

OAS Series Evaporators



- **Small to Medium Industrial Applications**
- **From 2 through 31 Tons**
- **Stainless, Aluminum, Galvanized and Copper**



Save On...

Current Technology

- “Clean sheet” design approach
- Premier components and materials
- Modern manufacturing techniques
- Based on today’s needs

World-class Manufacturing

- Cost effective methods
- Aggressive production times
- Commitment to customer satisfaction

Optimal Performance

- Thorough testing and evaluation of alternative designs
- Numerous sizes and countless circuiting arrangements
- High efficiency coil material alternatives
- Configured to satisfy specific project requirements

Designed for Service

- Hinged fan faces and flat, continuous fins
- Robust design and corrosion resistant material alternatives
- Attention to detail
- Technology driven support systems for prompt sales and service

| Capital | Commissioning | Energy | Maintenance |
|---------|---------------|--------|-------------|
| ✓ | ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ | ✓ |
| ✓ | ✓ | ✓ | ✓ |



Construction Features

Coil Design

All coils are pressure tested to 350 psig. with air under water. Units are shipped with a nitrogen holding charge.

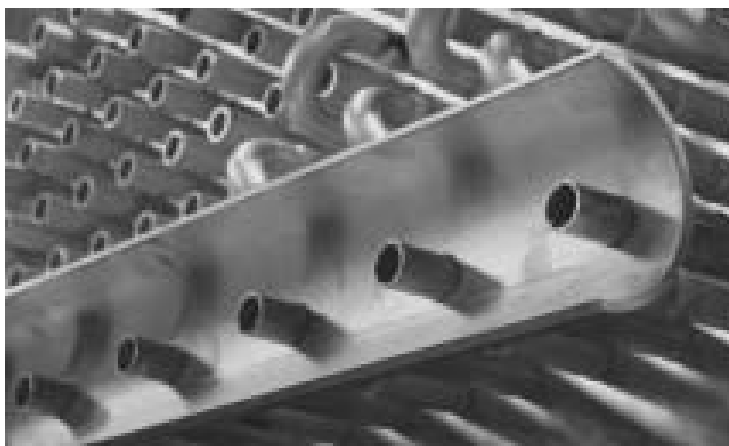
Tubes – Evaporators are constructed with stainless steel, aluminum, or galvanized steel tubes, staggered in the direction of airflow to ensure maximum air turbulence and coil heat transfer efficiency.

Fins – Coils are available with 3, 4 or 6 fins per inch with 6 or 8 rows of tubes. Die-formed, flat pattern fins are a continuous design with a clean full collar to optimize performance, resistance to airflow, and cleanability. The flat pattern also reduces resistance to airflow to provide performance comparable to corrugated fins at a given horsepower.

Circuiting – Each coil is individually circuited for specific applications in recirculated, flooded, direct expansion, or control pressure receiver refrigeration systems along with water, glycols, or brines.

Tube Frame

The coil incorporates a heavy-duty structural tube frame, which improves rigidity, square-ness, and long-term stability, rather than a less robust angle design. The tube frame also improves cleanability by reducing cavities while enclosing and protecting OMRAN supplied wiring options.



Casing

Casings are constructed of durable, corrosion resistant galvanized steel load . carrying components are engineered with reinforcing panel brakes and select hardware. Fans are individually compartmented with continuous tube sheets to permit fan cycling.

Drain Pan

Inner drain pans are constructed of heavy gauge welded HDGS for corrosion resistance, light weight, and good heat conductance for pan defrost. Pans are furnished with an extra large drain connection, when coupled with the flatness and smoothness of the sloped pan, permits swift and total water drainage.

Fans

Direct-drive fans with contoured aluminum blades are selected and installed to maximize performance and efficiency. OMRAN has optimized the fan proximity to the coil face, fan positioning within the tapered fan orifice, and the coil aspect ratio to maximize performance of the selected fan. Fan motors are basket-mounted in a heavy-gauge, PVC-coated steel fan guard.

Wiring

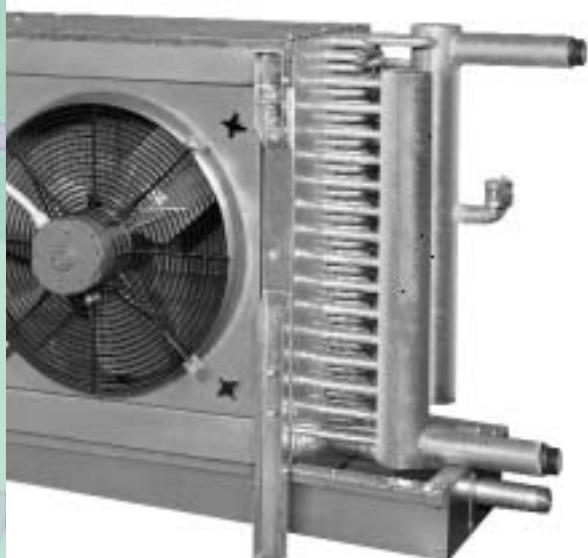
Motors are pre-wired to a common non-fused disconnect, as standard. Flexible conduit from the motor to the air unit frame permits opening of the hinged fan panel. Wiring is run through the structural tube frame and terminated in a factory mounted NEMA-4 enclosure.

Hinged Fan Panel

Fan orifice panels are constructed with smooth, large radius orifices. Fan panels are hinged to permit unrestricted access to both faces of the tube bundle for maintenance and cleaning.

Motors

Motors are a totally enclosed air over (TEAO) design with auto-resetting thermal overload (ATO) protection. Motors are furnished with low temperature grease and are otherwise designed to ensure reliability and longevity in a harsh environment. Motors are available to suit most common 3-phase, 50-Hertz electrical systems.



Optional Features

Coil Materials

Galvanized steel tubes and fins – A conventional choice for decades, carbon steel coils are hot-dip galvanized for corrosion protection.

Aluminum tubes with aluminum fins – Aluminum coils weigh far less than galvanized steel coils and have superior thermal conductivity, improving performance in both cooling and defrost modes.

Stainless steel tubes with aluminum fins – In addition to the durability of stainless steel tubes, stainless-aluminum coils weigh far less than galvanized steel coils and have the superior thermal conductivity of aluminum fins, improving performance in both cooling and defrost modes.

Copper tubes with aluminum fins – Designed for halocarbon or liquid applications, copper-aluminum coils are manufactured with 5/8" OD copper tube to be efficient, cost competitive, corrosion resistant, and light in weight.

Vari-Fin

For severe frost applications, fins on the air inlet face of the coil have wider spacing than the remainder of the coil. Fin spacing is 2 fins/inch (fpi) or 1.5 fpi for the first 2 rows and 4 fpi or 3 fpi, respectively, for the remaining rows. Performance must be de-rated accordingly.

Casing

Optional casing materials include type 304 stainless steel Corrosion Protection System, a polymer coating which is baked on galvanized steel in a meticulously controlled process at the OMRAN manufacturing facility. These casing material upgrades offer corrosion resistance, durability, and enhanced appearance.

Pan Material

Heavy gauge stainless steel is available as an alternative to HDGS. Stainless steel provides a broader resistance to airborne impurities and cleaning agents that could damage galvanized steel.

Reheat Coils

Finned reheat coils produce continuous dehumidification and reduce sweating by heating the air after it leaves the cooling coil section. The reheat section is separated from the cooling section by an air brake. This brake in the fins eliminates thermal conductance between the sections and prevents water from migrating to the reheat coil, reducing wasted artificial loads and providing better dehumidification.



Insulated Pan with Cover

Insulated drain pans have closed-cell insulation and an outer pan cover. Outer pan covers are constructed of either galvanized steel, stainless steel, or the Corrosion Protection System (see description for Casing alternatives, above).

Motors

Motors are available in 2-speed/1-winding or 2-speed/2-winding alternatives. Standard voltages include 230 , and 380 for 3-phase, 50-Hz applications. Contact your OMRAN Representative for 60-Hertz applications.

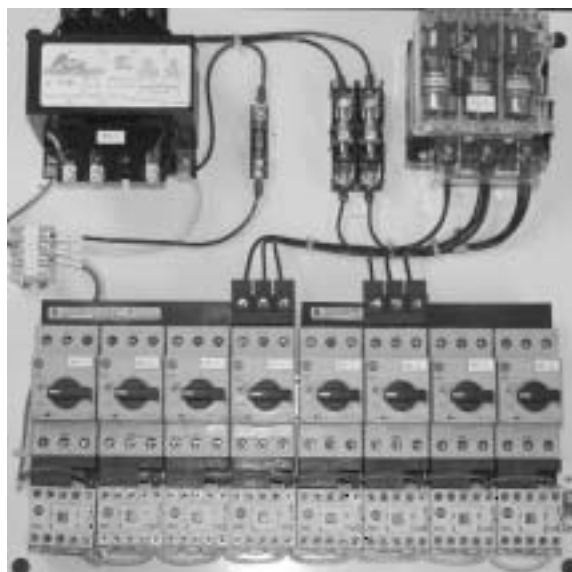
Hot Gas Pan

A corrosion resistant stainless steel pan coil is attached to the underside of the drain pan. A unique slotted channel mounting method provides intimate contact to maximize heat transfer between the pan coil and the drain pan for a rapid defrost. Pan coils are piped in series with the cooling coil to provide a single hot gas inlet. A check valve is factory mounted to isolate the pan coil from the refrigerant circuit during the refrigeration cycle. An insulated pan with cover is provided with this option.



