DAIKIN

## Air Conditioning

# Technical Data

**Outdoor unit-Heatpump**


EEDEN12-005

RYN-L

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## RYN-L

# 1 Features

- Heat pumps are all-in-one heating & cooling solutions for residential & commercial applications. They extract thermal energy from the ambient air and are therfore more energy efficient and emit far less CO2 than comparable fossil fuel based boiler systems.
- Energy efficient units: up to class A energy labels
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- Anti-corrosion treated heat exchangers protect the outdoor unit
- Outdoor units for pair application



# 2 Specifications



| 2-1 Nominal Capacity And Nominal Input | | | | | FTYN25LV1B / RYN25LV1B | FTYN35LV1B / RYN35LV1B | FTYN50LV1B / RYN50LV1B | FTYN60LV1B / RYN60LV1B |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | Nom. | | | kW | 2.650 (3) | 3.300 (3) | 5.250 (3) | 6.010 (3) |
| | | | | Btu/h | 9,040 (3) | 11,300 (3) | 17,900 (3) | 20,500 (3) |
| Heating capacity | Nom. | | | kW | 2.800 (4) | 3.470 (4) | 5.550 (4) | 6.350 (4) |
| | | | | Btu/h | 9,550 (4) | 11,800 (4) | 18,900 (4) | 21,700 (4) |
| Power input | Cooling | Nom. | | kW | 0.825 | 1.080 | 1.635 | 1.870 |
| | Heating | Nom. | | kW | 0.775 | 0.980 | 1.480 | 1.740 |
| EER | | | | | 3.21 | 3.06 | 3.21 | |
| COP | | | | | 3.61 | 3.54 | 3.75 | 3.65 |
| Annual energy consumption | | | | kWh | 412 | 540 | 818 | 935 |
| Energy label | Cooling | | | | A | B | A | |
| | Heating | | | | A | B | A | |

**Notes**

(1) Energy label: scale from A (most efficient) to G (less efficient)

(2) Annual energy consumption: based on average use of 500 running hours per year at full load (nominal conditions)

(3) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB, 24ºCWB

(4) Heating: indoor temp. 20ºCDB; outdoor temp. 7ºCDB, 6ºCWB

(5) All units are being tested and comply to ISO 5151 (Non-ducted unit)

(6) All specifications are subjected to change by the manufacturer without prior notice.

| 2-2 Technical Specifications | | | | | | RYN25L | RYN35L | RYN50L | RYN60L |
|---|---|---|---|---|---|---|---|---|---|
| Casing | Colour | | | | | Light grey | | | |
| Dimensions | Unit | Height | | | mm | 521 | | 651 | 753 |
| | | Width | | | mm | 700 | | 855 | |
| | | Depth | | | mm | 250 | | 328 | |
| | Packed unit | Height | | | mm | 596 | | 693 | 793 |
| | | Width | | | mm | 803 | | 990 | |
| | | Depth | | | mm | 323 | | 415 | |
| Weight | Unit | | | | kg | 29 | 31 | 49 | 50 |
| Heat exchanger | Rows | Quantity | | | | 1 | | 2 | |
| | Face area | | | | m² | 0.35 | 0.36 | 0.50 | 0.61 |
| | Tube material | | | | | Seamless Inner Grooved Copper | | | |
| | Tube diameter | | | | mm | 7 | 9.52 | 7 | |
| | Fin | Type | | | | Aluminium (Raise lance) | Aluminium (Slit) | Aluminium (Raise lance) | Aluminium (Corrugated) |
| Fan | Type | | | | | Propeller fan | | | |
| | Air flow rate | Cooling | Nom. | | m³/min | 23.76 | 27.42 | 37.08 | 41.04 |
| | | | | | cfm | 840 | 969 | 1,310 | 1,450 |
| | | | Super low | | m³/min | - | | | |
| | | | | | cfm | - | | | |
| | | Heating | Nom. | | m³/min | 23.76 | 27.42 | 37.08 | 41.04 |
| | | | | | cfm | 840 | 969 | 1,310 | 1,450 |
| | | | Super low | | m³/min | - | | | |
| | | | | | cfm | - | | | |
| Fan motor | Model | | | | | Induction | | | |
| | Index of Protection | | | | | 23 | 44 | | 23 |
| | Insulation grade | | | | | B | | | F |
| | Poles | | | | | 6 | | 8 | 6 |
| | Output | | | | W | 21 | 30 | 43 | 60 |
| | Drive | | | | | Direct drive | | | |
| | Speed | Cooling | Super low | | rpm | - | | | |
| | | Heating | Super low | | rpm | - | | | |
| Sound pressure level | Nom. | | | | dBA | 46 | 49 | 52 | |

# 2 Specifications



| 2-2 Technical Specifications | | | | | RYN25L | RYN35L | RYN50L | RYN60L |
|---|---|---|---|---|---|---|---|---|
| Compressor | Oil Amount | | | cm³ | 350 | | 670 | |
| | Type | | | | Rotary | | | |
| | Oil Type | | | | FV50S | | | |
| | Power input | Cooling | Nom. | W | 736 | 981 | 1,473 | 1,675 |
| | | Heating | Nom. | W | 686 | 879 | 1,318 | 1,545 |
| | Running current | Cooling | Nom. | A | 3.28 | 4.53 | 6.46 | 7.38 |
| | | Heating | Nom. | A | 3.05 | 4.08 | 5.76 | 6.80 |
| | Locked rotor amp. | | | A | 15.8 | 23.0 | 32.0 | 32.3 |
| Operation range | Cooling | Ambient | Min. | °CDB | 19 | | | |
| | | | Max. | °CDB | 46 | | | |
| | Heating | Ambient | Min. | °CWB | -9 | | | |
| | | | Max. | °CWB | 18 | | | |
| Refrigerant | Type | | | | R-410A | | | |
| | Charge | | | kg | 0.80 | 0.85 | 1.45 | 1.65 |
| Piping connections | Liquid | Type | | | Flare valve | | | |
| | | OD | | mm | 6.35 | | | |
| | Gas | Type | | | Flare valve | | | |
| | | OD | | mm | 9.52 | 12.70 | | 15.88 |
| | Drain | ID | | mm | - | | | |
| | Piping length | OU - IU | Max. | m | 12 | | 15 | |
| | Level difference | IU - OU | Max. | m | 5 | | 8 | |

| 2-3 Electrical Specifications | | | | RYN25L | RYN35L | RYN50L | RYN60L |
|---|---|---|---|---|---|---|---|
| Power supply | Name | | | V1 | | | |
| | Phase | | | 1~ | | | |
| | Frequency | | Hz | 50 | | | |
| | Voltage | | V | 220-240 | | | |
| Current | Nominal running current (RLA) | Cooling | A | 0.23 | 0.26 | 0.46 | 0.54 |
| | | Heating | A | 0.23 | 0.26 | 0.46 | 0.54 |

**Notes**

(1) All specifications are subjected to change by the manufacturer without prior notice.

