

# SAL Series

Ceiling Type Air Cooler





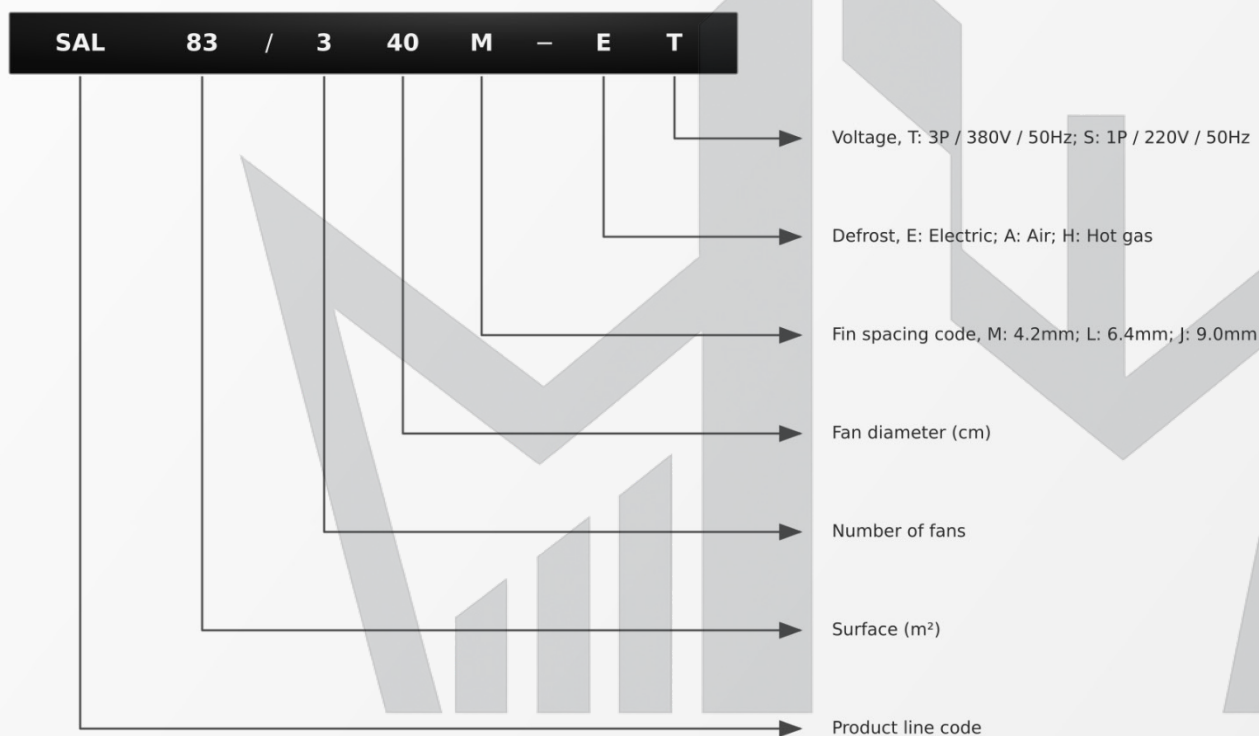


## SAL Series Ceiling Type Air Cooler

### 1. Product Description

- 1** Housing: Made of 304 stainless steel plate with strong anti-corrosion performance. The cover plates on both sides and the outer water tray use a hinged structure for convenient and fast operation.
- 2** Coil: Using 304 stainless steel pipes  $\Phi 15$ . Pipe spacing  $50 \times 50$  in a square arrangement, with a large heat-transfer area and a small heat-transfer temperature difference. The operating pressure of the stainless steel pipes can reach up to 5MPa, and the burst pressure can reach up to 50MPa. Floating coil pipes are fully automatic argon-arc welded. Corrugated aluminium sheets have spacing of 4.2mm, 6.4mm and 9.0mm. Direct-expansion liquid supply.
- 3** Fan: Axial fans designed for high power and high wind pressure. The mesh cover and fan blades are made of 304 stainless steel. Operating temperature:  $-40^{\circ}\text{C}$  to  $60^{\circ}\text{C}$ . The integral high-air-duct design provides good air guidance, long range and low noise. Independent junction box. Fan specifications:  $\Phi 350$ ,  $\Phi 400$ ,  $\Phi 500$  and  $\Phi 630$ .
- 4** Defrosting: Standard electric defrosting with stainless steel heating tubes evenly distributed in the coil fins and on the inner water plate, with an independent heating-tube junction box.
- 5** Compatible refrigerants: R404A, R507A, R448A, R449A, R134a, R22 and other refrigerants.

