TCTC-E17-RES004-2

TOSHIBA
Leading Innovation >>>

# Engineering Databook

**Indoor unit**

RAS-25PKVPG-ND
RAS-35PKVPG-ND

**Outdoor unit**

RAS-25PAVPG-ND
RAS-35PAVPG-ND

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# Specifications

## Performance data

| Outdoor unit<br>Indoor unit | | | RAS-25PAVPG-ND<br>RAS-25PKVPG-ND | RAS-35PAVPG-ND<br>RAS-35PKVPG-ND |
|---|---|---|---|---|
| Cooling capacity | kW | | 2.5 | 3.5 |
| Cooling range (min. - max.) | kW | | 0.9 - 3.50 | 0.9 - 4.1 |
| Power input (min. - rated - max.) | kW | C | 0.18 - 0.48 - 0.80 | 0.18 - 0.77 - 0.98 |
| Pdesignc | kW | | 2.5 | 3.5 |
| EER | W/W | | 5.0 - 5.21 - 4.38 | 5.0 - 4.55 - 4.18 |
| SEER | | | 9 | 8.9 |
| Energy efficiency class | | C | A+++ | A+++ |
| Heating capacity | kW | | 3.2 | 4.0 |
| Heating range (min. - max.) | kW | | 0.70 - 6.70 | 0.70 - 7.70 |
| Power input (min. - rated - max.) | kW | H | 0.17 - 0.60 - 1.90 | 0.17 - 0.80 - 2.40 |
| Pdesignh | kW | | 3.0 | 3.8 |
| COP | W/W | | 4.12 - 5.33 - 3.53 | 4.12 -5.0 - 3.21 |
| SCOP | | | 5.3 | 5.1 |
| Energy efficiency class | | H | A+++ | A+++ |

## Physical data indoor

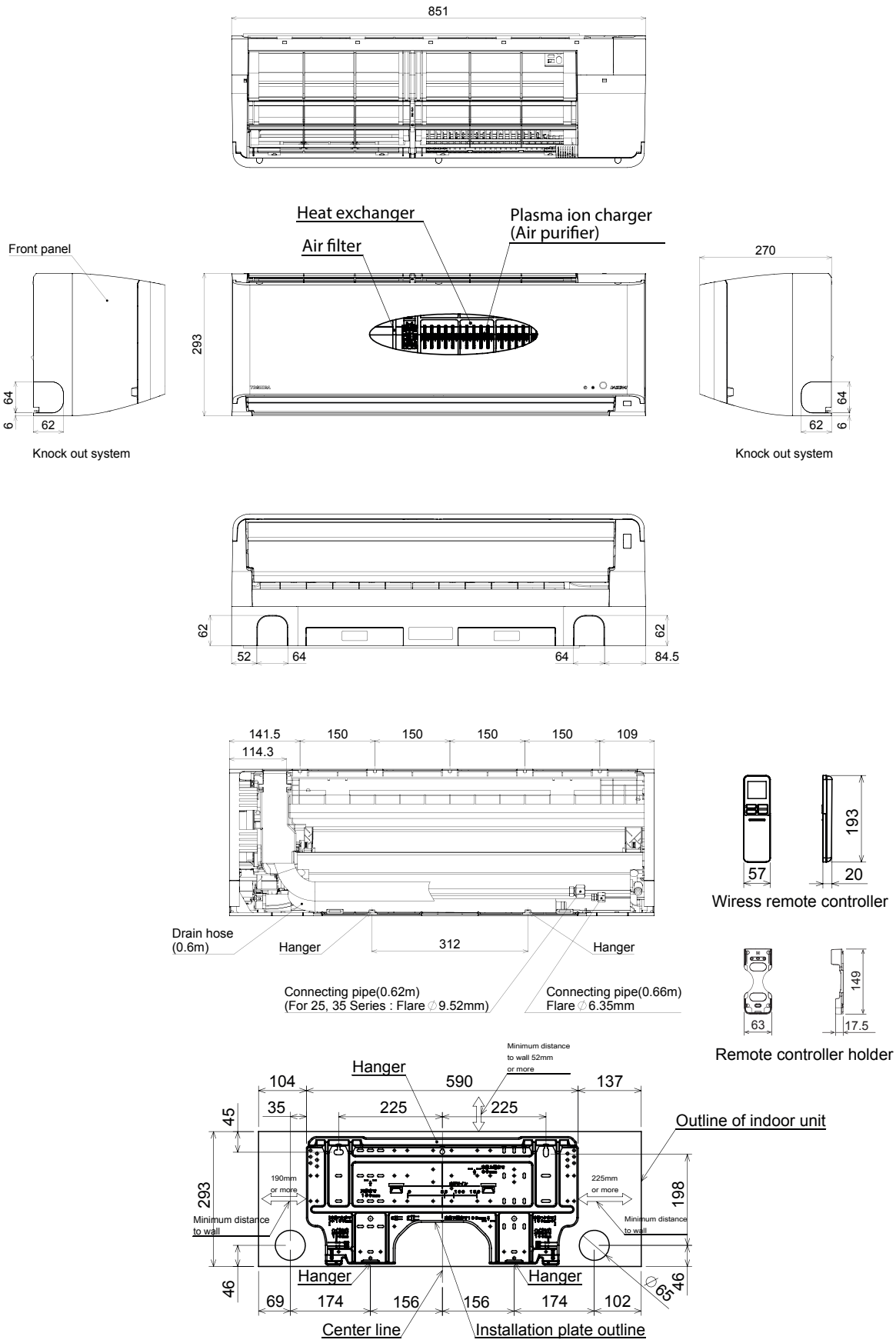
| Indoor unit | | | RAS-25PKVPG-ND | RAS-35PKVPG-ND |
|---|---|---|---|---|
| Air Flow (h) | $m^3$/h - l/s | C | 670 -187 | 670 -187 |
| Air Flow (l) | $m^3$/h - l/s | C | 300 - 83 | 300 - 83 |
| Sound pressure level (h/l (q)) | dB(A) | C | 42/24 (20) | 43/25 (20) |
| Sound power level (h) | dB(A) | C | 57 | 58 |
| Air Flow (h) | $m^3$/h - l/s | H | 720 - 202 | 720 - 200 |
| Air Flow (l) | $m^3$/h - l/s | H | 320- 88 | 320 - 88 |
| Sound pressure level (h/l (q)) | dB(A) | H | 44/24 (20) | 44/25 (20) |
| Sound power level (h) | dB(A) | H | 59 | 59 |
| Dimensions (hxwxd) | mm | | 293 x 851 x 270 | 293 x 851 x 270 |
| Weight | kg | | 14 | 14 |

## Physical data outdoor

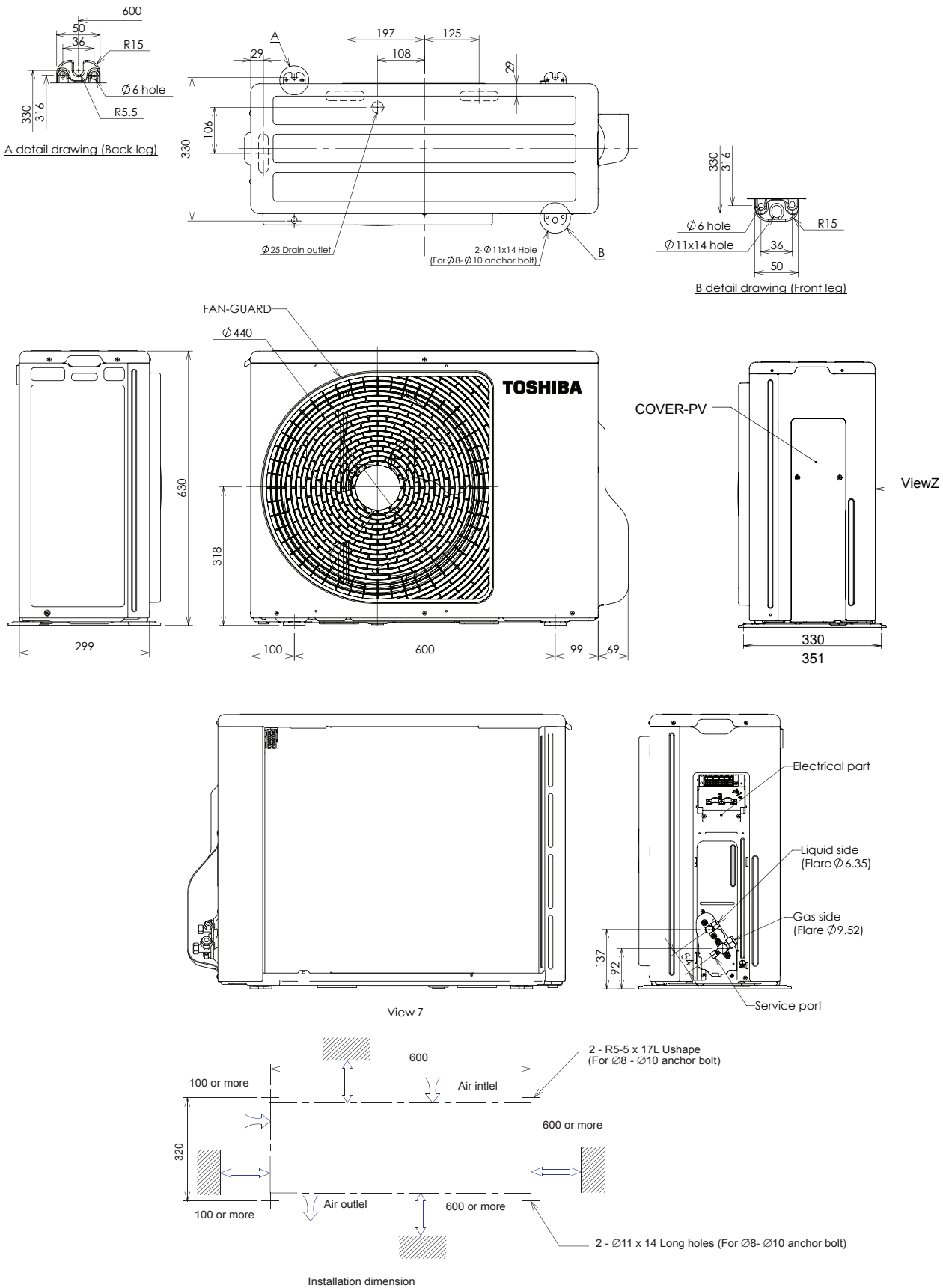
| Outdoor unit | | | RAS-25PAVPG-ND | RAS-35PAVPG-ND |
|---|---|---|---|---|
| Air Flow (max) | $m^3$/h - l/s | C | 1870 -520 | 2160 -600 |
| Sound pressure level (night mode) | dB(A) | C | 46 (41) | 48 (43) |
| Sound power level | dB(A) | C | 61 | 65 |
| Operating range | °C | C | -15~46 | -15~46 |
| Air Flow (max) | $m^3$/h - l/s | H | 2160 -600 | 2160 -600 |
| Sound pressure level (night mode) | dB(A) | H | 47 (42) | 49 (44) |
| Sound power level (h) | dBA | H | 62 | 64 |
| Operating range | °C | H | -30~24 | -30~24 |
| Dimensions (hxwxd) | mm | | 630 x 800 x 300 | 630 x 800 x 300 |
| Weight | kg | | 42 | 43 |
| Compressor type | | | DC Twin Rotary | DC Twin Rotary |
| Flare connections (gas-liquid) | | | 3/8" - 1/4" | 3/8" - 1/4" |
| Minimum pipe length | m | | 2 | 2 |
| Maximum pipe length | m | | 25 | 25 |
| Maximum height difference | m | | 10 | 10 |
| Chargeless pipe length | m | | 15 | 15 |
| Remote | | | WH-TA01LE | WH-TA01LE |
| Refrigerant amount | kg | | 1.1 | 1.05 |
| Power supply | V-ph-Hz | | 220-240 / 1 / 50 | 220-240 / 1 / 50 |

C = cooling mode
H = heating mode

# Dimensions of Indoor units

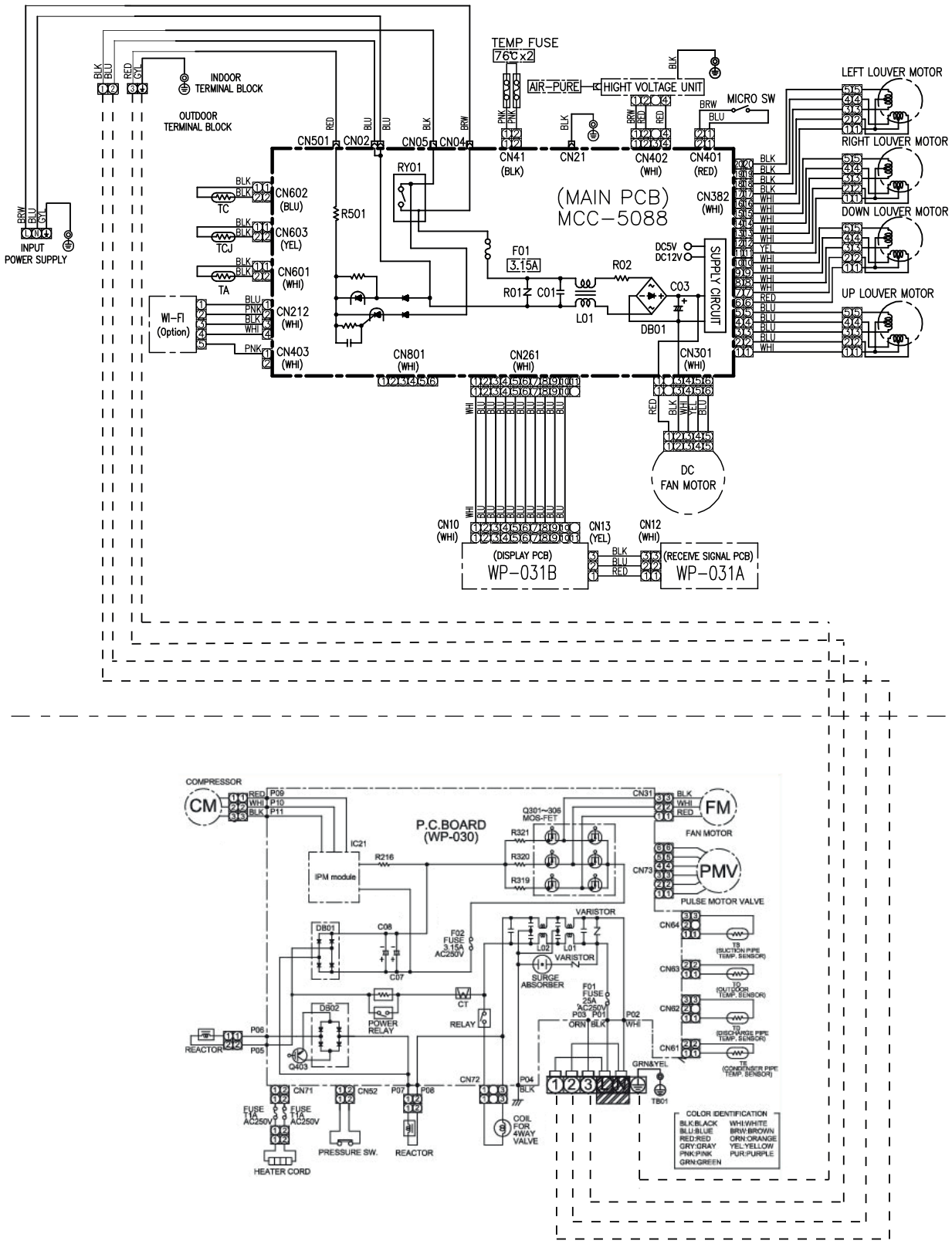


# Dimensions of outdoor units




Installation dimension

# Wiring Diagrams



## Sensible capacity table

**Product models : RAS-25PKVPG-ND RAS-25PAVPG-ND**

Specification of product at standard condition

| Standard Condition | | |
|---|---|---|
| | Indoor | 27°C (DB) / 19°C (WB) |
| | Outdoor | 35°C (DB) / 24°C (WB) |