# 3 Capacity tables

## 3 - 1 Cooling/Heating Capacity Tables

### FTYN25L+RYN25L

#### Cooling

| AFR (CFM) | EWB | EDB | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 19°C | | | 25°C | | | 30°C | | | 35°C | | | 40°C | | | 46°C | | |
| | | | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 225 | 16°C | 21°C | 2.50 | 1.93 | 0.63 | 2.41 | 1.88 | 0.68 | 2.32 | 1.83 | 0.73 | 2.23 | 1.78 | 0.80 | 2.04 | 1.65 | 0.86 | 1.89 | 1.56 | 0.95 |
| | | 24°C | 2.50 | 2.31 | 0.63 | 2.41 | 2.26 | 0.68 | 2.32 | 2.21 | 0.73 | 2.23 | 2.15 | 0.80 | 2.05 | 2.01 | 0.86 | 1.90 | 1.90 | 0.95 |
| | | 27°C | 2.52 | 2.52 | 0.63 | 2.44 | 2.44 | 0.68 | 2.35 | 2.35 | 0.74 | 2.26 | 2.26 | 0.80 | 2.09 | 2.09 | 0.87 | 1.94 | 1.94 | 0.96 |
| | | 30°C | 2.60 | 2.60 | 0.63 | 2.52 | 2.52 | 0.68 | 2.45 | 2.45 | 0.74 | 2.37 | 2.37 | 0.80 | 2.20 | 2.20 | 0.87 | 2.05 | 2.05 | 0.97 |
| | 19°C | 24°C | 2.76 | 1.80 | 0.64 | 2.66 | 1.76 | 0.69 | 2.56 | 1.71 | 0.75 | 2.46 | 1.66 | 0.81 | 2.26 | 1.55 | 0.88 | 2.09 | 1.46 | 0.97 |
| | | 27°C | 2.76 | 2.06 | 0.64 | 2.66 | 2.02 | 0.69 | 2.56 | 1.97 | 0.75 | 2.46 | 1.92 | 0.81 | 2.26 | 1.80 | 0.88 | 2.09 | 1.70 | 0.97 |
| | | 30°C | 2.76 | 2.55 | 0.64 | 2.67 | 2.49 | 0.69 | 2.57 | 2.44 | 0.75 | 2.47 | 2.38 | 0.81 | 2.28 | 2.22 | 0.88 | 2.11 | 2.10 | 0.97 |
| | | 33°C | 2.79 | 2.79 | 0.64 | 2.70 | 2.70 | 0.69 | 2.62 | 2.62 | 0.75 | 2.53 | 2.53 | 0.81 | 2.34 | 2.34 | 0.88 | 2.19 | 2.19 | 0.98 |
| | 22°C | 27°C | 3.03 | 1.77 | 0.65 | 2.93 | 1.72 | 0.70 | 2.82 | 1.68 | 0.76 | 2.71 | 1.63 | 0.83 | 2.49 | 1.52 | 0.90 | 2.31 | 1.43 | 0.99 |
| | | 30°C | 3.03 | 2.15 | 0.65 | 2.93 | 2.11 | 0.70 | 2.82 | 2.06 | 0.76 | 2.71 | 2.01 | 0.83 | 2.49 | 1.88 | 0.90 | 2.31 | 1.78 | 0.99 |
| | | 33°C | 3.03 | 2.51 | 0.65 | 2.93 | 2.46 | 0.70 | 2.82 | 2.42 | 0.76 | 2.71 | 2.37 | 0.83 | 2.50 | 2.22 | 0.90 | 2.31 | 2.11 | 0.99 |
| | | 36°C | 3.04 | 2.85 | 0.65 | 2.94 | 2.79 | 0.70 | 2.84 | 2.73 | 0.76 | 2.74 | 2.67 | 0.83 | 2.52 | 2.51 | 0.90 | 2.35 | 2.35 | 0.99 |
| 282 | 16°C | 21°C | 2.60 | 2.02 | 0.63 | 2.51 | 1.96 | 0.68 | 2.41 | 1.91 | 0.74 | 2.31 | 1.86 | 0.80 | 2.12 | 1.73 | 0.87 | 1.96 | 1.63 | 0.96 |
| | | 24°C | 2.61 | 2.45 | 0.63 | 2.51 | 2.39 | 0.68 | 2.42 | 2.33 | 0.74 | 2.32 | 2.27 | 0.80 | 2.13 | 2.12 | 0.87 | 1.97 | 1.97 | 0.96 |
| | | 27°C | 2.64 | 2.64 | 0.63 | 2.55 | 2.55 | 0.69 | 2.46 | 2.46 | 0.74 | 2.37 | 2.37 | 0.81 | 2.19 | 2.19 | 0.88 | 2.04 | 2.04 | 0.97 |
| | | 30°C | 2.75 | 2.75 | 0.64 | 2.67 | 2.67 | 0.69 | 2.59 | 2.59 | 0.75 | 2.50 | 2.50 | 0.81 | 2.32 | 2.32 | 0.88 | 2.17 | 2.17 | 0.98 |
| | 19°C | 24°C | 2.86 | 1.91 | 0.64 | 2.76 | 1.86 | 0.70 | 2.66 | 1.81 | 0.75 | 2.55 | 1.76 | 0.82 | 2.34 | 1.64 | 0.89 | 2.16 | 1.55 | 0.98 |
| | | 27°C | 2.87 | 2.20 | 0.64 | 2.77 | 2.15 | 0.70 | 2.66 | 2.10 | 0.75 | 2.56 | 2.05 | 0.82 | 2.35 | 1.92 | 0.89 | 2.17 | 1.81 | 0.98 |
| | | 30°C | 2.88 | 2.71 | 0.64 | 2.78 | 2.65 | 0.70 | 2.68 | 2.59 | 0.76 | 2.58 | 2.53 | 0.82 | 2.38 | 2.36 | 0.89 | 2.20 | 2.20 | 0.98 |
| | | 33°C | 2.93 | 2.93 | 0.65 | 2.84 | 2.84 | 0.70 | 2.75 | 2.75 | 0.76 | 2.66 | 2.66 | 0.82 | 2.46 | 2.46 | 0.90 | 2.30 | 2.30 | 0.99 |
| | 22°C | 27°C | 3.15 | 1.87 | 0.65 | 3.04 | 1.82 | 0.71 | 2.92 | 1.78 | 0.77 | 2.81 | 1.73 | 0.83 | 2.58 | 1.61 | 0.90 | 2.39 | 1.52 | 1.00 |
| | | 30°C | 3.15 | 2.29 | 0.65 | 3.04 | 2.24 | 0.71 | 2.93 | 2.19 | 0.77 | 2.81 | 2.14 | 0.83 | 2.58 | 2.01 | 0.90 | 2.39 | 1.90 | 1.00 |
| | | 33°C | 3.16 | 2.68 | 0.66 | 3.05 | 2.63 | 0.71 | 2.93 | 2.58 | 0.77 | 2.82 | 2.52 | 0.83 | 2.59 | 2.37 | 0.91 | 2.40 | 2.25 | 1.00 |
| | | 36°C | 3.18 | 3.03 | 0.66 | 3.07 | 2.98 | 0.71 | 2.97 | 2.92 | 0.77 | 2.86 | 2.85 | 0.84 | 2.64 | 2.64 | 0.91 | 2.46 | 2.46 | 1.00 |
| 342 | 16°C | 21°C | 2.70 | 2.10 | 0.64 | 2.60 | 2.05 | 0.69 | 2.50 | 2.00 | 0.75 | 2.39 | 1.94 | 0.81 | 2.20 | 1.81 | 0.88 | 2.02 | 1.70 | 0.97 |
| | | 24°C | 2.71 | 2.56 | 0.64 | 2.61 | 2.50 | 0.69 | 2.51 | 2.43 | 0.75 | 2.41 | 2.37 | 0.81 | 2.22 | 2.21 | 0.88 | 2.05 | 2.05 | 0.97 |
| | | 27°C | 2.75 | 2.75 | 0.64 | 2.66 | 2.66 | 0.69 | 2.57 | 2.57 | 0.75 | 2.48 | 2.48 | 0.81 | 2.29 | 2.29 | 0.88 | 2.14 | 2.14 | 0.98 |
| | | 30°C | 2.89 | 2.89 | 0.65 | 2.81 | 2.81 | 0.70 | 2.72 | 2.72 | 0.76 | 2.63 | 2.63 | 0.82 | 2.44 | 2.44 | 0.90 | 2.28 | 2.28 | 0.99 |
| | 19°C | 24°C | 2.97 | 2.02 | 0.65 | 2.86 | 1.97 | 0.70 | 2.75 | 1.92 | 0.76 | 2.64 | 1.87 | 0.82 | 2.42 | 1.74 | 0.89 | 2.24 | 1.64 | 0.98 |
| | | 27°C | 2.98 | 2.33 | 0.65 | 2.87 | 2.28 | 0.70 | 2.76 | 2.23 | 0.76 | 2.65 | 2.17 | 0.83 | 2.43 | 2.03 | 0.89 | 2.25 | 1.92 | 0.99 |
| | | 30°C | 3.00 | 2.87 | 0.65 | 2.89 | 2.81 | 0.70 | 2.79 | 2.75 | 0.76 | 2.68 | 2.68 | 0.83 | 2.47 | 2.47 | 0.90 | 2.29 | 2.29 | 0.99 |
| | | 33°C | 3.07 | 3.07 | 0.65 | 2.98 | 2.98 | 0.71 | 2.88 | 2.88 | 0.77 | 2.79 | 2.79 | 0.83 | 2.58 | 2.58 | 0.91 | 2.42 | 2.42 | 1.00 |
| | 22°C | 27°C | 3.26 | 1.97 | 0.66 | 3.14 | 1.93 | 0.72 | 3.02 | 1.88 | 0.78 | 2.90 | 1.83 | 0.84 | 2.66 | 1.71 | 0.91 | 2.46 | 1.61 | 1.00 |
| | | 30°C | 3.26 | 2.43 | 0.66 | 3.15 | 2.39 | 0.72 | 3.03 | 2.34 | 0.78 | 2.91 | 2.28 | 0.84 | 2.67 | 2.14 | 0.91 | 2.47 | 2.03 | 1.00 |
| | | 33°C | 3.27 | 2.85 | 0.66 | 3.16 | 2.80 | 0.72 | 3.04 | 2.74 | 0.78 | 2.93 | 2.68 | 0.84 | 2.69 | 2.51 | 0.91 | 2.49 | 2.39 | 1.01 |
| | | 36°C | 3.30 | 3.22 | 0.66 | 3.20 | 3.16 | 0.72 | 3.09 | 3.09 | 0.78 | 2.98 | 2.98 | 0.85 | 2.75 | 2.75 | 0.92 | 2.57 | 2.57 | 1.01 |

**Remark**

AFR: Air flow rate (CFM)
EWB: Entering wet bulb temp. (°C)
EDB: Entering dry bulb temp. (°C)
TC: Total cooling capacity (kW)
SHC: Sensible heating capacity (kW)
PI: Power input

**Notes**

1 Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2 Shows nominal capacities
3 Direct interpolation is permissible. Do not extrapolate.
4 Unit is able to operate at ambient from 0°C to 46°C without pressure trip.

#### Heating

| Indoor DB°C | Outdoor WB°C | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -9 | | -6 | | -5 | | 6 | | 12 | | 15 | | 18 | |
| | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) |
| 15 | 1.692 | 1.692 | 1.915 | 1.915 | 1.989 | 1.989 | 2.807 | 2.807 | 3.253 | 3.253 | 3.476 | 3.476 | 3.700 | 3.700 |
| 17 | 1.648 | 1.648 | 1.850 | 1.850 | 1.946 | 1.946 | 2.804 | 2.804 | 3.215 | 3.215 | 3.439 | 3.439 | 3.663 | 3.663 |
| 19 | 1.603 | 1.603 | 1.785 | 1.785 | 1.903 | 1.903 | 2.801 | 2.801 | 3.177 | 3.177 | 3.402 | 3.402 | 3.627 | 3.627 |
| 21 | 1.559 | 1.559 | 1.738 | 1.738 | 1.860 | 1.860 | 2.766 | 2.766 | 3.139 | 3.139 | 3.364 | 3.364 | 3.590 | 3.590 |
| 23 | 1.515 | 1.515 | 1.710 | 1.710 | 1.817 | 1.817 | 2.700 | 2.700 | 3.101 | 3.101 | 3.327 | 3.327 | 3.554 | 3.554 |
| 25 | 1.470 | 1.470 | 1.682 | 1.682 | 1.773 | 1.773 | 2.634 | 2.634 | 3.062 | 3.062 | 3.290 | 3.290 | 3.517 | 3.517 |
| 27 | 1.426 | 1.426 | 1.654 | 1.654 | 1.730 | 1.730 | 2.567 | 2.567 | 3.024 | 3.024 | 3.252 | 3.252 | 3.481 | 3.481 |