### 2. Model Description





## Performance Data Sheet

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## 3.1 Fin Spacing 4.2mm

| Model          | Capacity R404A (kW) |                       | Surface (m²) | Volume (dm³) | Airflow (m³/h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|----------------|---------------------|-----------------------|--------------|--------------|----------------|---------------|-----------------|--------|-------|-------------|
|                | Tc = 0°C<br>ΔT = 8K | Tc = -18°C<br>ΔT = 7K |              |              |                |               | Inlet           | Outlet | Drain |             |
| Fan 350        |                     |                       |              |              |                |               |                 |        |       |             |
| SAL10/135M-ES  | 1.6                 | 1.4                   | 10.4         | 1.8          | 2300           | 6             | φ12             | φ19    | G1"   |             |
| SAL15/135M-ES  | 2.4                 | 2.0                   | 15.0         | 2.6          | 2000           | 5             | φ12             | φ19    | G1"   |             |
| SAL21/235M-ES  | 3.5                 | 2.7                   | 20.7         | 3.2          | 4600           | 8             | φ12             | φ19    | G1"   |             |
| SAL28/235M-ES  | 4.8                 | 4.0                   | 27.6         | 4.3          | 4000           | 7             | φ12             | φ22    | G1"   |             |
| SAL31/335M-ES  | 5.0                 | 4.3                   | 31.1         | 4.6          | 6900           | 10            | φ12             | φ22    | G1"   |             |
| SAL42/335M-ES  | 7.0                 | 6.0                   | 41.5         | 6.2          | 6000           | 10            | φ16             | φ28    | G1"   |             |
| SAL42/435M-ES  | 6.8                 | 5.9                   | 41.5         | 6.1          | 9200           | 12            | φ12             | φ22    | G1"   |             |
| SAL56/435M-ES  | 9.6                 | 8.1                   | 56           | 8.1          | 8000           | 12            | φ16             | φ28    | G1"   |             |
| Fan 400        |                     |                       |              |              |                |               |                 |        |       |             |
| SAL27/140M-ET  | 4.0                 | 3.4                   | 27.0         | 4.4          | 3000           | 8             | φ12             | φ22    | G1"   |             |
| SAL36/140M-ET  | 5.0                 | 4.0                   | 35.9         | 5.9          | 2700           | 7             | φ12             | φ22    | G1"   |             |
| SAL36/240M-ET  | 5.8                 | 4.7                   | 35.9         | 5.9          | 6400           | 13            | φ12             | φ22    | G1"   |             |
| SAL54/240M-ET  | 8.2                 | 6.7                   | 53.9         | 8.2          | 6000           | 12            | φ16             | φ28    | G1"   |             |
| SAL72/240M-ET  | 10.3                | 8.3                   | 71.9         | 10.9         | 5400           | 11            | φ16             | φ28    | G1"   |             |
| SAL83/340M-ET  | 12.3                | 10.5                  | 82.9         | 12.3         | 9000           | 15            | φ22             | φ42    | 2"G1" |             |
| SAL110/340M-ET | 15.8                | 12.7                  | 110.6        | 16.4         | 8100           | 13            | φ22             | φ42    | 2"G1" |             |
| SAL108/440M-ET | 16.6                | 13.6                  | 107.8        | 15.8         | 12000          | 16            | φ22             | φ42    | 2"G1" |             |
| SAL144/440M-ET | 20.7                | 16.8                  | 143.8        | 21.1         | 10800          | 15            | φ22             | φ42    | 2"G1" |             |
| SAL180/540M-ET | 26                  | 20                    | 179.7        | 26.2         | 13500          | 18            | φ28             | φ50    | 3"G1" |             |
| Fan 500        |                     |                       |              |              |                |               |                 |        |       |             |
| SAL58/150M-ET  | 8.6                 | 7.2                   | 58.0         | 9.3          | 6000           | 18            | φ16             | φ28    | G1"   |             |
| SAL73/150M-ET  | 10.1                | 8.5                   | 72.6         | 11.3         | 5750           | 17            | φ16             | φ28    | G1"   |             |
| SAL87/150M-ET  | 11.4                | 9.5                   | 87.1         | 13.3         | 5500           | 17            | φ16             | φ28    | G1"   |             |
| SAL116/250M-ET | 17.5                | 14.4                  | 116.1        | 17.4         | 12000          | 21            | φ22             | φ42    | G1"   |             |
| SAL145/250M-ET | 19.8                | 16.8                  | 145.2        | 21.4         | 11500          | 20            | φ22             | φ42    | G1"   |             |
| SAL174/250M-ET | 23.2                | 17.3                  | 174.2        | 25.5         | 11000          | 20            | φ22             | φ42    | G1"   |             |
| SAL174/350M-ET | 26.2                | 19.6                  | 174.2        | 25.5         | 18000          | 23            | φ28             | φ50    | 2"G1" |             |
| SAL218/350M-ET | 30.9                | 24.6                  | 217.7        | 31.6         | 17300          | 22            | φ28             | φ50    | 2"G1" |             |
| SAL261/350M-ET | 35.2                | 28.1                  | 261.3        | 37.6         | 16500          | 22            | φ28             | φ50    | 2"G1" |             |
| SAL232/450M-ET | 35                  | 29                    | 232.2        | 33.5         | 24000          | 25            | φ28             | φ50    | 3"G1" |             |
| SAL290/450M-ET | 40.8                | 30.2                  | 290.3        | 41.6         | 23000          | 24            | φ28             | φ50    | 3"G1" |             |
| SAL348/450M-ET | 46.8                | 35                    | 348.4        | 49.7         | 22000          | 24            | φ28             | φ50    | 3"G   |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.