| | | |
|---|---|---|
| Total Cooling Capacity (TC) | 2.50 | kW |
| Sensible Heat Capacity (SHC) | 2.00 | kW |

| Outdoor air temperature | Indoor air temperature | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20.0°C (DB) 14.0°C (WB) | | 23.0°C (DB) 16.0°C (WB) | | 26.0°C (DB) 18.0°C (WB) | | 27.0°C (DB) 19.0°C (WB) | | 28.0°C (DB) 20.0°C (WB) | | 30.0°C (DB) 22.0°C (WB) | | 32.0°C (DB) 24.0°C (WB) | |
| DB (°C) | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 20 | 2.45 | 2.11 | 2.70 | 2.25 | 2.90 | 2.39 | 2.98 | 2.39 | 3.07 | 2.38 | 3.25 | 2.36 | 3.40 | 2.32 |
| 21 | 2.42 | 2.09 | 2.68 | 2.22 | 2.86 | 2.36 | 2.95 | 2.36 | 3.03 | 2.36 | 3.21 | 2.34 | 3.36 | 2.29 |
| 22 | 2.40 | 2.06 | 2.65 | 2.20 | 2.83 | 2.34 | 2.92 | 2.33 | 3.00 | 2.33 | 3.18 | 2.31 | 3.32 | 2.27 |
| 23 | 2.37 | 2.04 | 2.62 | 2.17 | 2.80 | 2.31 | 2.89 | 2.31 | 2.97 | 2.31 | 3.14 | 2.29 | 3.29 | 2.24 |
| 24 | 2.34 | 2.02 | 2.59 | 2.15 | 2.77 | 2.29 | 2.85 | 2.28 | 2.93 | 2.28 | 3.11 | 2.26 | 3.25 | 2.22 |
| 25 | 2.32 | 1.99 | 2.56 | 2.13 | 2.74 | 2.26 | 2.82 | 2.26 | 2.90 | 2.26 | 3.07 | 2.23 | 3.21 | 2.19 |
| 26 | 2.29 | 1.97 | 2.53 | 2.10 | 2.71 | 2.23 | 2.79 | 2.23 | 2.87 | 2.23 | 3.04 | 2.21 | 3.18 | 2.17 |
| 27 | 2.26 | 1.95 | 2.50 | 2.08 | 2.68 | 2.21 | 2.76 | 2.21 | 2.84 | 2.20 | 3.00 | 2.18 | 3.14 | 2.14 |
| 28 | 2.24 | 1.93 | 2.47 | 2.05 | 2.65 | 2.18 | 2.72 | 2.18 | 2.80 | 2.18 | 2.97 | 2.16 | 3.10 | 2.12 |
| 29 | 2.21 | 1.90 | 2.44 | 2.03 | 2.62 | 2.16 | 2.69 | 2.15 | 2.77 | 2.15 | 2.93 | 2.13 | 3.07 | 2.09 |
| 30 | 2.19 | 1.88 | 2.41 | 2.01 | 2.58 | 2.13 | 2.66 | 2.13 | 2.74 | 2.13 | 2.90 | 2.11 | 3.03 | 2.07 |
| 31 | 2.16 | 1.86 | 2.38 | 1.98 | 2.55 | 2.11 | 2.63 | 2.10 | 2.70 | 2.10 | 2.86 | 2.08 | 2.99 | 2.04 |
| 32 | 2.13 | 1.84 | 2.36 | 1.96 | 2.52 | 2.08 | 2.60 | 2.08 | 2.67 | 2.08 | 2.83 | 2.06 | 2.96 | 2.02 |
| 33 | 2.11 | 1.81 | 2.33 | 1.93 | 2.49 | 2.05 | 2.56 | 2.05 | 2.64 | 2.05 | 2.79 | 2.03 | 2.92 | 1.99 |
| 34 | 2.08 | 1.79 | 2.30 | 1.91 | 2.46 | 2.03 | 2.53 | 2.03 | 2.60 | 2.02 | 2.76 | 2.01 | 2.88 | 1.97 |
| 35 | 2.05 | 1.77 | 2.27 | 1.88 | 2.43 | 2.00 | 2.50 | 2.00 | 2.57 | 2.00 | 2.72 | 1.98 | 2.85 | 1.94 |
| 36 | 2.03 | 1.74 | 2.24 | 1.86 | 2.40 | 1.98 | 2.47 | 1.97 | 2.54 | 1.97 | 2.69 | 1.95 | 2.81 | 1.92 |
| 37 | 2.00 | 1.72 | 2.21 | 1.84 | 2.37 | 1.95 | 2.44 | 1.95 | 2.51 | 1.95 | 2.65 | 1.93 | 2.78 | 1.89 |
| 38 | 1.97 | 1.70 | 2.18 | 1.81 | 2.34 | 1.93 | 2.40 | 1.92 | 2.47 | 1.92 | 2.62 | 1.90 | 2.74 | 1.87 |
| 39 | 1.95 | 1.68 | 2.15 | 1.79 | 2.30 | 1.90 | 2.37 | 1.90 | 2.44 | 1.90 | 2.58 | 1.88 | 2.70 | 1.84 |
| 40 | 1.92 | 1.65 | 2.12 | 1.76 | 2.27 | 1.87 | 2.34 | 1.87 | 2.41 | 1.87 | 2.55 | 1.85 | 2.67 | 1.82 |
| 41 | 1.90 | 1.63 | 2.09 | 1.74 | 2.24 | 1.85 | 2.31 | 1.85 | 2.37 | 1.84 | 2.51 | 1.83 | 2.63 | 1.79 |
| 42 | 1.87 | 1.61 | 2.06 | 1.72 | 2.21 | 1.82 | 2.28 | 1.82 | 2.34 | 1.82 | 2.48 | 1.80 | 2.59 | 1.77 |
| 43 | 1.84 | 1.59 | 2.03 | 1.69 | 2.18 | 1.80 | 2.24 | 1.79 | 2.31 | 1.79 | 2.44 | 1.78 | 2.56 | 1.74 |
| 44 | 1.82 | 1.56 | 2.01 | 1.67 | 2.15 | 1.77 | 2.21 | 1.77 | 2.27 | 1.77 | 2.41 | 1.75 | 2.52 | 1.72 |
| 45 | 1.79 | 1.54 | 1.98 | 1.64 | 2.12 | 1.75 | 2.18 | 1.74 | 2.24 | 1.74 | 2.37 | 1.73 | 2.48 | 1.69 |
| 46 | 1.76 | 1.52 | 1.95 | 1.62 | 2.09 | 1.72 | 2.15 | 1.72 | 2.21 | 1.72 | 2.34 | 1.70 | 2.45 | 1.67 |

**Product models : RAS-35PKVPG-ND RAS-35PAVPG-ND**

Specification of product at standard condition

| Standard Condition | | |
|---|---|---|
| | Indoor | 27°C (DB) / 19°C (WB) |
| | Outdoor | 35°C (DB) / 24°C (WB) |

| | | |
|---|---|---|
| Total Cooling Capacity (TC) | 3.50 | kW |
| Sensible Heat Capacity (SHC) | 2.63 | kW |

| Outdoor air temperature | Indoor air temperature | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 20.0°C (DB) 14.0°C (WB) | | 23.0°C (DB) 16.0°C (WB) | | 26.0°C (DB) 18.0°C (WB) | | 27.0°C (DB) 19.0°C (WB) | | 28.0°C (DB) 20.0°C (WB) | | 30.0°C (DB) 22.0°C (WB) | | 32.0°C (DB) 24.0°C (WB) | |
| DB (°C) | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 20 | 3.43 | 2.78 | 3.79 | 2.96 | 4.05 | 3.15 | 4.17 | 3.14 | 4.29 | 3.13 | 4.55 | 3.09 | 4.76 | 3.01 |
| 21 | 3.39 | 2.75 | 3.75 | 2.93 | 4.01 | 3.11 | 4.13 | 3.10 | 4.25 | 3.09 | 4.50 | 3.05 | 4.70 | 2.98 |
| 22 | 3.35 | 2.72 | 3.70 | 2.90 | 3.97 | 3.08 | 4.08 | 3.07 | 4.20 | 3.06 | 4.45 | 3.02 | 4.65 | 2.95 |
| 23 | 3.32 | 2.69 | 3.66 | 2.87 | 3.92 | 3.05 | 4.04 | 3.04 | 4.15 | 3.03 | 4.40 | 2.99 | 4.60 | 2.91 |
| 24 | 3.28 | 2.66 | 3.62 | 2.83 | 3.88 | 3.01 | 3.99 | 3.00 | 4.11 | 2.99 | 4.35 | 2.95 | 4.55 | 2.88 |
| 25 | 3.24 | 2.63 | 3.58 | 2.80 | 3.84 | 2.98 | 3.95 | 2.97 | 4.06 | 2.96 | 4.30 | 2.92 | 4.50 | 2.85 |
| 26 | 3.21 | 2.60 | 3.54 | 2.77 | 3.79 | 2.94 | 3.90 | 2.93 | 4.02 | 2.93 | 4.25 | 2.89 | 4.45 | 2.82 |
| 27 | 3.17 | 2.57 | 3.50 | 2.74 | 3.75 | 2.91 | 3.86 | 2.90 | 3.97 | 2.89 | 4.20 | 2.85 | 4.40 | 2.78 |
| 28 | 3.13 | 2.54 | 3.46 | 2.71 | 3.71 | 2.88 | 3.81 | 2.87 | 3.92 | 2.86 | 4.16 | 2.82 | 4.35 | 2.75 |
| 29 | 3.10 | 2.51 | 3.42 | 2.68 | 3.66 | 2.84 | 3.77 | 2.83 | 3.88 | 2.83 | 4.11 | 2.79 | 4.29 | 2.72 |
| 30 | 3.06 | 2.48 | 3.38 | 2.64 | 3.62 | 2.81 | 3.72 | 2.80 | 3.83 | 2.79 | 4.06 | 2.75 | 4.24 | 2.69 |
| 31 | 3.02 | 2.45 | 3.34 | 2.61 | 3.57 | 2.78 | 3.68 | 2.77 | 3.78 | 2.76 | 4.01 | 2.72 | 4.19 | 2.66 |
| 32 | 2.99 | 2.42 | 3.30 | 2.58 | 3.53 | 2.74 | 3.63 | 2.73 | 3.74 | 2.72 | 3.96 | 2.69 | 4.14 | 2.62 |
| 33 | 2.95 | 2.40 | 3.26 | 2.55 | 3.49 | 2.71 | 3.59 | 2.70 | 3.69 | 2.69 | 3.91 | 2.65 | 4.09 | 2.59 |
| 34 | 2.91 | 2.37 | 3.22 | 2.52 | 3.44 | 2.67 | 3.54 | 2.66 | 3.65 | 2.66 | 3.86 | 2.62 | 4.04 | 2.56 |
| 35 | 2.87 | 2.34 | 3.17 | 2.48 | 3.40 | 2.64 | 3.50 | 2.63 | 3.60 | 2.62 | 3.81 | 2.59 | 3.99 | 2.53 |
| 36 | 2.84 | 2.31 | 3.13 | 2.45 | 3.36 | 2.61 | 3.46 | 2.60 | 3.55 | 2.59 | 3.76 | 2.55 | 3.94 | 2.49 |
| 37 | 2.80 | 2.28 | 3.09 | 2.42 | 3.31 | 2.57 | 3.41 | 2.56 | 3.51 | 2.56 | 3.71 | 2.52 | 3.89 | 2.46 |
| 38 | 2.76 | 2.25 | 3.05 | 2.39 | 3.27 | 2.54 | 3.37 | 2.53 | 3.46 | 2.52 | 3.67 | 2.49 | 3.83 | 2.43 |
| 39 | 2.73 | 2.22 | 3.01 | 2.36 | 3.23 | 2.50 | 3.32 | 2.49 | 3.42 | 2.49 | 3.62 | 2.45 | 3.78 | 2.40 |
| 40 | 2.69 | 2.19 | 2.97 | 2.32 | 3.18 | 2.47 | 3.28 | 2.46 | 3.37 | 2.46 | 3.57 | 2.42 | 3.73 | 2.36 |
| 41 | 2.65 | 2.16 | 2.93 | 2.29 | 3.14 | 2.44 | 3.23 | 2.43 | 3.32 | 2.42 | 3.52 | 2.39 | 3.68 | 2.33 |
| 42 | 2.62 | 2.13 | 2.89 | 2.26 | 3.09 | 2.40 | 3.19 | 2.39 | 3.28 | 2.39 | 3.47 | 2.35 | 3.63 | 2.30 |
| 43 | 2.58 | 2.10 | 2.85 | 2.23 | 3.05 | 2.37 | 3.14 | 2.36 | 3.23 | 2.35 | 3.42 | 2.32 | 3.58 | 2.27 |
| 44 | 2.54 | 2.07 | 2.81 | 2.20 | 3.01 | 2.33 | 3.10 | 2.33 | 3.18 | 2.32 | 3.37 | 2.29 | 3.53 | 2.23 |
| 45 | 2.51 | 2.04 | 2.77 | 2.17 | 2.96 | 2.30 | 3.05 | 2.29 | 3.14 | 2.29 | 3.32 | 2.26 | 3.48 | 2.20 |
| 46 | 2.47 | 2.01 | 2.73 | 2.13 | 2.92 | 2.27 | 3.01 | 2.26 | 3.09 | 2.25 | 3.27 | 2.22 | 3.42 | 2.17 |

# Part load performance

### Sigle Split Type

**Indoor:** **RAS-25PKVPG-ND**
**Outdoor:** **RAS-25PAVPG-ND**

| Operation range | | Cooling | | Heating | |
|---|---|---|---|---|---|
| | | Q | P | Q | P |
| MINIMUM | W | 900 | 180 | 700 | 170 |
| RATING | W | 2500 | 480 | 3200 | 600 |
| MAXIMUM | W | 3500 | 800 | 6700 | 1900 |

