# D&N Series Air Coolers








Product Description:

- ★ Power Painting Steel Body;
- ★ Defrosting with stainless steel electric heater;
- ★ Double layer drain plate keep the condensate water from frozen.



Nomenclature:

## LSQ-03ASLZ

**D :** **Evaporator with Checking Door**

**D series:**

1. Supcool classical design for evaporator with checking door;
2. Water defrosting is optional; Long distance air throw is optional.

**N Series:**

1. N series appearance is based on D series improvement;
2. The front panel improved with reinforced design to drop the noise during the running of our evaporator.

**L :** **Application Temperature**

L: -5°C ~ +5°C D:-15°C ~ -20°C J:Below-25°C

**(S/L) :** **Vacancy: electrical defrosting&standard air throw**

S: water defrosting;
C: Long distance air throw
(Basically increase 1-3m on same model)

**29 :** **Cooling Capacity KW**

**45 :** **Dia.(cm) of Fan Motor**

**3 :** **Quantity of Fan Motors**

**A :** A:380V 3 Phase 50Hz B:220V 1 Phase 50Hz





## DL Chiller Room Air Cooler ( Fin Space 4.5mm)

| Model | | DL2.2/311A | DL3.5/311A | DL4.7/312A | DL6/312A | DL9/352A | DL12.5/402A | DL14.5/402A | DL17/402A | DL25/502A |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ↓T=7K $T_0$=-7°C (R404A/R448A/R449A) | | 2.3 | 3.7 | 4.9 | 6.3 | 9.5 | 13.1 | 15.2 | 17.9 | 26.3 |
| Heat Transfer Area ($m^2$) | | 7 | 11 | 14 | 26 | 35 | 43 | 52 | 61 | 87 |
| Tube Cubage (C) | | 1.4 | 2.4 | 3.1 | 4.4 | 6.1 | 7.9 | 9.4 | 11 | 15.6 |
| Air Flow ($m^3$/h) | | 1500 | 1500 | 3000 | 3000 | 4500 | 7000 | 7000 | 7000 | 12000 |
| Air Throw (m) | | 9 | 9 | 9 | 9 | 10 | 12 | 12 | 12 | 15 |
| Fan Input (m) | | 90 | 90 | 180 | 180 | 280 | 390 | 390 | 390 | 1000 |
| Defrosting (kw) | Coil | 1.0 | 1.5 | 2.7 | 3.6 | 3.6 | 4.8 | 6 | 6.0 | 10.0 |
| | Drain Plate | 0.5 | 0.5 | 0.9 | 0.9 | 1.2 | 1.2 | 1.2 | 1.2 | 4.0 |
| Pipe Dia (mm) | Liquid | ϕ12.7 | ϕ12.7 | ϕ12.7 | ϕ12.7 | ϕ16 | ϕ16 | ϕ16 | ϕ16 | ϕ22 |
| | Gas | ϕ12.7 | ϕ19 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 |

| Model | | DL29/453A | DL36.5/503A | DL42/503A | DL49/503A | DL59/504A | DL70/554A | DL84/554A | DL103/604A | DL112/634A | DL122/634A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ↓T=7K $T_0$=-7°C (R404A/R448A/R449A) | | 30.5 | 38.3 | 44.1 | 51.5 | 62.0 | 73.5 | 88.2 | 108.2 | 117.6 | 128.1 |
| Heat Transfer Area ($m^2$) | | 104 | 122 | 156 | 182 | 208 | 260 | 306 | 371 | 390 | 463 |
| Tube Cubage (C) | | 19.1 | 22.4 | 25.6 | 32 | 38.7 | 45.1 | 58 | 70.9 | 77.3 | 83.7 |
| Air Flow ($m^3$/h) | | 13500 | 18000 | 18000 | 18000 | 24000 | 30000 | 30000 | 42000 | 46000 | 46000 |
| Air Throw (m) | | 14 | 15 | 15 | 15 | 15 | 18 | 18 | 18 | 18 | 20 |
| Fan Input (m) | | 840 | 1500 | 1500 | 1500 | 2000 | 3000 | 3000 | 3400 | 3520 | 3520 |
| Defrosting (kw) | Coil | 10.0 | 10.0 | 12.0 | 12.0 | 15.6 | 15.6 | 23.4 | 26 | 31.2 | 33.8 |
| | Drain Plate | 4.0 | 4.0 | 4.0 | 4.0 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Pipe Dia (mm) | Liquid | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 | ϕ35 |
| | Gas | ϕ35 | ϕ42 | ϕ42 | ϕ54 | ϕ54 | ϕ54 | ϕ54 | ϕ60 | ϕ60 | ϕ60 |

