# Round flow cassette Air Conditioning Technical Data

# FXFA-A

FXFA20A2VEB
FXFA25A2VEB
FXFA32A2VEB
FXFA40A2VEB
FXFA50A2VEB
FXFA63A2VEB
FXFA80A2VEB
FXFA100A2VEB
FXFA125A2VEB

EEDEN22B

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# FXFA-A

# 1 Features

## 1 - 1 FXFA-A

### 360° air discharge for optimum efficiency and comfort

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- Optimised design for R-32 refrigerant
- Optional automatic filter cleaning panel results in higher efficiency & comfort and lower maintenance costs.
- Two optional intelligent sensors improve energy efficiency and comfort
- Widest choice ever in decoration panels: designer panels in white (RAL9010) and black (RAL9005) and standard panels in white (RAL9010) with grey louvers or full white
- Bigger flaps and unique swing pattern improve equal air distribution
- Individual flap control: flexibility to suit every room layout without changing the location of the unit!
- Lowest installation height in the market: 214mm for class 20-63
- Optional fresh air intake
- Standard drain pump with 675mm lift increases flexibility and installation speed

Auto-cleaning filter (optional)

Onecta app (optional) (optional)

Presence & floor sensor (optional)

Home leave operation

Fan only

Draught prevention

Auto cooling-heating changeover

Whisper quiet

Ceiling soiling prevention

Individual flap control

Vertical auto swing

Fan speed steps (5 steps + auto)

Dry programme

Air filter (pre filter)

Weekly timer

Infrared remote control (optional - must be combined with Madoka wired remote controller)

Wired remote control (required option)

Centralised control (optional)

Auto-restart

Self diagnosis

Multi tenant

Drain pump kit (standard)

# 2 Specifications

## 1 - 1 FXFA-A

| Technical specifications | | | | FXFA20A | FXFA25A | FXFA32A | FXFA40A | FXFA50A |
|---|---|---|---|---|---|---|---|---|
| Cooling capacity | Sensible capacity | At high fan speed | kW | 1.50 | 2.00 | 2.50 | 3.10 | 3.80 |
| | | At medium high fan speed | kW | 1.40 | 1.80 | 2.40 | 2.90 | 3.50 |
| | | At medium fan speed | kW | 1.30 | 1.70 | 2.10 | 2.60 | 3.10 |
| | | At medium low fan speed | kW | 1.20 | 1.50 | 1.90 | 2.50 | 2.90 |
| | | At low fan speed | kW | 1.10 | 1.40 | 1.80 | 2.20 | 2.60 |
| | Latent capacity | At high fan speed | kW | 0.70 | 0.80 | 1.10 | 1.40 | 1.80 |
| | | At medium high fan speed | kW | 0.70 | 0.80 | 1.00 | 1.30 | 1.70 |
| | | At medium fan speed | kW | 0.60 | 0.80 | 1.00 | 1.30 | 1.60 |
| | | At medium low fan speed | kW | 0.60 | 0.80 | 1.00 | 1.20 | 1.50 |
| | | At low fan speed | kW | 0.60 | 0.80 | 0.90 | 1.20 | 1.40 |
| | Total capacity | At high fan speed | kW | 2.20 | 2.80 | 3.60 | 4.50 | 5.60 |
| | | At medium high fan speed | kW | 2.10 | 2.60 | 3.40 | 4.20 | 5.20 |
| | | At medium fan speed | kW | 1.90 | 2.50 | 3.10 | 3.90 | 4.70 |
| | | At medium low fan speed | kW | 1.80 | 2.30 | 2.90 | 3.70 | 4.40 |
| | | At low fan speed | kW | 1.70 | 2.20 | 2.70 | 3.40 | 4.00 |
| Heating capacity | Total capacity | At high fan speed | kW | 2.50 | 3.20 | 4.00 | 5.00 | 6.30 |
| | | At medium high fan speed | kW | 2.30 | 2.90 | 3.70 | 4.60 | 5.80 |
| | | At medium fan speed | kW | 2.10 | 2.70 | 3.40 | 4.20 | 5.10 |
| | | At medium low fan speed | kW | 1.90 | 2.50 | 3.10 | 3.90 | 4.90 |
| | | At low fan speed | kW | 1.80 | 2.30 | 2.90 | 3.60 | 4.10 |
| Power input - 50Hz | Cooling | At high fan speed | kW | 0.017 (1) | | | 0.018 (1) | 0.023 (1) |
| | | At medium high fan speed | kW | 0.015 (1) | | | 0.016 (1) | 0.020 (1) |
| | | At medium fan speed | kW | 0.013 (1) | | | 0.014 (1) | 0.017 (1) |
| | | At medium low fan speed | kW | 0.012 (1) | | | | 0.014 (1) |
| | | At low fan speed | kW | 0.011 (1) | | | | 0.012 (1) |
| | Heating | At high fan speed | kW | 0.017 (1) | | | 0.018 (1) | 0.023 (1) |
| | | At medium high fan speed | kW | 0.015 (1) | | | 0.016 (1) | 0.020 (1) |
| | | At medium fan speed | kW | 0.013 (1) | | | 0.014 (1) | 0.017 (1) |
| | | At medium low fan speed | kW | 0.012 (1) | | | | 0.014 (1) |
| | | At low fan speed | kW | 0.011 (1) | | | | 0.012 (1) |
| Power input - 60Hz | Cooling | At high fan speed | kW | 0.017 (1) | | | 0.018 (1) | 0.023 (1) |
| | Heating | At high fan speed | kW | 0.017 (1) | | | 0.018 (1) | 0.023 (1) |
| Dimensions | Unit | Height | mm | 204 | | | | |
| | | Width | mm | 840 | | | | |
| | | Depth | mm | 840 | | | | |
| | Packed unit | Height | mm | 220 | | | | |
| Dimensions | Packed unit | Width | mm | 882 | | | | |
| | | Depth | mm | 882 | | | | |
| Weight | Unit | | kg | 18 | | | 19 | 21 |
| | Packed unit | | kg | 21 | | | 22 | 24 |
| Casing | Material | | | Galvanised steel plate | | | | |
| Heat exchanger | Inside length | | mm | 2,134 | | | | 2,090 |
| | Outside length | | mm | 2,181 | | | | 2,184 |
| | Rows | Quantity | | 2 | | | | 3 |
| | Fin pitch | | mm | 1.20 | | | | |
| | Passes | Quantity | | 4 | | | 6 | 12 |
| | Face area | | $m^2$ | 0.278 | | | 0.366 | 0.371 |
| | Stages | Quantity | | 9 | | | 12 | |
| | Empty tubeplate hole | Quantity | | 0 | | | | |
| | Tube type | | | Ø5 HI-XA | | | | |
| | Fin | Type | | Cross fin coil (Multi slit fins and Ø5HI-XA tubes) | | | | |