**Cooling**

| Outdoor Temperature DB (°C) | Parts Load (%) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 100 (Max) | | 90 | | 80 | | 70 (Rated) | | 60 | | 50 | | 40 | | 30 | | 20 | | 10 | |
| | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P |
| 20 | 4174 | 628 | 3756 | 540 | 3339 | 452 | 2981 | 377 | 2504 | 314 | 2087 | 259 | 1670 | 204 | 1491 | 181 | 1073 | 141 | 1073 | 141 |
| 21 | 4129 | 639 | 3716 | 550 | 3303 | 460 | 2949 | 384 | 2477 | 320 | 2064 | 264 | 1652 | 208 | 1475 | 184 | 1062 | 144 | 1062 | 144 |
| 22 | 4084 | 651 | 3676 | 560 | 3267 | 469 | 2917 | 391 | 2450 | 325 | 2042 | 269 | 1634 | 212 | 1459 | 187 | 1050 | 146 | 1050 | 146 |
| 23 | 4039 | 662 | 3635 | 570 | 3231 | 477 | 2885 | 397 | 2423 | 331 | 2020 | 273 | 1616 | 215 | 1443 | 190 | 1039 | 149 | 1039 | 149 |
| 24 | 3994 | 674 | 3595 | 580 | 3195 | 485 | 2853 | 404 | 2396 | 337 | 1997 | 278 | 1598 | 219 | 1426 | 194 | 1027 | 152 | 1027 | 152 |
| 25 | 3949 | 685 | 3554 | 589 | 3159 | 493 | 2821 | 411 | 2370 | 343 | 1975 | 283 | 1580 | 223 | 1410 | 197 | 1016 | 154 | 1016 | 154 |
| 26 | 3904 | 697 | 3514 | 599 | 3123 | 502 | 2789 | 418 | 2343 | 348 | 1952 | 287 | 1562 | 226 | 1394 | 200 | 1004 | 157 | 1004 | 157 |
| 27 | 3859 | 708 | 3473 | 609 | 3087 | 510 | 2757 | 425 | 2316 | 354 | 1930 | 292 | 1544 | 230 | 1378 | 204 | 992 | 159 | 992 | 159 |
| 28 | 3814 | 720 | 3433 | 619 | 3052 | 518 | 2725 | 432 | 2289 | 360 | 1907 | 297 | 1526 | 234 | 1362 | 207 | 981 | 162 | 981 | 162 |
| 29 | 3770 | 731 | 3393 | 629 | 3016 | 526 | 2693 | 439 | 2262 | 366 | 1885 | 302 | 1508 | 238 | 1346 | 210 | 969 | 165 | 969 | 165 |
| 30 | 3725 | 743 | 3352 | 639 | 2980 | 535 | 2660 | 446 | 2235 | 371 | 1862 | 306 | 1490 | 241 | 1330 | 214 | 958 | 167 | 958 | 167 |
| 31 | 3680 | 754 | 3312 | 649 | 2944 | 543 | 2628 | 452 | 2208 | 377 | 1840 | 311 | 1472 | 245 | 1314 | 217 | 946 | 170 | 946 | 170 |
| 32 | 3635 | 766 | 3271 | 658 | 2908 | 551 | 2596 | 459 | 2181 | 383 | 1817 | 316 | 1454 | 249 | 1298 | 220 | 935 | 172 | 935 | 172 |
| 33 | 3590 | 777 | 3231 | 668 | 2872 | 559 | 2564 | 466 | 2154 | 389 | 1795 | 321 | 1436 | 253 | 1282 | 223 | 923 | 175 | 923 | 175 |
| 34 | 3545 | 789 | 3190 | 678 | 2836 | 568 | 2532 | 473 | 2127 | 394 | 1772 | 325 | 1418 | 256 | 1266 | 227 | 912 | 177 | 912 | 177 |
| 35 | 3500 | 800 | 3150 | 688 | 2800 | 576 | 2500 | 480 | 2100 | 400 | 1750 | 330 | 1400 | 260 | 1250 | 230 | 900 | 180 | 900 | 180 |
| 36 | 3455 | 811 | 3110 | 698 | 2764 | 584 | 2468 | 487 | 2073 | 406 | 1728 | 335 | 1382 | 264 | 1234 | 233 | 888 | 183 | 888 | 183 |
| 37 | 3410 | 823 | 3069 | 708 | 2728 | 593 | 2436 | 494 | 2046 | 411 | 1705 | 339 | 1364 | 267 | 1218 | 237 | 877 | 185 | 877 | 185 |
| 38 | 3365 | 834 | 3029 | 718 | 2692 | 601 | 2404 | 501 | 2019 | 417 | 1683 | 344 | 1346 | 271 | 1202 | 240 | 865 | 188 | 865 | 188 |
| 39 | 3320 | 846 | 2988 | 727 | 2656 | 609 | 2372 | 508 | 1992 | 423 | 1660 | 349 | 1328 | 275 | 1186 | 243 | 854 | 190 | 854 | 190 |
| 40 | 3275 | 857 | 2948 | 737 | 2620 | 617 | 2340 | 514 | 1965 | 429 | 1638 | 354 | 1310 | 279 | 1170 | 246 | 842 | 193 | 842 | 193 |
| 41 | 3231 | 869 | 2907 | 747 | 2584 | 626 | 2308 | 521 | 1938 | 434 | 1615 | 358 | 1292 | 282 | 1154 | 250 | 831 | 195 | 831 | 195 |
| 42 | 3186 | 880 | 2867 | 757 | 2548 | 634 | 2275 | 528 | 1911 | 440 | 1593 | 363 | 1274 | 286 | 1138 | 253 | 819 | 198 | 819 | 198 |
| 43 | 3141 | 892 | 2827 | 767 | 2513 | 642 | 2243 | 535 | 1884 | 446 | 1570 | 368 | 1256 | 290 | 1122 | 256 | 808 | 201 | 808 | 201 |
| 44 | 3096 | 903 | 2786 | 777 | 2477 | 650 | 2211 | 542 | 1857 | 452 | 1548 | 373 | 1238 | 294 | 1106 | 260 | 796 | 203 | 796 | 203 |
| 45 | 3051 | 915 | 2746 | 787 | 2441 | 659 | 2179 | 549 | 1831 | 457 | 1525 | 377 | 1220 | 297 | 1090 | 263 | 785 | 206 | 785 | 206 |
| 46 | 3006 | 926 | 2705 | 796 | 2405 | 667 | 2147 | 556 | 1804 | 463 | 1503 | 382 | 1202 | 301 | 1074 | 266 | 773 | 208 | 773 | 208 |

**Heating**

| Outdoor Temperature DB (°C) | Parts Load (%) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 100 (Max) | | 90 | | 80 | | 70 | | 60 | | 50 | | 48 (Rated) | | 40 | | 30 | | 20 | | 10 | |
| | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P |
| -25 | 2700 | 1460 | 2430 | 1269 | 2160 | 1078 | 1890 | 886 | 1620 | 695 | 1350 | 504 | 1228 | 461 | 1028 | 381 | 771 | 254 | 514 | 191 | 269 | 131 |
| -24 | 2800 | 1462 | 2520 | 1271 | 2240 | 1079 | 1960 | 888 | 1680 | 696 | 1400 | 505 | 1273 | 462 | 1066 | 382 | 800 | 254 | 533 | 191 | 278 | 131 |
| -23 | 2900 | 1464 | 2610 | 1272 | 2320 | 1080 | 2030 | 889 | 1740 | 697 | 1450 | 505 | 1319 | 463 | 1104 | 383 | 828 | 255 | 552 | 191 | 288 | 131 |
| -22 | 3000 | 1466 | 2700 | 1274 | 2400 | 1082 | 2100 | 890 | 1800 | 698 | 1500 | 506 | 1364 | 463 | 1142 | 383 | 857 | 255 | 571 | 192 | 298 | 131 |
| -21 | 3100 | 1468 | 2790 | 1276 | 2480 | 1083 | 2170 | 891 | 1860 | 699 | 1550 | 507 | 1409 | 464 | 1180 | 384 | 885 | 255 | 590 | 192 | 308 | 131 |
| -20 | 3200 | 1470 | 2880 | 1277 | 2560 | 1085 | 2240 | 892 | 1920 | 700 | 1600 | 507 | 1455 | 465 | 1219 | 384 | 914 | 256 | 609 | 192 | 318 | 132 |
| -19 | 3320 | 1472 | 2988 | 1279 | 2656 | 1086 | 2324 | 894 | 1992 | 701 | 1660 | 508 | 1510 | 465 | 1264 | 385 | 948 | 256 | 632 | 192 | 330 | 132 |
| -18 | 3440 | 1474 | 3096 | 1281 | 2752 | 1088 | 2408 | 895 | 2064 | 702 | 1720 | 509 | 1564 | 466 | 1310 | 385 | 982 | 256 | 655 | 193 | 342 | 132 |
| -17 | 3560 | 1476 | 3204 | 1283 | 2848 | 1089 | 2492 | 896 | 2136 | 703 | 1780 | 509 | 1619 | 466 | 1356 | 386 | 1017 | 257 | 678 | 193 | 354 | 132 |
| -16 | 3680 | 1478 | 3312 | 1284 | 2944 | 1091 | 2576 | 897 | 2208 | 704 | 1840 | 510 | 1673 | 467 | 1401 | 386 | 1051 | 257 | 701 | 193 | 366 | 132 |
| -15 | 3800 | 1480 | 3420 | 1286 | 3040 | 1092 | 2660 | 898 | 2280 | 705 | 1900 | 511 | 1728 | 468 | 1447 | 387 | 1085 | 257 | 724 | 194 | 378 | 133 |
| -14 | 3875 | 1495 | 3488 | 1299 | 3100 | 1103 | 2713 | 908 | 2325 | 712 | 1938 | 516 | 1762 | 473 | 1476 | 391 | 1107 | 260 | 738 | 195 | 385 | 134 |
| -13 | 3950 | 1510 | 3555 | 1312 | 3160 | 1114 | 2765 | 917 | 2370 | 719 | 1975 | 521 | 1796 | 477 | 1504 | 395 | 1128 | 263 | 752 | 197 | 393 | 135 |
| -12 | 4025 | 1525 | 3623 | 1325 | 3220 | 1126 | 2818 | 926 | 2415 | 726 | 2013 | 526 | 1830 | 482 | 1533 | 398 | 1150 | 265 | 766 | 199 | 400 | 137 |
| -11 | 4100 | 1540 | 3690 | 1338 | 3280 | 1137 | 2870 | 935 | 2460 | 733 | 2050 | 531 | 1864 | 487 | 1561 | 402 | 1171 | 268 | 781 | 201 | 408 | 138 |
| -10 | 4175 | 1555 | 3758 | 1351 | 3340 | 1148 | 2923 | 944 | 2505 | 740 | 2088 | 537 | 1898 | 491 | 1590 | 406 | 1192 | 270 | 795 | 203 | 415 | 139 |
| -9 | 4250 | 1570 | 3825 | 1364 | 3400 | 1159 | 2975 | 953 | 2550 | 747 | 2125 | 542 | 1932 | 496 | 1618 | 410 | 1214 | 273 | 809 | 205 | 423 | 141 |
| -8 | 4325 | 1585 | 3893 | 1377 | 3460 | 1170 | 3028 | 962 | 2595 | 755 | 2163 | 547 | 1966 | 501 | 1647 | 414 | 1235 | 276 | 823 | 207 | 430 | 142 |
| -7 | 4400 | 1600 | 3960 | 1390 | 3520 | 1181 | 3080 | 971 | 2640 | 762 | 2200 | 552 | 2001 | 506 | 1675 | 418 | 1257 | 278 | 838 | 209 | 438 | 143 |
| -6 | 4478 | 1609 | 4030 | 1398 | 3582 | 1187 | 3134 | 977 | 2687 | 766 | 2239 | 555 | 2036 | 508 | 1705 | 420 | 1279 | 280 | 853 | 210 | 445 | 144 |
| -5 | 4556 | 1618 | 4100 | 1406 | 3644 | 1194 | 3189 | 982 | 2733 | 770 | 2278 | 558 | 2071 | 511 | 1735 | 423 | 1301 | 281 | 867 | 212 | 453 | 145 |
| -4 | 4633 | 1627 | 4170 | 1414 | 3707 | 1201 | 3243 | 987 | 2780 | 774 | 2317 | 561 | 2107 | 514 | 1764 | 425 | 1323 | 283 | 882 | 213 | 461 | 146 |
| -3 | 4711 | 1636 | 4240 | 1421 | 3769 | 1207 | 3298 | 993 | 2827 | 779 | 2356 | 564 | 2142 | 517 | 1794 | 427 | 1345 | 284 | 897 | 214 | 469 | 146 |
| -2 | 4789 | 1644 | 4310 | 1429 | 3831 | 1214 | 3352 | 998 | 2873 | 783 | 2394 | 568 | 2177 | 520 | 1824 | 430 | 1368 | 286 | 912 | 215 | 476 | 147 |
| -1 | 4867 | 1653 | 4380 | 1437 | 3893 | 1220 | 3407 | 1004 | 2920 | 787 | 2433 | 571 | 2213 | 523 | 1853 | 432 | 1390 | 287 | 927 | 216 | 484 | 148 |
| 0 | 4944 | 1662 | 4450 | 1445 | 3956 | 1227 | 3461 | 1009 | 2967 | 791 | 2472 | 574 | 2248 | 525 | 1883 | 434 | 1412 | 289 | 941 | 217 | 492 | 149 |
| 1 | 5022 | 1671 | 4520 | 1452 | 4018 | 1233 | 3516 | 1014 | 3013 | 796 | 2511 | 577 | 2283 | 528 | 1912 | 437 | 1434 | 291 | 956 | 219 | 500 | 150 |
| 2 | 5100 | 1680 | 4590 | 1460 | 4080 | 1240 | 3570 | 1020 | 3060 | 800 | 2550 | 580 | 2319 | 531 | 1942 | 439 | 1457 | 292 | 971 | 220 | 507 | 150 |
| 3 | 5203 | 1702 | 4683 | 1479 | 4162 | 1257 | 3642 | 1034 | 3122 | 811 | 2601 | 588 | 2357 | 538 | 1974 | 445 | 1480 | 296 | 987 | 223 | 516 | 152 |
| 4 | 5306 | 1725 | 4775 | 1499 | 4245 | 1273 | 3714 | 1047 | 3183 | 821 | 2653 | 595 | 2395 | 545 | 2006 | 451 | 1504 | 300 | 1003 | 226 | 524 | 154 |
| 5 | 5409 | 1747 | 4868 | 1519 | 4327 | 1290 | 3786 | 1061 | 3245 | 832 | 2704 | 603 | 2433 | 552 | 2037 | 457 | 1528 | 304 | 1019 | 229 | 532 | 157 |
| 6 | 6527 | 1871 | 5874 | 1626 | 5222 | 1381 | 4569 | 1136 | 3916 | 891 | 3264 | 646 | 3117 | 591 | 2611 | 488 | 1958 | 325 | 1305 | 244 | 682 | 167 |
| 7 | 6700 | 1900 | 6030 | 1651 | 5360 | 1402 | 4690 | 1153 | 4020 | 905 | 3350 | 656 | 3200 | 600 | 2680 | 496 | 2010 | 330 | 1340 | 248 | 700 | 170 |
| 8 | 6873 | 1929 | 6186 | 1677 | 5498 | 1424 | 4811 | 1171 | 4124 | 919 | 3436 | 666 | 3283 | 609 | 2749 | 504 | 2062 | 335 | 1375 | 252 | 718 | 173 |
| 9 | 7046 | 1959 | 6341 | 1702 | 5637 | 1446 | 4932 | 1189 | 4227 | 933 | 3523 | 676 | 3365 | 619 | 2818 | 511 | 2114 | 340 | 1409 | 256 | 736 | 175 |
| 10 | 7219 | 1988 | 6497 | 1728 | 5775 | 1467 | 5053 | 1207 | 4331 | 947 | 3609 | 686 | 3448 | 628 | 2887 | 519 | 2166 | 345 | 1444 | 260 | 754 | 178 |
| 11 | 7392 | 2018 | 6652 | 1753 | 5913 | 1489 | 5174 | 1225 | 4435 | 961 | 3696 | 696 | 3530 | 637 | 2957 | 527 | 2217 | 351 | 1478 | 264 | 772 | 181 |
| 12 | 7565 | 2047 | 6808 | 1779 | 6052 | 1511 | 5295 | 1243 | 4539 | 975 | 3782 | 706 | 3613 | 646 | 3026 | 534 | 2269 | 356 | 1513 | 267 | 790 | 183 |
| 13 | 7737 | 2077 | 6964 | 1805 | 6190 | 1533 | 5416 | 1261 | 4642 | 989 | 3869 | 717 | 3695 | 656 | 3095 | 542 | 2321 | 361 | 1547 | 271 | 808 | 186 |
| 14 | 7910 | 2106 | 7119 | 1830 | 6328 | 1554 | 5537 | 1278 | 4746 | 1003 | 3955 | 727 | 3778 | 665 | 3164 | 550 | 2373 | 366 | 1582 | 275 | 826 | 188 |
| 15 | 8083 | 2135 | 7275 | 1856 | 6467 | 1576 | 5658 | 1296 | 4850 | 1017 | 4042 | 737 | 3861 | 674 | 3233 | 557 | 2425 | 371 | 1617 | 279 | 845 | 191 |
| 16 | 8256 | 2165 | 7431 | 1881 | 6605 | 1598 | 5779 | 1314 | 4954 | 1031 | 4128 | 747 | 3943 | 684 | 3302 | 565 | 2477 | 376 | 1651 | 283 | 863 | 194 |
| 17 | 8429 | 2194 | 7586 | 1907 | 6743 | 1619 | 5900 | 1332 | 5057 | 1045 | 4215 | 757 | 4026 | 693 | 3372 | 573 | 2529 | 381 | 1686 | 287 | 881 | 196 |
| 18 | 8602 | 2224 | 7742 | 1932 | 6882 | 1641 | 6021 | 1350 | 5161 | 1059 | 4301 | 767 | 4108 | 702 | 3441 | 580 | 2581 | 386 | 1720 | 291 | 899 | 199 |
| 19 | 8775 | 2253 | 7897 | 1958 | 7020 | 1663 | 6142 | 1368 | 5265 | 1073 | 4387 | 778 | 4191 | 711 | 3510 | 588 | 2632 | 391 | 1755 | 294 | 917 | 202 |
| 20 | 8948 | 2282 | 8053 | 1984 | 7158 | 1685 | 6263 | 1386 | 5369 | 1087 | 4474 | 788 | 4274 | 721 | 3579 | 596 | 2684 | 397 | 1790 | 298 | 935 | 204 |
| 21 | 9121 | 2312 | 8209 | 2009 | 7297 | 1706 | 6384 | 1403 | 5472 | 1101 | 4560 | 798 | 4356 | 730 | 3648 | 604 | 2736 | 402 | 1824 | 302 | 953 | 207 |
| 22 | 9294 | 2341 | 8364 | 2035 | 7435 | 1728 | 6505 | 1421 | 5576 | 1115 | 4647 | 808 | 4439 | 739 | 3717 | 611 | 2788 | 407 | 1859 | 306 | 971 | 209 |
| 23 | 9466 | 2371 | 8520 | 2060 | 7573 | 1750 | 6627 | 1439 | 5680 | 1129 | 4733 | 818 | 4521 | 749 | 3787 | 619 | 2840 | 412 | 1893 | 310 | 989 | 212 |
| 24 | 9639 | 2400 | 8675 | 2086 | 7711 | 1771 | 6748 | 1457 | 5784 | 1143 | 4820 | 828 | 4604 | 758 | 3856 | 627 | 2892 | 417 | 1928 | 314 | 1007 | 215 |

