimized negative impact to the environment.

Self Protected from Harsh Environments

Our unit is uniquely designed to protect itself in NEMA 3R, 4, and 4X environments. An example of this is the location of our control electronics within our dry, cool interior circuit.



DTS 31X1 SL Series (3000 - 5000 Btu/h) Side-Mount Cooling Units

| Model Number | Part Number | Voltage (VAC) | Frequency (Hz) | Power Consumption (W) | Nominal (Run) Current* @ 35A/35A °C | Fuse (maximum)** Class CC | Noise Level (according to EN ISO 3741) dB(A) | Weight (without packaging) lb (kg) |
|---|--|--|----------------|-----------------------|-------------------------------------|---------------------------|--|------------------------------------|
| DTS 3141 SL Indoor Rated (NEMA Type 12) | 13383444255 | 115 | 60 | 917 | 13.4 | 15 | <70 | 108 (49) |
| | 13383441255 | 230 | 50/60 | 890 | 6.6 | 15 | <70 | 108 (49) |
| | 13383436255 | 400/460 | 50/60 | 751 | 1.9 | 15 | <70 | 108 (49) |
| Design | Housing: galvanized sheet steel Cover: electrostatically powder coated RAL 7035 (light grey); for ANSI 61 grey use part no. ending in ...251 | | | | | | | |
| DTS 3161 SL Outdoor Rated (NEMA Type 3R/4) | 13383441355 | 230 | 50/60 | 890 | 6.6 | 15 | <70 | 108 (49) |
| | 13383436355 | 400/460 | 50/60 | 751 | 1.9 | 15 | <70 | 108 (49) |
| | Design | Housing: galvanized sheet steel Cover: electrostatically powder coated RAL 7035 (light grey); for ANSI 61 grey use part no. ending in ...351 | | | | | | |
| DTS 3181 SL Washdown (NEMA Type 4/4x) | 13383441158 | 230 | 50/60 | 890 | 6.6 | 15 | <70 | 108 (49) |
| | 13383436158 | 400/460 | 50/60 | 751 | 1.9 | 15 | <70 | 108 (49) |
| | Design | Housing: galvanized sheet steel Cover: stainless steel 304 | | | | | | |

| Additional Data | | DTS 3141 SL | DTS 3161 SL | DTS 3181 SL | |
|--|-------------|---|------------------------------|-----------------------------|---|
| Ambient Temperature Range | 115 VAC | + 59 ... + 113 / + 15 ... + 45 | N/A | N/A | °F / °C |
| | 460/230 VAC | + 59 ... + 131 / + 15 ... + 55 | + 32... + 131 / + 0 ... + 55 | + 32 ... + 131 / 0 ... + 55 | |
| Control range (adjustable) | SC | + 77 ... + 113 / + 25 ... + 45; factory setting + 95 / + 35 | | | |
| Refrigerant | type | R134a | | | |
| | quantity | 900 | | | g |
| Condensate management | | active condensate evaporation system with safety overflow | | | |
| Protection system according to NEMA Type | | 12 | 3R/4 | 4/4X | against enclosure when properly installed |
| | | NEMA 1 towards the surroundings when properly installed | | | |
| Accessories | | For spare part kits and additional accessories visit pgs. 74-75 in this catalog | | | |

* For the MCA (Maximum Current Ampacity) value per UL, please consult product technical datasheets available on our website
 ** SCCR rating - See user manual for instructions to achieve 50 kA (230V) or 200 kA (460V) SCCR Rating



For additional technical data, drawings and templates.
www.pfannenbergusa.com

Available Models:

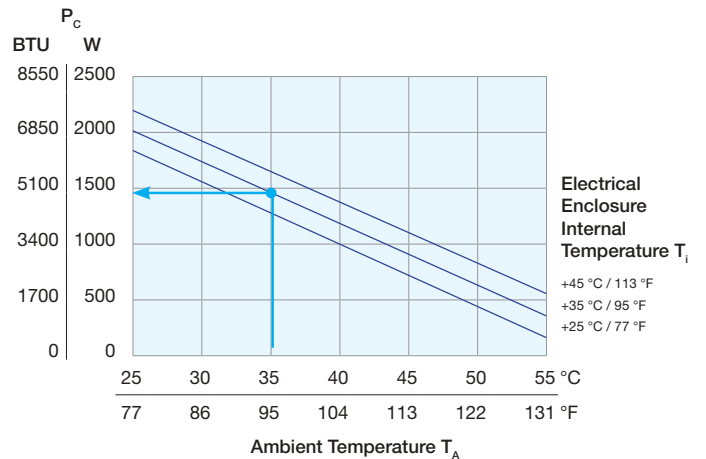


DTS 3141 SL Indoor Rated (NEMA Type 12)
DTS 3161 SL Outdoor Rated (NEMA Type 3R/4)
DTS 3181 SL Washdown (NEMA Type 4/4x)

Cooling Capacity Performance Curve

How to use this chart

Example: @ 95 °F (ambient, X-axis), @ 95 °F (internal, diagonal lines) = 5097 Btu/h cooling capacity (Y-axis)



Note: Cooling capacity may vary between voltage and configurations.