# 2 Specifications

## 1 - 1 FXFA-A



| Technical specifications | | | | | FXFA20A | FXFA25A | FXFA32A | FXFA40A | FXFA50A |
|---|---|---|---|---|---|---|---|---|---|
| Fan | Type | | | | Turbo fan | | | | |
| | Quantity | | | | 1 | | | | |
| | Air flow rate - 50Hz | Cooling | At high fan speed | $m^3$/min | 12.8 | | | 14.8 | 15.1 |
| | | | At medium high fan speed | $m^3$/min | 11.8 | | | 13.7 | 14.0 |
| | | | At medium fan speed | $m^3$/min | 10.7 | | | 12.6 | 12.8 |
| | | | At medium low fan speed | $m^3$/min | 9.8 | | | 11.5 | 11.8 |
| | | | At low fan speed | $m^3$/min | 8.9 | | | 10.4 | 10.7 |
| | | Heating | At high fan speed | $m^3$/min | 12.8 | | | 14.8 | 15.1 |
| | | | At medium high fan speed | $m^3$/min | 11.8 | | | 13.7 | 14.0 |
| | | | At medium fan speed | $m^3$/min | 10.7 | | | 12.6 | 12.8 |
| | | | At medium low fan speed | $m^3$/min | 9.8 | | | 11.5 | 11.8 |
| | | | At low fan speed | $m^3$/min | 8.9 | | | 10.4 | 10.7 |
| | Air flow rate - 60Hz | Cooling | At high fan speed | cfm | 452 | | | 523 | 533 |
| | | | At medium high fan speed | cfm | 417 | | | 484 | 494 |
| | | | At medium low fan speed | cfm | 346 | | | 406 | 417 |
| | | | At medium fan speed | cfm | 378 | | | 445 | 452 |
| | | | At low fan speed | cfm | 314 | | | 367 | 378 |
| | | Heating | At high fan speed | cfm | 452 | | | 523 | 533 |
| | | | At medium high fan speed | cfm | 417 | | | 484 | 494 |
| | | | At medium fan speed | cfm | 378 | | | 445 | 452 |
| | | | At medium low fan speed | cfm | 346 | | | 406 | 417 |
| | | | At low fan speed | cfm | 314 | | | 367 | 378 |
| Sound power level | Cooling | At high fan speed | | dBA | 49.0 | | | 51.0 | |
| Sound pressure level | Cooling | At high fan speed | | dBA | 31.0 | | | 33.0 | |
| | | At medium high fan speed | | dBA | 30.0 | | | 32.0 | |
| | | At medium fan speed | | dBA | 29.0 | | | 31.0 | |
| | | At medium low fan speed | | dBA | 29.5 | | | 30.0 | |
| | | At low fan speed | | dBA | 28.0 | | | 29.0 | |
| | Heating | At high fan speed | | dBA | 31.0 | | | 33.0 | |
| | | At medium high fan speed | | dBA | 30.0 | | | 32.0 | |
| | | At medium fan speed | | dBA | 29.0 | | | 31.0 | |
| | | At medium low fan speed | | dBA | 29.5 | | | 30.0 | |
| | | At low fan speed | | dBA | 28.0 | | | 29.0 | |
| Fan motor | Quantity | | | | 1 | | | | |
| | Speed | Steps | | | 5 | | | | |
| Refrigerant | Type | | | | R-32 | | | | |
| | GWP | | | | 675.0 | | | | |
| Piping connections | Liquid | Type | | | Flare connection | | | | |
| | | OD | | mm | 6 | | | | |
| | Gas | Type | | | Flare connection | | | | |
| | | OD | | mm | 9.52 | | | 12.70 | |
| | Drain | | | | VP25 (O.D. 32 / I.D. 25) | | | | |
| | Heat insulation | | | | Foamed polystyrene / Foamed polyethylene | | | | |
| | Sound absorbing insulation | | | | Foamed polyurethane | | | | |
| Decoration panel | Model | | | | BYCQ140E2W1 / BYCQ140E2W1W / BYCQ140E2W1B | | | | |
| | Dimensions | Height | | mm | 65 | | | | |
| | | Width | | mm | 950 | | | | |
| | | Depth | | mm | 950 | | | | |
| | Weight | | | kg | 5.5 | | | | |
| Decoration panel 2 | Model | | | | BYCQ140E2GFW1 / BYCQ140E2GFW1B | | | | |
| | Dimensions | Height | | mm | 148 | | | | |
| | | Width | | mm | 950 | | | | |
| | | Depth | | mm | 950 | | | | |
| | Weight | | | kg | 10.3 | | | | |
| Decoration panel 3 | Model | | | | BYCQ140E2P / BYCQ140E2PB | | | | |
| | Dimensions | Height | | mm | 106 | | | | |
| | | Width | | mm | 950 | | | | |
| | | Depth | | mm | 950 | | | | |
| | Weight | | | kg | 6.5 | | | | |
| Air filter | Type | | | | Resin net | | | | |