## Sigle Split Type

**Indoor:** **RAS-35PKVPG-ND**
**Outdoor:** **RAS-35PAVPG-ND**

| Operation range | | Cooling | | Heating | |
|---|---|---|---|---|---|
| | | Q | P | Q | P |
| MINIMUM | W | 900 | 180 | 700 | 170 |
| RATING | W | 3500 | 770 | 4000 | 800 |
| MAXIMUM | W | 4100 | 980 | 7700 | 2400 |

**Cooling**

| Outdoor Temperature DB (°C) | Parts Load (%) | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 100 (Max) | | 90 | | 80 | | 70 (Rated) | | 60 | | 50 | | 40 | | 30 | | 20 | | 10 | |
| | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P |
| 20 | 4889 | 769 | 4400 | 657 | 4174 | 604 | 4174 | 604 | 2934 | 395 | 2445 | 312 | 2087 | 251 | 2087 | 251 | 1073 | 141 | 1073 | 141 |
| 21 | 4837 | 783 | 4353 | 669 | 4129 | 615 | 4129 | 615 | 2902 | 402 | 2418 | 317 | 2064 | 256 | 2064 | 256 | 1062 | 144 | 1062 | 144 |
| 22 | 4784 | 797 | 4306 | 681 | 4084 | 627 | 4084 | 627 | 2870 | 409 | 2392 | 323 | 2042 | 260 | 2042 | 260 | 1050 | 146 | 1050 | 146 |
| 23 | 4731 | 811 | 4258 | 693 | 4039 | 638 | 4039 | 638 | 2839 | 416 | 2366 | 329 | 2020 | 265 | 2020 | 265 | 1039 | 149 | 1039 | 149 |
| 24 | 4679 | 825 | 4211 | 705 | 3994 | 649 | 3994 | 649 | 2807 | 423 | 2339 | 335 | 1997 | 270 | 1997 | 270 | 1027 | 152 | 1027 | 152 |
| 25 | 4626 | 840 | 4164 | 717 | 3949 | 660 | 3949 | 660 | 2776 | 431 | 2313 | 340 | 1975 | 274 | 1975 | 274 | 1016 | 154 | 1016 | 154 |
| 26 | 4574 | 854 | 4116 | 729 | 3904 | 671 | 3904 | 671 | 2744 | 438 | 2287 | 346 | 1952 | 279 | 1952 | 279 | 1004 | 157 | 1004 | 157 |
| 27 | 4521 | 868 | 4069 | 741 | 3859 | 682 | 3859 | 682 | 2713 | 445 | 2260 | 352 | 1930 | 283 | 1930 | 283 | 992 | 159 | 992 | 159 |
| 28 | 4468 | 882 | 4021 | 753 | 3814 | 693 | 3814 | 693 | 2681 | 452 | 2234 | 357 | 1907 | 288 | 1907 | 288 | 981 | 162 | 981 | 162 |
| 29 | 4416 | 896 | 3974 | 765 | 3770 | 704 | 3770 | 704 | 2649 | 459 | 2208 | 363 | 1885 | 292 | 1885 | 292 | 969 | 165 | 969 | 165 |
| 30 | 4363 | 910 | 3927 | 777 | 3725 | 715 | 3725 | 715 | 2618 | 467 | 2182 | 369 | 1862 | 297 | 1862 | 297 | 958 | 167 | 958 | 167 |
| 31 | 4310 | 924 | 3879 | 789 | 3680 | 726 | 3680 | 726 | 2586 | 474 | 2155 | 374 | 1840 | 302 | 1840 | 302 | 946 | 170 | 946 | 170 |
| 32 | 4258 | 938 | 3832 | 801 | 3635 | 737 | 3635 | 737 | 2555 | 481 | 2129 | 380 | 1817 | 306 | 1817 | 306 | 935 | 172 | 935 | 172 |
| 33 | 4205 | 952 | 3785 | 813 | 3590 | 748 | 3590 | 748 | 2523 | 488 | 2103 | 386 | 1795 | 311 | 1795 | 311 | 923 | 175 | 923 | 175 |
| 34 | 4153 | 966 | 3737 | 825 | 3545 | 759 | 3545 | 759 | 2492 | 495 | 2076 | 391 | 1772 | 315 | 1772 | 315 | 912 | 177 | 912 | 177 |
| 35 | 4100 | 980 | 3690 | 837 | 3500 | 770 | 3500 | 770 | 2460 | 503 | 2050 | 397 | 1750 | 320 | 1750 | 320 | 900 | 180 | 900 | 180 |
| 36 | 4047 | 994 | 3643 | 848 | 3455 | 781 | 3455 | 781 | 2428 | 510 | 2024 | 403 | 1728 | 325 | 1728 | 325 | 888 | 183 | 888 | 183 |
| 37 | 3995 | 1008 | 3595 | 860 | 3410 | 792 | 3410 | 792 | 2397 | 517 | 1997 | 409 | 1705 | 329 | 1705 | 329 | 877 | 185 | 877 | 185 |
| 38 | 3942 | 1022 | 3548 | 872 | 3365 | 803 | 3365 | 803 | 2365 | 524 | 1971 | 414 | 1683 | 334 | 1683 | 334 | 865 | 188 | 865 | 188 |
| 39 | 3890 | 1036 | 3501 | 884 | 3320 | 814 | 3320 | 814 | 2334 | 531 | 1945 | 420 | 1660 | 338 | 1660 | 338 | 854 | 190 | 854 | 190 |
| 40 | 3837 | 1050 | 3453 | 896 | 3275 | 825 | 3275 | 825 | 2302 | 539 | 1918 | 426 | 1638 | 343 | 1638 | 343 | 842 | 193 | 842 | 193 |
| 41 | 3784 | 1064 | 3406 | 908 | 3231 | 836 | 3231 | 836 | 2271 | 546 | 1892 | 431 | 1615 | 348 | 1615 | 348 | 831 | 195 | 831 | 195 |
| 42 | 3732 | 1078 | 3359 | 920 | 3186 | 847 | 3186 | 847 | 2239 | 553 | 1866 | 437 | 1593 | 352 | 1593 | 352 | 819 | 198 | 819 | 198 |
| 43 | 3679 | 1092 | 3311 | 932 | 3141 | 858 | 3141 | 858 | 2207 | 560 | 1840 | 443 | 1570 | 357 | 1570 | 357 | 808 | 201 | 808 | 201 |
| 44 | 3626 | 1106 | 3264 | 944 | 3096 | 869 | 3096 | 869 | 2176 | 567 | 1813 | 448 | 1548 | 361 | 1548 | 361 | 796 | 203 | 796 | 203 |
| 45 | 3574 | 1120 | 3216 | 956 | 3051 | 880 | 3051 | 880 | 2144 | 575 | 1787 | 454 | 1525 | 366 | 1525 | 366 | 785 | 206 | 785 | 206 |
| 46 | 3521 | 1135 | 3169 | 968 | 3006 | 891 | 3006 | 891 | 2113 | 582 | 1761 | 460 | 1503 | 370 | 1503 | 370 | 773 | 208 | 773 | 208 |