# 3 Capacity tables

## 3 - 1 Cooling/Heating Capacity Tables

### FTYN35L+RYN35L

**Cooling**

| AFR (CFM) | EWB | EDB | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 19°C | | | 25°C | | | 30°C | | | 35°C | | | 40°C | | | 46°C | | |
| | | | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 242 | 16°C | 21°C | 3.11 | 2.29 | 0.82 | 3.00 | 2.23 | 0.89 | 2.89 | 2.17 | 0.96 | 2.77 | 2.11 | 1.04 | 2.55 | 1.96 | 1.13 | 2.35 | 1.84 | 1.25 |
| | | 24°C | 3.11 | 2.74 | 0.82 | 3.00 | 2.68 | 0.89 | 2.89 | 2.62 | 0.96 | 2.78 | 2.55 | 1.04 | 2.55 | 2.38 | 1.13 | 2.36 | 2.25 | 1.25 |
| | | 27°C | 3.14 | 3.11 | 0.82 | 3.04 | 3.04 | 0.89 | 2.93 | 2.93 | 0.96 | 2.82 | 2.82 | 1.04 | 2.60 | 2.60 | 1.13 | 2.42 | 2.42 | 1.25 |
| | | 30°C | 3.24 | 3.24 | 0.83 | 3.14 | 3.14 | 0.89 | 3.05 | 3.05 | 0.97 | 2.95 | 2.95 | 1.05 | 2.73 | 2.73 | 1.14 | 2.56 | 2.56 | 1.26 |
| | 19°C | 24°C | 3.43 | 2.14 | 0.83 | 3.31 | 2.08 | 0.90 | 3.19 | 2.03 | 0.98 | 3.06 | 1.97 | 1.06 | 2.82 | 1.83 | 1.15 | 2.60 | 1.73 | 1.27 |
| | | 27°C | 3.43 | 2.44 | 0.83 | 3.31 | 2.39 | 0.90 | 3.19 | 2.33 | 0.98 | 3.07 | 2.28 | 1.06 | 2.82 | 2.13 | 1.15 | 2.61 | 2.02 | 1.27 |
| | | 30°C | 3.44 | 3.02 | 0.83 | 3.32 | 2.95 | 0.90 | 3.20 | 2.89 | 0.98 | 3.08 | 2.82 | 1.06 | 2.84 | 2.63 | 1.15 | 2.63 | 2.49 | 1.27 |
| | | 33°C | 3.48 | 3.48 | 0.84 | 3.37 | 3.37 | 0.91 | 3.26 | 3.26 | 0.98 | 3.15 | 3.15 | 1.07 | 2.91 | 2.91 | 1.16 | 2.72 | 2.72 | 1.28 |
| | 22°C | 27°C | 3.77 | 2.09 | 0.85 | 3.64 | 2.04 | 0.92 | 3.51 | 1.99 | 1.00 | 3.37 | 1.93 | 1.08 | 3.10 | 1.80 | 1.17 | 2.87 | 1.70 | 1.29 |
| | | 30°C | 3.78 | 2.55 | 0.85 | 3.65 | 2.49 | 0.92 | 3.51 | 2.44 | 1.00 | 3.37 | 2.38 | 1.08 | 3.10 | 2.23 | 1.17 | 2.87 | 2.11 | 1.29 |
| | | 33°C | 3.78 | 2.98 | 0.85 | 3.65 | 2.92 | 0.92 | 3.51 | 2.86 | 1.00 | 3.38 | 2.80 | 1.08 | 3.11 | 2.63 | 1.17 | 2.88 | 2.50 | 1.29 |
| | | 36°C | 3.79 | 3.38 | 0.85 | 3.67 | 3.31 | 0.92 | 3.54 | 3.24 | 1.00 | 3.41 | 3.17 | 1.08 | 3.14 | 2.97 | 1.18 | 2.92 | 2.82 | 1.30 |
| 298 | 16°C | 21°C | 3.24 | 2.39 | 0.83 | 3.12 | 2.33 | 0.90 | 3.00 | 2.26 | 0.97 | 2.88 | 2.20 | 1.05 | 2.64 | 2.05 | 1.14 | 2.44 | 1.93 | 1.26 |
| | | 24°C | 3.25 | 2.90 | 0.83 | 3.13 | 2.83 | 0.90 | 3.01 | 2.76 | 0.97 | 2.89 | 2.69 | 1.05 | 2.66 | 2.51 | 1.14 | 2.46 | 2.37 | 1.26 |
| | | 27°C | 3.29 | 3.29 | 0.83 | 3.18 | 3.18 | 0.90 | 3.07 | 3.07 | 0.97 | 2.96 | 2.96 | 1.06 | 2.73 | 2.73 | 1.15 | 2.54 | 2.54 | 1.27 |
| | | 30°C | 3.42 | 3.42 | 0.84 | 3.32 | 3.32 | 0.91 | 3.22 | 3.22 | 0.98 | 3.12 | 3.12 | 1.07 | 2.89 | 2.89 | 1.16 | 2.70 | 2.70 | 1.28 |
| | 19°C | 24°C | 3.57 | 2.26 | 0.84 | 3.44 | 2.20 | 0.91 | 3.31 | 2.14 | 0.99 | 3.18 | 2.09 | 1.07 | 2.92 | 1.94 | 1.16 | 2.70 | 1.83 | 1.28 |
| | | 27°C | 3.57 | 2.60 | 0.84 | 3.45 | 2.54 | 0.91 | 3.32 | 2.49 | 0.99 | 3.18 | 2.43 | 1.07 | 2.92 | 2.27 | 1.16 | 2.70 | 2.15 | 1.28 |
| | | 30°C | 3.59 | 3.21 | 0.84 | 3.46 | 3.14 | 0.91 | 3.34 | 3.07 | 0.99 | 3.21 | 2.99 | 1.07 | 2.96 | 2.80 | 1.16 | 2.74 | 2.65 | 1.28 |
| | | 33°C | 3.65 | 3.65 | 0.85 | 3.54 | 3.54 | 0.92 | 3.43 | 3.43 | 0.99 | 3.31 | 3.31 | 1.08 | 3.07 | 3.07 | 1.17 | 2.87 | 2.87 | 1.29 |
| | 22°C | 27°C | 3.92 | 2.21 | 0.86 | 3.78 | 2.16 | 0.93 | 3.64 | 2.10 | 1.01 | 3.50 | 2.05 | 1.09 | 3.21 | 1.91 | 1.18 | 2.97 | 1.80 | 1.30 |
| | | 30°C | 3.92 | 2.71 | 0.86 | 3.79 | 2.66 | 0.93 | 3.64 | 2.60 | 1.01 | 3.50 | 2.54 | 1.09 | 3.22 | 2.38 | 1.18 | 2.98 | 2.26 | 1.30 |
| | | 33°C | 3.93 | 3.18 | 0.86 | 3.79 | 3.12 | 0.93 | 3.65 | 3.06 | 1.01 | 3.51 | 2.99 | 1.09 | 3.23 | 2.81 | 1.19 | 2.99 | 2.66 | 1.31 |
| | | 36°C | 3.95 | 3.59 | 0.86 | 3.83 | 3.53 | 0.93 | 3.69 | 3.45 | 1.01 | 3.56 | 3.37 | 1.10 | 3.28 | 3.16 | 1.19 | 3.06 | 2.98 | 1.31 |
| 355 | 16°C | 21°C | 3.36 | 2.49 | 0.83 | 3.23 | 2.43 | 0.90 | 3.11 | 2.36 | 0.98 | 2.98 | 2.30 | 1.06 | 2.73 | 2.14 | 1.15 | 2.52 | 2.01 | 1.27 |
| | | 24°C | 3.37 | 3.03 | 0.84 | 3.25 | 2.96 | 0.90 | 3.13 | 2.88 | 0.98 | 3.00 | 2.81 | 1.06 | 2.76 | 2.62 | 1.15 | 2.55 | 2.47 | 1.27 |
| | | 27°C | 3.43 | 3.43 | 0.84 | 3.32 | 3.32 | 0.91 | 3.21 | 3.21 | 0.98 | 3.09 | 3.09 | 1.07 | 2.86 | 2.86 | 1.16 | 2.66 | 2.66 | 1.28 |
| | | 30°C | 3.60 | 3.60 | 0.85 | 3.50 | 3.50 | 0.92 | 3.39 | 3.39 | 0.99 | 3.28 | 3.28 | 1.08 | 3.03 | 3.03 | 1.17 | 2.83 | 2.83 | 1.29 |
| | 19°C | 24°C | 3.70 | 2.39 | 0.85 | 3.56 | 2.33 | 0.92 | 3.43 | 2.27 | 1.00 | 3.29 | 2.21 | 1.08 | 3.02 | 2.06 | 1.17 | 2.78 | 1.94 | 1.29 |
| | | 27°C | 3.71 | 2.77 | 0.85 | 3.57 | 2.70 | 0.92 | 3.44 | 2.64 | 1.00 | 3.30 | 2.57 | 1.08 | 3.03 | 2.41 | 1.17 | 2.80 | 2.28 | 1.29 |
| | | 30°C | 3.74 | 3.40 | 0.85 | 3.60 | 3.33 | 0.92 | 3.48 | 3.25 | 1.00 | 3.34 | 3.17 | 1.08 | 3.08 | 2.96 | 1.17 | 2.86 | 2.79 | 1.30 |
| | | 33°C | 3.82 | 3.82 | 0.85 | 3.71 | 3.71 | 0.93 | 3.59 | 3.59 | 1.01 | 3.47 | 3.47 | 1.09 | 3.22 | 3.22 | 1.19 | 3.01 | 3.01 | 1.31 |
| | 22°C | 27°C | 4.05 | 2.34 | 0.86 | 3.91 | 2.29 | 0.94 | 3.76 | 2.23 | 1.01 | 3.61 | 2.17 | 1.10 | 3.32 | 2.03 | 1.19 | 3.07 | 1.91 | 1.31 |
| | | 30°C | 4.06 | 2.88 | 0.86 | 3.92 | 2.83 | 0.94 | 3.77 | 2.77 | 1.02 | 3.62 | 2.70 | 1.10 | 3.33 | 2.53 | 1.19 | 3.08 | 2.40 | 1.32 |
| | | 33°C | 4.08 | 3.38 | 0.87 | 3.94 | 3.32 | 0.94 | 3.79 | 3.25 | 1.02 | 3.64 | 3.18 | 1.10 | 3.35 | 2.98 | 1.20 | 3.10 | 2.83 | 1.32 |
| | | 36°C | 4.11 | 3.81 | 0.87 | 3.98 | 3.74 | 0.94 | 3.85 | 3.66 | 1.02 | 3.71 | 3.57 | 1.11 | 3.43 | 3.33 | 1.20 | 3.20 | 3.14 | 1.33 |

**Remark**

AFR: Air flow rate (CFM)
EWB: Entering wet bulb temp. (°C)
EDB: Entering dry bulb temp. (°C)
TC: Total cooling capacity (kW)
SHC: Sensible heating capacity (kW)
PI: Power input

**Notes**

1 Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2 Shows nominal capacities
3 Direct interpolation is permissible. Do not extrapolate.
4 Unit is able to operate at ambient from 0°C to 46°C without pressure trip.

**Heating**

| Indoor DB°C | Outdoor WB°C | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -9 | | -6 | | -5 | | 6 | | 12 | | 15 | | 18 | |
| | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) |
| 15 | 2.091 | 2.091 | 2.366 | 2.366 | 2.458 | 2.458 | 3.469 | 3.469 | 4.020 | 4.020 | 4.296 | 4.296 | 4.571 | 4.571 |
| 17 | 2.036 | 2.036 | 2.287 | 2.287 | 2.400 | 2.400 | 3.465 | 3.465 | 3.947 | 3.947 | 4.220 | 4.220 | 4.493 | 4.493 |
| 19 | 1.981 | 1.981 | 2.208 | 2.208 | 2.342 | 2.342 | 3.460 | 3.460 | 3.874 | 3.874 | 4.145 | 4.145 | 4.415 | 4.415 |
| 21 | 1.926 | 1.926 | 2.148 | 2.148 | 2.283 | 2.283 | 3.402 | 3.402 | 3.801 | 3.801 | 4.069 | 4.069 | 4.337 | 4.337 |
| 23 | 1.871 | 1.871 | 2.106 | 2.106 | 2.225 | 2.225 | 3.289 | 3.289 | 3.729 | 3.729 | 3.994 | 3.994 | 4.259 | 4.259 |
| 25 | 1.817 | 1.817 | 2.064 | 2.064 | 2.167 | 2.167 | 3.176 | 3.176 | 3.656 | 3.656 | 3.918 | 3.918 | 4.181 | 4.181 |
| 27 | 1.762 | 1.762 | 2.022 | 2.022 | 2.109 | 2.109 | 3.063 | 3.063 | 3.583 | 3.583 | 3.843 | 3.843 | 4.103 | 4.103 |