## DD Freezer Room Air Cooler ( Fin Space 6.0 mm)

| Model | | DD1.4/311A | DD2.3/311A | DD3/312A | DD4.5/312A | DD6/352A | DD7.5/402A | DD9/402A | DD11/402A | DD15.5/502A |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ↓T=7K $T_0$=-25°C (R404A/R448A/R449A) | | 1.5 | 2.4 | 3.2 | 4.7 | 6.3 | 7.9 | 9.5 | 11.6 | 16.3 |
| Heat Transfer Area ($m^2$) | | 5.5 | 8.5 | 11 | 20 | 27 | 33 | 40 | 47 | 67 |
| Tube Cubage (C) | | 1.4 | 2.4 | 3.1 | 4.4 | 6.1 | 7.9 | 9.4 | 11 | 15.6 |
| Air Flow ($m^3$/h) | | 1500 | 1500 | 3000 | 3000 | 4500 | 7000 | 7000 | 7000 | 12000 |
| Air Throw (m) | | 9 | 9 | 9 | 9 | 10 | 12 | 12 | 12 | 15 |
| Fan Input (W) | | 90 | 90 | 180 | 180 | 280 | 390 | 390 | 390 | 1000 |
| Defrosting (kw) | Coil | 1.0 | 1.5 | 2.7 | 3.6 | 3.6 | 4.8 | 6.0 | 6.0 | 7.5 |
| | Drain Plate | 0.5 | 0.5 | 0.9 | 0.9 | 1.2 | 1.2 | 1.2 | 1.2 | 3.0 |
| Pipe Dia (mm) | Liquid | ϕ12.7 | ϕ12.7 | ϕ12.7 | ϕ12.7 | ϕ16 | ϕ16 | ϕ16 | ϕ16 | ϕ22 |
| | Gas | ϕ12.7 | ϕ19 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 |

| Model | | DD19/453A | DD24/503A | DD29/503A | DD32/503A | DD38/504A | DD47/554A | DD58/554A | DD72/604A | DD79/634A | DD88/634A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ↓T=7K $T_0$=-25°C (R404A/R448A/R449A) | | 20 | 25.2 | 30.5 | 33.6 | 39.9 | 49.4 | 60.9 | 75.6 | 83 | 92.4 |
| Heat Transfer Area ($m^2$) | | 80 | 94 | 120 | 140 | 160 | 200 | 235 | 285 | 300 | 356 |
| Tube Cubage (C) | | 19.1 | 22.4 | 25.6 | 32 | 38.7 | 45.1 | 58 | 70.9 | 77.3 | 83.7 |
| Air Flow ($m^3$/h) | | 13500 | 18000 | 18000 | 18000 | 24000 | 30000 | 30000 | 42000 | 46000 | 46000 |
| Air Throw (m) | | 14 | 15 | 15 | 15 | 15 | 18 | 18 | 18 | 18 | 20 |
| Fan Input (W) | | 840 | 1500 | 1500 | 1500 | 2000 | 3000 | 3000 | 3400 | 3520 | 3520 |
| Defrosting (kw) | Coil | 10.0 | 10.0 | 12.0 | 12.0 | 15.6 | 15.6 | 23.4 | 26 | 31.2 | 33.8 |
| | Drain Plate | 4.0 | 4.0 | 4.0 | 4.0 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Pipe Dia (mm) | Liquid | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 | ϕ35 |
| | Gas | ϕ35 | ϕ42 | ϕ42 | ϕ54 | ϕ54 | ϕ54 | ϕ54 | ϕ60 | ϕ60 | ϕ60 |