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### 3.1 Fin Spacing 4.2mm — Fan 630

| Model          | Capacity R404A (kW) |                       | Surface (m <sup>2</sup> ) | Volume (dm <sup>3</sup> ) | Airflow (m <sup>3</sup> /h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|----------------|---------------------|-----------------------|---------------------------|---------------------------|-----------------------------|---------------|-----------------|--------|-------|-------------|
|                | Tc = 0°C<br>ΔT = 8K | Tc = -18°C<br>ΔT = 7K |                           |                           |                             |               | Inlet           | Outlet | Drain |             |
| Fan 630        |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL100/163M-ET | 14.5                | 11.9                  | 99.5                      | 15.0                      | 10200                       | 28            | φ22             | φ28    | G1"   |             |
| SAL125/163M-ET | 16.8                | 14.1                  | 124.4                     | 18.8                      | 9900                        | 27            | φ22             | φ35    | G1"   |             |
| SAL150/163M-ET | 19.4                | 15.6                  | 149.3                     | 22.5                      | 9600                        | 27            | φ22             | φ35    | G1"   |             |
| SAL199/263M-ET | 29.3                | 22.6                  | 199.0                     | 28.9                      | 20400                       | 32            | φ22             | φ42    | 2"G1" |             |
| SAL249/263M-ET | 33.9                | 24.4                  | 248.8                     | 36.1                      | 19800                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL299/263M-ET | 36.6                | 25                    | 298.5                     | 43.3                      | 19200                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL299/363M-ET | 43.8                | 32.7                  | 298.5                     | 42.8                      | 30600                       | 35            | φ28             | φ50    | 3"G1" |             |
| SAL373/363M-ET | 51.8                | 38.6                  | 373.2                     | 53.5                      | 29700                       | 34            | φ28             | φ50    | 3"G1" |             |
| SAL448/363M-ET | 58.8                | 43.7                  | 447.8                     | 64.1                      | 28800                       | 34            | φ28             | φ50    | 3"G   |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.

### 3.2 Fin Spacing 6.4mm

| Model          | Capacity R404A (kW) |                       | Surface (m <sup>2</sup> ) | Volume (dm <sup>3</sup> ) | Airflow (m <sup>3</sup> /h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|----------------|---------------------|-----------------------|---------------------------|---------------------------|-----------------------------|---------------|-----------------|--------|-------|-------------|
|                | Tc = 0°C<br>ΔT = 8K | Tc = -18°C<br>ΔT = 7K |                           |                           |                             |               | Inlet           | Outlet | Drain |             |
| Fan 350        |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL7/135L-ES   | 1.1                 | 1.0                   | 7.0                       | 1.8                       | 2300                        | 6             | φ12             | φ19    | G1"   |             |
| SAL10/135L-ES  | 1.8                 | 1.5                   | 10.0                      | 2.6                       | 2000                        | 5             | φ12             | φ19    | G1"   |             |
| SAL14/235L-ES  | 2.7                 | 2.2                   | 13.9                      | 3.2                       | 4600                        | 8             | φ12             | φ19    | G1"   |             |
| SAL19/235L-ES  | 3.7                 | 3.2                   | 18.5                      | 4.3                       | 4000                        | 7             | φ12             | φ22    | G1"   |             |
| SAL21/335L-ES  | 3.8                 | 3.3                   | 20.8                      | 4.6                       | 6900                        | 10            | φ16             | φ28    | G1"   |             |
| SAL28/335L-ES  | 5.4                 | 4.6                   | 27.8                      | 6.2                       | 6000                        | 10            | φ16             | φ28    | G1"   |             |
| SAL28/435L-ES  | 5.1                 | 4.4                   | 27.8                      | 6.1                       | 9200                        | 12            | φ16             | φ28    | G1"   |             |
| SAL38/435L-ES  | 7.4                 | 6.3                   | 38                        | 8.1                       | 8000                        | 12            | φ16             | φ28    | G1"   |             |
| Fan 400        |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL18/140L-ET  | 3.0                 | 2.5                   | 18.0                      | 4.4                       | 3200                        | 8             | φ12             | φ22    | G1"   |             |
| SAL24/140L-ET  | 4.0                 | 3.3                   | 24.1                      | 5.9                       | 2900                        | 7             | φ12             | φ22    | G1"   |             |
| SAL24/240L-ET  | 4.4                 | 3.7                   | 24.1                      | 5.9                       | 6600                        | 13            | φ12             | φ22    | G1"   |             |
| SAL36/240L-ET  | 6.3                 | 5.3                   | 36.1                      | 8.2                       | 6400                        | 12            | φ16             | φ28    | G1"   |             |
| SAL48/240L-ET  | 8.2                 | 6.7                   | 48.2                      | 10.9                      | 5800                        | 11            | φ16             | φ28    | G1"   |             |
| SAL56/340L-ET  | 9.4                 | 7.9                   | 55.6                      | 12.3                      | 9600                        | 14            | φ22             | φ42    | 2"G1" |             |
| SAL74/340L-ET  | 12.5                | 10.3                  | 74.1                      | 16.4                      | 8700                        | 13            | φ22             | φ42    | 2"G1" |             |
| SAL72/440L-ET  | 12.9                | 10.7                  | 72.3                      | 15.8                      | 12800                       | 16            | φ22             | φ42    | 2"G1" |             |
| SAL96/440L-ET  | 16.4                | 13.6                  | 96.3                      | 21.1                      | 11600                       | 15            | φ22             | φ42    | 2"G1" |             |
| SAL120/540L-ET | 20.9                | 16.6                  | 120.4                     | 26.2                      | 14500                       | 18            | φ28             | φ50    | 3"G1" |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.