Electrical

Several electrical panel and pre-wiring options are available. Alternatives to the standard non-fused disconnect include; no wiring, junction boxes, and contactor panels with fused disconnects and with/without control power transformers. Motors can be wired to operate individually or in unison. Wiring options are available to reduce field installation time, labor, and cost.



Convertible to Cast Aluminum Fans

AS units are easily modified from basket-mount paddle fan systems to cast aluminum fan systems, long throw adaptors, and 45°-down discharge to accommodate changes in the use of the Evaporators. Coil circuiting and connection sizes must be reviewed for suitability if there are to be significant changes to the operating duty.

Water Defrost

A water defrost pan is available to wet the entire finned surface during water defrost. The material of construction matches the selected casing material. The pan increases the unit height by 6 1/2".

Selection Information

Base Rating

The base unit capacities as listed in the tables are based on sensible heat removal using a galvanized steel coil with either a flooded or a pump recirculated ammonia refrigerant system. Base Ratings are expressed in Btu/hr/°F for both frosted and wet conditions. See Tables 1 and 2, below for correction factors and limitations of various coil materials and refrigerant systems.

Selection Procedure

1. Calculate the total required cooling load in Btu/hour (BtuH).

Note: Motor heat of 4,150 BtuH/hp is not included in the ratings; include this heat load to calculate a total required cooling load.

2. Calculate the temperature difference (TD) between the design room temperature and the design saturation temperature in the evaporator.
3. Divide the total required cooling load by the TD to determine the design BtuH/°F.
4. Divide the design BtuH/°F by the applicable Coil Material Correction Factor (Table 1) and the Refrigerant System Correction Factor (Table 2), below.

5. From the table, select a model that meets or exceeds the required base rating BtuH/°F.

Note: To prevent moisture carryover on wet applications where the room temperature exceeds 32°F, select only those models with average face velocities less than 620 fpm.

Selection Example

Select units for a room load of 360,000 Btu/hr in a +50°F cooler using +35°F pump recirculated ammonia and galvanized steel coils. Three (3) units are requested to suit the room layout.

1. The net required cooling load per unit equals $(360,000 \text{ BtuH} / 3 =) 120,000 \text{ BtuH per unit}$.

Adding an estimated 1 hp fan motor heat per unit yields a total cooling load of $(120,000 \text{ BtuH} + 4,150 \text{ BtuH} =) 124,150 \text{ BtuH per unit}$.

2. The temperature difference (TD) equals $(50^\circ\text{F} - 35^\circ\text{F} =) 15^\circ\text{F}$.

3. The design BtuH/°F equals $(124,150 \text{ BtuH} / 15^\circ\text{F} =) 8,276 \text{ BtuH/}^\circ\text{F}$.

4. The required Base Rating equals $(8,276 \text{ BtuH/}^\circ\text{F} / 1.00 / 1.00 =) 8,276 \text{ BtuH/}^\circ\text{F}$.

5. From the model tables, select a model OAS2S-4084-050L with a wet Base Rating of 8,600 BtuH/°F and an average face velocity of 556 fpm (<620 fpm for wet operation). This unit has two fans at 1/2 hp each, yielding 4,150 BtuH motor load, as estimated. Final selection: Three (3) OAS2S-4084-050L-ARB

Correction Factors

The following tables provide correction factors relative to the Base Ratings. When using these tables, please note the limitations expressed below the tables.

Table 1. Coil Material Correction Factors

| Coil Material | Correction Factors |
|-------------------------------------|--------------------|
| Galvanized Steel Tube & Fin | 1.00 |
| Aluminum Tube — Aluminum Fin | 1.14 |
| Stainless Steel Tube — Aluminum Fin | 1.12 |
| Copper Tube — Aluminum Fin | 1.00 |

Table 2. Refrigerant System Correction Factors

| Refrigerant System | | Saturated Suction Temperature (°F) | | | | |
|--------------------|-----------------------------------|------------------------------------|-------|------|-------|-------|
| | | +40°F | +20°F | 0°F | -20°F | -40°F |
| Ammonia | Pump Recirc., Bottom Feed (ARB) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | Pump Recirc., Top Feed (ART) | 1.00 | 1.00 | * | * | * |
| | Flooded (AFL) | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| | Direct Expansion (ADX) | 0.83 | 0.83 | NA | NA | NA |
| | Control Pressure Receiver (APT/B) | 1.00 | 1.00 | * | * | * |
| R-22 | Direct Expansion (FDX) | 0.83 | 0.83 | 0.83 | * | * |
| R-134a | Pump Recirc., Bottom Feed (FRB) | 1.00 | 1.00 | 0.95 | 0.90 | 0.80 |
| R404A | Pump Recirc., Top Feed (FRT) | 1.00 | 1.00 | * | * | * |
| R-507 | Flooded (FFL) | * | * | * | * | * |

Pump recirculated refrigerant coils must have a liquid feed temperature within 10°F of the coil's design saturated suction temperature and a feed pressure 5 psi. above the design saturated suction pressure to achieve these performance ratings. Air defrost coils should be top feed. Hot gas defrost coils should be bottom feed, particularly at suction temperatures below +10°F.

Flooded coils have the same ratings as recirculated refrigerant coils. Flooded coils are bottom feed and circuited to minimize refrigerant pressure drop.

Direct expansion (DX) coils must have a liquid feed temperature at the thermal expansion valve (TEV) higher than the coil's design saturated suction temperature to achieve these performance ratings. The temperature difference between the air

and the saturated suction temperature at the coil should be a minimum of 12°F for ammonia and a minimum of 10°F for halocarbons. The minimum design evaporator temperature is +10°F for ammonia and -10°F for halocarbon. TEVs must be externally equalized and the discharge tube must be removed.

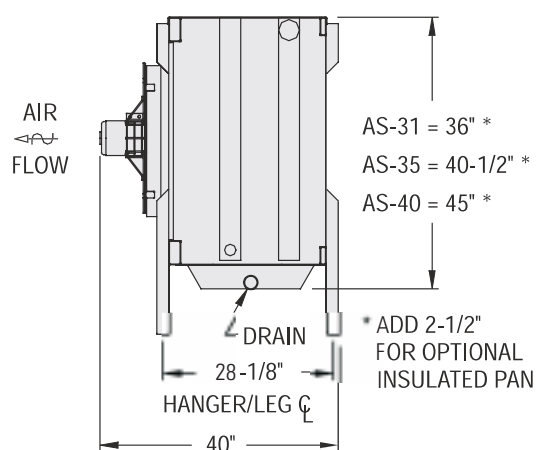
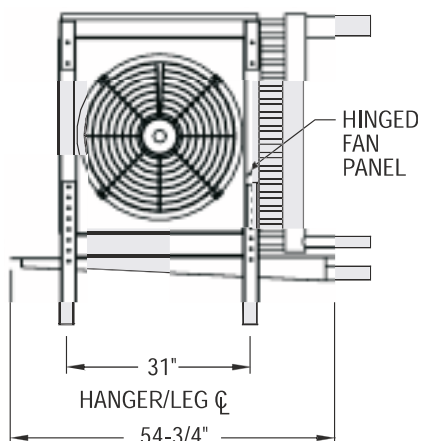
Controlled pressure receiver system coils may require a top feed with a distributor(s).

Brine and other single phase fluid systems are not rated in this manual.