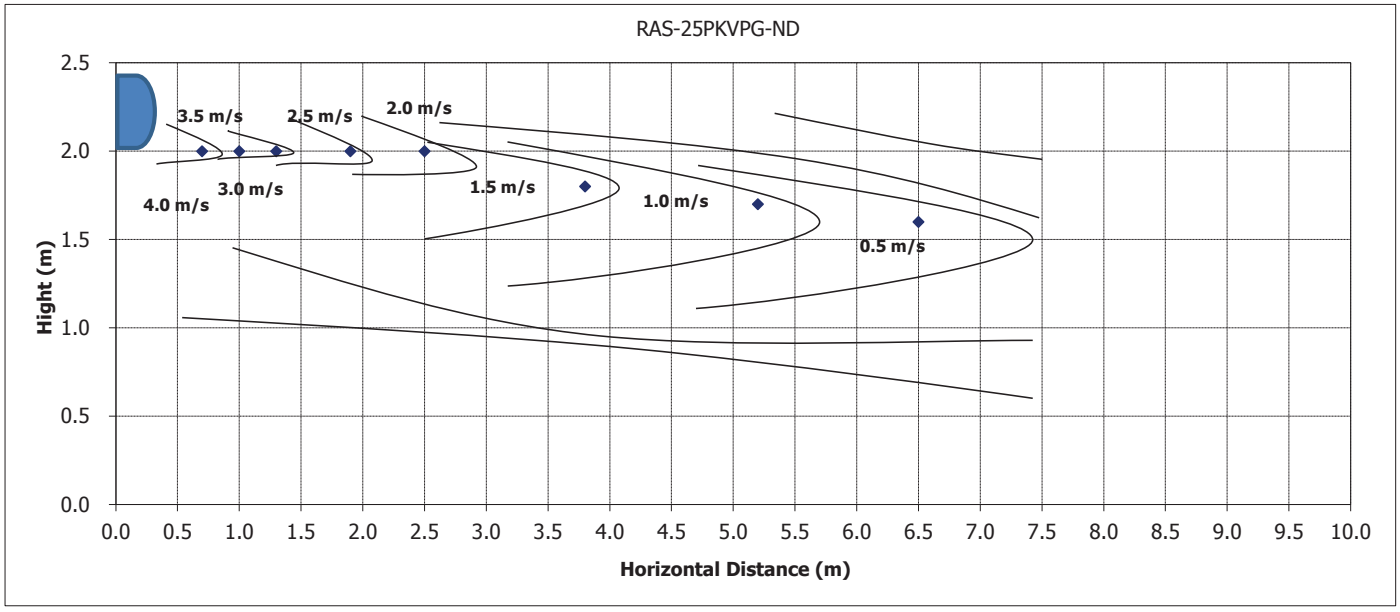
**Heating**

| Outdoor Temperature DB (°C) | Parts Load (%) | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 100 (Max) | | 90 | | 80 | | 70 | | 60 | | 50 (Rated) | | 40 | | 30 | | 20 | | 10 | | 9 | |
| | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P | Q | P |
| -25 | 2900 | 1990 | 2610 | 1714 | 2320 | 1438 | 2030 | 1162 | 1740 | 886 | 1425 | 637 | 1097 | 476 | 823 | 323 | 549 | 233 | 274 | 144 | 249 | 135 |
| -24 | 2980 | 1994 | 2682 | 1717 | 2384 | 1441 | 2086 | 1164 | 1788 | 887 | 1464 | 639 | 1127 | 477 | 845 | 324 | 564 | 234 | 282 | 144 | 256 | 136 |
| -23 | 3060 | 1998 | 2754 | 1721 | 2448 | 1444 | 2142 | 1166 | 1836 | 889 | 1503 | 640 | 1158 | 478 | 868 | 324 | 579 | 234 | 289 | 144 | 263 | 136 |
| -22 | 3140 | 2002 | 2826 | 1724 | 2512 | 1446 | 2198 | 1169 | 1884 | 891 | 1543 | 641 | 1188 | 479 | 891 | 325 | 594 | 235 | 297 | 144 | 270 | 136 |
| -21 | 3220 | 2006 | 2898 | 1728 | 2576 | 1449 | 2254 | 1171 | 1932 | 893 | 1582 | 643 | 1218 | 480 | 914 | 326 | 609 | 235 | 305 | 145 | 277 | 137 |
| -20 | 3300 | 2010 | 2970 | 1731 | 2640 | 1452 | 2310 | 1173 | 1980 | 895 | 1621 | 644 | 1248 | 481 | 936 | 326 | 624 | 236 | 312 | 145 | 284 | 137 |
| -19 | 3540 | 2018 | 3186 | 1738 | 2832 | 1458 | 2478 | 1178 | 2124 | 898 | 1739 | 646 | 1339 | 483 | 1004 | 328 | 670 | 237 | 335 | 146 | 304 | 137 |
| -18 | 3780 | 2026 | 3402 | 1745 | 3024 | 1464 | 2646 | 1183 | 2268 | 902 | 1857 | 649 | 1430 | 485 | 1072 | 329 | 715 | 238 | 357 | 146 | 325 | 138 |
| -17 | 4020 | 2034 | 3618 | 1752 | 3216 | 1470 | 2814 | 1187 | 2412 | 905 | 1975 | 652 | 1521 | 487 | 1141 | 330 | 760 | 238 | 380 | 147 | 346 | 138 |
| -16 | 4260 | 2042 | 3834 | 1759 | 3408 | 1475 | 2982 | 1192 | 2556 | 909 | 2093 | 654 | 1611 | 489 | 1209 | 331 | 806 | 239 | 403 | 147 | 366 | 139 |
| -15 | 4500 | 2050 | 4050 | 1766 | 3600 | 1481 | 3150 | 1197 | 2700 | 912 | 2211 | 657 | 1702 | 491 | 1277 | 333 | 851 | 240 | 426 | 148 | 387 | 140 |
| -14 | 4625 | 2080 | 4163 | 1791 | 3700 | 1503 | 3238 | 1214 | 2775 | 926 | 2272 | 666 | 1750 | 498 | 1312 | 338 | 875 | 244 | 437 | 150 | 398 | 142 |
| -13 | 4750 | 2110 | 4275 | 1817 | 3800 | 1525 | 3325 | 1232 | 2850 | 939 | 2334 | 676 | 1797 | 505 | 1348 | 342 | 898 | 247 | 449 | 152 | 408 | 144 |
| -12 | 4875 | 2140 | 4388 | 1843 | 3900 | 1546 | 3413 | 1249 | 2925 | 952 | 2395 | 686 | 1844 | 512 | 1383 | 347 | 922 | 251 | 461 | 154 | 419 | 146 |
| -11 | 5000 | 2170 | 4500 | 1869 | 4000 | 1568 | 3500 | 1267 | 3000 | 966 | 2456 | 695 | 1891 | 519 | 1419 | 352 | 946 | 254 | 473 | 157 | 430 | 148 |
| -10 | 5125 | 2200 | 4613 | 1895 | 4100 | 1590 | 3588 | 1284 | 3075 | 979 | 2518 | 705 | 1939 | 526 | 1454 | 357 | 969 | 258 | 485 | 159 | 441 | 150 |
| -9 | 5250 | 2230 | 4725 | 1921 | 4200 | 1611 | 3675 | 1302 | 3150 | 992 | 2579 | 714 | 1986 | 534 | 1489 | 362 | 993 | 261 | 496 | 161 | 451 | 152 |
| -8 | 5375 | 2260 | 4838 | 1946 | 4300 | 1633 | 3763 | 1319 | 3225 | 1006 | 2641 | 724 | 2033 | 541 | 1525 | 367 | 1017 | 265 | 508 | 163 | 462 | 154 |
| -7 | 5500 | 2290 | 4950 | 1972 | 4400 | 1655 | 3850 | 1337 | 3300 | 1019 | 2702 | 734 | 2081 | 548 | 1560 | 372 | 1040 | 268 | 520 | 165 | 473 | 156 |
| -6 | 5544 | 2281 | 4990 | 1965 | 4436 | 1648 | 3881 | 1332 | 3327 | 1015 | 2724 | 731 | 2097 | 546 | 1573 | 370 | 1049 | 267 | 524 | 165 | 477 | 155 |
| -5 | 5589 | 2272 | 5030 | 1957 | 4471 | 1642 | 3912 | 1326 | 3353 | 1011 | 2746 | 728 | 2114 | 544 | 1586 | 369 | 1057 | 266 | 529 | 164 | 480 | 155 |
| -4 | 5633 | 2263 | 5070 | 1949 | 4507 | 1635 | 3943 | 1321 | 3380 | 1007 | 2768 | 725 | 2131 | 542 | 1598 | 367 | 1066 | 265 | 533 | 163 | 484 | 154 |
| -3 | 5678 | 2254 | 5110 | 1942 | 4542 | 1629 | 3974 | 1316 | 3407 | 1003 | 2789 | 722 | 2148 | 539 | 1611 | 366 | 1074 | 264 | 537 | 163 | 488 | 153 |
| -2 | 5722 | 2246 | 5150 | 1934 | 4578 | 1622 | 4006 | 1311 | 3433 | 999 | 2811 | 719 | 2165 | 537 | 1623 | 364 | 1082 | 263 | 541 | 162 | 492 | 153 |
| -1 | 5767 | 2237 | 5190 | 1926 | 4613 | 1616 | 4037 | 1306 | 3460 | 995 | 2833 | 717 | 2181 | 535 | 1636 | 363 | 1091 | 262 | 545 | 161 | 496 | 152 |
| 0 | 5811 | 2228 | 5230 | 1919 | 4649 | 1610 | 4068 | 1301 | 3487 | 991 | 2855 | 714 | 2198 | 533 | 1649 | 362 | 1099 | 261 | 550 | 161 | 500 | 152 |
| 1 | 5856 | 2219 | 5270 | 1911 | 4684 | 1603 | 4099 | 1295 | 3513 | 988 | 2877 | 711 | 2215 | 531 | 1661 | 360 | 1108 | 260 | 554 | 160 | 503 | 151 |
| 2 | 5900 | 2210 | 5310 | 1903 | 4720 | 1597 | 4130 | 1290 | 3540 | 984 | 2899 | 708 | 2232 | 529 | 1674 | 359 | 1116 | 259 | 558 | 159 | 507 | 150 |
| 3 | 6022 | 2247 | 5420 | 1935 | 4818 | 1623 | 4215 | 1312 | 3613 | 1000 | 2946 | 717 | 2268 | 536 | 1701 | 364 | 1134 | 263 | 567 | 162 | 516 | 152 |
| 4 | 6144 | 2284 | 5529 | 1967 | 4915 | 1650 | 4301 | 1333 | 3686 | 1016 | 2994 | 727 | 2305 | 543 | 1729 | 368 | 1153 | 266 | 576 | 164 | 524 | 154 |
| 5 | 6266 | 2320 | 5639 | 1998 | 5013 | 1676 | 4386 | 1355 | 3759 | 1033 | 3041 | 737 | 2342 | 550 | 1756 | 373 | 1171 | 270 | 585 | 166 | 532 | 157 |
| 6 | 7501 | 2363 | 6751 | 2035 | 6001 | 1707 | 5251 | 1379 | 4501 | 1052 | 3897 | 788 | 3001 | 588 | 2250 | 399 | 1500 | 288 | 750 | 177 | 682 | 167 |
| 7 | 7700 | 2400 | 6930 | 2067 | 6160 | 1734 | 5390 | 1401 | 4620 | 1068 | 4000 | 800 | 3080 | 598 | 2310 | 405 | 1540 | 293 | 770 | 180 | 700 | 170 |
| 8 | 7899 | 2437 | 7109 | 2099 | 6319 | 1761 | 5529 | 1423 | 4739 | 1085 | 4103 | 812 | 3159 | 607 | 2370 | 412 | 1580 | 297 | 790 | 183 | 718 | 173 |
| 9 | 8097 | 2474 | 7288 | 2131 | 6478 | 1788 | 5668 | 1444 | 4858 | 1101 | 4206 | 825 | 3239 | 616 | 2429 | 418 | 1619 | 302 | 810 | 186 | 736 | 175 |
| 10 | 8296 | 2511 | 7467 | 2163 | 6637 | 1815 | 5807 | 1466 | 4978 | 1118 | 4310 | 837 | 3318 | 625 | 2489 | 424 | 1659 | 306 | 830 | 189 | 754 | 178 |
| 11 | 8495 | 2549 | 7645 | 2195 | 6796 | 1841 | 5946 | 1488 | 5097 | 1134 | 4413 | 850 | 3398 | 635 | 2548 | 430 | 1699 | 311 | 849 | 191 | 772 | 181 |
| 12 | 8694 | 2586 | 7824 | 2227 | 6955 | 1868 | 6085 | 1510 | 5216 | 1151 | 4516 | 862 | 3477 | 644 | 2608 | 437 | 1739 | 315 | 869 | 194 | 790 | 183 |
| 13 | 8892 | 2623 | 8003 | 2259 | 7114 | 1895 | 6225 | 1531 | 5335 | 1167 | 4619 | 874 | 3557 | 653 | 2668 | 443 | 1778 | 320 | 889 | 197 | 808 | 186 |
| 14 | 9091 | 2660 | 8182 | 2291 | 7273 | 1922 | 6364 | 1553 | 5455 | 1184 | 4723 | 887 | 3636 | 662 | 2727 | 449 | 1818 | 325 | 909 | 200 | 826 | 188 |
| 15 | 9264 | 2687 | 8337 | 2314 | 7411 | 1941 | 6485 | 1569 | 5558 | 1196 | 4826 | 899 | 3716 | 672 | 2787 | 456 | 1858 | 329 | 929 | 203 | 845 | 191 |
| 16 | 9369 | 2687 | 8432 | 2314 | 7495 | 1941 | 6559 | 1569 | 5622 | 1196 | 4929 | 911 | 3795 | 681 | 2847 | 462 | 1898 | 334 | 949 | 205 | 863 | 194 |
| 17 | 9474 | 2687 | 8526 | 2314 | 7579 | 1941 | 6632 | 1569 | 5684 | 1196 | 5032 | 924 | 3875 | 690 | 2906 | 468 | 1937 | 338 | 969 | 208 | 881 | 196 |
| 18 | 9577 | 2687 | 8619 | 2314 | 7661 | 1941 | 6704 | 1569 | 5746 | 1196 | 5135 | 936 | 3954 | 699 | 2966 | 474 | 1977 | 343 | 989 | 211 | 899 | 199 |
| 19 | 9678 | 2687 | 8710 | 2314 | 7743 | 1941 | 6775 | 1569 | 5807 | 1196 | 5239 | 949 | 4034 | 709 | 3025 | 481 | 2017 | 347 | 1008 | 214 | 917 | 202 |
| 20 | 9779 | 2687 | 8801 | 2314 | 7823 | 1941 | 6845 | 1569 | 5867 | 1196 | 5342 | 961 | 4113 | 718 | 3085 | 487 | 2057 | 352 | 1028 | 217 | 935 | 204 |
| 21 | 9878 | 2687 | 8890 | 2314 | 7902 | 1941 | 6915 | 1569 | 5927 | 1196 | 5445 | 973 | 4193 | 727 | 3145 | 493 | 2096 | 356 | 1048 | 219 | 953 | 207 |
| 22 | 9976 | 2687 | 8979 | 2314 | 7981 | 1941 | 6983 | 1569 | 5986 | 1196 | 5548 | 986 | 4272 | 736 | 3204 | 499 | 2136 | 361 | 1068 | 222 | 971 | 209 |
| 23 | 10074 | 2687 | 9066 | 2314 | 8059 | 1941 | 7051 | 1569 | 6044 | 1196 | 5652 | 998 | 4352 | 746 | 3264 | 506 | 2176 | 365 | 1088 | 225 | 989 | 212 |
| 24 | 10170 | 2687 | 9153 | 2314 | 8136 | 1941 | 7119 | 1569 | 6102 | 1196 | 5755 | 1011 | 4431 | 755 | 3323 | 512 | 2216 | 370 | 1108 | 228 | 1007 | 215 |