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## 3.2 Fin Spacing 6.4mm — Fan 500 and Fan 630

| Model          | Capacity R404A (kW) |                       | Surface (m <sup>2</sup> ) | Volume (dm <sup>3</sup> ) | Airflow (m <sup>3</sup> /h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|----------------|---------------------|-----------------------|---------------------------|---------------------------|-----------------------------|---------------|-----------------|--------|-------|-------------|
|                | Tc = 0°C<br>ΔT = 8K | Tc = -18°C<br>ΔT = 7K |                           |                           |                             |               | Inlet           | Outlet | Drain |             |
| Fan 500        |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL39/150L-ET  | 6.7                 | 5.6                   | 38.9                      | 9.3                       | 6200                        | 18            | φ16             | φ28    | G1"   |             |
| SAL49/150L-ET  | 8.0                 | 6.7                   | 48.6                      | 11.3                      | 5950                        | 17            | φ16             | φ28    | G1"   |             |
| SAL58/150L-ET  | 9.2                 | 7.6                   | 58.4                      | 13.3                      | 5700                        | 17            | φ16             | φ28    | G1"   |             |
| SAL78/250L-ET  | 13.7                | 11.5                  | 77.8                      | 17.4                      | 12400                       | 21            | φ22             | φ42    | G1"   |             |
| SAL97/250L-ET  | 14.9                | 12.7                  | 97.3                      | 21.5                      | 11900                       | 20            | φ22             | φ42    | G1"   |             |
| SAL117/250L-ET | 19.5                | 14.9                  | 116.7                     | 25.5                      | 11400                       | 20            | φ22             | φ42    | G1"   |             |
| SAL117/350L-ET | 21.2                | 16.4                  | 116.7                     | 25.5                      | 18600                       | 23            | φ28             | φ50    | 2"G1" |             |
| SAL146/350L-ET | 24.7                | 20.2                  | 145.9                     | 31.6                      | 17850                       | 22            | φ28             | φ50    | 2"G1" |             |
| SAL175/350L-ET | 28.8                | 23.4                  | 175.1                     | 37.6                      | 17100                       | 22            | φ28             | φ50    | 2"G1" |             |
| SAL156/450L-ET | 27.3                | 23                    | 155.6                     | 33.5                      | 24800                       | 25            | φ28             | φ50    | 3"G1" |             |
| SAL195/450L-ET | 33.5                | 25.7                  | 194.5                     | 41.6                      | 23800                       | 24            | φ28             | φ50    | 3"G1" |             |
| SAL234/450L-ET | 39                  | 30                    | 233.5                     | 49.7                      | 22800                       | 24            | φ28             | φ50    | 3"G1" |             |
| Fan 630        |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL67/163L-ET  | 11.3                | 9.4                   | 66.7                      | 15.0                      | 10600                       | 28            | φ22             | φ28    | G1"   |             |
| SAL83/163L-ET  | 12.9                | 10.8                  | 83.4                      | 18.8                      | 10300                       | 27            | φ22             | φ35    | G1"   |             |
| SAL100/163L-ET | 15.6                | 12.8                  | 100.1                     | 22.5                      | 10000                       | 27            | φ22             | φ35    | G1"   |             |
| SAL133/263L-ET | 23.4                | 18.5                  | 133.4                     | 28.9                      | 21200                       | 32            | φ22             | φ42    | 2"G1" |             |
| SAL167/263L-ET | 28                  | 21                    | 166.8                     | 36.1                      | 20600                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL200/263L-ET | 31.4                | 22.3                  | 200.2                     | 43.3                      | 20000                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL200/363L-ET | 35.2                | 27.2                  | 200.1                     | 42.8                      | 31800                       | 35            | φ28             | φ50    | 3"G1" |             |
| SAL250/363L-ET | 42.3                | 32.6                  | 250.1                     | 53.5                      | 30900                       | 34            | φ28             | φ50    | 3"G1" |             |
| SAL300/363L-ET | 48.7                | 37.4                  | 300.2                     | 64.1                      | 30000                       | 34            | φ28             | φ50    | 3"G1" |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.