Engineering Data

Models OAS1S-3163 to OAS1S-4066

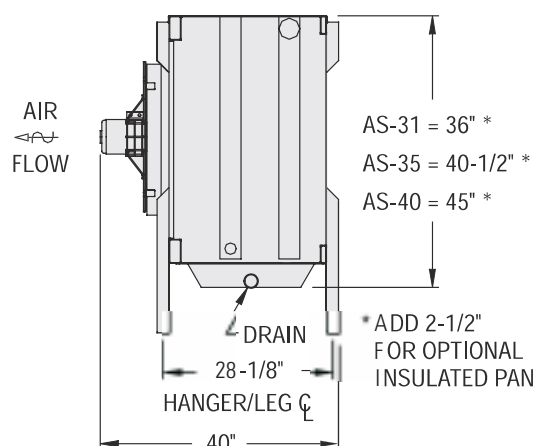
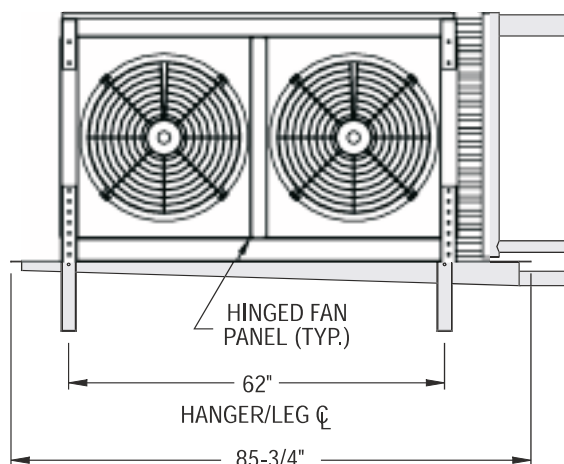
Do not use for construction. Refer to factory certified dimensions.
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| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Face Velocity (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surf. Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|-------|---------------|---------------------|-----------------------|-----------------|-----------|-----------------|------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS1S-3163-033L | 2,290 | 2,520 | 3,900 | 575 | 72 | 6.8 | 6 | 3 | 451 | 0.7 | 700 | 330 | 450 |
| OAS1S-3163-050L | 2,430 | - | 4,500 | 664 | 73 | 6.8 | 6 | 3 | 451 | 0.7 | 700 | 330 | 450 |
| OAS1S-3183-033L | 2,680 | 2,950 | 3,750 | 553 | 72 | 6.8 | 8 | 3 | 602 | 1.0 | 790 | 360 | 500 |
| OAS1S-3164-033L | 2,580 | 2,840 | 3,780 | 557 | 73 | 6.8 | 6 | 4 | 584 | 0.7 | 760 | 340 | 460 |
| OAS1S-3164-050L | 2,760 | - | 4,300 | 634 | 73 | 6.8 | 6 | 4 | 584 | 0.7 | 760 | 340 | 460 |
| OAS1S-3184-050L | 3,210 | 3,530 | 4,100 | 605 | 73 | 6.8 | 8 | 4 | 779 | 1.0 | 870 | 380 | 520 |
| OAS1S-3166-050L | - | 3,450 | 4,200 | 619 | 73 | 6.8 | 6 | 6 | 850 | 0.7 | 920 | 370 | 480 |
| OAS1S-3663-033L | 2,670 | 2,940 | 4,750 | 613 | 74 | 7.8 | 6 | 3 | 516 | 0.8 | 770 | 360 | 490 |
| OAS1S-3663-050L | 2,900 | - | 5,600 | 723 | 75 | 7.8 | 6 | 3 | 516 | 0.8 | 770 | 360 | 490 |
| OAS1S-3683-033L | 3,160 | 3,480 | 4,500 | 581 | 74 | 7.8 | 8 | 3 | 688 | 1.1 | 880 | 390 | 550 |
| OAS1S-3683-050L | 3,430 | - | 5,200 | 671 | 75 | 7.8 | 8 | 3 | 688 | 1.1 | 880 | 390 | 550 |
| OAS1S-3664-033L | 3,010 | 3,310 | 4,500 | 581 | 74 | 7.8 | 6 | 4 | 668 | 0.8 | 840 | 370 | 510 |
| OAS1S-3664-050L | 3,290 | - | 5,300 | 684 | 75 | 7.8 | 6 | 4 | 668 | 0.8 | 840 | 370 | 510 |
| OAS1S-3684-033L | 3,500 | 3,850 | 4,300 | 555 | 74 | 7.8 | 8 | 4 | 890 | 1.1 | 970 | 410 | 570 |
| OAS1S-3684-050L | 3,810 | - | 4,950 | 639 | 75 | 7.8 | 8 | 4 | 890 | 1.1 | 970 | 410 | 570 |
| OAS1S-3666-050L | - | 4,070 | 4,650 | 600 | 75 | 7.8 | 6 | 6 | 971 | 0.8 | 1,030 | 400 | 540 |
| OAS1S-4063-050L | 3,130 | - | 5,800 | 665 | 75 | 8.7 | 6 | 3 | 580 | 0.9 | 830 | 380 | 530 |
| OAS1S-4083-050L | 3,750 | - | 5,550 | 637 | 75 | 8.7 | 8 | 3 | 774 | 1.2 | 960 | 420 | 600 |
| OAS1S-4064-050L | 3,570 | - | 5,580 | 640 | 75 | 8.7 | 6 | 4 | 751 | 0.9 | 910 | 400 | 550 |
| OAS1S-4084-050L | 4,130 | 4,540 | 5,250 | 602 | 75 | 8.7 | 8 | 4 | 1,001 | 1.2 | 1,060 | 440 | 620 |
| OAS1S-4066-050L | - | 4,590 | 5,270 | 604 | 75 | 8.7 | 6 | 6 | 1,092 | 0.9 | 1,120 | 430 | 580 |

Models OAS2S-3163 to OAS2S-4066

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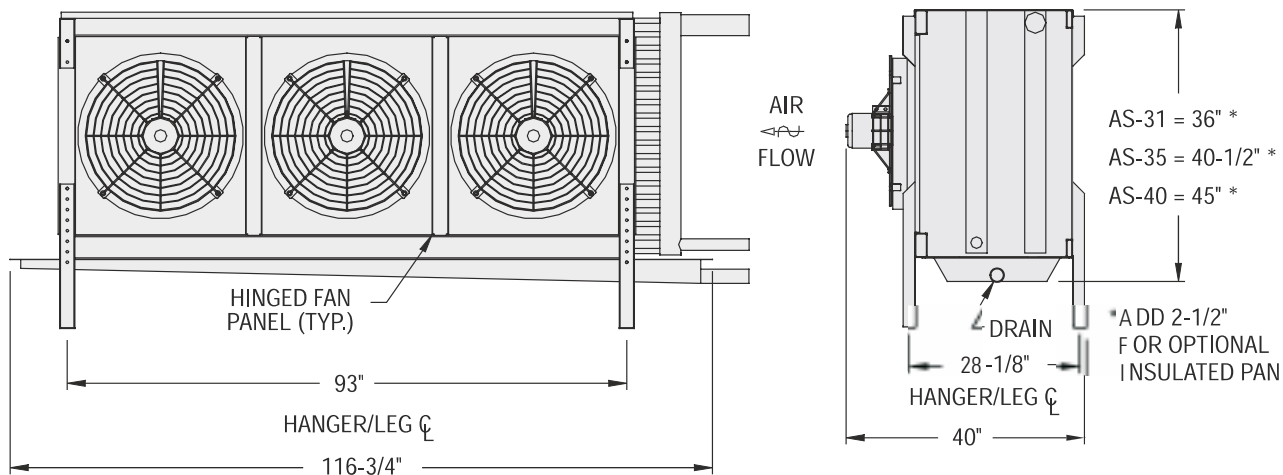


| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|-------|---------------|----------------------|-----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS2S-3163-033L | 4,580 | 5,040 | 7,800 | 575 | 74 | 13.6 | 6 | 3 | 903 | 1.5 | 1,180 | 560 | 730 |
| OAS2S-3163-050L | 4,860 | - | 9,000 | 664 | 75 | 13.6 | 6 | 3 | 903 | 1.5 | 1,180 | 560 | 730 |
| OAS2S-3183-033L | 5,360 | 5,900 | 7,500 | 553 | 74 | 13.6 | 8 | 3 | 1,204 | 1.9 | 1,360 | 620 | 830 |
| OAS2S-3164-033L | 5,160 | 5,680 | 7,560 | 557 | 74 | 13.6 | 6 | 4 | 1,168 | 1.5 | 1,290 | 590 | 760 |
| OAS2S-3164-050L | 5,520 | - | 8,600 | 634 | 75 | 13.6 | 6 | 4 | 1,168 | 1.5 | 1,290 | 590 | 760 |
| OAS2S-3184-050L | 6,420 | 7,060 | 8,200 | 605 | 75 | 13.6 | 8 | 4 | 1,558 | 1.9 | 1,510 | 650 | 870 |
| OAS2S-3166-050L | - | 6,900 | 8,400 | 619 | 75 | 13.6 | 6 | 6 | 1,699 | 1.5 | 1,600 | 640 | 810 |
| OAS2S-3663-033L | 5,340 | 5,880 | 9,500 | 613 | 76 | 15.5 | 6 | 3 | 1,032 | 1.7 | 1,300 | 610 | 810 |
| OAS2S-3663-050L | 5,800 | - | 11,200 | 723 | 77 | 15.5 | 6 | 3 | 1,032 | 1.7 | 1,300 | 610 | 810 |
| OAS2S-3683-033L | 6,320 | 6,960 | 9,000 | 581 | 76 | 15.5 | 8 | 3 | 1,376 | 2.2 | 1,510 | 680 | 930 |
| OAS2S-3683-050L | 6,860 | - | 10,400 | 671 | 77 | 15.5 | 8 | 3 | 1,376 | 2.2 | 1,510 | 680 | 930 |
| OAS2S-3664-033L | 6,020 | 6,620 | 9,000 | 581 | 76 | 15.5 | 6 | 4 | 1,335 | 1.7 | 1,440 | 640 | 840 |
| OAS2S-3664-050L | 6,580 | - | 10,600 | 684 | 77 | 15.5 | 6 | 4 | 1,335 | 1.7 | 1,440 | 640 | 840 |
| OAS2S-3684-033L | 7,000 | 7,700 | 8,600 | 555 | 76 | 15.5 | 8 | 4 | 1,780 | 2.2 | 1,690 | 720 | 970 |
| OAS2S-3684-050L | 7,620 | - | 9,900 | 639 | 77 | 15.5 | 8 | 4 | 1,780 | 2.2 | 1,690 | 720 | 970 |
| OAS2S-3666-050L | - | 8,140 | 9,300 | 600 | 77 | 15.5 | 6 | 6 | 1,942 | 1.7 | 1,790 | 700 | 900 |
| OAS2S-4063-050L | 6,260 | - | 11,600 | 665 | 77 | 17.4 | 6 | 3 | 1,161 | 1.9 | 1,410 | 650 | 870 |
| OAS2S-4083-050L | 7,500 | - | 11,100 | 637 | 77 | 17.4 | 8 | 3 | 1,547 | 2.5 | 1,650 | 720 | 1,000 |
| OAS2S-4064-050L | 7,140 | - | 11,160 | 640 | 77 | 17.4 | 6 | 4 | 1,502 | 1.9 | 1,560 | 680 | 910 |
| OAS2S-4084-050L | 8,260 | 9,080 | 10,500 | 602 | 77 | 17.4 | 8 | 4 | 2,003 | 2.5 | 1,840 | 770 | 1,050 |
| OAS2S-4066-050L | - | 9,180 | 10,540 | 604 | 77 | 17.4 | 6 | 6 | 2,185 | 1.9 | 1,950 | 750 | 970 |

Engineering Data

Models OAS3S-3163 to OAS3S-4066

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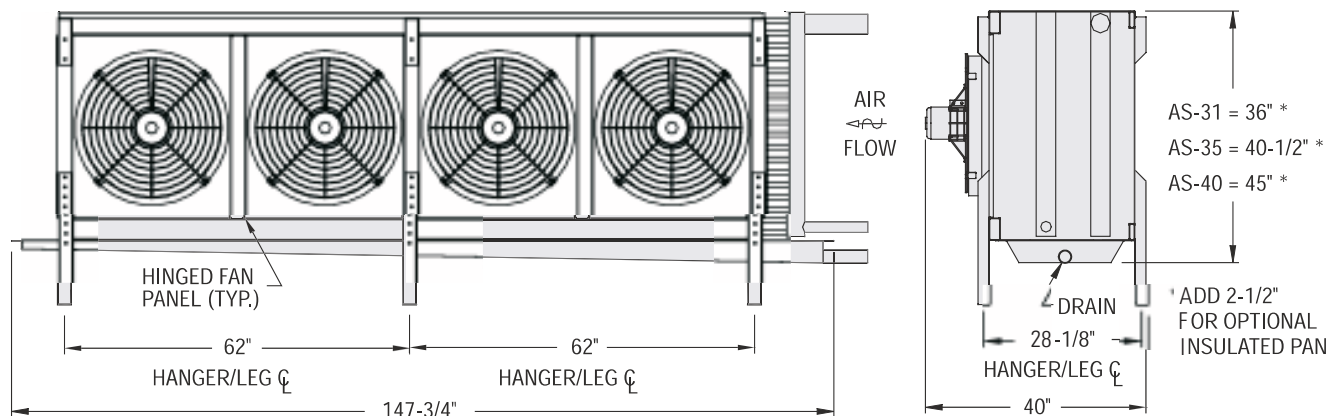
| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|--------|---------------|----------------------|-----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS3S-3163-033L | 6,870 | 7,560 | 11,700 | 575 | 76 | 20.3 | 6 | 3 | 1,354 | 2.2 | 1,660 | 790 | 1,020 |
| OAS3S-3163-050L | 7,290 | - | 13,500 | 664 | 77 | 20.3 | 6 | 3 | 1,354 | 2.2 | 1,660 | 790 | 1,020 |
| OAS3S-3183-033L | 8,040 | 8,850 | 11,250 | 553 | 76 | 20.3 | 8 | 3 | 1,805 | 2.9 | 1,920 | 870 | 1,170 |
| OAS3S-3164-033L | 7,740 | 8,520 | 11,340 | 557 | 76 | 20.3 | 6 | 4 | 1,752 | 2.2 | 1,830 | 830 | 1,060 |
| OAS3S-3164-050L | 8,280 | - | 12,900 | 634 | 77 | 20.3 | 6 | 4 | 1,752 | 2.2 | 1,830 | 830 | 1,060 |
| OAS3S-3184-050L | 9,630 | 10,590 | 12,300 | 605 | 77 | 20.3 | 8 | 4 | 2,336 | 2.9 | 2,150 | 930 | 1,220 |
| OAS3S-3166-050L | - | 10,350 | 12,600 | 619 | 77 | 20.3 | 6 | 6 | 2,549 | 2.2 | 2,280 | 910 | 1,140 |
| OAS3S-3663-033L | 8,010 | 8,820 | 14,250 | 613 | 78 | 23.3 | 6 | 3 | 1,547 | 2.5 | 1,830 | 870 | 1,130 |
| OAS3S-3663-050L | 8,700 | - | 16,800 | 723 | 79 | 23.3 | 6 | 3 | 1,547 | 2.5 | 1,830 | 870 | 1,130 |
| OAS3S-3683-033L | 9,480 | 10,440 | 13,500 | 581 | 78 | 23.3 | 8 | 3 | 2,063 | 3.3 | 2,140 | 960 | 1,300 |
| OAS3S-3683-050L | 10,290 | - | 15,600 | 671 | 79 | 23.3 | 8 | 3 | 2,063 | 3.3 | 2,140 | 960 | 1,300 |
| OAS3S-3664-033L | 9,030 | 9,930 | 13,500 | 581 | 78 | 23.3 | 6 | 4 | 2,003 | 2.5 | 2,030 | 910 | 1,180 |
| OAS3S-3664-050L | 9,870 | - | 15,900 | 684 | 79 | 23.3 | 6 | 4 | 2,003 | 2.5 | 2,030 | 910 | 1,180 |
| OAS3S-3684-033L | 10,500 | 11,550 | 12,900 | 555 | 78 | 23.3 | 8 | 4 | 2,670 | 3.3 | 2,400 | 1,020 | 1,360 |
| OAS3S-3684-050L | 11,430 | - | 14,850 | 639 | 79 | 23.3 | 8 | 4 | 2,670 | 3.3 | 2,400 | 1,020 | 1,360 |
| OAS3S-3666-050L | - | 12,210 | 13,950 | 600 | 79 | 23.3 | 6 | 6 | 2,913 | 2.5 | 2,550 | 1,000 | 1,260 |
| OAS3S-4063-050L | 9,390 | - | 17,400 | 665 | 79 | 26.2 | 6 | 3 | 1,741 | 2.8 | 1,990 | 920 | 1,210 |
| OAS3S-4083-050L | 11,250 | - | 16,650 | 637 | 79 | 26.2 | 8 | 3 | 2,321 | 3.7 | 2,330 | 1,020 | 1,400 |
| OAS3S-4064-050L | 10,710 | - | 16,740 | 640 | 79 | 26.2 | 6 | 4 | 2,253 | 2.8 | 2,210 | 970 | 1,260 |
| OAS3S-4084-050L | 12,390 | 13,620 | 15,750 | 602 | 79 | 26.2 | 8 | 4 | 3,004 | 3.7 | 2,620 | 1,090 | 1,470 |
| OAS3S-4066-050L | - | 13,770 | 15,810 | 604 | 79 | 26.2 | 6 | 6 | 3,277 | 2.8 | 2,790 | 1,070 | 1,360 |