## DJ Blast Freezer Air Cooler ( Fin Space 9.0mm)

| Model | | DJ1.7/311A | DJ2.2/312A | DJ2.7/312A | DJ4.2/352A | DJ5.6/402A | DJ6.8/402A | DJ7.8/402A | DJ11.5/502A | DJ14/453A |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-32°C (R404A/R448A/R449A) | | 1.8 | 2.3 | 2.8 | 4.4 | 5.9 | 7.1 | 8.2 | 12.1 | 14.7 |
| Area ($m^2$) | | 6 | 8 | 14 | 19 | 23 | 28 | 33 | 47 | 56 |
| Tube Cubage (C) | | 2.4 | 3.1 | 4.4 | 6.1 | 7.9 | 9.4 | 11 | 15.6 | 19.1 |
| Air Flow ($m^3$/h) | | 1500 | 3000 | 3000 | 4500 | 7000 | 7000 | 7000 | 12000 | 13500 |
| Air Throw (m) | | 9 | 9 | 9 | 10 | 12 | 12 | 12 | 15 | 14 |
| Fan Input (W) | | 90 | 180 | 180 | 280 | 390 | 390 | 390 | 1000 | 840 |
| Defrosting (kw) | Coil | 1.5 | 2.7 | 3.6 | 3.6 | 4.8 | 6 | 6.0 | 7.5 | 10.0 |
| | Drain Plate | 0.5 | 0.9 | 0.9 | 1.2 | 1.2 | 1.2 | 1.2 | 3.0 | 4.0 |
| Pipe Dia (mm) | Liquid | ϕ12.7 | ϕ12.7 | ϕ12.7 | ϕ16 | ϕ16 | ϕ16 | ϕ16 | ϕ22 | ϕ22 |
| | Gas | ϕ19 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 | ϕ35 |

| Model | | DJ17/503A | DJ20/503A | DJ23/503A | DJ26/504A | DJ31/554A | DJ40/554A | DJ49/604A | DJ53.6/634A | DJ58/634A |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-32°C (R404A/R448A/R449A) | | 17.9 | 21 | 24.2 | 27.3 | 32.6 | 42 | 51.5 | 56 | 61 |
| Area ($m^2$) | | 66 | 84 | 98 | 112 | 140 | 165 | 200 | 210 | 249 |
| Tube Cubage (C) | | 22.4 | 25.6 | 32 | 38.7 | 45.1 | 58 | 70.9 | 77.3 | 83.7 |
| Air Flow ($m^3$/h) | | 18000 | 18000 | 18000 | 24000 | 30000 | 30000 | 42000 | 46000 | 46000 |
| Air Throw (m) | | 15 | 15 | 15 | 15 | 18 | 18 | 18 | 18 | 20 |
| Fan Input (W) | | 1500 | 1500 | 1500 | 2000 | 3000 | 3000 | 3400 | 3520 | 3520 |
| Defrosting (kw) | Coil | 10.0 | 12.0 | 12.0 | 15.6 | 15.6 | 23.4 | 26 | 31.2 | 33.8 |
| | Drain Plate | 4.0 | 4.0 | 4.0 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 | 5.2 |
| Pipe Dia (mm) | Liquid | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ22 | ϕ28 | ϕ28 | ϕ35 | ϕ35 |
| | Gas | ϕ42 | ϕ42 | ϕ54 | ϕ54 | ϕ54 | ϕ54 | ϕ60 | ϕ60 | ϕ60 |

## NL Type Air Cooler ( Fin Space 4.5mm)

| Model | | NL2.0/10 | NL3.0/15 | NL5.0/25 | NL8.0/40 | NL11.2/55 | NL16.2/80 | NL21.3/105 | NL25.0/125 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-7°C (R404A/R448A/R449A) | | 2 | 3 | 5 | 8 | 11.2 | 16.2 | 21.3 | 25 |
| Fan Motor | Quantity (pc) | 1 | 2 | 3 | 2 | 2 | 2 | 2 | 3 |
| | Dia. (mm) | 350 | 350 | 350 | 400 | 400 | 500 | 500 | 500 |
| | Input (W) | 150 | 150 | 280 | 280 | 280 | 640 | 640 | 640 |
| | Air Flow ($m^3$/h) | 3110 | 3110 | 5100 | 5100 | 8500 | 8500 | 8500 | 8500 |
| Defrost Heater (Kw) | | 2x0.5 | 2x0.9 | 2x1.2 | 3x1.3 | 3x1.3 | 3x1.3 | 3x1.5 | 3x1.9 |
| Pipe Dia (mm) | Liquid (mm) | 12 | 12 | 12 | 16 | 16 | 19 | 19 | 19 |
| | Gas (mm) | 16 | 16 | 16 | 25 | 25 | 38 | 38 | 38 |
| Overall Dimension L×W×H (mm) | | 765×430×480 | 1165×430×480 | 1610×430×480 | 1590×530×560 | 1590×530×560 | 1890×590×660 | 1890×590×660 | 2370×590×660 |