## 3.3 Fin Spacing 9.0mm

| Model         | Capacity R404A (kW) |                       | Surface (m <sup>2</sup> ) | Volume (dm <sup>3</sup> ) | Airflow (m <sup>3</sup> /h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|---------------|---------------------|-----------------------|---------------------------|---------------------------|-----------------------------|---------------|-----------------|--------|-------|-------------|
|               | Tc = 0°C<br>ΔT = 8K | Tc = -18°C<br>ΔT = 7K |                           |                           |                             |               | Inlet           | Outlet | Drain |             |
| Fan 350       |                     |                       |                           |                           |                             |               |                 |        |       |             |
| SAL5/135J-ES  | 0.82                | 0.73                  | 5.1                       | 1.8                       | 2300                        | 6             | φ12             | φ19    | G1"   |             |
| SAL7/135J-ES  | 1.4                 | 1.2                   | 7.3                       | 2.6                       | 2000                        | 5             | φ12             | φ19    | G1"   |             |
| SAL10/235J-ES | 2.15                | 1.76                  | 10.1                      | 3.2                       | 4600                        | 8             | φ12             | φ19    | G1"   |             |
| SAL14/235J-ES | 2.9                 | 2.5                   | 13.5                      | 4.3                       | 4000                        | 7             | φ12             | φ22    | G1"   |             |
| SAL15/335J-ES | 3.0                 | 2.5                   | 15.2                      | 4.6                       | 6900                        | 10            | φ16             | φ28    | G1"   |             |
| SAL21/335J-ES | 4.1                 | 3.5                   | 21                        | 6.2                       | 6000                        | 10            | φ16             | φ28    | G1"   |             |
| SAL20/435J-ES | 3.8                 | 3.3                   | 20.3                      | 6.1                       | 9200                        | 12            | φ16             | φ28    | G1"   |             |
| SAL27/435J-ES | 5.8                 | 4.9                   | 27.0                      | 8.1                       | 8000                        | 12            | φ16             | φ28    | G1"   |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.



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## 3.3 Fin Spacing 9.0mm — Fan 400, Fan 500 and Fan 630