Evaporators

OMRAN TAHVIEH

Models OAS4S-3163 to OAS4S-4066

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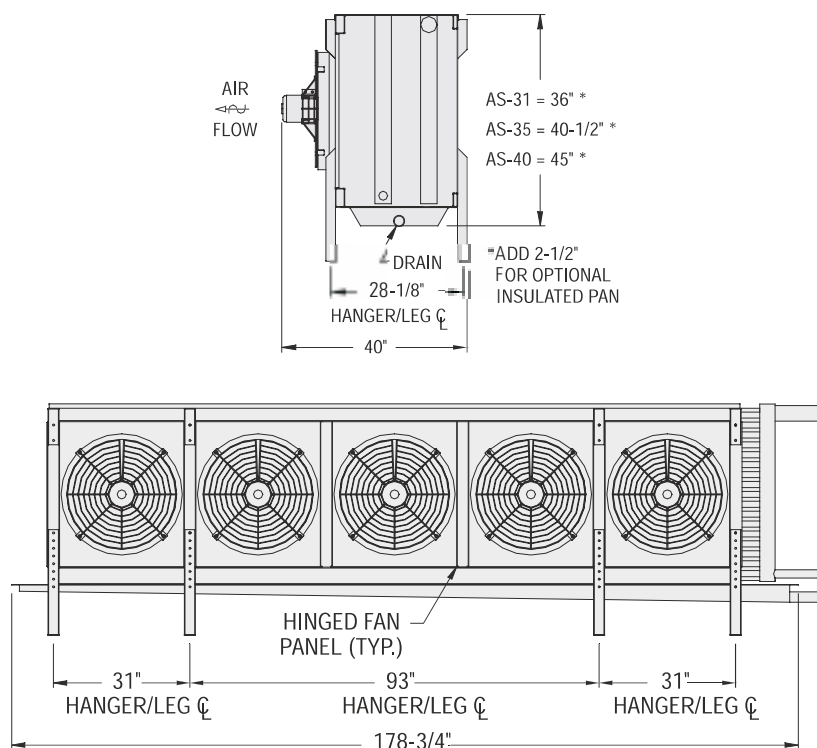


| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|--------|---------------|----------------------|-----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS4S-3163-033L | 9,160 | 10,080 | 15,600 | 575 | 76 | 27.1 | 6 | 3 | 1,805 | 2.9 | 2,150 | 1,040 | 1,330 |
| OAS4S-3163-050L | 9,720 | - | 18,000 | 664 | 77 | 27.1 | 6 | 3 | 1,805 | 2.9 | 2,150 | 1,040 | 1,330 |
| OAS4S-3183-033L | 10,720 | 11,800 | 15,000 | 553 | 76 | 27.1 | 8 | 3 | 2,407 | 3.9 | 2,510 | 1,140 | 1,520 |
| OAS4S-3164-033L | 10,320 | 11,360 | 15,120 | 557 | 76 | 27.1 | 6 | 4 | 2,336 | 2.9 | 2,380 | 1,090 | 1,380 |
| OAS4S-3164-050L | 11,040 | - | 17,200 | 634 | 77 | 27.1 | 6 | 4 | 2,336 | 2.9 | 2,380 | 1,090 | 1,380 |
| OAS4S-3184-050L | 12,840 | 14,120 | 16,400 | 605 | 77 | 27.1 | 8 | 4 | 3,115 | 3.9 | 2,810 | 1,210 | 1,590 |
| OAS4S-3166-050L | - | 13,800 | 16,800 | 619 | 77 | 27.1 | 6 | 6 | 3,398 | 2.9 | 2,980 | 1,190 | 1,480 |
| OAS4S-3663-033L | 10,680 | 11,760 | 19,000 | 613 | 78 | 31.0 | 6 | 3 | 2,063 | 3.3 | 2,380 | 1,140 | 1,470 |
| OAS4S-3663-050L | 11,600 | - | 22,400 | 723 | 79 | 31.0 | 6 | 3 | 2,063 | 3.3 | 2,380 | 1,140 | 1,470 |
| OAS4S-3683-033L | 12,640 | 13,920 | 18,000 | 581 | 78 | 31.0 | 8 | 3 | 2,751 | 4.4 | 2,790 | 1,260 | 1,690 |
| OAS4S-3683-050L | 13,720 | - | 20,800 | 671 | 79 | 31.0 | 8 | 3 | 2,751 | 4.4 | 2,790 | 1,260 | 1,690 |
| OAS4S-3664-033L | 12,040 | 13,240 | 18,000 | 581 | 78 | 31.0 | 6 | 4 | 2,670 | 3.3 | 2,640 | 1,190 | 1,530 |
| OAS4S-3664-050L | 13,160 | - | 21,200 | 684 | 79 | 31.0 | 6 | 4 | 2,670 | 3.3 | 2,640 | 1,190 | 1,530 |
| OAS4S-3684-033L | 14,000 | 15,400 | 17,200 | 555 | 78 | 31.0 | 8 | 4 | 3,560 | 4.4 | 3,130 | 1,340 | 1,760 |
| OAS4S-3684-050L | 15,240 | - | 19,800 | 639 | 79 | 31.0 | 8 | 4 | 3,560 | 4.4 | 3,130 | 1,340 | 1,760 |
| OAS4S-3666-050L | - | 16,280 | 18,600 | 600 | 79 | 31.0 | 6 | 6 | 3,884 | 3.3 | 3,330 | 1,310 | 1,640 |
| OAS4S-4063-050L | 12,520 | - | 23,200 | 665 | 79 | 34.9 | 6 | 3 | 2,321 | 3.7 | 2,580 | 1,200 | 1,570 |
| OAS4S-4083-050L | 15,000 | - | 22,200 | 637 | 79 | 34.9 | 8 | 3 | 3,095 | 5.0 | 3,030 | 1,340 | 1,820 |
| OAS4S-4064-050L | 14,280 | - | 22,320 | 640 | 79 | 34.9 | 6 | 4 | 3,004 | 3.7 | 2,870 | 1,270 | 1,640 |
| OAS4S-4084-050L | 16,520 | 18,160 | 21,000 | 602 | 79 | 34.9 | 8 | 4 | 4,005 | 5.0 | 3,420 | 1,430 | 1,910 |
| OAS4S-4066-050L | - | 18,360 | 21,080 | 604 | 79 | 34.9 | 6 | 6 | 4,369 | 3.7 | 3,630 | 1,400 | 1,770 |

Engineering Data

Models OAS5S-3163 to OAS5S-4066

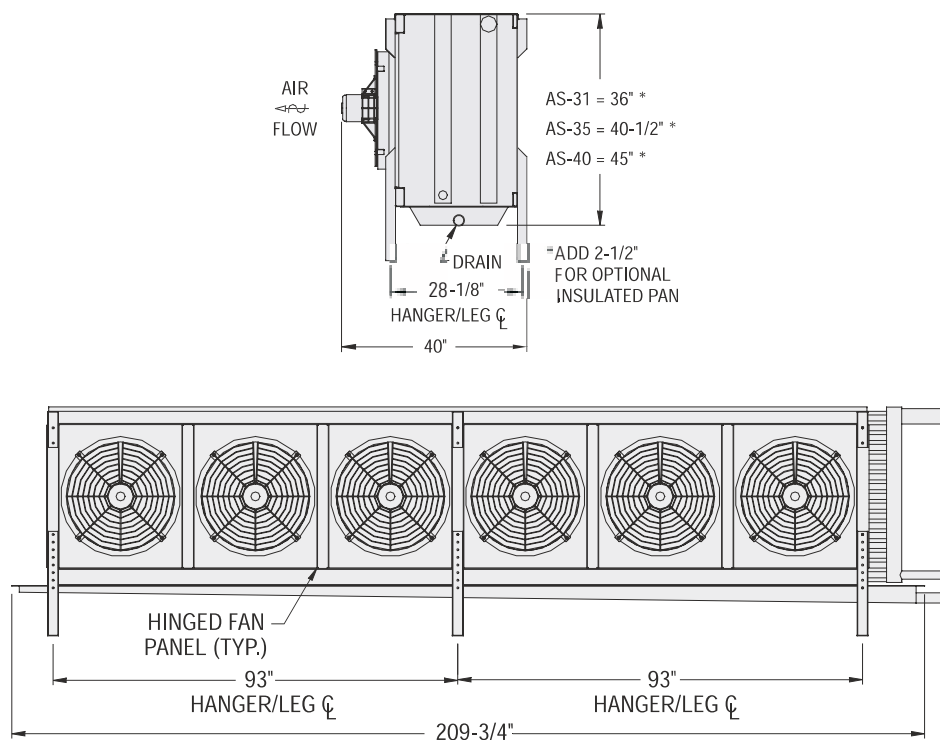
Do not use for construction. Refer to factory certified dimensions.
This brochure includes data current at the time of publication, which should be reconfirmed at the time of purchase.



| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|--------|---------------|----------------------|-----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS5S-3163-033L | 11,450 | 12,600 | 19,500 | 575 | 77 | 33.9 | 6 | 3 | 2,257 | 3.6 | 2,650 | 1,280 | 1,630 |
| OAS5S-3163-050L | 12,150 | - | 22,500 | 664 | 78 | 33.9 | 6 | 3 | 2,257 | 3.6 | 2,650 | 1,280 | 1,630 |
| OAS5S-3183-033L | 13,400 | 14,750 | 18,750 | 553 | 77 | 33.9 | 8 | 3 | 3,009 | 4.9 | 3,090 | 1,420 | 1,870 |
| OAS5S-3164-033L | 12,900 | 14,200 | 18,900 | 557 | 77 | 33.9 | 6 | 4 | 2,920 | 3.6 | 2,930 | 1,350 | 1,700 |
| OAS5S-3164-050L | 13,800 | - | 21,500 | 634 | 78 | 33.9 | 6 | 4 | 2,920 | 3.6 | 2,930 | 1,350 | 1,700 |
| OAS5S-3184-050L | 16,050 | 17,650 | 20,500 | 605 | 78 | 33.9 | 8 | 4 | 3,894 | 4.9 | 3,460 | 1,500 | 1,950 |
| OAS5S-3166-050L | - | 17,250 | 21,000 | 619 | 78 | 33.9 | 6 | 6 | 4,248 | 3.6 | 3,680 | 1,480 | 1,830 |
| OAS5S-3663-033L | 13,350 | 14,700 | 23,750 | 613 | 79 | 38.8 | 6 | 3 | 2,579 | 4.2 | 2,930 | 1,400 | 1,800 |
| OAS5S-3663-050L | 14,500 | - | 28,000 | 723 | 80 | 38.8 | 6 | 3 | 2,579 | 4.2 | 2,930 | 1,400 | 1,800 |
| OAS5S-3683-033L | 15,800 | 17,400 | 22,500 | 581 | 79 | 38.8 | 8 | 3 | 3,439 | 5.5 | 3,430 | 1,560 | 2,070 |
| OAS5S-3683-050L | 17,150 | - | 26,000 | 671 | 80 | 38.8 | 8 | 3 | 3,439 | 5.5 | 3,430 | 1,560 | 2,070 |
| OAS5S-3664-033L | 15,050 | 16,550 | 22,500 | 581 | 79 | 38.8 | 6 | 4 | 3,338 | 4.2 | 3,250 | 1,480 | 1,880 |
| OAS5S-3664-050L | 16,450 | - | 26,500 | 684 | 80 | 38.8 | 6 | 4 | 3,338 | 4.2 | 3,250 | 1,480 | 1,880 |
| OAS5S-3684-033L | 17,500 | 19,250 | 21,500 | 555 | 79 | 38.8 | 8 | 4 | 4,450 | 5.5 | 3,860 | 1,660 | 2,170 |
| OAS5S-3684-050L | 19,050 | - | 24,750 | 639 | 80 | 38.8 | 8 | 4 | 4,450 | 5.5 | 3,860 | 1,660 | 2,170 |
| OAS5S-3666-050L | - | 20,350 | 23,250 | 600 | 80 | 38.8 | 6 | 6 | 4,855 | 4.2 | 4,100 | 1,630 | 2,020 |
| OAS5S-4063-050L | 15,650 | - | 29,000 | 665 | 80 | 43.6 | 6 | 3 | 2,902 | 4.7 | 3,170 | 1,480 | 1,930 |
| OAS5S-4083-050L | 18,750 | - | 27,750 | 637 | 80 | 43.6 | 8 | 3 | 3,869 | 6.2 | 3,730 | 1,660 | 2,230 |
| OAS5S-4064-050L | 17,850 | - | 27,900 | 640 | 80 | 43.6 | 6 | 4 | 3,755 | 4.7 | 3,530 | 1,570 | 2,010 |
| OAS5S-4084-050L | 20,650 | 22,700 | 26,250 | 602 | 80 | 43.6 | 8 | 4 | 5,006 | 6.2 | 4,210 | 1,770 | 2,350 |
| OAS5S-4066-050L | - | 22,950 | 26,350 | 604 | 80 | 43.6 | 6 | 6 | 5,461 | 4.7 | 4,480 | 1,730 | 2,180 |

Models OAS6S-3163 to OAS6S-4066

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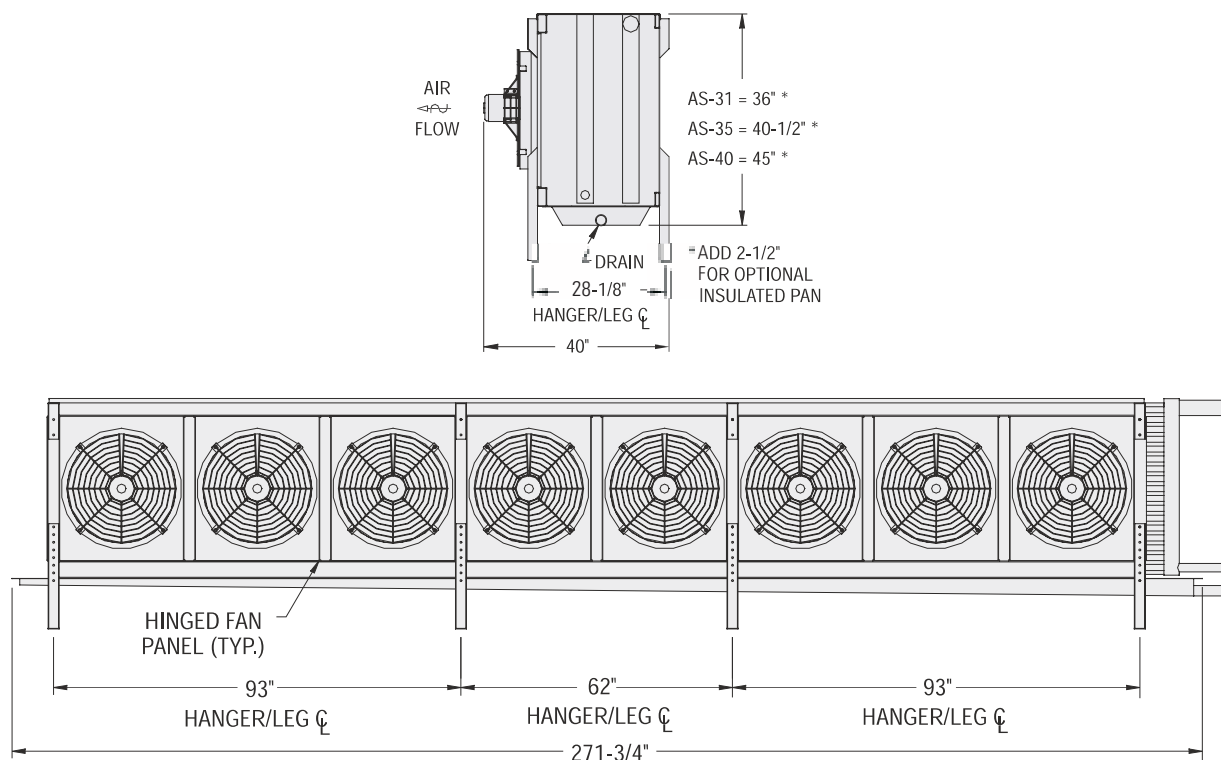


| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound Pwr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|--------|---------------|----------------------|-----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS6S-3163-033L | 13,740 | 15,120 | 23,400 | 575 | 79 | 40.7 | 6 | 3 | 2,708 | 4.4 | 3,120 | 1,510 | 1,920 |
| OAS6S-3163-050L | 14,580 | - | 27,000 | 664 | 80 | 40.7 | 6 | 3 | 2,708 | 4.4 | 3,120 | 1,510 | 1,920 |
| OAS6S-3183-033L | 16,080 | 17,700 | 22,500 | 553 | 79 | 40.7 | 8 | 3 | 3,611 | 5.8 | 3,650 | 1,670 | 2,200 |
| OAS6S-3164-033L | 15,480 | 17,040 | 22,680 | 557 | 79 | 40.7 | 6 | 4 | 3,504 | 4.4 | 3,460 | 1,590 | 1,990 |
| OAS6S-3164-050L | 16,560 | - | 25,800 | 634 | 80 | 40.7 | 6 | 4 | 3,504 | 4.4 | 3,460 | 1,590 | 1,990 |
| OAS6S-3184-050L | 19,260 | 21,180 | 24,600 | 605 | 80 | 40.7 | 8 | 4 | 4,673 | 5.8 | 4,100 | 1,770 | 2,300 |
| OAS6S-3166-050L | - | 20,700 | 25,200 | 619 | 80 | 40.7 | 6 | 6 | 5,097 | 4.4 | 4,360 | 1,740 | 2,150 |
| OAS6S-3663-033L | 16,020 | 17,640 | 28,500 | 613 | 81 | 46.5 | 6 | 3 | 3,095 | 5.0 | 3,460 | 1,650 | 2,120 |
| OAS6S-3663-050L | 17,400 | - | 33,600 | 723 | 82 | 46.5 | 6 | 3 | 3,095 | 5.0 | 3,460 | 1,650 | 2,120 |
| OAS6S-3683-033L | 18,960 | 20,880 | 27,000 | 581 | 81 | 46.5 | 8 | 3 | 4,127 | 6.7 | 4,060 | 1,840 | 2,440 |
| OAS6S-3683-050L | 20,580 | - | 31,200 | 671 | 82 | 46.5 | 8 | 3 | 4,127 | 6.7 | 4,060 | 1,840 | 2,440 |
| OAS6S-3664-033L | 18,060 | 19,860 | 27,000 | 581 | 81 | 46.5 | 6 | 4 | 4,005 | 5.0 | 3,850 | 1,740 | 2,210 |
| OAS6S-3664-050L | 19,740 | - | 31,800 | 684 | 82 | 46.5 | 6 | 4 | 4,005 | 5.0 | 3,850 | 1,740 | 2,210 |
| OAS6S-3684-033L | 21,000 | 23,100 | 25,800 | 555 | 81 | 46.5 | 8 | 4 | 5,340 | 6.7 | 4,570 | 1,950 | 2,560 |
| OAS6S-3684-050L | 22,860 | - | 29,700 | 639 | 82 | 46.5 | 8 | 4 | 5,340 | 6.7 | 4,570 | 1,950 | 2,560 |
| OAS6S-3666-050L | - | 24,420 | 27,900 | 600 | 82 | 46.5 | 6 | 6 | 5,826 | 5.0 | 4,860 | 1,920 | 2,380 |
| OAS6S-4063-050L | 18,780 | - | 34,800 | 665 | 82 | 52.3 | 6 | 3 | 3,482 | 5.6 | 3,740 | 1,750 | 2,270 |
| OAS6S-4083-050L | 22,500 | - | 33,300 | 637 | 82 | 52.3 | 8 | 3 | 4,642 | 7.5 | 4,410 | 1,950 | 2,630 |
| OAS6S-4064-050L | 21,420 | - | 33,480 | 640 | 82 | 52.3 | 6 | 4 | 4,506 | 5.6 | 4,180 | 1,850 | 2,370 |
| OAS6S-4084-050L | 24,780 | 27,240 | 31,500 | 602 | 82 | 52.3 | 8 | 4 | 6,008 | 7.5 | 4,990 | 2,090 | 2,770 |
| OAS6S-4066-050L | - | 27,540 | 31,620 | 604 | 82 | 52.3 | 6 | 6 | 6,554 | 5.6 | 5,310 | 2,050 | 2,570 |

Engineering Data

Models OAS8S-3163 to OAS8S-4066

Do not use for construction. Refer to factory certified dimensions.
This brochure includes data current at the time of publication, which should be reconfirmed at the time of purchase.



| Model Number | Capacity (Btu/hr/°F) | | Airflow (CFM) | Avg. Face Vel. (fpm) | Sound wr. Lvl. (dBA) | Face Area (ft²) | Rows Deep | Fin Dens. (fpi) | Surface Area (ft²) | Coil Vol. (ft³) | Est. Shipping Wt. | | |
|-----------------|----------------------|--------|---------------|----------------------|----------------------|-----------------|-----------|-----------------|--------------------|-----------------|-------------------|--------------|---------------|
| | Frosted | Wet | | | | | | | | | Galv. (lbs.) | Alum. (lbs.) | SST-Al (lbs.) |
| OAS8S-3163-033L | 18,320 | 20,160 | 31,200 | 575 | 80 | 54.3 | 6 | 3 | 3,611 | 5.8 | 4,100 | 1,990 | 2,510 |
| OAS8S-3163-050L | 19,440 | - | 36,000 | 664 | 81 | 54.3 | 6 | 3 | 3,611 | 5.8 | 4,100 | 1,990 | 2,510 |
| OAS8S-3183-033L | 21,440 | 23,600 | 30,000 | 553 | 80 | 54.3 | 8 | 3 | 4,814 | 7.8 | 4,800 | 2,200 | 2,880 |
| OAS8S-3164-033L | 20,640 | 22,720 | 30,240 | 557 | 80 | 54.3 | 6 | 4 | 4,673 | 5.8 | 4,550 | 2,090 | 2,610 |
| OAS8S-3164-050L | 22,080 | - | 34,400 | 634 | 81 | 54.3 | 6 | 4 | 4,673 | 5.8 | 4,550 | 2,090 | 2,610 |
| OAS8S-3184-050L | 25,680 | 28,240 | 32,800 | 605 | 81 | 54.3 | 8 | 4 | 6,230 | 7.8 | 5,390 | 2,340 | 3,020 |
| OAS8S-3166-050L | - | 27,600 | 33,600 | 619 | 81 | 54.3 | 6 | 6 | 6,796 | 5.8 | 5,740 | 2,300 | 2,820 |
| OAS8S-3663-033L | 21,360 | 23,520 | 38,000 | 613 | 82 | 62.0 | 6 | 3 | 4,127 | 6.7 | 4,540 | 2,170 | 2,770 |
| OAS8S-3663-050L | 23,200 | - | 44,800 | 723 | 83 | 62.0 | 6 | 3 | 4,127 | 6.7 | 4,540 | 2,170 | 2,770 |
| OAS8S-3683-033L | 25,280 | 27,840 | 36,000 | 581 | 82 | 62.0 | 8 | 3 | 5,502 | 8.9 | 5,330 | 2,420 | 3,200 |
| OAS8S-3683-050L | 27,440 | - | 41,600 | 671 | 83 | 62.0 | 8 | 3 | 5,502 | 8.9 | 5,330 | 2,420 | 3,200 |
| OAS8S-3664-033L | 24,080 | 26,480 | 36,000 | 581 | 82 | 62.0 | 6 | 4 | 5,340 | 6.7 | 5,050 | 2,290 | 2,890 |
| OAS8S-3664-050L | 26,320 | - | 42,400 | 684 | 83 | 62.0 | 6 | 4 | 5,340 | 6.7 | 5,050 | 2,290 | 2,890 |
| OAS8S-3684-033L | 28,000 | 30,800 | 34,400 | 555 | 82 | 62.0 | 8 | 4 | 7,120 | 8.9 | 6,010 | 2,580 | 3,360 |
| OAS8S-3684-050L | 30,480 | - | 39,600 | 639 | 83 | 62.0 | 8 | 4 | 7,120 | 8.9 | 6,010 | 2,580 | 3,360 |
| OAS8S-3666-050L | - | 32,560 | 37,200 | 600 | 83 | 62.0 | 6 | 6 | 7,767 | 6.7 | 6,400 | 2,530 | 3,130 |
| OAS8S-4063-050L | 25,040 | - | 46,400 | 665 | 83 | 69.8 | 6 | 3 | 4,642 | 7.5 | 4,910 | 2,300 | 2,970 |
| OAS8S-4083-050L | 30,000 | - | 44,400 | 637 | 83 | 69.8 | 8 | 3 | 6,190 | 10.0 | 5,800 | 2,570 | 3,450 |
| OAS8S-4064-050L | 28,560 | - | 44,640 | 640 | 83 | 69.8 | 6 | 4 | 6,008 | 7.5 | 5,480 | 2,430 | 3,100 |
| OAS8S-4084-050L | 33,040 | 36,320 | 42,000 | 602 | 83 | 69.8 | 8 | 4 | 8,010 | 10.0 | 6,560 | 2,750 | 3,630 |
| OAS8S-4066-050L | - | 36,720 | 42,160 | 604 | 83 | 69.8 | 6 | 6 | 8,738 | 7.5 | 6,990 | 2,700 | 3,370 |

Engineering Specifications

Coil Connections

Following are general guidelines for connection types and sizes for various construction options, refrigerant systems, and unit capacities. Pump recirculated guidelines are based on overfeed ratios of 3:1 for ammonia and 2:1 for halocarbons. Please refer to factory certified data for specific project requirements.

Galvanized steel coil connections will be capped carbon steel pipe, Schedule 80 for less than 2" diameter and Schedule 40 elsewhere. Aluminum coils will ship with an aluminum flange and a mating carbon steel flange. Stainless steel coils will terminate with a capped carbon steel stub to facilitate field piping. Hot gas defrost connections in the pan will be capped carbon steel.