# 3 Capacity tables

## 3 - 1 Cooling/Heating Capacity Tables

### FTYN50L+RYN50L

#### Cooling

| AFR (CFM) | EWB | EDB | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 19°C | | | 25°C | | | 30°C | | | 35°C | | | 40°C | | | 46°C | | |
| | | | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 424 | 16°C | 21°C | 4.95 | 3.55 | 1.24 | 4.78 | 3.46 | 1.34 | 4.60 | 3.36 | 1.46 | 4.41 | 3.27 | 1.58 | 4.05 | 3.04 | 1.71 | 3.74 | 2.86 | 1.89 |
| | | 24°C | 4.96 | 4.25 | 1.24 | 4.78 | 4.15 | 1.34 | 4.60 | 4.06 | 1.46 | 4.42 | 3.96 | 1.58 | 4.06 | 3.69 | 1.71 | 3.76 | 3.49 | 1.89 |
| | | 27°C | 5.00 | 4.82 | 1.24 | 4.83 | 4.71 | 1.35 | 4.66 | 4.60 | 1.46 | 4.48 | 4.48 | 1.58 | 4.14 | 4.14 | 1.72 | 3.85 | 3.85 | 1.89 |
| | | 30°C | 5.15 | 5.15 | 1.25 | 5.00 | 5.00 | 1.35 | 4.85 | 4.85 | 1.47 | 4.69 | 4.69 | 1.59 | 4.35 | 4.35 | 1.73 | 4.07 | 4.07 | 1.91 |
| | 19°C | 24°C | 5.46 | 3.31 | 1.26 | 5.27 | 3.23 | 1.37 | 5.08 | 3.14 | 1.48 | 4.87 | 3.06 | 1.61 | 4.48 | 2.85 | 1.74 | 4.14 | 2.68 | 1.92 |
| | | 27°C | 5.46 | 3.79 | 1.26 | 5.27 | 3.71 | 1.37 | 5.08 | 3.62 | 1.48 | 4.88 | 3.53 | 1.61 | 4.48 | 3.31 | 1.74 | 4.15 | 3.13 | 1.92 |
| | | 30°C | 5.47 | 4.68 | 1.26 | 5.28 | 4.58 | 1.37 | 5.10 | 4.48 | 1.48 | 4.90 | 4.37 | 1.61 | 4.52 | 4.09 | 1.74 | 4.19 | 3.87 | 1.92 |
| | | 33°C | 5.54 | 5.54 | 1.27 | 5.36 | 5.36 | 1.37 | 5.18 | 5.18 | 1.49 | 5.01 | 5.01 | 1.61 | 4.63 | 4.63 | 1.75 | 4.33 | 4.33 | 1.94 |
| | 22°C | 27°C | 6.01 | 3.24 | 1.28 | 5.80 | 3.17 | 1.39 | 5.59 | 3.09 | 1.51 | 5.37 | 3.00 | 1.64 | 4.94 | 2.80 | 1.78 | 4.57 | 2.64 | 1.96 |
| | | 30°C | 6.01 | 3.95 | 1.28 | 5.80 | 3.87 | 1.39 | 5.59 | 3.78 | 1.51 | 5.37 | 3.69 | 1.64 | 4.94 | 3.46 | 1.78 | 4.57 | 3.28 | 1.96 |
| | | 33°C | 6.01 | 4.62 | 1.29 | 5.80 | 4.53 | 1.39 | 5.59 | 4.44 | 1.51 | 5.37 | 4.35 | 1.64 | 4.95 | 4.08 | 1.78 | 4.58 | 3.88 | 1.96 |
| | | 36°C | 6.03 | 5.24 | 1.29 | 5.83 | 5.13 | 1.39 | 5.63 | 5.02 | 1.51 | 5.43 | 4.91 | 1.64 | 5.00 | 4.61 | 1.78 | 4.65 | 4.37 | 1.96 |
| 478 | 16°C | 21°C | 5.15 | 3.70 | 1.25 | 4.96 | 3.61 | 1.36 | 4.78 | 3.51 | 1.47 | 4.58 | 3.41 | 1.59 | 4.20 | 3.18 | 1.73 | 3.88 | 2.99 | 1.90 |
| | | 24°C | 5.17 | 4.49 | 1.25 | 4.98 | 4.39 | 1.36 | 4.79 | 4.28 | 1.47 | 4.60 | 4.18 | 1.59 | 4.23 | 3.90 | 1.73 | 3.91 | 3.68 | 1.90 |
| | | 27°C | 5.23 | 5.10 | 1.26 | 5.05 | 4.98 | 1.36 | 4.88 | 4.86 | 1.47 | 4.70 | 4.70 | 1.60 | 4.34 | 4.34 | 1.74 | 4.05 | 4.05 | 1.92 |
| | | 30°C | 5.45 | 5.45 | 1.27 | 5.29 | 5.29 | 1.37 | 5.13 | 5.13 | 1.49 | 4.96 | 4.96 | 1.61 | 4.60 | 4.60 | 1.75 | 4.30 | 4.30 | 1.94 |
| | 19°C | 24°C | 5.67 | 3.50 | 1.27 | 5.47 | 3.41 | 1.38 | 5.27 | 3.32 | 1.49 | 5.06 | 3.23 | 1.62 | 4.64 | 3.01 | 1.76 | 4.29 | 2.84 | 1.94 |
| | | 27°C | 5.68 | 4.03 | 1.27 | 5.48 | 3.94 | 1.38 | 5.28 | 3.86 | 1.49 | 5.06 | 3.76 | 1.62 | 4.65 | 3.52 | 1.76 | 4.30 | 3.33 | 1.94 |
| | | 30°C | 5.71 | 4.98 | 1.28 | 5.51 | 4.87 | 1.38 | 5.32 | 4.76 | 1.50 | 5.11 | 4.64 | 1.62 | 4.71 | 4.34 | 1.76 | 4.37 | 4.10 | 1.94 |
| | | 33°C | 5.81 | 5.81 | 1.28 | 5.63 | 5.63 | 1.39 | 5.45 | 5.45 | 1.50 | 5.27 | 5.27 | 1.63 | 4.88 | 4.88 | 1.77 | 4.56 | 4.56 | 1.96 |
| | 22°C | 27°C | 6.23 | 3.43 | 1.30 | 6.02 | 3.35 | 1.41 | 5.79 | 3.26 | 1.52 | 5.56 | 3.18 | 1.65 | 5.11 | 2.96 | 1.79 | 4.73 | 2.79 | 1.97 |
| | | 30°C | 6.24 | 4.21 | 1.30 | 6.02 | 4.12 | 1.41 | 5.80 | 4.03 | 1.52 | 5.57 | 3.93 | 1.65 | 5.12 | 3.68 | 1.79 | 4.73 | 3.50 | 1.97 |
| | | 33°C | 6.25 | 4.93 | 1.30 | 6.04 | 4.84 | 1.41 | 5.81 | 4.74 | 1.53 | 5.59 | 4.64 | 1.65 | 5.14 | 4.35 | 1.79 | 4.76 | 4.13 | 1.98 |
| | | 36°C | 6.29 | 5.57 | 1.30 | 6.09 | 5.47 | 1.41 | 5.88 | 5.35 | 1.53 | 5.66 | 5.23 | 1.66 | 5.22 | 4.89 | 1.80 | 4.87 | 4.62 | 1.99 |
| 536 | 16°C | 21°C | 5.34 | 3.86 | 1.26 | 5.15 | 3.76 | 1.37 | 4.95 | 3.67 | 1.48 | 4.74 | 3.56 | 1.60 | 4.35 | 3.32 | 1.74 | 4.01 | 3.12 | 1.92 |
| | | 24°C | 5.37 | 4.69 | 1.27 | 5.17 | 4.58 | 1.37 | 4.98 | 4.47 | 1.48 | 4.78 | 4.35 | 1.61 | 4.39 | 4.06 | 1.74 | 4.05 | 3.83 | 1.92 |
| | | 27°C | 5.46 | 5.38 | 1.27 | 5.28 | 5.24 | 1.37 | 5.10 | 5.09 | 1.49 | 4.92 | 4.92 | 1.61 | 4.54 | 4.54 | 1.75 | 4.23 | 4.23 | 1.94 |
| | | 30°C | 5.73 | 5.73 | 1.28 | 5.56 | 5.56 | 1.39 | 5.39 | 5.39 | 1.50 | 5.21 | 5.21 | 1.63 | 4.83 | 4.83 | 1.77 | 4.51 | 4.51 | 1.96 |
| | 19°C | 24°C | 5.88 | 3.70 | 1.28 | 5.67 | 3.61 | 1.39 | 5.45 | 3.52 | 1.51 | 5.23 | 3.43 | 1.63 | 4.80 | 3.19 | 1.77 | 4.43 | 3.01 | 1.95 |
| | | 27°C | 5.90 | 4.29 | 1.29 | 5.68 | 4.19 | 1.39 | 5.47 | 4.09 | 1.51 | 5.25 | 3.99 | 1.64 | 4.82 | 3.73 | 1.77 | 4.46 | 3.53 | 1.95 |
| | | 30°C | 5.94 | 5.27 | 1.29 | 5.73 | 5.16 | 1.39 | 5.53 | 5.04 | 1.51 | 5.32 | 4.92 | 1.64 | 4.90 | 4.59 | 1.78 | 4.54 | 4.33 | 1.96 |
| | | 33°C | 6.07 | 6.07 | 1.29 | 5.90 | 5.90 | 1.40 | 5.71 | 5.71 | 1.52 | 5.53 | 5.53 | 1.65 | 5.12 | 5.12 | 1.80 | 4.79 | 4.79 | 1.98 |
| | 22°C | 27°C | 6.45 | 3.62 | 1.31 | 6.22 | 3.54 | 1.42 | 5.99 | 3.46 | 1.54 | 5.75 | 3.36 | 1.67 | 5.28 | 3.14 | 1.81 | 4.88 | 2.96 | 1.99 |
| | | 30°C | 6.46 | 4.47 | 1.31 | 6.23 | 4.38 | 1.42 | 6.00 | 4.29 | 1.54 | 5.76 | 4.19 | 1.67 | 5.29 | 3.92 | 1.81 | 4.89 | 3.72 | 1.99 |
| | | 33°C | 6.49 | 5.24 | 1.31 | 6.26 | 5.14 | 1.42 | 6.03 | 5.04 | 1.54 | 5.79 | 4.93 | 1.67 | 5.33 | 4.62 | 1.81 | 4.94 | 4.38 | 2.00 |
| | | 36°C | 6.54 | 5.91 | 1.31 | 6.34 | 5.80 | 1.42 | 6.12 | 5.68 | 1.54 | 5.90 | 5.54 | 1.68 | 5.45 | 5.16 | 1.82 | 5.09 | 4.86 | 2.01 |

**Remark**

AFR: Air flow rate (CFM)
EWB: Entering wet bulb temp. (°C)
EDB: Entering dry bulb temp. (°C)
TC: Total cooling capacity (kW)
SHC: Sensible heating capacity (kW)
PI: Power input

**Notes**

1 Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2 Shows nominal capacities
3 Direct interpolation is permissible. Do not extrapolate.
4 Unit is able to operate at ambient from 0°C to 46°C without pressure trip.

#### Heating

| Indoor DB°C | Outdoor WB°C | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -9 | | -6 | | -5 | | 6 | | 12 | | 15 | | 18 | |
| | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) |
| 15 | 3.349 | 3.349 | 3.790 | 3.790 | 3.937 | 3.937 | 5.556 | 5.556 | 6.439 | 6.439 | 6.880 | 6.880 | 7.322 | 7.322 |
| 17 | 3.261 | 3.261 | 3.399 | 3.399 | 3.839 | 3.839 | 5.549 | 5.549 | 6.298 | 6.298 | 6.732 | 6.732 | 7.166 | 7.166 |
| 19 | 3.173 | 3.173 | 3.009 | 3.009 | 3.742 | 3.742 | 5.543 | 5.543 | 6.158 | 6.158 | 6.584 | 6.584 | 7.011 | 7.011 |
| 21 | 3.085 | 3.085 | 2.871 | 2.871 | 3.644 | 3.644 | 5.434 | 5.434 | 6.018 | 6.018 | 6.437 | 6.437 | 6.855 | 6.855 |
| 23 | 2.997 | 2.997 | 2.987 | 2.987 | 3.546 | 3.546 | 5.224 | 5.224 | 5.877 | 5.877 | 6.289 | 6.289 | 6.700 | 6.700 |
| 25 | 2.910 | 2.910 | 3.103 | 3.103 | 3.448 | 3.448 | 5.014 | 5.014 | 5.737 | 5.737 | 6.141 | 6.141 | 6.545 | 6.545 |
| 27 | 2.822 | 2.822 | 3.218 | 3.218 | 3.350 | 3.350 | 4.804 | 4.804 | 5.596 | 5.596 | 5.993 | 5.993 | 6.389 | 6.389 |