| Model          | Capacity R404A (kW)             |                                   | Surface (m <sup>2</sup> ) | Volume (dm <sup>3</sup> ) | Airflow (m <sup>3</sup> /h) | Air Throw (m) | Connection Pipe |        |       | Weight (kg) |
|----------------|---------------------------------|-----------------------------------|---------------------------|---------------------------|-----------------------------|---------------|-----------------|--------|-------|-------------|
|                | T <sub>c</sub> = 0°C<br>ΔT = 8K | T <sub>c</sub> = -18°C<br>ΔT = 7K |                           |                           |                             |               | Inlet           | Outlet | Drain |             |
| Fan 400        |                                 |                                   |                           |                           |                             |               |                 |        |       |             |
| SAL13/140J-ET  | 2.2                             | 1.9                               | 13.2                      | 4.4                       | 3400                        | 8             | φ12             | φ22    | G1"   |             |
| SAL18/140J-ET  | 3.3                             | 2.7                               | 17.6                      | 5.9                       | 3100                        | 7             | φ12             | φ22    | G1"   |             |
| SAL18/240J-ET  | 3.5                             | 2.9                               | 17.6                      | 5.9                       | 7000                        | 13            | φ12             | φ22    | G1"   |             |
| SAL26/240J-ET  | 5.1                             | 4.3                               | 26.3                      | 8.2                       | 6800                        | 12            | φ16             | φ28    | G1"   |             |
| SAL35/240J-ET  | 6.6                             | 5.5                               | 35.1                      | 10.9                      | 6200                        | 11            | φ16             | φ28    | G1"   |             |
| SAL41/340J-ET  | 7.0                             | 6.0                               | 40.5                      | 12.3                      | 10200                       | 14            | φ22             | φ42    | 2"G1" |             |
| SAL54/340J-ET  | 10.2                            | 8.4                               | 54.0                      | 16.4                      | 9300                        | 13            | φ22             | φ42    | 2"G1" |             |
| SAL53/440J-ET  | 10.3                            | 8.6                               | 52.7                      | 15.8                      | 13600                       | 16            | φ22             | φ42    | 2"G1" |             |
| SAL70/440J-ET  | 13.3                            | 10.9                              | 70.3                      | 21.1                      | 12400                       | 15            | φ22             | φ42    | 2"G1" |             |
| SAL88/540J-ET  | 17.2                            | 13.8                              | 87.8                      | 26.2                      | 15500                       | 18            | φ28             | φ50    | 3"G1" |             |
| Fan 500        |                                 |                                   |                           |                           |                             |               |                 |        |       |             |
| SAL28/150J-ET  | 5.0                             | 4.4                               | 28.3                      | 9.3                       | 6400                        | 18            | φ16             | φ28    | G1"   |             |
| SAL36/150J-ET  | 6.2                             | 5.2                               | 35.5                      | 11.3                      | 6150                        | 17            | φ16             | φ28    | G1"   |             |
| SAL43/150J-ET  | 7.1                             | 6.0                               | 42.5                      | 13.3                      | 5900                        | 17            | φ16             | φ28    | G1"   |             |
| SAL57/250J-ET  | 11                              | 9.1                               | 56.6                      | 17.4                      | 12800                       | 21            | φ22             | φ42    | G1"   |             |
| SAL71/250J-ET  | 11.2                            | 9.8                               | 70.9                      | 21.5                      | 12300                       | 20            | φ22             | φ42    | G1"   |             |
| SAL85/250J-ET  | 16.4                            | 12.8                              | 85.0                      | 25.5                      | 11800                       | 20            | φ22             | φ42    | G1"   |             |
| SAL85/350J-ET  | 17.4                            | 13.8                              | 85.0                      | 25.5                      | 19200                       | 23            | φ28             | φ50    | 2"G1" |             |
| SAL107/350J-ET | 20.3                            | 16.8                              | 106.4                     | 31.6                      | 18450                       | 22            | φ28             | φ50    | 2"G1" |             |
| SAL128/350J-ET | 23.8                            | 19.5                              | 127.5                     | 37.6                      | 17700                       | 22            | φ28             | φ50    | 2"G1" |             |
| SAL114/450J-ET | 22                              | 18.3                              | 113.3                     | 33.5                      | 25600                       | 25            | φ28             | φ50    | 3"G1" |             |
| SAL142/450J-ET | 27.9                            | 21.9                              | 141.9                     | 41.6                      | 24600                       | 24            | φ28             | φ50    | 3"G1" |             |
| SAL170/450J-ET | 32.8                            | 25.8                              | 170.0                     | 49.7                      | 23600                       | 24            | φ28             | φ50    | 3"G1" |             |
| Fan 630        |                                 |                                   |                           |                           |                             |               |                 |        |       |             |
| SAL49/163J-ET  | 9.0                             | 7.4                               | 48.6                      | 15.0                      | 11000                       | 28            | φ22             | φ28    | G1"   |             |
| SAL61/163J-ET  | 9.8                             | 8.4                               | 60.8                      | 18.8                      | 10700                       | 27            | φ22             | φ35    | G1"   |             |
| SAL73/163J-ET  | 12.6                            | 10.3                              | 72.8                      | 22.5                      | 10400                       | 27            | φ22             | φ35    | G1"   |             |
| SAL97/263J-ET  | 19                              | 15.3                              | 97.1                      | 28.9                      | 22000                       | 32            | φ22             | φ42    | 2"G1" |             |
| SAL122/263J-ET | 24                              | 18                                | 121.6                     | 36.1                      | 21400                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL146/263J-ET | 27                              | 19.7                              | 145.7                     | 43.3                      | 20800                       | 31            | φ22             | φ42    | 2"G1" |             |
| SAL146/363J-ET | 28.9                            | 22.8                              | 145.7                     | 42.8                      | 33000                       | 35            | φ28             | φ50    | 3"G1" |             |
| SAL182/363J-ET | 35                              | 27.5                              | 182.4                     | 53.5                      | 32100                       | 34            | φ28             | φ50    | 3"G1" |             |
| SAL219/363J-ET | 40.8                            | 32                                | 218.5                     | 64.1                      | 31200                       | 34            | φ28             | φ50    | 3"G1" |             |

Remarks: In the table, T<sub>c</sub> is the cold-room temperature, and ΔT is the difference between the cold-room temperature and the evaporation temperature.



## Electrical Parameter Table

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### 4. Fan Motor and Electric Defrost Specifications