Table 3. Ammonia Connection Size Guidelines – Iron Pipe Sizes

| Capacity Per Conn. | Pump Recirculated (3:1) | | | | | | Flooded | | | | | | Direct Exp. | |
|--------------------|-------------------------|---------------------|------|------|------|------|-------------|---------------------|------|-----|-----|-----|--------------------------|------|
| | Liquid Feed | Suction Temperature | | | | | Liquid Feed | Suction Temperature | | | | | Suction Temperature (°F) | |
| | | +40 | +20 | 0 | -20 | -40 | | +40 | +20 | 0 | -20 | -40 | +30 | +10 |
| 2.5 Tons | 0.75 | 0.75 | 1 | 1 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 | 1.5 | 2 | 2 | 0.75 | 1 |
| 5 Tons | 0.75 | 1 | 1 | 1.25 | 1.5 | 2 | 1.5 | 1.5 | 2 | 2 | 2.5 | 3 | 1 | 1.25 |
| 10 Tons | 0.75 | 1.25 | 1.25 | 2 | 2 | 2.5 | 2 | 2 | 2 | 2.5 | 3 | 4 | 1.25 | 1.25 |
| 15 Tons | 0.75 | 1.25 | 1.5 | 2 | 2.5 | 3 | 2.5 | 2.5 | 2.5 | 3 | 4 | 4 | 1.25 | 1.5 |
| 20 Tons | 0.75 | 1.5 | 2 | 2.5 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 5 | 1.5 | 2 |
| 25 Tons | 1 | 2 | 2 | 2.5 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 5 | 1.5 | 2 |
| 30 Tons | 1 | 2 | 2.5 | 3 | 4 | 5 | 3 | 3 | 3 | 4 | 5 | 5 | 2 | 2 |
| 35 Tons | 1 | 2 | 2.5 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 6 | 2 | 2.5 |
| 40 Tons | 1 | 2 | 2.5 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 5 | 6 | * | * |

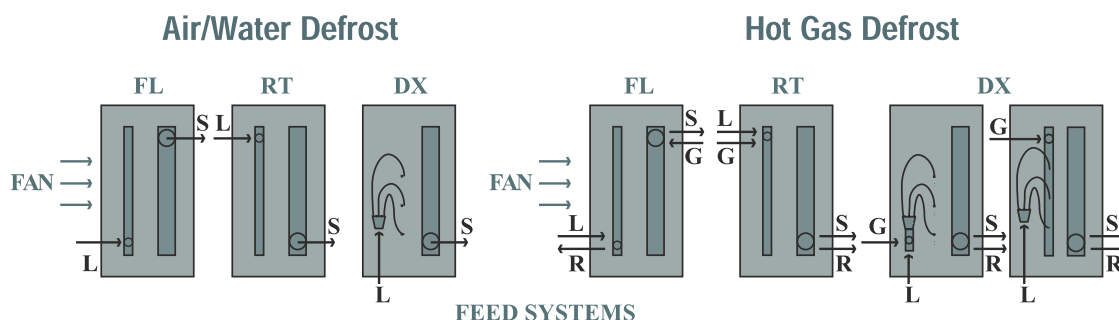
Table 4. R-22 Connection Size Guidelines – Iron Pipe Sizes

| Capacity Per Conn. | Pump Recirculated (2:1) | | | | | | Direct Expansion | | |
|--------------------|-------------------------|--------------------------|------|------|-----|-----|--------------------------|------|------|
| | Liquid Feed | Suction Temperature (°F) | | | | | Suction Temperature (°F) | | |
| | | +40 | +20 | 0 | -20 | -40 | +30 | +10 | -10 |
| 2.5 Tons | 0.75 | 1 | 1.25 | 1.25 | 1.5 | 2 | 1 | 1 | 1.25 |
| 5 Tons | 0.75 | 1.25 | 1.5 | 1.5 | 2 | 2.5 | 1.25 | 1.25 | 1.5 |
| 10 Tons | 1 | 1.5 | 2 | 2.5 | 2.5 | 3 | 1.5 | 2 | 2 |
| 15 Tons | 1.25 | 2 | 2.5 | 2.5 | 3 | 4 | 2 | 2 | 2.5 |
| 20 Tons | 1.25 | 2 | 2.5 | 3 | 4 | 4 | 2 | 2.5 | 3 |
| 25 Tons | 1.25 | 2.5 | 3 | 3 | 4 | 5 | 2.5 | 2.5 | 3 |
| 30 Tons | 1.5 | 2.5 | 3 | 4 | 4 | 5 | 2.5 | 3 | * |
| 35 Tons | 1.5 | 3 | 3 | 4 | 4 | 5 | 2.5 | 3 | * |
| 40 Tons | 1.5 | 3 | 3 | 4 | 5 | 6 | * | * | * |

Warning: Do not use connection size estimates to size system piping.

Coil Connections (cont.)

Following are the schematics of coil connection locations for a right hand unit, identifying the general location of liquid feed (L), suction (S), hot gas feed (G), and hot gas defrost relief (R) locations:



Motor Amperage

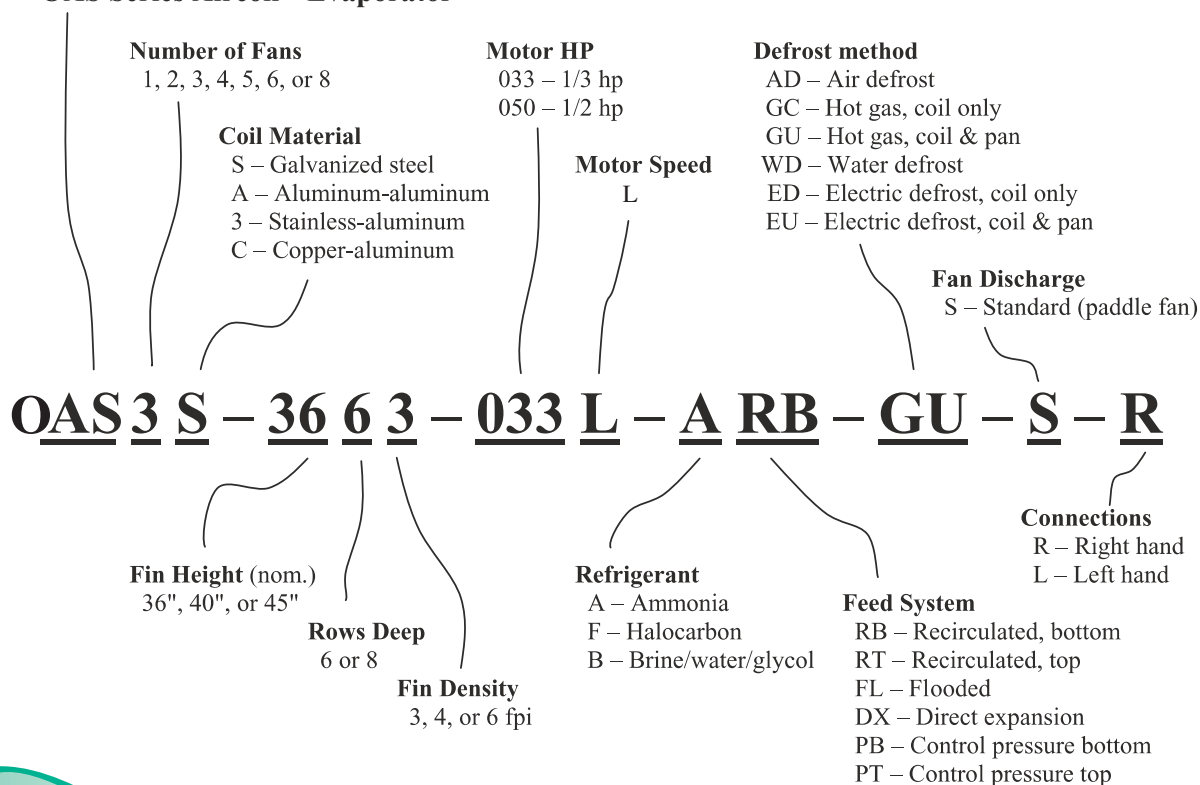
The capacities of TEAO motors increase as room temperatures decrease due to the increased cooling effects of the colder, denser air. This increase in capacity more than accommodates the motor amp. draw increase that also results from the colder, denser air. For reference, Table 5 provide approximate air density correction factors for a range of room temperatures.

Table-5. Air Density Correction Factors

| Room Temp. | +40°F | +20°F | 0°F | -20°F | -30°F |
|------------|-------|-------|------|-------|-------|
| Factor | 1.06 | 1.11 | 1.15 | 1.21 | 1.26 |

Nomenclature

OAS Series Aircoil™ Evaporator



Evaporator Product Lines



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All data and specification subject to change without notice .

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