# 3 Capacity tables

## 3 - 1 Cooling/Heating Capacity Tables

### FTYN60L+RYN60L

**Cooling**

| AFR (CFM) | EWB | EDB | Outdoor temperature | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 19°C | | | 25°C | | | 30°C | | | 35°C | | | 40°C | | | 46°C | | |
| | | | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 474 | 16°C | 21°C | 5.67 | 3.96 | 1.42 | 5.47 | 3.85 | 1.54 | 5.26 | 3.75 | 1.66 | 5.05 | 3.64 | 1.80 | 4.64 | 3.39 | 1.96 | 4.28 | 3.19 | 2.16 |
| | | 24°C | 5.67 | 4.74 | 1.42 | 5.47 | 4.63 | 1.54 | 5.27 | 4.52 | 1.66 | 5.06 | 4.41 | 1.81 | 4.65 | 4.12 | 1.96 | 4.30 | 3.89 | 2.16 |
| | | 27°C | 5.72 | 5.37 | 1.42 | 5.53 | 5.25 | 1.54 | 5.33 | 5.13 | 1.67 | 5.13 | 4.99 | 1.81 | 4.74 | 4.65 | 1.96 | 4.41 | 4.36 | 2.17 |
| | | 30°C | 5.90 | 5.90 | 1.43 | 5.73 | 5.73 | 1.55 | 5.55 | 5.55 | 1.68 | 5.37 | 5.37 | 1.82 | 4.98 | 4.98 | 1.98 | 4.66 | 4.66 | 2.19 |
| | 19°C | 24°C | 6.25 | 3.69 | 1.44 | 6.03 | 3.60 | 1.56 | 5.81 | 3.50 | 1.69 | 5.58 | 3.41 | 1.84 | 5.13 | 3.17 | 1.99 | 4.74 | 2.99 | 2.20 |
| | | 27°C | 6.26 | 4.23 | 1.44 | 6.03 | 4.13 | 1.56 | 5.81 | 4.04 | 1.69 | 5.58 | 3.94 | 1.84 | 5.13 | 3.68 | 1.99 | 4.75 | 3.49 | 2.20 |
| | | 30°C | 6.26 | 5.22 | 1.44 | 6.05 | 5.10 | 1.56 | 5.83 | 4.99 | 1.69 | 5.61 | 4.87 | 1.84 | 5.17 | 4.56 | 1.99 | 4.79 | 4.31 | 2.20 |
| | | 33°C | 6.34 | 6.34 | 1.45 | 6.13 | 6.13 | 1.57 | 5.93 | 5.93 | 1.70 | 5.73 | 5.73 | 1.85 | 5.30 | 5.30 | 2.00 | 4.96 | 4.96 | 2.21 |
| | 22°C | 27°C | 6.88 | 3.62 | 1.47 | 6.64 | 3.53 | 1.59 | 6.40 | 3.44 | 1.73 | 6.15 | 3.34 | 1.87 | 5.65 | 3.12 | 2.03 | 5.23 | 2.94 | 2.24 |
| | | 30°C | 6.88 | 4.41 | 1.47 | 6.64 | 4.31 | 1.59 | 6.40 | 4.21 | 1.73 | 6.15 | 4.11 | 1.87 | 5.65 | 3.85 | 2.03 | 5.23 | 3.65 | 2.24 |
| | | 33°C | 6.88 | 5.15 | 1.47 | 6.64 | 5.05 | 1.59 | 6.40 | 4.95 | 1.73 | 6.15 | 4.85 | 1.87 | 5.66 | 4.55 | 2.03 | 5.25 | 4.32 | 2.24 |
| | | 36°C | 6.91 | 5.83 | 1.47 | 6.68 | 5.72 | 1.59 | 6.45 | 5.60 | 1.73 | 6.21 | 5.48 | 1.88 | 5.73 | 5.13 | 2.04 | 5.33 | 4.87 | 2.24 |
| 537 | 16°C | 21°C | 5.90 | 4.13 | 1.43 | 5.68 | 4.02 | 1.55 | 5.47 | 3.91 | 1.68 | 5.24 | 3.80 | 1.82 | 4.81 | 3.54 | 1.97 | 4.44 | 3.33 | 2.18 |
| | | 24°C | 5.91 | 5.01 | 1.43 | 5.70 | 4.89 | 1.55 | 5.49 | 4.77 | 1.68 | 5.27 | 4.65 | 1.82 | 4.84 | 4.34 | 1.98 | 4.47 | 4.10 | 2.18 |
| | | 27°C | 5.98 | 5.69 | 1.44 | 5.78 | 5.56 | 1.56 | 5.58 | 5.41 | 1.69 | 5.38 | 5.25 | 1.83 | 4.97 | 4.88 | 1.99 | 4.63 | 4.56 | 2.19 |
| | | 30°C | 6.23 | 6.23 | 1.45 | 6.05 | 6.05 | 1.57 | 5.87 | 5.87 | 1.70 | 5.68 | 5.68 | 1.85 | 5.26 | 5.26 | 2.01 | 4.92 | 4.92 | 2.21 |
| | 19°C | 24°C | 6.50 | 3.90 | 1.46 | 6.26 | 3.81 | 1.58 | 6.03 | 3.71 | 1.71 | 5.79 | 3.60 | 1.85 | 5.31 | 3.36 | 2.01 | 4.91 | 3.17 | 2.21 |
| | | 27°C | 6.51 | 4.50 | 1.46 | 6.27 | 4.40 | 1.58 | 6.04 | 4.30 | 1.71 | 5.80 | 4.19 | 1.85 | 5.33 | 3.92 | 2.01 | 4.92 | 3.71 | 2.22 |
| | | 30°C | 6.54 | 5.55 | 1.46 | 6.31 | 5.43 | 1.58 | 6.08 | 5.30 | 1.71 | 5.85 | 5.17 | 1.86 | 5.39 | 4.84 | 2.01 | 5.00 | 4.57 | 2.22 |
| | | 33°C | 6.65 | 6.65 | 1.46 | 6.44 | 6.44 | 1.59 | 6.24 | 6.24 | 1.72 | 6.03 | 6.03 | 1.87 | 5.59 | 5.59 | 2.03 | 5.22 | 5.22 | 2.24 |
| | 22°C | 27°C | 7.14 | 3.82 | 1.48 | 6.89 | 3.73 | 1.61 | 6.63 | 3.64 | 1.74 | 6.37 | 3.54 | 1.89 | 5.85 | 3.30 | 2.05 | 5.41 | 3.11 | 2.26 |
| | | 30°C | 7.15 | 4.69 | 1.48 | 6.89 | 4.59 | 1.61 | 6.64 | 4.49 | 1.74 | 6.37 | 4.39 | 1.89 | 5.86 | 4.11 | 2.05 | 5.42 | 3.90 | 2.26 |
| | | 33°C | 7.16 | 5.49 | 1.48 | 6.91 | 5.39 | 1.61 | 6.66 | 5.28 | 1.74 | 6.39 | 5.17 | 1.89 | 5.88 | 4.85 | 2.05 | 5.45 | 4.60 | 2.26 |
| | | 36°C | 7.20 | 6.21 | 1.49 | 6.97 | 6.09 | 1.61 | 6.73 | 5.97 | 1.75 | 6.48 | 5.83 | 1.90 | 5.98 | 5.45 | 2.06 | 5.58 | 5.15 | 2.27 |
| 614 | 16°C | 21°C | 6.11 | 4.31 | 1.45 | 5.89 | 4.20 | 1.56 | 5.66 | 4.09 | 1.69 | 5.43 | 3.97 | 1.83 | 4.98 | 3.70 | 1.99 | 4.59 | 3.48 | 2.19 |
| | | 24°C | 6.15 | 5.23 | 1.45 | 5.92 | 5.11 | 1.57 | 5.70 | 4.98 | 1.70 | 5.47 | 4.85 | 1.84 | 5.02 | 4.53 | 1.99 | 4.64 | 4.27 | 2.20 |
| | | 27°C | 6.25 | 5.99 | 1.45 | 6.04 | 5.84 | 1.57 | 5.84 | 5.68 | 1.70 | 5.63 | 5.50 | 1.85 | 5.20 | 5.10 | 2.01 | 4.85 | 4.76 | 2.21 |
| | | 30°C | 6.56 | 6.56 | 1.46 | 6.37 | 6.37 | 1.59 | 6.17 | 6.17 | 1.72 | 5.97 | 5.97 | 1.87 | 5.53 | 5.53 | 2.03 | 5.16 | 5.16 | 2.24 |
| | 19°C | 24°C | 6.73 | 4.13 | 1.47 | 6.49 | 4.03 | 1.59 | 6.24 | 3.92 | 1.72 | 5.99 | 3.82 | 1.87 | 5.49 | 3.56 | 2.03 | 5.07 | 3.36 | 2.23 |
| | | 27°C | 6.75 | 4.78 | 1.47 | 6.51 | 4.67 | 1.59 | 6.26 | 4.56 | 1.72 | 6.01 | 4.45 | 1.87 | 5.52 | 4.16 | 2.03 | 5.10 | 3.93 | 2.23 |
| | | 30°C | 6.81 | 5.88 | 1.47 | 6.56 | 5.75 | 1.59 | 6.33 | 5.62 | 1.73 | 6.09 | 5.48 | 1.87 | 5.60 | 5.12 | 2.03 | 5.20 | 4.82 | 2.24 |
| | | 33°C | 6.95 | 6.95 | 1.48 | 6.75 | 6.75 | 1.60 | 6.54 | 6.54 | 1.74 | 6.33 | 6.33 | 1.89 | 5.86 | 5.86 | 2.05 | 5.48 | 5.48 | 2.27 |
| | 22°C | 27°C | 7.38 | 4.04 | 1.50 | 7.12 | 3.95 | 1.62 | 6.85 | 3.85 | 1.76 | 6.58 | 3.75 | 1.91 | 6.04 | 3.50 | 2.07 | 5.58 | 3.30 | 2.28 |
| | | 30°C | 7.40 | 4.98 | 1.50 | 7.14 | 4.89 | 1.62 | 6.87 | 4.78 | 1.76 | 6.59 | 4.67 | 1.91 | 6.06 | 4.37 | 2.07 | 5.60 | 4.15 | 2.28 |
| | | 33°C | 7.43 | 5.84 | 1.50 | 7.17 | 5.73 | 1.62 | 6.91 | 5.61 | 1.76 | 6.63 | 5.49 | 1.91 | 6.10 | 5.15 | 2.07 | 5.65 | 4.88 | 2.28 |
| | | 36°C | 7.49 | 6.59 | 1.50 | 7.26 | 6.47 | 1.63 | 7.01 | 6.33 | 1.77 | 6.75 | 6.17 | 1.92 | 6.24 | 5.76 | 2.08 | 5.82 | 5.42 | 2.30 |

**Remark**

AFR: Air flow rate (CFM)
EWB: Entering wet bulb temp. (°C)
EDB: Entering dry bulb temp. (°C)
TC: Total cooling capacity (kW)
SHC: Sensible heating capacity (kW)
PI: Power input

**Notes**

1 Ratings shown are gross capacities which do not include a deduction for indoor fan motor heat.
2 Shows nominal capacities
3 Direct interpolation is permissible. Do not extrapolate.
4 Unit is able to operate at ambient from 0°C to 46°C without pressure trip.

**Heating**

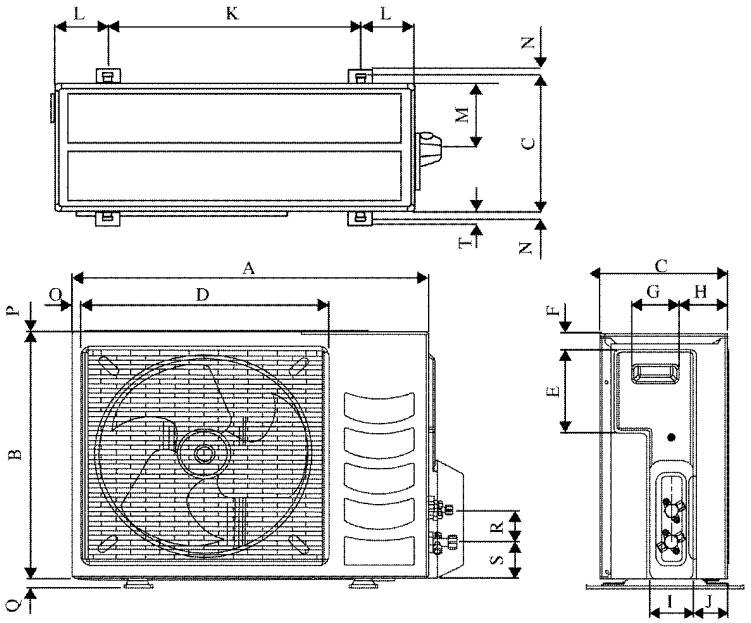
| Indoor DB°C | Outdoor WB°C | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | -9 | | -6 | | -5 | | 6 | | 12 | | 15 | | 18 | |
| | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) | Q (kW) | SC (kW) |
| 15 | 3.845 | 3.845 | 4.352 | 4.352 | 4.521 | 4.521 | 6.379 | 6.379 | 7.393 | 7.393 | 7.899 | 7.899 | 8.406 | 8.406 |
| 17 | 3.744 | 3.744 | 3.818 | 3.818 | 4.418 | 4.418 | 6.371 | 6.371 | 7.284 | 7.284 | 7.789 | 7.789 | 8.295 | 8.295 |
| 19 | 3.643 | 3.643 | 3.285 | 3.285 | 4.316 | 4.316 | 6.364 | 6.364 | 7.174 | 7.174 | 7.679 | 7.679 | 8.183 | 8.183 |
| 21 | 3.542 | 3.542 | 3.122 | 3.122 | 4.213 | 4.213 | 6.271 | 6.271 | 7.065 | 7.065 | 7.569 | 7.569 | 8.072 | 8.072 |
| 23 | 3.442 | 3.442 | 3.328 | 3.328 | 4.111 | 4.111 | 6.094 | 6.094 | 6.956 | 6.956 | 7.458 | 7.458 | 7.960 | 7.960 |
| 25 | 3.341 | 3.341 | 3.534 | 3.534 | 4.009 | 4.009 | 5.916 | 5.916 | 6.847 | 6.847 | 7.348 | 7.348 | 7.849 | 7.849 |
| 27 | 3.240 | 3.240 | 3.740 | 3.740 | 3.906 | 3.906 | 5.739 | 5.739 | 6.738 | 6.738 | 7.238 | 7.238 | 7.737 | 7.737 |