| Model                                             | Fan Motor   |           |             |              | Electric Defrost |           |            |
|---------------------------------------------------|-------------|-----------|-------------|--------------|------------------|-----------|------------|
|                                                   | Voltage (V) | Power (W) | Current (A) | Rev. (r/min) | Coil (KW)        | Tray (KW) | Total (KW) |
| SAL*/135**                                        | 220-1       | 185       | 0.54        | 1330         | 2×0.5            | 1×0.5     | 1.5        |
| SAL*/235**                                        | 220-1       | 370       | 1.08        | 1330         | 2×0.9            | 1×0.9     | 2.7        |
| SAL*/335**                                        | 220-1       | 555       | 1.62        | 1330         | 2×1.3            | 1×1.3     | 3.9        |
| SAL*/435**                                        | 220-1       | 740       | 2.16        | 1330         | 2×1.7            | 1×1.7     | 5.1        |
| SAL27/140M-ET<br>SAL18/140L-ET<br>SAL13/140J-ET   | 380-3       | 240       | 0.52        | 1330         | 2×0.65           | 1×0.7     | 2.0        |
| SAL36/140M-ET<br>SAL24/140L-ET<br>SAL18/140J-ET   | 380-3       | 240       | 0.52        | 1330         | 4×0.65           | 1×0.7     | 3.3        |
| SAL36/240M-ET<br>SAL24/240L-ET<br>SAL18/240J-ET   | 380-3       | 480       | 1.04        | 1330         | 2×1.17           | 1×1.22    | 3.56       |
| SAL54/240M-ET<br>SAL36/240L-ET<br>SAL26/240J-ET   | 380-3       | 480       | 1.04        | 1330         | 2×1.17           | 1×1.22    | 3.56       |
| SAL72/240M-ET<br>SAL48/240L-ET<br>SAL35/240J-ET   | 380-3       | 480       | 1.04        | 1330         | 4×1.17           | 1×1.22    | 5.9        |
| SAL83/340M-ET<br>SAL56/340L-ET<br>SAL41/340J-ET   | 380-3       | 720       | 1.56        | 1330         | 2×1.73           | 1×1.78    | 5.2        |
| SAL110/340M-ET<br>SAL74/340L-ET<br>SAL54/340J-ET  | 380-3       | 720       | 1.56        | 1330         | 4×1.73           | 1×1.78    | 8.7        |
| SAL108/440M-ET<br>SAL72/440L-ET<br>SAL53/440J-ET  | 380-3       | 960       | 2.08        | 1330         | 2×2.2            | 1×2.26    | 6.7        |
| SAL144/440M-ET<br>SAL96/440L-ET<br>SAL70/440J-ET  | 380-3       | 960       | 2.08        | 1330         | 4×2.2            | 1×2.26    | 11.1       |
| SAL180/540M-ET<br>SAL120/540L-ET<br>SAL89/540J-ET | 380-3       | 1200      | 2.6         | 1330         | 4×2.73           | 1×2.8     | 13.7       |
| SAL58/150M-ET<br>SAL39/150L-ET<br>SAL28/150J-ET   | 380-3       | 548       | 1.1         | 1380         | 4×0.85           | 2×0.9     | 5.2        |
| SAL73/150M-ET<br>SAL49/150L-ET<br>SAL36/150J-ET   | 380-3       | 548       | 1.1         | 1380         | 6×0.85           | 2×0.9     | 6.9        |
| SAL87/150M-ET<br>SAL58/150L-ET<br>SAL43/150J-ET   | 380-3       | 548       | 1.1         | 1380         | 6×0.85           | 2×0.9     | 6.9        |
| SAL116/250M-ET<br>SAL78/250L-ET<br>SAL57/250J-ET  | 380-3       | 1096      | 2.2         | 1380         | 4×1.57           | 2×1.62    | 9.5        |
| SAL145/250M-ET<br>SAL97/250L-ET<br>SAL71/250J-ET  | 380-3       | 1096      | 2.2         | 1380         | 6×1.57           | 2×1.62    | 12.7       |
| SAL174/250M-ET<br>SAL117/250L-ET<br>SAL85/250J-ET | 380-3       | 1096      | 2.2         | 1380         | 6×1.57           | 2×1.62    | 12.7       |

Electrical parameters reproduced exactly from the supplied SAL source sheet.  
Grouped model designations share the values shown across their row.



## Electrical Parameter Table

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## 4. Fan Motor and Electric Defrost Specifications — Continued