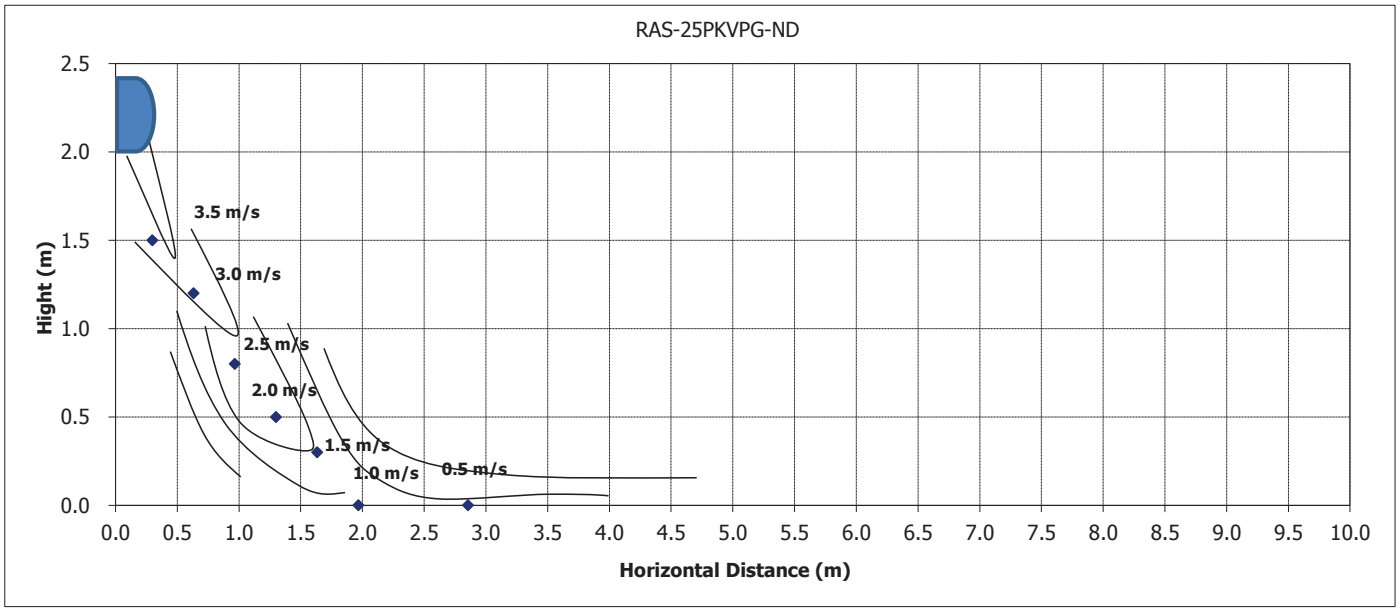
# Air Speed distribution

## RAS-25PKVPG-ND

### Cooling

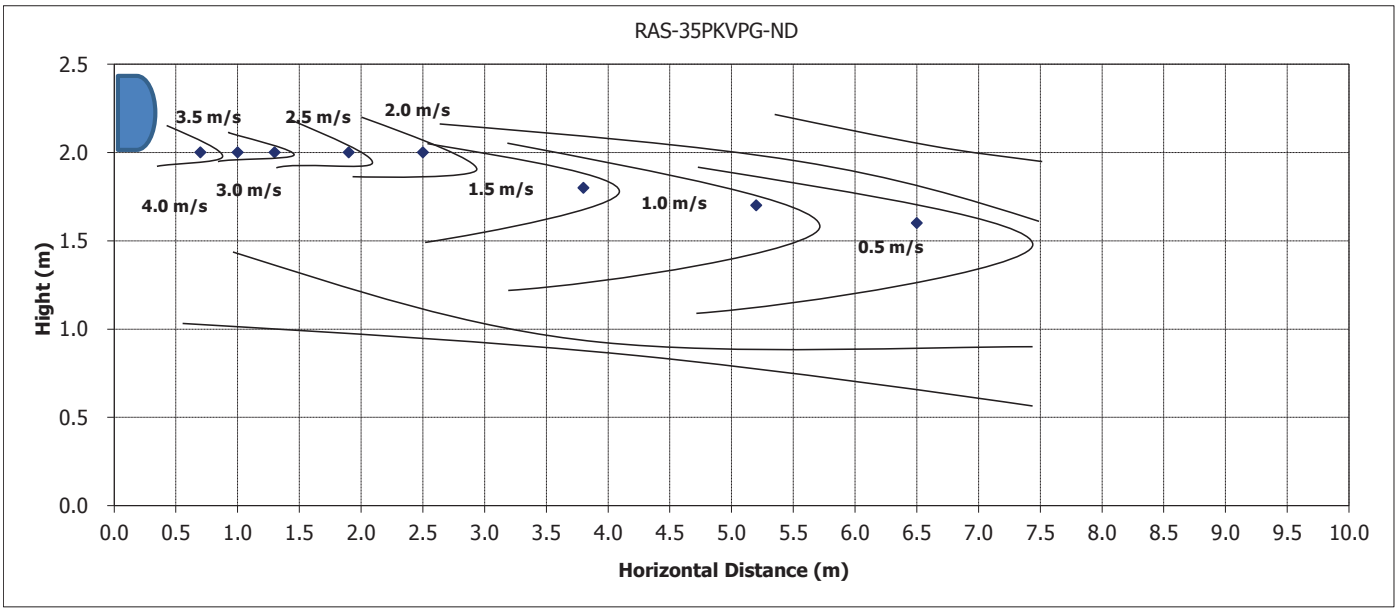



### Heating

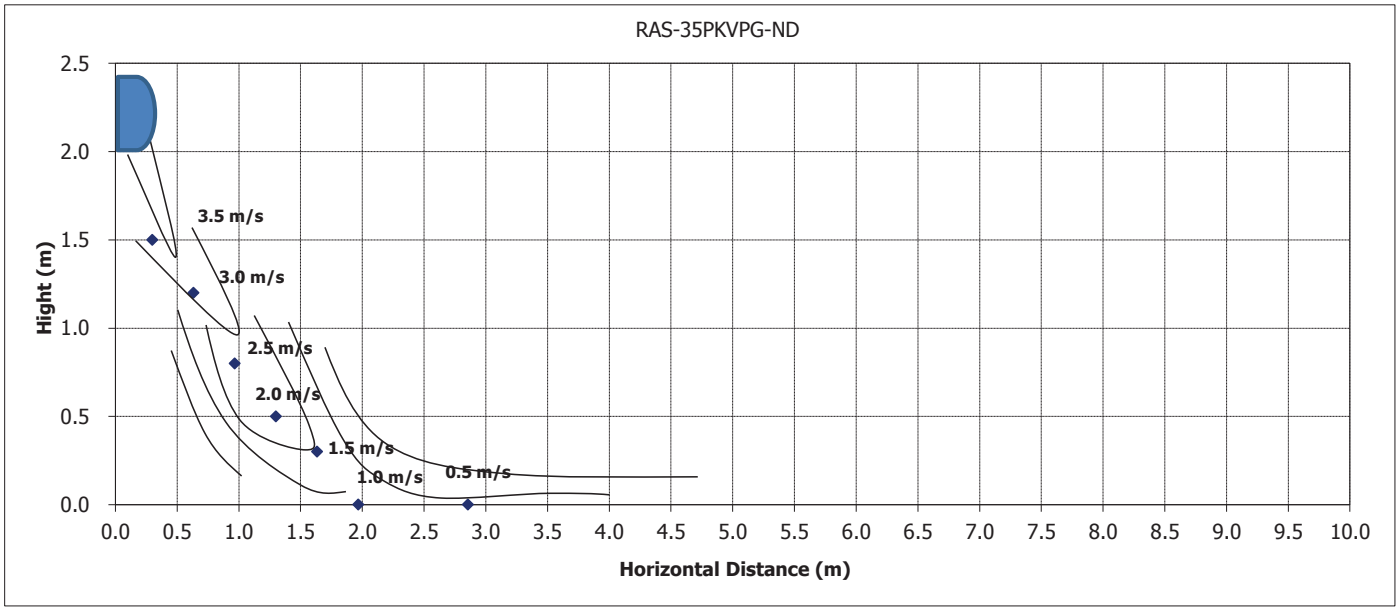


## RAS-35PKVPG-ND

### Cooling



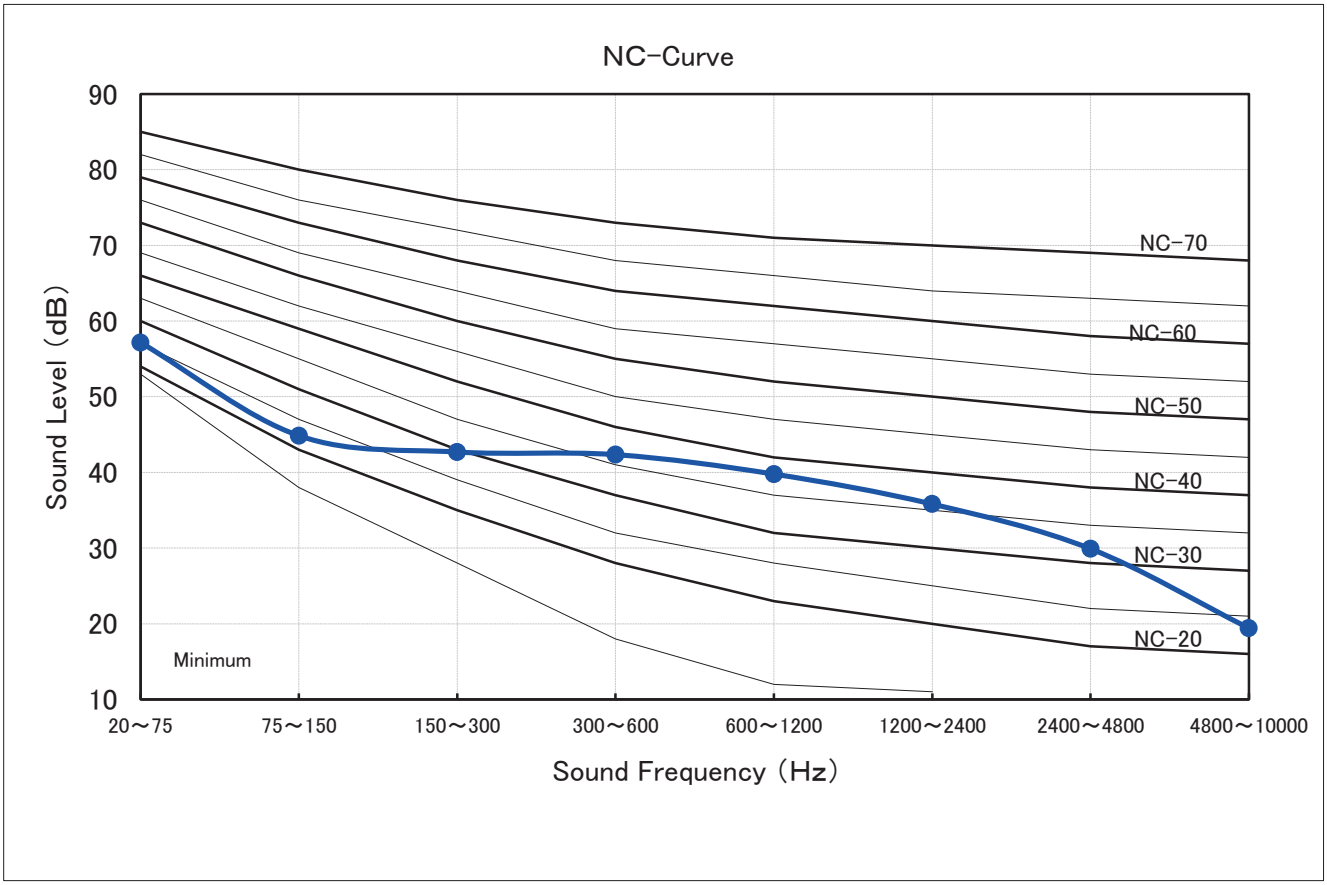

### Heating



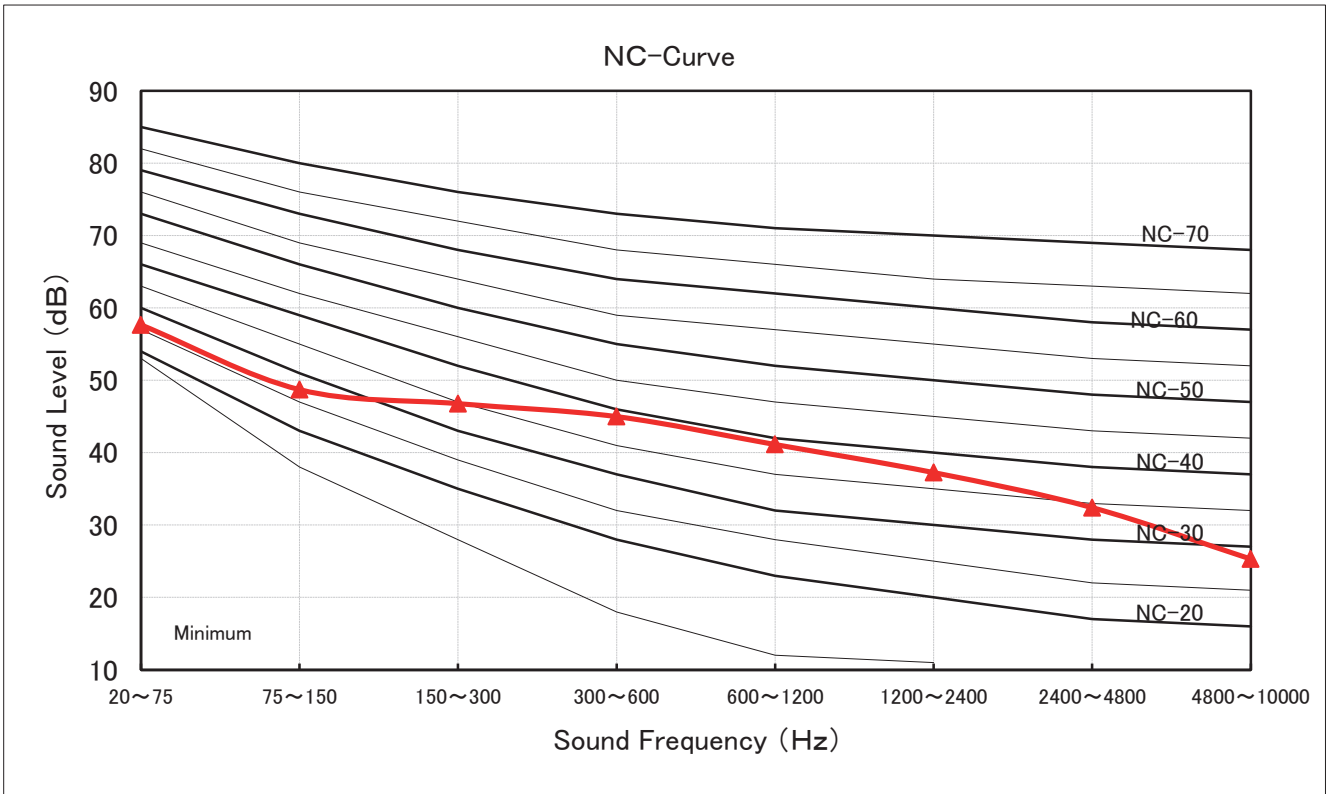
# Sound characteristics (NC Curve)

## RAS-25PAVPG-ND (Rate Hz)

Cooling

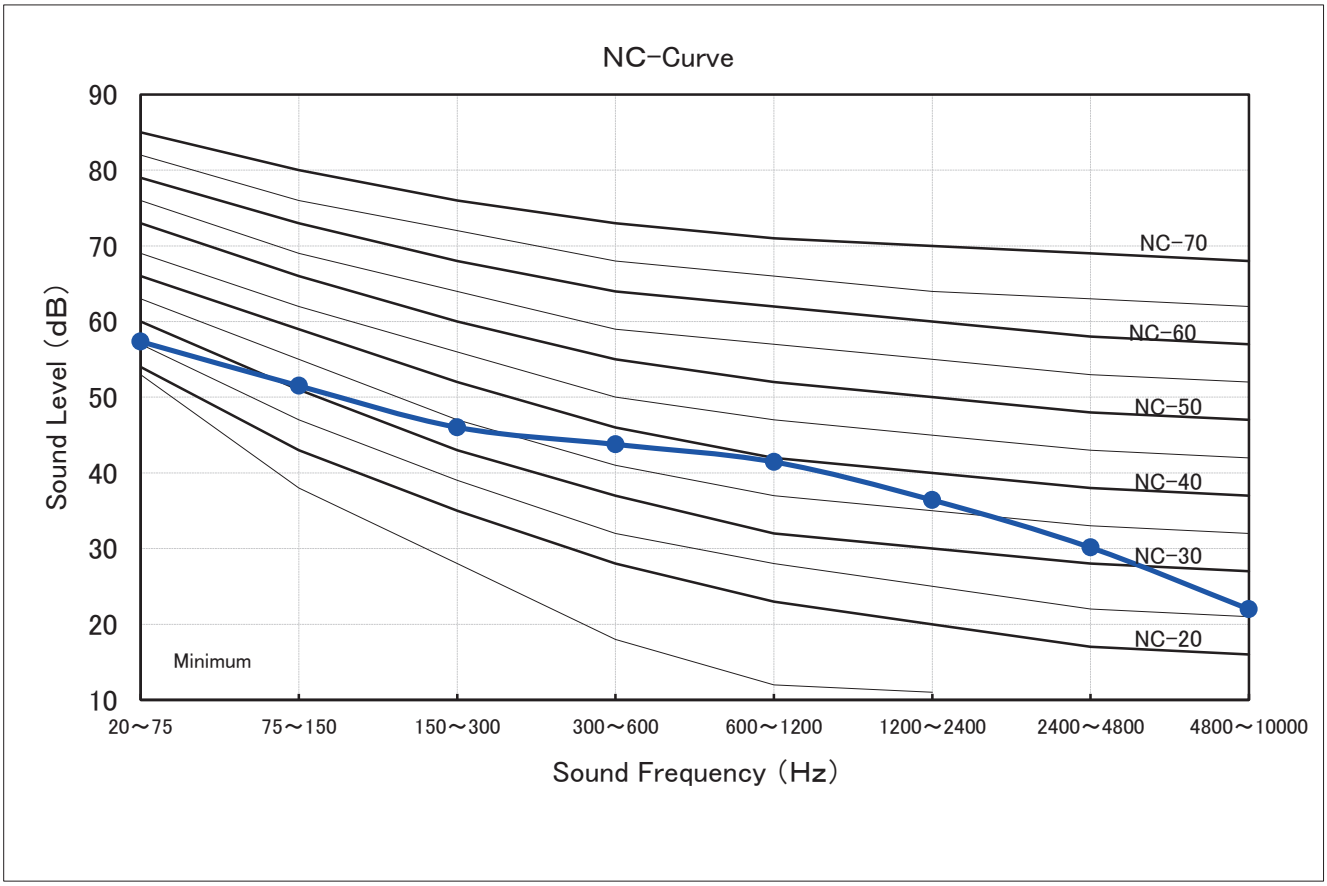



Heating

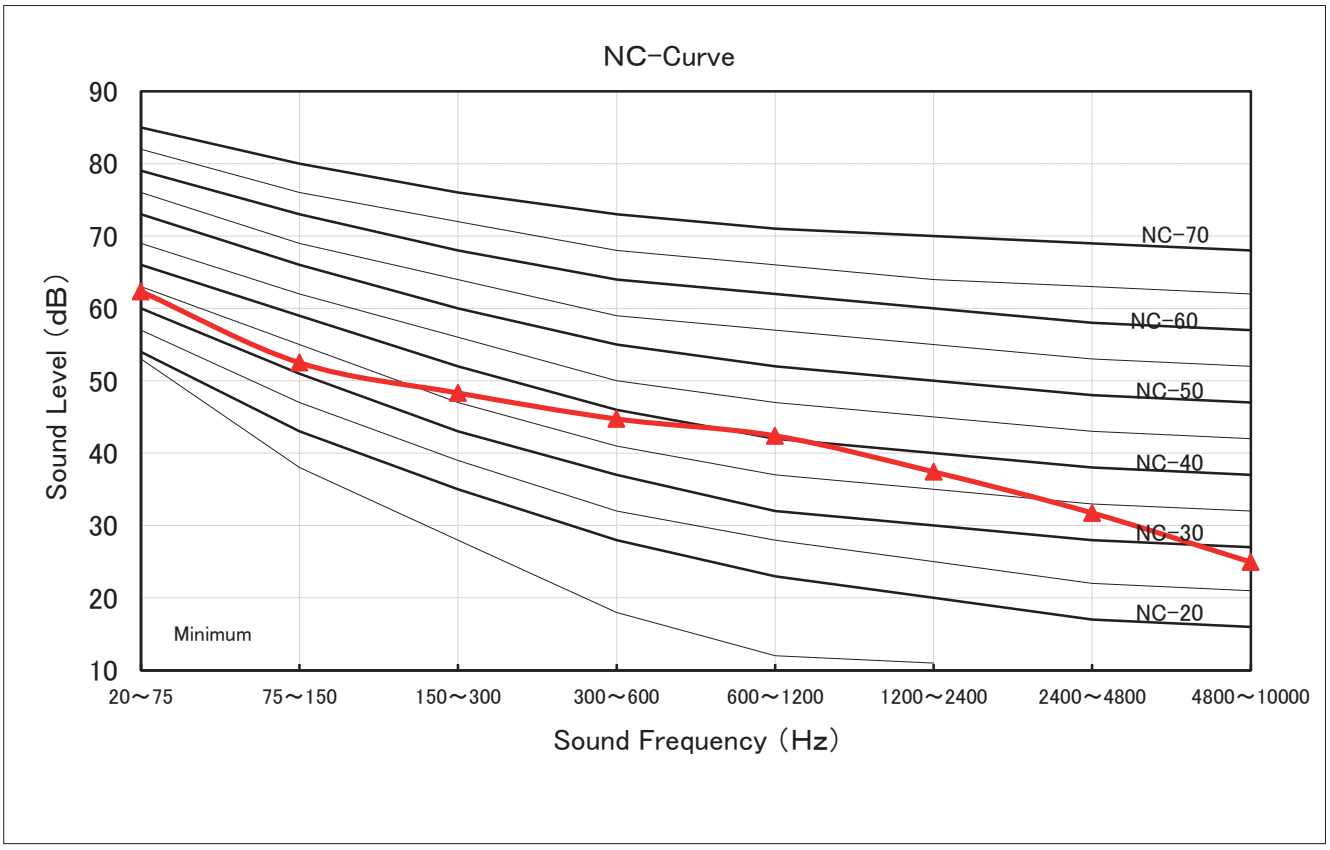


**RAS-35PAVPG-ND (Rate Hz)**

Cooling




Heating



# Performance characteristic

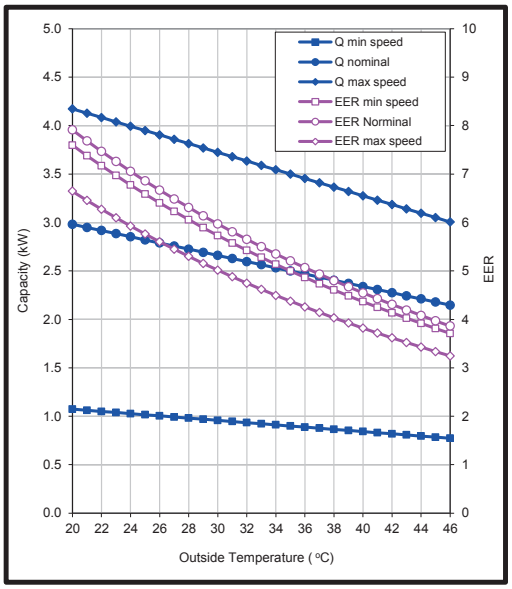
**Model : RAS-25PKVPG-ND / RAS-25PAVPG-ND**