# 4 Dimensional drawings

## 4 - 1 Dimensional Drawings

**RYN25-35L**

All dimensions are in mm



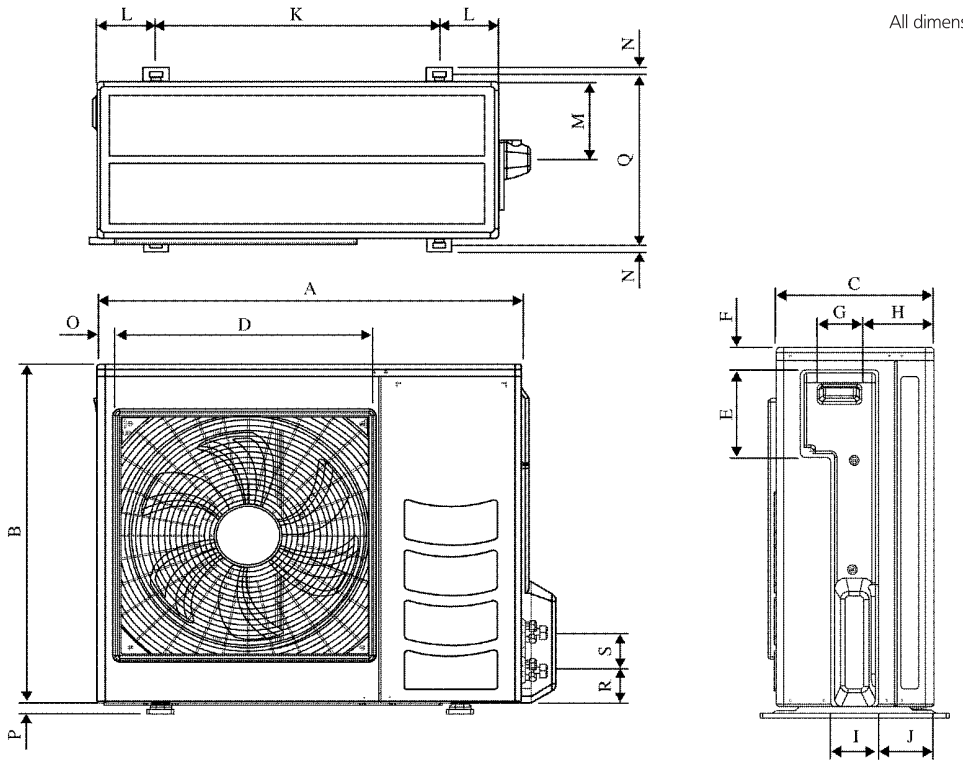

| Model \ Dimension | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RYN25/35L | 700 | 521 | 250 | 485 | 175 | 36 | 95 | 93 | 86 | 68 | 441 | 130 | 111 | 15 | 18 | 3 | 19 | 65 | 80 | 30 |

# 4 Dimensional drawings

## 4 - 1 Dimensional Drawings

**RYN50-60L**

All dimensions are in mm




| Model \ Dimension | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RYN50L | 855 | 628 | 328 | 520 | 179 | 46 | 93 | 149 | 101 | 113 | 603 | 126 | 164 | 15 | 34 | 23 | 362 | 73 | 75 |
| RYN60L | 855 | 730 | 328 | 520 | 179 | 46 | 93 | 149 | 101 | 113 | 603 | 126 | 164 | 15 | 34 | 23 | 362 | 73 | 75 |

# 5 Piping diagrams

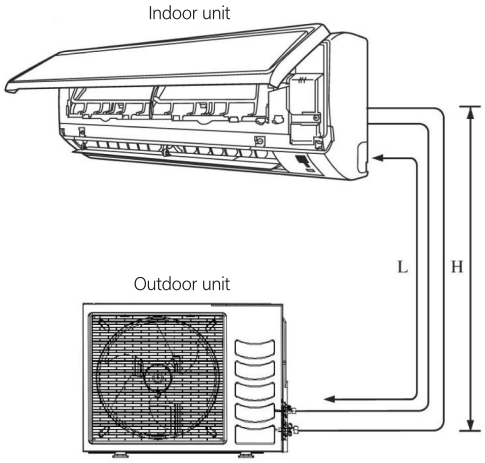
## 5 - 1 Piping Diagrams

### FTYN-L+RYN-L

#### Max. piping length

If the pipe is too long, both the capacity and reliability of the unit will drop. As the number of bends increases, resistance to the flow of refrigerant system increases, thus lowering cooling capacity. As a result, the compressor may become defective. Always choose the shortest path and follow the recommendations as tabulated below:






| Model | Indoor | FTYN25L | FTYN35L | FTYN50L | FTYN60L |
|---|---|---|---|---|---|
| | Outdoor | RYN25L | RYN35L | RYN50L | RYN60L |
| Min. allowable length, m | | 3 | | 3 | |
| Max. allowable length, m | | 12 | | 15 | |
| Max. allowable elevation, m | | 5 | | 8 | |
| Liquid, mm/(inch) | | 6.35 (1/4″) | | | |
| gas, mm/(inch) | | 9.52 (3/8″) | 12.70 (1/2″) | | 15.88 (5/8″) |

*Be sure to add the proper amount of additional refrigerant. Failure to do so may result in reduced performance.

**Remark:** The refrigerant pre-charged in the outdoor unit is for piping length up to 7.6m / 25ft.

#### Additional charge

The refrigerant is pre-charged in the outdoor unit. If the piping length is less than 7.6m, then additional charge after vacuuming is not necessary. If the piping lenght is more than 7.6m, then is the additional charge value as indiated in the table.

#### Additional refrigerant charge [g] per additional 1m length as tabulated (For R410A models)

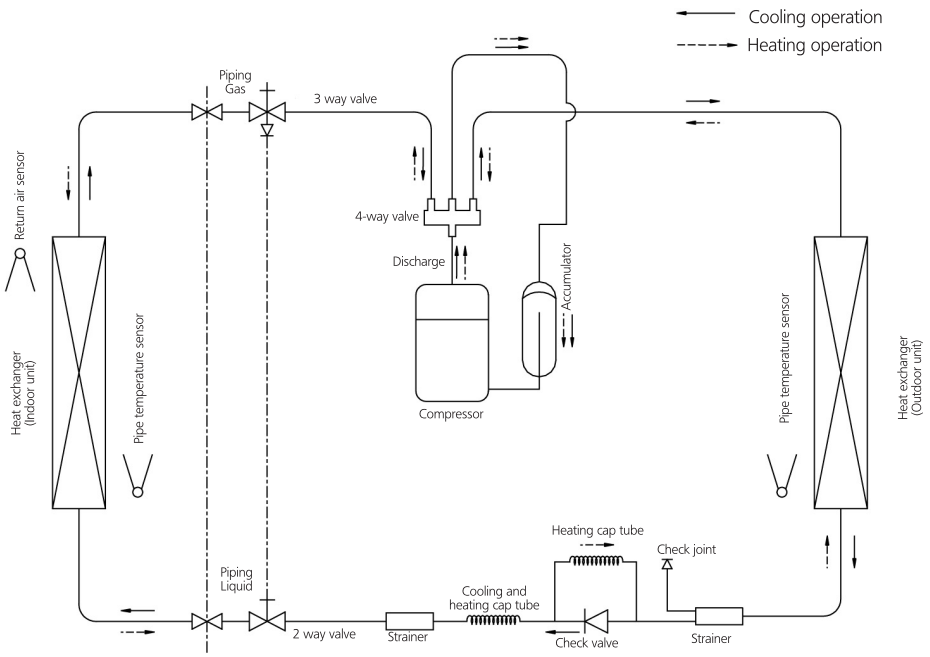
| Model | Indoor | FTYN25L | FTYN35L | FTYN50L | FTYN60L |
|---|---|---|---|---|---|
| | Outdoor | RYN25L | RYN35L | RYN50L | RYN60L |
| Additional charge [g/m] | | 16 | | | |