| Model                                              | Fan Motor   |           |             |              | Electric Defrost |           |            |
|----------------------------------------------------|-------------|-----------|-------------|--------------|------------------|-----------|------------|
|                                                    | Voltage (V) | Power (W) | Current (A) | Rev. (r/min) | Coil (KW)        | Tray (KW) | Total (KW) |
| SAL174/350M-ET<br>SAL117/350L-ET<br>SAL85/350J-ET  | 380-3       | 1644      | 3.3         | 1380         | 4×2.3            | 2×2.34    | 13.9       |
| SAL218/350M-ET<br>SAL146/350L-ET<br>SAL107/350J-ET | 380-3       | 1644      | 3.3         | 1380         | 6×2.3            | 2×2.34    | 18.5       |
| SAL261/350M-ET<br>SAL175/350L-ET<br>SAL128/350J-ET | 380-3       | 1644      | 3.3         | 1380         | 6×2.3            | 2×2.34    | 18.5       |
| SAL232/450M-ET<br>SAL156/450L-ET<br>SAL114/450J-ET | 380-3       | 2192      | 4.4         | 1380         | 4×3.0            | 2×3.1     | 18.2       |
| SAL290/450M-ET<br>SAL195/450L-ET<br>SAL142/450J-ET | 380-3       | 2192      | 4.4         | 1380         | 6×3.0            | 2×3.1     | 24.2       |
| SAL348/450M-ET<br>SAL234/450L-ET<br>SAL170/450J-ET | 380-3       | 2192      | 4.4         | 1380         | 6×3.0            | 2×3.1     | 24.2       |
| SAL100/163M-ET<br>SAL67/163L-ET<br>SAL49/163J-ET   | 380-3       | 937       | 1.75        | 1378         | 6×1.16           | 2×1.28    | 9.52       |
| SAL125/163M-ET<br>SAL83/163L-ET<br>SAL61/163J-ET   | 380-3       | 937       | 1.75        | 1378         | 9×1.16           | 2×1.28    | 13.0       |
| SAL150/163M-ET<br>SAL100/163L-ET<br>SAL73/163J-ET  | 380-3       | 937       | 1.75        | 1378         | 9×1.16           | 2×1.28    | 13.0       |
| SAL199/263M-ET<br>SAL133/263L-ET<br>SAL97/263J-ET  | 380-3       | 1874      | 3.5         | 1378         | 6×2.12           | 2×2.24    | 17.2       |
| SAL249/263M-ET<br>SAL167/263L-ET<br>SAL122/263J-ET | 380-3       | 1874      | 3.5         | 1378         | 9×2.12           | 2×2.24    | 23.6       |
| SAL299/263M-ET<br>SAL200/263L-ET<br>SAL146/263J-ET | 380-3       | 1874      | 3.5         | 1378         | 9×2.12           | 2×2.24    | 23.6       |
| SAL299/363M-ET<br>SAL200/363L-ET<br>SAL146/363J-ET | 380-3       | 2811      | 5.25        | 1378         | 6×3.1            | 2×3.2     | 25.0       |
| SAL373/363M-ET<br>SAL250/363L-ET<br>SAL182/363J-ET | 380-3       | 2811      | 5.25        | 1378         | 9×3.1            | 2×3.2     | 34.3       |
| SAL448/363M-ET<br>SAL300/363L-ET<br>SAL219/363J-ET | 380-3       | 2811      | 5.25        | 1378         | 9×3.1            | 2×3.2     | 34.3       |

Electrical parameters reproduced exactly from the supplied SAL source sheet.  
Grouped model designations share the values shown across their row.



## Outline and Installation Dimensions

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### 5. Outline and Installation Dimensions (mm)

| Model      | Outline Dimensions (mm) |     |      | Installation Dimensions (mm) |      |      |      |      |    |     |              |
|------------|-------------------------|-----|------|------------------------------|------|------|------|------|----|-----|--------------|
|            | L                       | W   | H    | A                            | B    | B1   | B2   | B3   | B4 | C   | Install Hole |
| SAL*/135** | 1000                    | 515 | 590  | 380                          | 530  | /    | /    | /    | /  | 300 | 4-φ13        |
| SAL*/235** | 1500                    | 515 | 590  | 380                          | 1030 | /    | /    | /    | /  | 300 | 4-φ13        |
| SAL*/335** | 2000                    | 515 | 590  | 380                          | 1530 | /    | /    | /    | /  | 300 | 4-φ13        |
| SAL*/435** | 2500                    | 515 | 590  | 380                          | 2030 | /    | 1000 | /    | /  | 300 | 6-φ13        |
| SAL*/140** | 1150                    | 540 | 730  | 430                          | 680  | /    | /    | /    | /  | 400 | 4-φ13        |
| SAL*/240** | 1800                    | 540 | 730  | 430                          | 1330 | /    | /    | /    | /  | 400 | 4-φ13        |
| SAL*/340** | 2500                    | 540 | 730  | 430                          | 2030 | /    | /    | /    | /  | 400 | 4-φ13        |
| SAL*/440** | 3100                    | 540 | 730  | 430                          | 2630 | /    | 1300 | /    | /  | 400 | 6-φ13        |
| SAL*/540** | 3750                    | 540 | 730  | 430                          | 3280 | /    | 1300 | 1950 | /  | 400 | 8-φ13        |
| SAL*/150** | 1400                    | 700 | 830  | 530                          | 930  | /    | /    | /    | /  | 500 | 4-φ13        |
| SAL*/250** | 2300                    | 700 | 830  | 530                          | 1830 | 900  | /    | /    | /  | 500 | 6-φ13        |
| SAL*/350** | 3200                    | 700 | 830  | 530                          | 2730 | 900  | 1800 | /    | /  | 500 | 8-φ13        |
| SAL*/450** | 4100                    | 700 | 830  | 530                          | 3630 | 900  | 1800 | 2700 | /  | 500 | 10-φ13       |
| SAL*/163** | 1750                    | 810 | 1030 | 620                          | 1230 | /    | /    | /    | /  | 600 | 4-φ13        |
| SAL*/263** | 2950                    | 810 | 1030 | 620                          | 2430 | 1200 | /    | /    | /  | 600 | 6-φ13        |
| SAL*/363** | 4150                    | 810 | 1030 | 620                          | 3630 | 1200 | 2400 | /    | /  | 600 | 8-φ13        |

### Original Engineering Views