**Product specification :**

| Condition | | Capacity (kW) | Power (kW) | EER/COP |
|---|---|---|---|---|
| Cooling JIS | Min | 0.90 | 0.18 | 5.00 |
| In: 27°C DB/19°C WB | Rated | 2.50 | 0.48 | 5.21 |
| Out: 35°C DB/24°C WB | Max | 3.50 | 0.80 | 4.38 |
| Heating JIS | Min | 0.70 | 0.17 | 4.12 |
| In: 20°C DB/15°C WB | Rated | 3.20 | 0.60 | 5.33 |
| Out: 7°C DB/6°C WB | Max | 6.70 | 1.90 | 3.53 |
| Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB | Max | 5.10 | 1.68 | 3.04 |

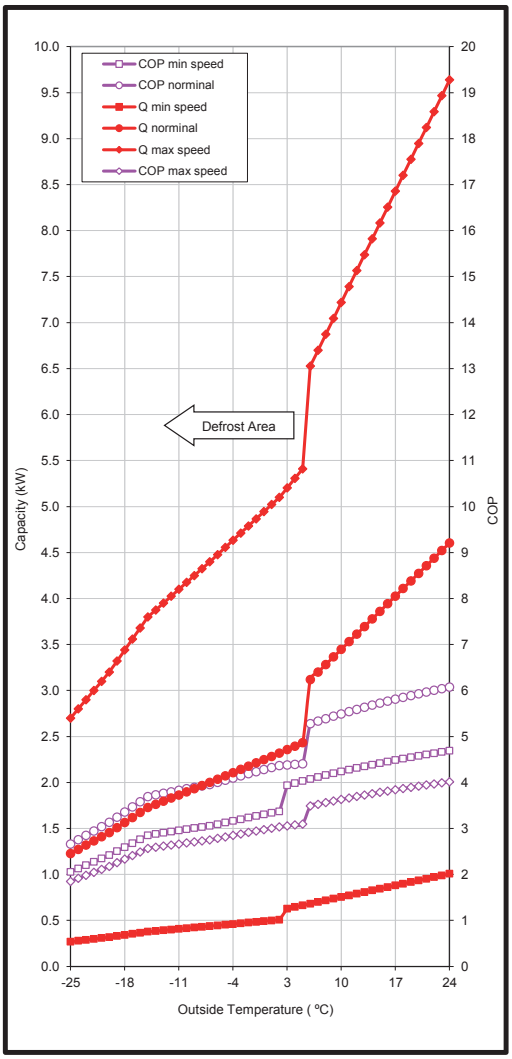
**Cooling performance characteristic :**

| Outside Temp | Min capacity | | | Nominal capacity | | | Max capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capacity | Power | EER | Capacity | Power | EER | Capacity | Power | EER |
| (°C) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) |
| 20 | 1.07 | 0.14 | 7.60 | 2.98 | 0.38 | 7.91 | 4.17 | 0.63 | 6.65 |
| 21 | 1.06 | 0.14 | 7.38 | 2.95 | 0.38 | 7.69 | 4.13 | 0.64 | 6.46 |
| 22 | 1.05 | 0.15 | 7.17 | 2.92 | 0.39 | 7.47 | 4.08 | 0.65 | 6.27 |
| 23 | 1.04 | 0.15 | 6.97 | 2.89 | 0.40 | 7.26 | 4.04 | 0.66 | 6.10 |
| 24 | 1.03 | 0.15 | 6.77 | 2.85 | 0.40 | 7.06 | 3.99 | 0.67 | 5.93 |
| 25 | 1.02 | 0.15 | 6.59 | 2.82 | 0.41 | 6.86 | 3.95 | 0.69 | 5.76 |
| 26 | 1.00 | 0.16 | 6.40 | 2.79 | 0.42 | 6.67 | 3.90 | 0.70 | 5.60 |
| 27 | 0.99 | 0.16 | 6.23 | 2.76 | 0.42 | 6.49 | 3.86 | 0.71 | 5.45 |
| 28 | 0.98 | 0.16 | 6.06 | 2.72 | 0.43 | 6.31 | 3.81 | 0.72 | 5.30 |
| 29 | 0.97 | 0.16 | 5.89 | 2.69 | 0.44 | 6.14 | 3.77 | 0.73 | 5.16 |
| 30 | 0.96 | 0.17 | 5.73 | 2.66 | 0.45 | 5.97 | 3.72 | 0.74 | 5.02 |
| 31 | 0.95 | 0.17 | 5.58 | 2.63 | 0.45 | 5.81 | 3.68 | 0.75 | 4.88 |
| 32 | 0.93 | 0.17 | 5.43 | 2.60 | 0.46 | 5.65 | 3.63 | 0.77 | 4.75 |
| 33 | 0.92 | 0.17 | 5.28 | 2.56 | 0.47 | 5.50 | 3.59 | 0.78 | 4.62 |
| 34 | 0.91 | 0.18 | 5.14 | 2.53 | 0.47 | 5.35 | 3.54 | 0.79 | 4.50 |
| **35** | **0.90** | **0.18** | **5.00** | **2.50** | **0.48** | **5.21** | **3.50** | **0.80** | **4.38** |
| 36 | 0.89 | 0.18 | 4.87 | 2.47 | 0.49 | 5.07 | 3.46 | 0.81 | 4.26 |
| 37 | 0.88 | 0.19 | 4.74 | 2.44 | 0.49 | 4.93 | 3.41 | 0.82 | 4.14 |
| 38 | 0.87 | 0.19 | 4.61 | 2.40 | 0.50 | 4.80 | 3.37 | 0.83 | 4.03 |
| 39 | 0.85 | 0.19 | 4.49 | 2.37 | 0.51 | 4.67 | 3.32 | 0.85 | 3.93 |
| 40 | 0.84 | 0.19 | 4.37 | 2.34 | 0.51 | 4.55 | 3.28 | 0.86 | 3.82 |
| 41 | 0.83 | 0.20 | 4.25 | 2.31 | 0.52 | 4.43 | 3.23 | 0.87 | 3.72 |
| 42 | 0.82 | 0.20 | 4.14 | 2.28 | 0.53 | 4.31 | 3.19 | 0.88 | 3.62 |
| 43 | 0.81 | 0.20 | 4.03 | 2.24 | 0.54 | 4.19 | 3.14 | 0.89 | 3.52 |
| 44 | 0.80 | 0.20 | 3.92 | 2.21 | 0.54 | 4.08 | 3.10 | 0.90 | 3.43 |
| 45 | 0.78 | 0.21 | 3.81 | 2.18 | 0.55 | 3.97 | 3.05 | 0.91 | 3.34 |
| 46 | 0.77 | 0.21 | 3.71 | 2.15 | 0.56 | 3.86 | 3.01 | 0.93 | 3.25 |




**Heating performance characteristic :**

| Outside Temp | Min capacity | | | Nominal capacity | | | Max capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capacity | Power | COP | Capacity | Power | COP | Capacity | Power | COP |
| (°C) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) |
| **-25** | **0.27** | **0.13** | **2.05** | **1.23** | **0.46** | **2.66** | **2.70** | **1.46** | **1.85** |
| -24 | 0.28 | 0.13 | 2.13 | 1.27 | 0.46 | 2.76 | 2.80 | 1.46 | 1.92 |
| -23 | 0.29 | 0.13 | 2.20 | 1.32 | 0.46 | 2.85 | 2.90 | 1.46 | 1.98 |
| -22 | 0.30 | 0.13 | 2.27 | 1.36 | 0.46 | 2.94 | 3.00 | 1.47 | 2.05 |
| -21 | 0.31 | 0.13 | 2.35 | 1.41 | 0.46 | 3.04 | 3.10 | 1.47 | 2.11 |
| -20 | 0.32 | 0.13 | 2.42 | 1.45 | 0.46 | 3.13 | 3.20 | 1.47 | 2.18 |
| -19 | 0.33 | 0.13 | 2.51 | 1.51 | 0.47 | 3.24 | 3.32 | 1.47 | 2.26 |
| -18 | 0.34 | 0.13 | 2.59 | 1.56 | 0.47 | 3.36 | 3.44 | 1.47 | 2.33 |
| -17 | 0.35 | 0.13 | 2.68 | 1.62 | 0.47 | 3.47 | 3.56 | 1.48 | 2.41 |
| -16 | 0.37 | 0.13 | 2.77 | 1.67 | 0.47 | 3.58 | 3.68 | 1.48 | 2.49 |
| **-15** | **0.38** | **0.13** | **2.85** | **1.73** | **0.47** | **3.69** | **3.80** | **1.48** | **2.57** |
| -14 | 0.39 | 0.13 | 2.88 | 1.76 | 0.47 | 3.73 | 3.88 | 1.50 | 2.59 |
| -13 | 0.39 | 0.14 | 2.91 | 1.80 | 0.48 | 3.76 | 3.95 | 1.51 | 2.62 |
| -12 | 0.40 | 0.14 | 2.93 | 1.83 | 0.48 | 3.80 | 4.03 | 1.53 | 2.64 |
| -11 | 0.41 | 0.14 | 2.96 | 1.86 | 0.49 | 3.83 | 4.10 | 1.54 | 2.66 |
| -10 | 0.42 | 0.14 | 2.98 | 1.90 | 0.49 | 3.86 | 4.18 | 1.56 | 2.68 |
| -9 | 0.42 | 0.14 | 3.01 | 1.93 | 0.50 | 3.89 | 4.25 | 1.57 | 2.71 |
| -8 | 0.43 | 0.14 | 3.03 | 1.97 | 0.50 | 3.93 | 4.33 | 1.59 | 2.73 |
| **-7** | **0.44** | **0.14** | **3.05** | **2.00** | **0.51** | **3.96** | **4.40** | **1.60** | **2.75** |
| -6 | 0.45 | 0.14 | 3.09 | 2.04 | 0.51 | 4.00 | 4.48 | 1.61 | 2.78 |
| -5 | 0.45 | 0.14 | 3.13 | 2.07 | 0.51 | 4.05 | 4.56 | 1.62 | 2.82 |
| -4 | 0.46 | 0.15 | 3.16 | 2.11 | 0.51 | 4.10 | 4.63 | 1.63 | 2.85 |
| -3 | 0.47 | 0.15 | 3.20 | 2.14 | 0.52 | 4.14 | 4.71 | 1.64 | 2.88 |
| -2 | 0.48 | 0.15 | 3.23 | 2.18 | 0.52 | 4.19 | 4.79 | 1.64 | 2.91 |
| -1 | 0.48 | 0.15 | 3.27 | 2.21 | 0.52 | 4.23 | 4.87 | 1.65 | 2.94 |
| 0 | 0.49 | 0.15 | 3.30 | 2.25 | 0.53 | 4.28 | 4.94 | 1.66 | 2.97 |
| 1 | 0.50 | 0.15 | 3.34 | 2.28 | 0.53 | 4.32 | 5.02 | 1.67 | 3.01 |
| **2** | **0.51** | **0.15** | **3.37** | **2.32** | **0.53** | **4.37** | **5.10** | **1.68** | **3.04** |
| 3 | 0.63 | 0.16 | 3.94 | 2.36 | 0.54 | 4.38 | 5.20 | 1.70 | 3.06 |
| 4 | 0.65 | 0.16 | 3.98 | 2.39 | 0.55 | 4.39 | 5.31 | 1.72 | 3.08 |
| 5 | 0.66 | 0.16 | 4.03 | 2.43 | 0.55 | 4.40 | 5.41 | 1.75 | 3.10 |
| 6 | 0.68 | 0.17 | 4.07 | 3.12 | 0.59 | 5.28 | 6.53 | 1.87 | 3.49 |
| **7** | **0.70** | **0.17** | **4.12** | **3.20** | **0.60** | **5.33** | **6.70** | **1.90** | **3.53** |
| 8 | 0.72 | 0.17 | 4.16 | 3.28 | 0.61 | 5.39 | 6.87 | 1.93 | 3.56 |
| 9 | 0.74 | 0.18 | 4.20 | 3.37 | 0.62 | 5.44 | 7.05 | 1.96 | 3.60 |
| 10 | 0.75 | 0.18 | 4.24 | 3.45 | 0.63 | 5.49 | 7.22 | 1.99 | 3.63 |
| 11 | 0.77 | 0.18 | 4.28 | 3.53 | 0.64 | 5.54 | 7.39 | 2.02 | 3.66 |
| 12 | 0.79 | 0.18 | 4.31 | 3.61 | 0.65 | 5.59 | 7.56 | 2.05 | 3.70 |
| 13 | 0.81 | 0.19 | 4.35 | 3.70 | 0.66 | 5.64 | 7.74 | 2.08 | 3.73 |
| 14 | 0.83 | 0.19 | 4.39 | 3.78 | 0.67 | 5.68 | 7.91 | 2.11 | 3.76 |
| 15 | 0.84 | 0.19 | 4.42 | 3.86 | 0.67 | 5.73 | 8.08 | 2.14 | 3.79 |
| 16 | 0.86 | 0.19 | 4.45 | 3.94 | 0.68 | 5.77 | 8.26 | 2.16 | 3.81 |
| 17 | 0.88 | 0.20 | 4.49 | 4.03 | 0.69 | 5.81 | 8.43 | 2.19 | 3.84 |
| 18 | 0.90 | 0.20 | 4.52 | 4.11 | 0.70 | 5.85 | 8.60 | 2.22 | 3.87 |
| 19 | 0.92 | 0.20 | 4.55 | 4.19 | 0.71 | 5.89 | 8.77 | 2.25 | 3.89 |
| 20 | 0.93 | 0.20 | 4.58 | 4.27 | 0.72 | 5.93 | 8.95 | 2.28 | 3.92 |
| 21 | 0.95 | 0.21 | 4.61 | 4.36 | 0.73 | 5.97 | 9.12 | 2.31 | 3.95 |
| 22 | 0.97 | 0.21 | 4.64 | 4.44 | 0.74 | 6.00 | 9.29 | 2.34 | 3.97 |
| 23 | 0.99 | 0.21 | 4.66 | 4.52 | 0.75 | 6.04 | 9.47 | 2.37 | 3.99 |
| 24 | 1.01 | 0.21 | 4.69 | 4.60 | 0.76 | 6.07 | 9.64 | 2.40 | 4.02 |