# 5 Piping diagrams

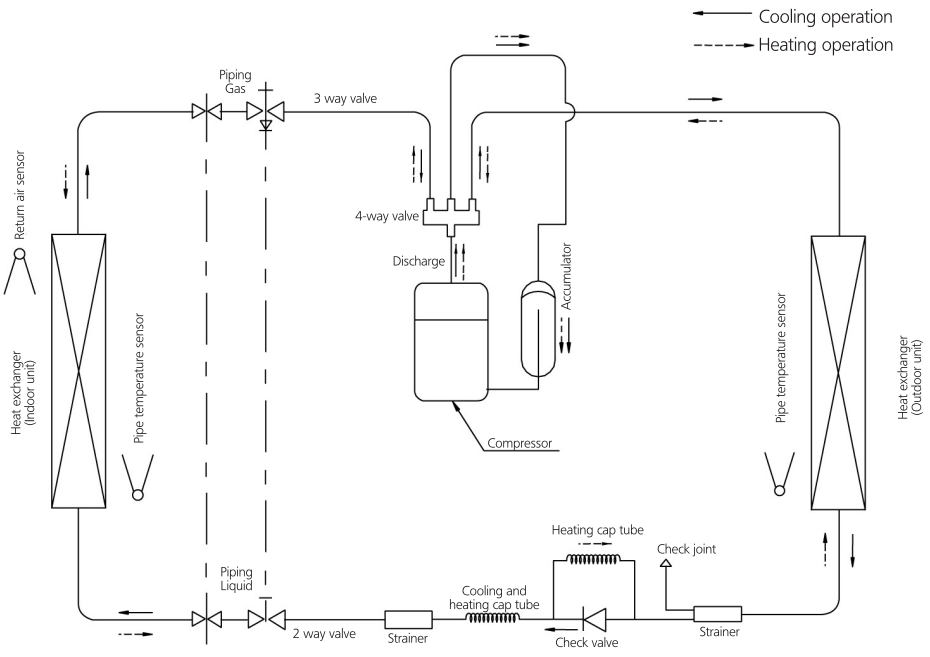
## 5 - 1 Piping Diagrams



**FTYN25L+RYN25L**
**FTYN35L+RYN35L**



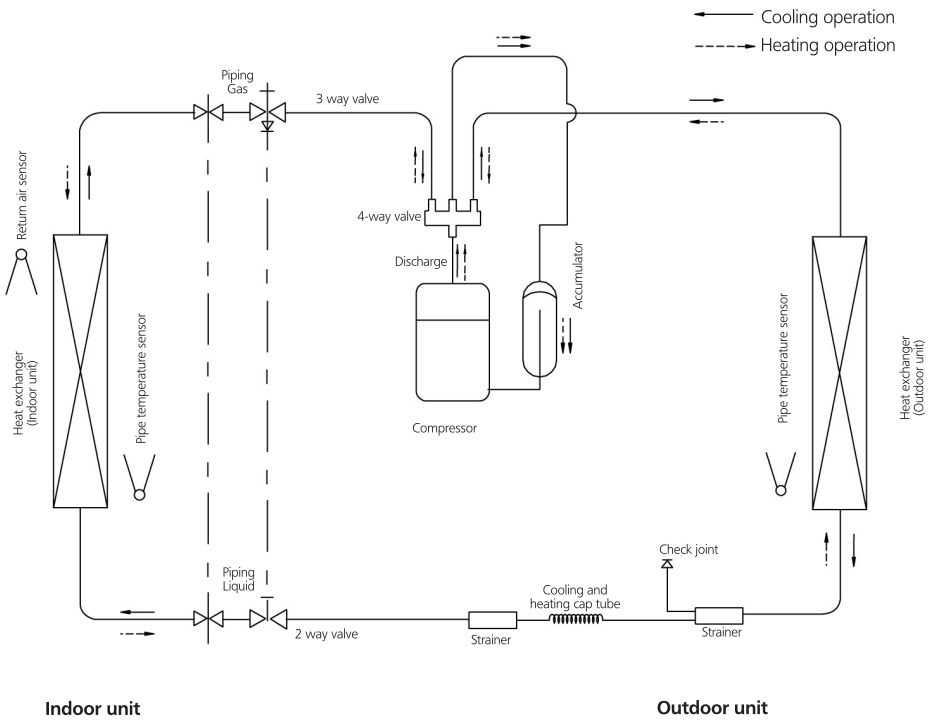

**FTYN50L+RYN50L**



# 5 Piping diagrams

## 5 - 1 Piping Diagrams

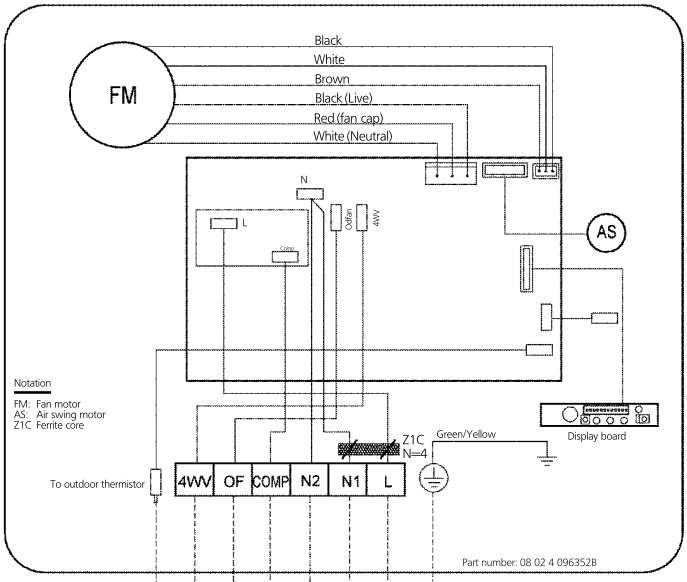
**FTYN60L+RYN60L**

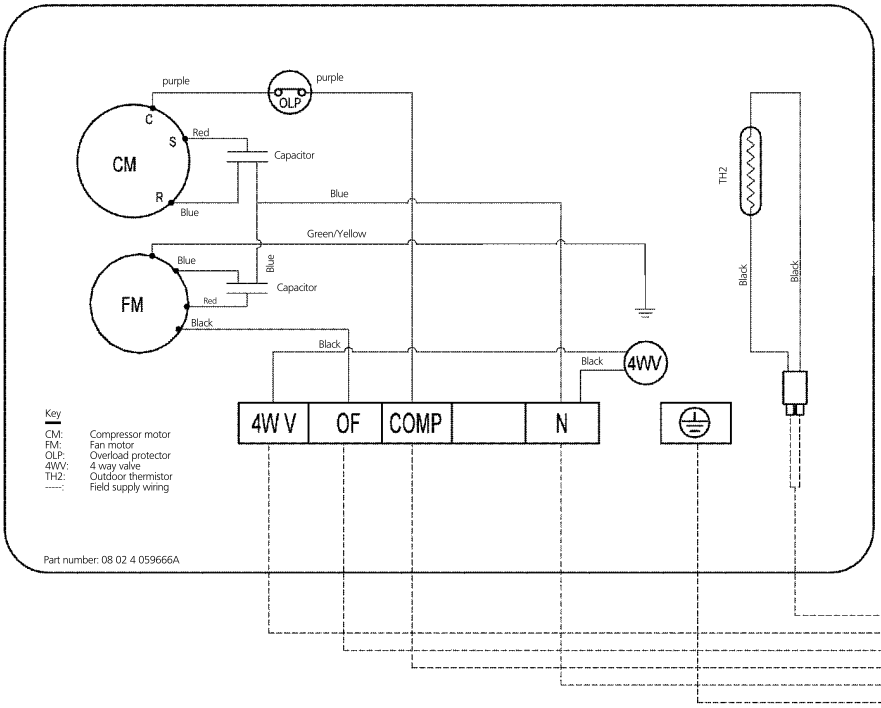


# 6 Wiring diagrams

## 6 - 1 Wiring Diagrams - Single Phase

**RYN25-35L**

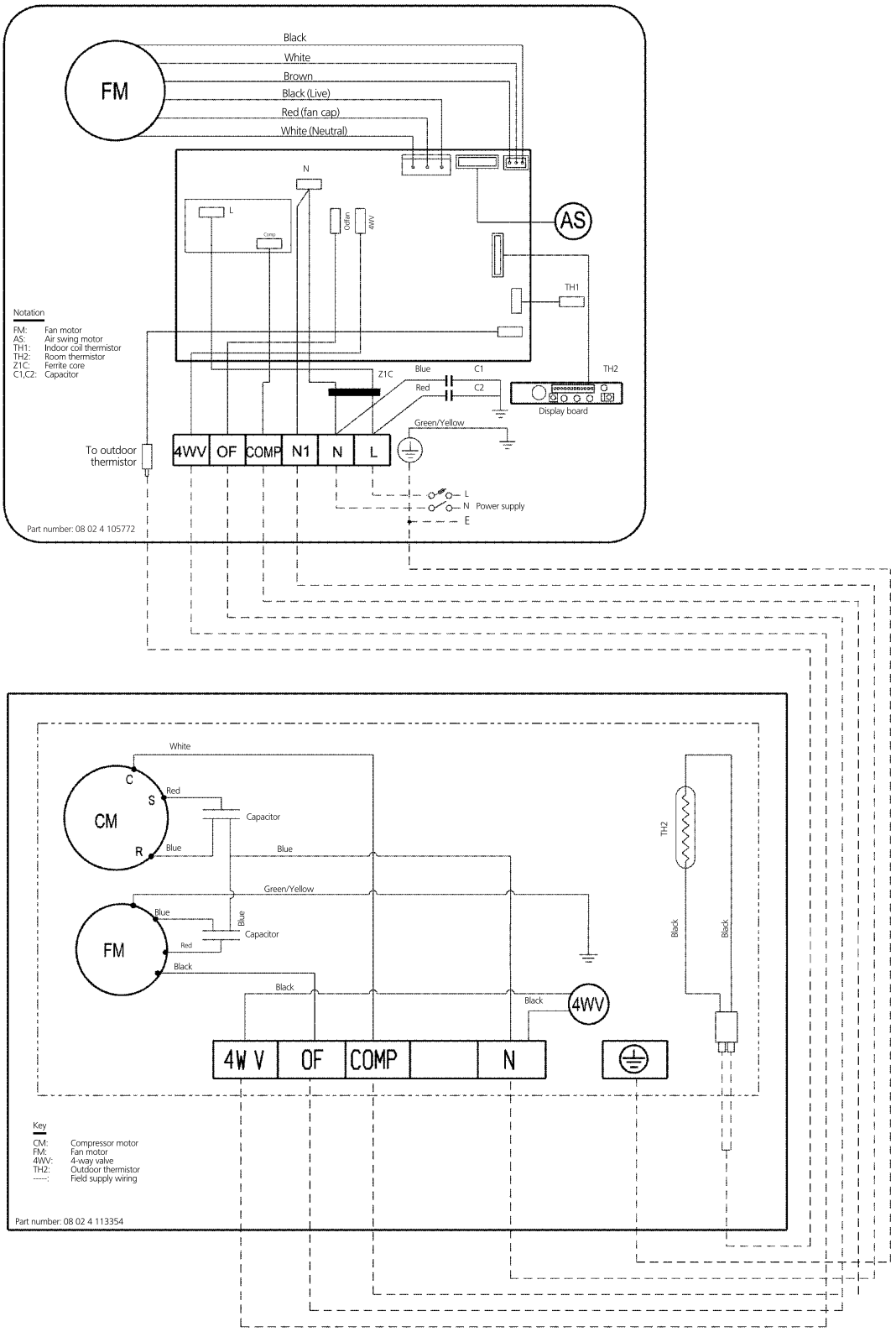


# 6 Wiring diagrams

## 6 - 1 Wiring Diagrams - Single Phase

**RYN50-60L**

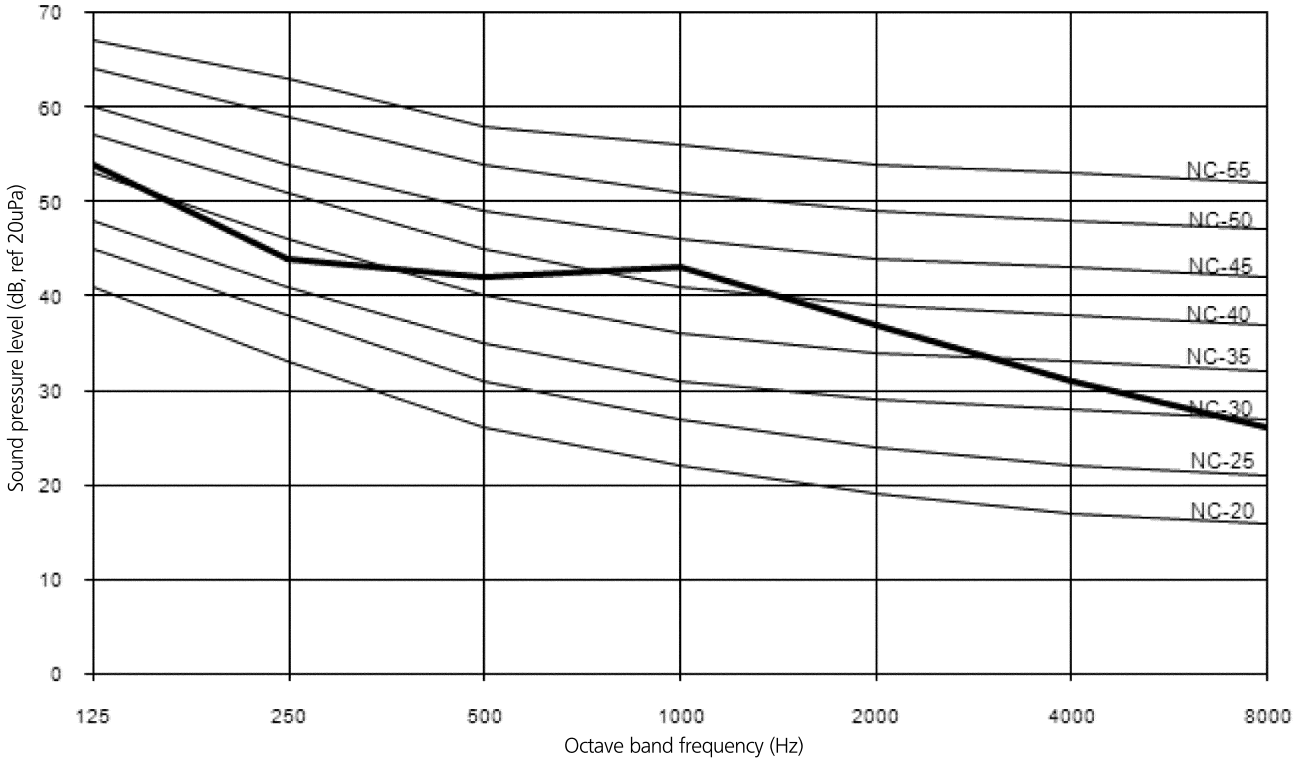