| Model | | NL32.6/160 | NL37.6/185 | NL42.7/210 | NL52.9/260 | NL66.0/330 | NL82.0/410 | NL94.0/470 | NL116/580 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-7°C (R404A/R448A/R449A) | | 32.6 | 37.6 | 42.7 | 52.9 | 66 | 82 | 94 | 116 |
| Fan Motor | Quantity (pc) | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| | Dia. (mm) | 500 | 500 | 500 | 550 | 550 | 600 | 710 | 710 |
| | Input (W) | 640 | 640 | 640 | 850 | 850 | 1100 | 1360 | 1760 |
| | Air Flow ($m^3$/h) | 8500 | 8500 | 8500 | 10500 | 10500 | 14500 | 19700 | 23500 |
| Defrost Heater (Kw) | | 3x2.4 | 3x2.4 | 3x2.6 | 4x2.6 | 5x2.6 | 5x2.8 | 6x2.4 | 6x2.6 |
| Pipe Dia (mm) | Liquid (mm) | 25 | 25 | 25 | 25 | 25 | 25 | 28 | 28 |
| | Gas (mm) | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Overall Dimension L×W×H (mm) | | 2390×590×660 | 3190×590×660 | 3590×590×660 | 3190×710×760 | 3390×710×760 | 3590×710×860 | 3090×810×960 | 3090×860×960 |

Remark: Coldroom temp. 0°C ; △ T=8°C





## ND Type Air Cooler ( Fin Space 6.0mm)

| Model | | ND1.3/7 | ND2.2/12 | ND2.8/15 | ND3.7/22 | ND5.6/30 | ND7.5/40 | ND11.2/60 | ND14.9/80 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-25°C (R404A/R448A/R449A) | | 1.3 | 2.2 | 2.8 | 3.7 | 5.6 | 7.5 | 11.2 | 14.9 |
| Fan Motor | Quantity (pc) | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 2 |
| | Dia. (mm) | 350 | 350 | 350 | 350 | 400 | 400 | 500 | 500 |
| | Input (W) | 150 | 150 | 150 | 150 | 280 | 280 | 640 | 640 |
| | Air Flow ($m^3$/h) | 3110 | 3110 | 3110 | 3110 | 5100 | 5100 | 8500 | 8500 |
| Defrost Heater (Kw) | | 3x0.5 | 3x0.9 | 3x0.9 | 3x1.2 | 3x1.5 | 3x1.5 | 6x1.3 | 6x1.5 |
| Pipe Dia (mm) | Liquid (mm) | 12 | 12 | 12 | 12 | 16 | 16 | 19 | 19 |
| | Gas (mm) | 16 | 16 | 16 | 16 | 25 | 25 | 38 | 38 |
| Overall Dimension L×W×H (mm) | | 765×430×480 | 1165×430×480 | 1165×430×480 | 1610×430×480 | 1590×530×560 | 1590×530×560 | 1890×590×660 | 1890×590×660 |