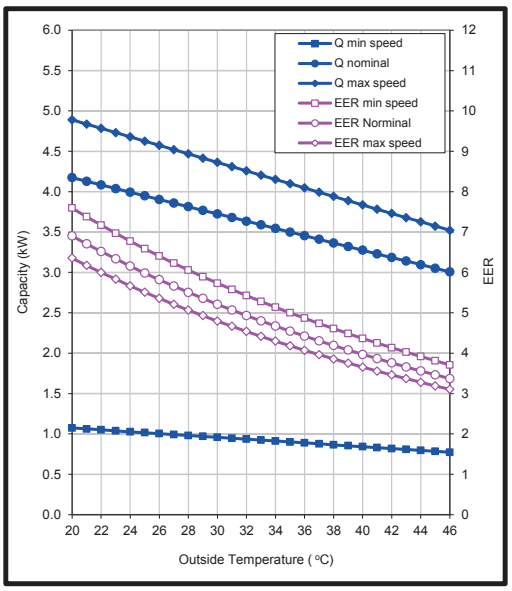
## Model : RAS-35PKVPG-ND / RAS-35PAVPG-ND

**Product specification :**

| Condition | | Capacity (kW) | Power (kW) | EER/COP |
|---|---|---|---|---|
| Cooling JIS | Min | 0.90 | 0.18 | 5.00 |
| In: 27°C DB/19°C WB | Rated | 3.50 | 0.77 | 4.55 |
| Out: 35°C DB/24°C WB | Max | 4.10 | 0.98 | 4.18 |
| Heating JIS | Min | 0.70 | 0.17 | 4.12 |
| In: 20°C DB/15°C WB | Rated | 4.00 | 0.80 | 5.00 |
| Out: 7°C DB/6°C WB | Max | 7.70 | 2.40 | 3.21 |
| Heating Low Temp. In: 20°C DB/15°C WB Out: 2°C DB/1°C WB | Max | 5.90 | 2.21 | 2.67 |

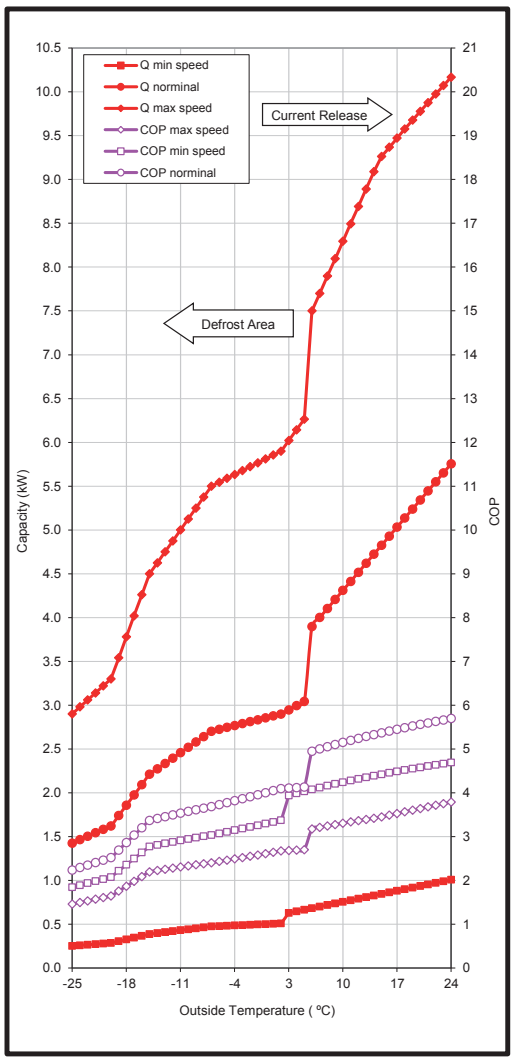
**Cooling performance characteristic :**

| Outside Temp | Min capacity | | | Nominal capacity | | | Max capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capacity | Power | EER | Capacity | Power | EER | Capacity | Power | EER |
| (°C) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) |
| 20 | 1.07 | 0.14 | 7.60 | 4.17 | 0.60 | 6.91 | 4.89 | 0.77 | 6.36 |
| 21 | 1.06 | 0.14 | 7.38 | 4.13 | 0.62 | 6.71 | 4.84 | 0.78 | 6.17 |
| 22 | 1.05 | 0.15 | 7.17 | 4.08 | 0.63 | 6.52 | 4.78 | 0.80 | 6.00 |
| 23 | 1.04 | 0.15 | 6.97 | 4.04 | 0.64 | 6.34 | 4.73 | 0.81 | 5.83 |
| 24 | 1.03 | 0.15 | 6.77 | 3.99 | 0.65 | 6.16 | 4.68 | 0.83 | 5.67 |
| 25 | 1.02 | 0.15 | 6.59 | 3.95 | 0.66 | 5.99 | 4.63 | 0.84 | 5.51 |
| 26 | 1.00 | 0.16 | 6.40 | 3.90 | 0.67 | 5.82 | 4.57 | 0.85 | 5.36 |
| 27 | 0.99 | 0.16 | 6.23 | 3.86 | 0.68 | 5.66 | 4.52 | 0.87 | 5.21 |
| 28 | 0.98 | 0.16 | 6.06 | 3.81 | 0.69 | 5.51 | 4.47 | 0.88 | 5.07 |
| 29 | 0.97 | 0.16 | 5.89 | 3.77 | 0.70 | 5.36 | 4.42 | 0.90 | 4.93 |
| 30 | 0.96 | 0.17 | 5.73 | 3.72 | 0.71 | 5.21 | 4.36 | 0.91 | 4.80 |
| 31 | 0.95 | 0.17 | 5.58 | 3.68 | 0.73 | 5.07 | 4.31 | 0.92 | 4.67 |
| 32 | 0.93 | 0.17 | 5.43 | 3.63 | 0.74 | 4.93 | 4.26 | 0.94 | 4.54 |
| 33 | 0.92 | 0.17 | 5.28 | 3.59 | 0.75 | 4.80 | 4.21 | 0.95 | 4.42 |
| 34 | 0.91 | 0.18 | 5.14 | 3.54 | 0.76 | 4.67 | 4.15 | 0.97 | 4.30 |
| **35** | **0.90** | **0.18** | **5.00** | **3.50** | **0.77** | **4.55** | **4.10** | **0.98** | **4.18** |
| 36 | 0.89 | 0.18 | 4.87 | 3.46 | 0.78 | 4.42 | 4.05 | 0.99 | 4.07 |
| 37 | 0.88 | 0.19 | 4.74 | 3.41 | 0.79 | 4.31 | 3.99 | 1.01 | 3.96 |
| 38 | 0.87 | 0.19 | 4.61 | 3.37 | 0.80 | 4.19 | 3.94 | 1.02 | 3.86 |
| 39 | 0.85 | 0.19 | 4.49 | 3.32 | 0.81 | 4.08 | 3.89 | 1.04 | 3.75 |
| 40 | 0.84 | 0.19 | 4.37 | 3.28 | 0.83 | 3.97 | 3.84 | 1.05 | 3.65 |
| 41 | 0.83 | 0.20 | 4.25 | 3.23 | 0.84 | 3.86 | 3.78 | 1.06 | 3.56 |
| 42 | 0.82 | 0.20 | 4.14 | 3.19 | 0.85 | 3.76 | 3.73 | 1.08 | 3.46 |
| 43 | 0.81 | 0.20 | 4.03 | 3.14 | 0.86 | 3.66 | 3.68 | 1.09 | 3.37 |
| 44 | 0.80 | 0.20 | 3.92 | 3.10 | 0.87 | 3.56 | 3.63 | 1.11 | 3.28 |
| 45 | 0.78 | 0.21 | 3.81 | 3.05 | 0.88 | 3.47 | 3.57 | 1.12 | 3.19 |
| 46 | 0.77 | 0.21 | 3.71 | 3.01 | 0.89 | 3.37 | 3.52 | 1.13 | 3.10 |




**Heating performance characteristic :**

| Outside Temp | Min capacity | | | Nominal capacity | | | Max capacity | | |
|---|---|---|---|---|---|---|---|---|---|
| | Capacity | Power | COP | Capacity | Power | COP | Capacity | Power | COP |
| (°C) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) | (kW) | (kW) | ( - ) |
| **-25** | **0.25** | **0.14** | **1.84** | **1.42** | **0.64** | **2.23** | **2.90** | **1.99** | **1.46** |
| -24 | 0.26 | 0.14 | 1.89 | 1.46 | 0.64 | 2.29 | 2.98 | 1.99 | 1.49 |
| -23 | 0.26 | 0.14 | 1.93 | 1.50 | 0.64 | 2.35 | 3.06 | 2.00 | 1.53 |
| -22 | 0.27 | 0.14 | 1.98 | 1.54 | 0.64 | 2.41 | 3.14 | 2.00 | 1.57 |
| -21 | 0.28 | 0.14 | 2.03 | 1.58 | 0.64 | 2.46 | 3.22 | 2.01 | 1.61 |
| -20 | 0.28 | 0.14 | 2.07 | 1.62 | 0.64 | 2.52 | 3.30 | 2.01 | 1.64 |
| -19 | 0.30 | 0.14 | 2.22 | 1.74 | 0.65 | 2.69 | 3.54 | 2.02 | 1.75 |
| -18 | 0.32 | 0.14 | 2.36 | 1.86 | 0.65 | 2.86 | 3.78 | 2.03 | 1.87 |
| -17 | 0.35 | 0.14 | 2.50 | 1.97 | 0.65 | 3.03 | 4.02 | 2.03 | 1.98 |
| -16 | 0.37 | 0.14 | 2.63 | 2.09 | 0.65 | 3.20 | 4.26 | 2.04 | 2.09 |
| **-15** | **0.39** | **0.14** | **2.77** | **2.21** | **0.66** | **3.37** | **4.50** | **2.05** | **2.20** |
| -14 | 0.40 | 0.14 | 2.81 | 2.27 | 0.67 | 3.41 | 4.63 | 2.08 | 2.22 |
| -13 | 0.41 | 0.14 | 2.84 | 2.33 | 0.68 | 3.45 | 4.75 | 2.11 | 2.25 |
| -12 | 0.42 | 0.15 | 2.88 | 2.39 | 0.69 | 3.49 | 4.88 | 2.14 | 2.28 |
| -11 | 0.43 | 0.15 | 2.91 | 2.46 | 0.70 | 3.53 | 5.00 | 2.17 | 2.30 |
| -10 | 0.44 | 0.15 | 2.94 | 2.52 | 0.70 | 3.57 | 5.13 | 2.20 | 2.33 |
| -9 | 0.45 | 0.15 | 2.97 | 2.58 | 0.71 | 3.61 | 5.25 | 2.23 | 2.35 |
| -8 | 0.46 | 0.15 | 3.00 | 2.64 | 0.72 | 3.65 | 5.38 | 2.26 | 2.38 |
| **-7** | **0.47** | **0.16** | **3.03** | **2.70** | **0.73** | **3.68** | **5.50** | **2.29** | **2.40** |
| -6 | 0.48 | 0.16 | 3.07 | 2.72 | 0.73 | 3.73 | 5.54 | 2.28 | 2.43 |
| -5 | 0.48 | 0.15 | 3.11 | 2.75 | 0.73 | 3.77 | 5.59 | 2.27 | 2.46 |
| -4 | 0.48 | 0.15 | 3.14 | 2.77 | 0.73 | 3.82 | 5.63 | 2.26 | 2.49 |
| -3 | 0.49 | 0.15 | 3.18 | 2.79 | 0.72 | 3.86 | 5.68 | 2.25 | 2.52 |
| -2 | 0.49 | 0.15 | 3.22 | 2.81 | 0.72 | 3.91 | 5.72 | 2.25 | 2.55 |
| -1 | 0.50 | 0.15 | 3.26 | 2.83 | 0.72 | 3.95 | 5.77 | 2.24 | 2.58 |
| 0 | 0.50 | 0.15 | 3.29 | 2.85 | 0.71 | 4.00 | 5.81 | 2.23 | 2.61 |
| 1 | 0.50 | 0.15 | 3.33 | 2.88 | 0.71 | 4.05 | 5.86 | 2.22 | 2.64 |
| **2** | **0.51** | **0.15** | **3.37** | **2.90** | **0.71** | **4.09** | **5.90** | **2.21** | **2.67** |
| 3 | 0.63 | 0.16 | 3.94 | 2.95 | 0.72 | 4.11 | 6.02 | 2.25 | 2.68 |
| 4 | 0.65 | 0.16 | 3.98 | 2.99 | 0.73 | 4.12 | 6.14 | 2.28 | 2.69 |
| 5 | 0.66 | 0.16 | 4.03 | 3.04 | 0.74 | 4.13 | 6.27 | 2.32 | 2.70 |
| 6 | 0.68 | 0.17 | 4.07 | 3.90 | 0.79 | 4.95 | 7.50 | 2.36 | 3.17 |
| 7 | **0.70** | **0.17** | **4.12** | **4.00** | **0.80** | **5.00** | **7.70** | **2.40** | **3.21** |
| 8 | 0.72 | 0.17 | 4.16 | 4.10 | 0.81 | 5.05 | 7.90 | 2.44 | 3.24 |
| 9 | 0.74 | 0.18 | 4.20 | 4.21 | 0.82 | 5.10 | 8.10 | 2.47 | 3.27 |
| 10 | 0.75 | 0.18 | 4.24 | 4.31 | 0.84 | 5.15 | 8.30 | 2.51 | 3.30 |
| 11 | 0.77 | 0.18 | 4.28 | 4.41 | 0.85 | 5.19 | 8.49 | 2.55 | 3.33 |
| 12 | 0.79 | 0.18 | 4.31 | 4.52 | 0.86 | 5.24 | 8.69 | 2.59 | 3.36 |
| 13 | 0.81 | 0.19 | 4.35 | 4.62 | 0.87 | 5.28 | 8.89 | 2.62 | 3.39 |
| 14 | 0.83 | 0.19 | 4.39 | 4.72 | 0.89 | 5.33 | 9.09 | 2.66 | 3.42 |
| 15 | 0.84 | 0.19 | 4.42 | 4.83 | 0.90 | 5.37 | 9.26 | 2.69 | 3.45 |
| 16 | 0.86 | 0.19 | 4.45 | 4.93 | 0.91 | 5.41 | 9.37 | 2.69 | 3.49 |
| 17 | 0.88 | 0.20 | 4.49 | 5.03 | 0.92 | 5.45 | 9.47 | 2.69 | 3.53 |
| 18 | 0.90 | 0.20 | 4.52 | 5.14 | 0.94 | 5.49 | 9.58 | 2.69 | 3.56 |
| 19 | 0.92 | 0.20 | 4.55 | 5.24 | 0.95 | 5.52 | 9.68 | 2.69 | 3.60 |
| 20 | 0.93 | 0.20 | 4.58 | 5.34 | 0.96 | 5.56 | 9.78 | 2.69 | 3.64 |
| 21 | 0.95 | 0.21 | 4.61 | 5.45 | 0.97 | 5.59 | 9.88 | 2.69 | 3.68 |
| 22 | 0.97 | 0.21 | 4.64 | 5.55 | 0.99 | 5.63 | 9.98 | 2.69 | 3.71 |
| 23 | 0.99 | 0.21 | 4.66 | 5.65 | 1.00 | 5.66 | 10.07 | 2.69 | 3.75 |
| 24 | 1.01 | 0.21 | 4.69 | 5.75 | 1.01 | 5.69 | 10.17 | 2.69 | 3.78 |



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