# 7 Sound data

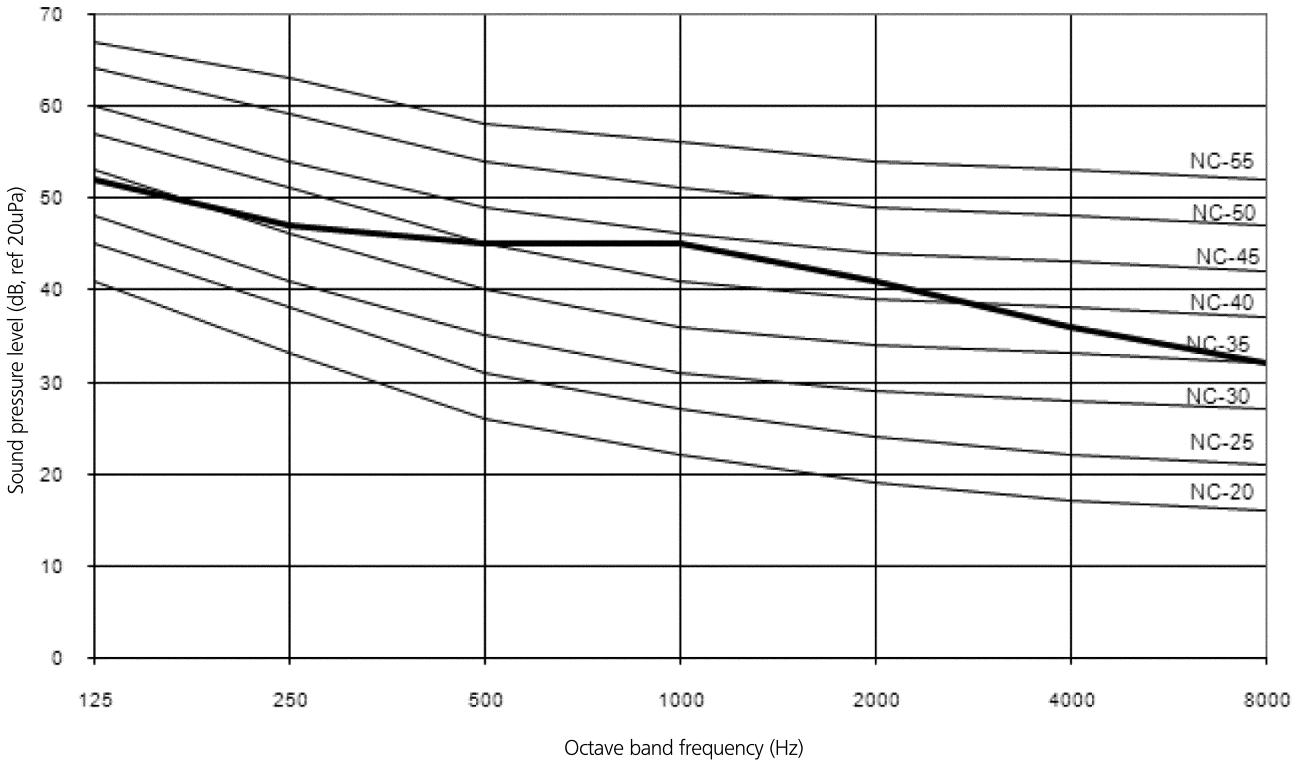
## 7 - 1 Sound Pressure Spectrum



**RYN25L**



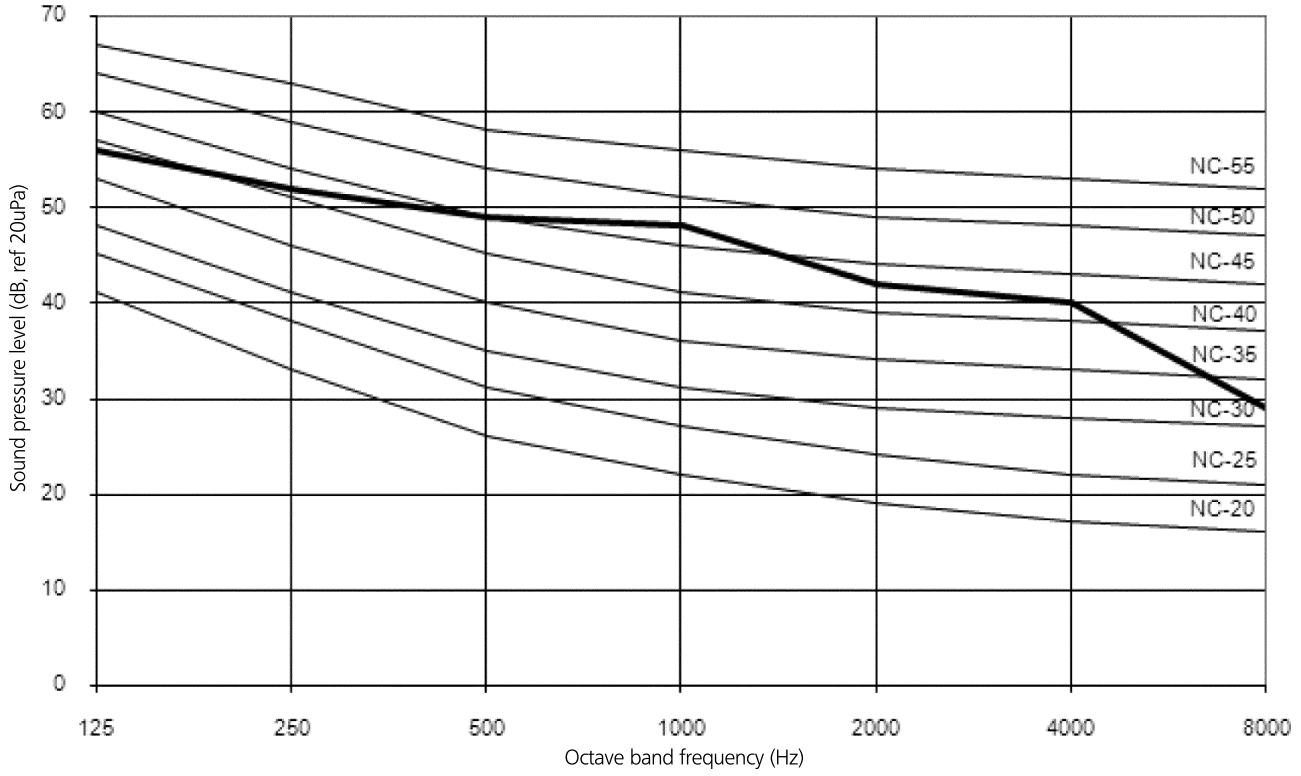

**RYN35L**



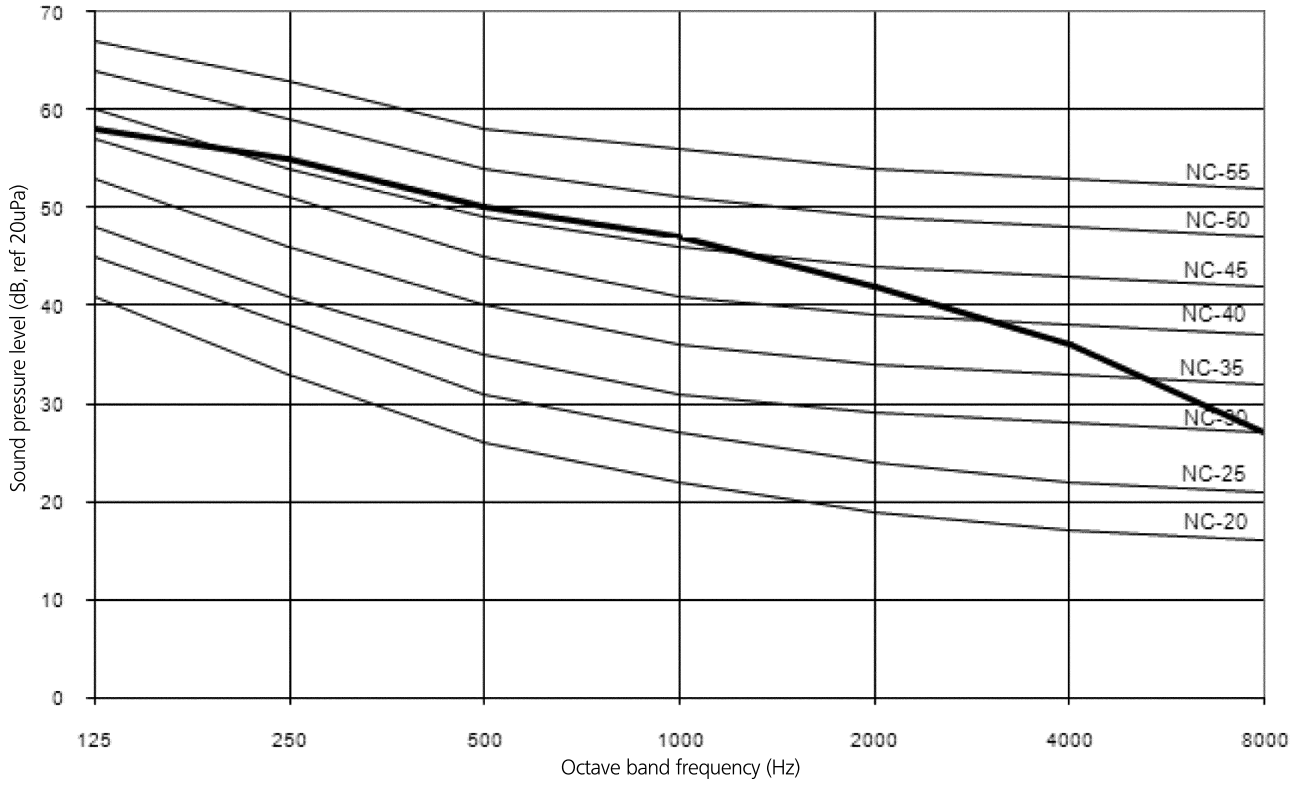
# 7 Sound data

## 7 - 1 Sound Pressure Spectrum

**RYN50L**



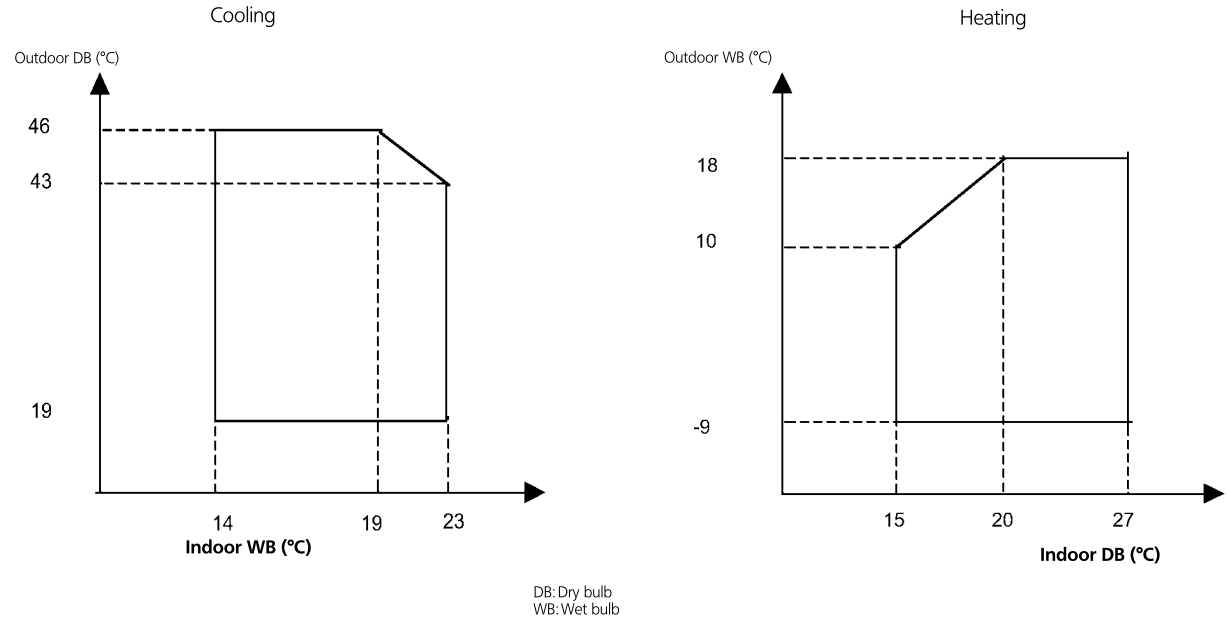

**RYN60L**



# 8 Operation range

## 8 - 1 Operation Range

**RYN-L**




DB: Dry bulb
WB: Wet bulb


Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.

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