| Model | | ND18.7/100 | ND22.4/120 | ND26.2/140 | ND30.0/160 | ND37.4/200 | ND46.2/250 | ND57.3/310 | ND66.6/360 | ND81.4/450 |
|---|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-25°C (R404A/R448A/R449A) | | 18.7 | 22.4 | 26.2 | 30 | 37.4 | 46.2 | 57.3 | 66.6 | 81.4 |
| Fan Motor | Quantity (pc) | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| | Dia. (mm) | 500 | 500 | 500 | 500 | 550 | 550 | 600 | 710 | 710 |
| | Input (W) | 640 | 640 | 640 | 640 | 850 | 850 | 1100 | 1360 | 1760 |
| | Air Flow ($m^3$/h) | 8500 | 8500 | 8500 | 8500 | 10500 | 10500 | 14500 | 19700 | 23500 |
| Defrost Heater (Kw) | | 6x1.9 | 6x2.4 | 6x2.6 | 6x2.8 | 7x2.6 | 9x2.6 | 9x2.8 | 12x2.4 | 12x2.6 |
| Pipe Dia (mm) | Liquid (mm) | 19 | 25 | 25 | 25 | 25 | 25 | 25 | 28 | 28 |
| | Gas (mm) | 38 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Overall Dimension L×W×H (mm) | | 2370×590×660 | 2390×590×660 | 3190×590×660 | 3590×590×660 | 3190×710×760 | 3390×710×760 | 3590×710×860 | 3090×810×960 | 3090×860×960 |

Remark: Coldroom temp. -18°C ; △ T =7°C

## NJ Type Air Cooler ( Fin Space 9.0mm)

| Model | | NJ1.2/8 | NJ2.1/15 | NJ3.6/20 | NJ4.6/30 | NJ7.1/40 | NJ8.9/55 | NJ11.6/70 | NJ14.3/85 |
|---|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-32°C (R404A/R448A/R449A) | | 1.2 | 2.1 | 3.6 | 4.6 | 7.1 | 8.9 | 11.6 | 14.3 |
| Fan Motor | Quantity (pc) | 2 | 3 | 2 | 2 | 2 | 2 | 3 | 3 |
| | Dia. (mm) | 350 | 350 | 350 | 400 | 400 | 500 | 500 | 500 |
| | Input (W) | 150 | 150 | 150 | 280 | 280 | 640 | 640 | 640 |
| | Air Flow ($m^3$/h) | 3110 | 3110 | 5100 | 5100 | 8500 | 8500 | 8500 | 8500 |
| Defrost Heater (Kw) | | 3x0.9 | 3x1.2 | 3x1.5 | 3x1.5 | 6x1.3 | 6x1.5 | 6x1.9 | 6x2.4 |
| Pipe Dia (mm) | Liquid (mm) | 12 | 12 | 16 | 16 | 19 | 19 | 19 | 19 |
| | Gas (mm) | 16 | 16 | 25 | 25 | 38 | 38 | 38 | 38 |
| Overall Dimension L×W×H (mm) | | 1165×430×480 | 1610×430×480 | 1590×530×560 | 1590×530×560 | 1890×590×660 | 1890×590×660 | 2370×590×660 | 2390×590×660 |

| Model | | NJ17.1/100 | NJ19.6/115 | NJ23.1/140 | NJ28/170 | NJ34.6/210 | NJ41.2/250 | NJ49.5/300 |
|---|---|---|---|---|---|---|---|---|
| Capacity kw ;T=7K $T_{ET}$=-32°C (R404A/R448A/R449A) | | 17.1 | 19.6 | 23.1 | 28 | 34.6 | 41.2 | 49.5 |
| Fan Motor | Quantity (pc) | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| | Dia. (mm) | 500 | 500 | 550 | 550 | 600 | 710 | 710 |
| | Input (W) | 640 | 640 | 850 | 850 | 1100 | 1360 | 1760 |
| | Air Flow ($m^3$/h) | 8500 | 8500 | 10500 | 10500 | 14500 | 19700 | 23500 |
| Defrost Heater (Kw) | | 6x2.6 | 6x2.8 | 7x2.6 | 9x2.6 | 9x2.8 | 12x2.4 | 12x2.6 |
| Pipe Dia (mm) | Liquid (mm) | 25 | 25 | 25 | 25 | 25 | 28 | 28 |
| | Gas (mm) | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Overall Dimension L×W×H (mm) | | 3190×590×660 | 3590×590×660 | 3190×710×760 | 3390×710×760 | 3590×710×860 | 3090×810×960 | 3090×860×960 |

Remark: Coldroom temp. -25°C ; △ T =6°C