# 2 Specifications

## 1 - 1 FXFA-A

| Technical specifications | | | FXFA20A | FXFA25A | FXFA32A | FXFA40A | FXFA50A |
|---|---|---|---|---|---|---|---|
| Safety devices | Item | 01 | PC board fuse | | | | |
| | | 02 | Fan motor overcurrent protector | | | | |
| Control systems | Infrared remote control | | BRC7FA532F / BRC7FB532F / BRC7FA532FB / BRC7FB532FB | | | | |
| | Wired remote control | | BRC1H52W/S/K | | | | |

| Technical specifications | | | | FXFA63A | FXFA80A | FXFA100A | FXFA125A |
|---|---|---|---|---|---|---|---|
| Cooling capacity | Sensible capacity | At high fan speed | kW | 4.80 | 6.10 | 7.70 | 9.70 |
| | | At medium high fan speed | kW | 4.30 | 5.50 | 6.80 | 8.50 |
| | | At medium fan speed | kW | 3.80 | 5.00 | 5.80 | 7.70 |
| | | At medium low fan speed | kW | 3.50 | 4.20 | 4.90 | 6.90 |
| | | At low fan speed | kW | 3.10 | 3.60 | 3.80 | 6.00 |
| | Latent capacity | At high fan speed | kW | 2.30 | 2.90 | 3.50 | 4.30 |
| | | At medium high fan speed | kW | 2.10 | 2.70 | 3.20 | 3.90 |
| | | At medium fan speed | kW | 2.00 | 2.50 | 2.90 | 3.70 |
| | | At medium low fan speed | kW | 1.80 | 2.20 | 2.40 | 3.40 |
| | | At low fan speed | kW | 1.60 | 1.80 | 2.00 | 3.00 |
| | Total capacity | At high fan speed | kW | 7.10 | 9.00 | 11.20 | 14.00 |
| | | At medium high fan speed | kW | 6.40 | 8.20 | 10.00 | 12.40 |
| | | At medium fan speed | kW | 5.80 | 7.50 | 8.70 | 11.40 |
| | | At medium low fan speed | kW | 5.30 | 6.40 | 7.30 | 10.30 |
| | | At low fan speed | kW | 4.70 | 5.40 | 5.80 | 9.00 |
| Heating capacity | Total capacity | At high fan speed | kW | 8.00 | 10.00 | 12.50 | 16.00 |
| | | At medium high fan speed | kW | 7.10 | 9.10 | 10.90 | 14.10 |
| | | At medium fan speed | kW | 6.30 | 8.30 | 9.30 | 12.80 |
| | | At medium low fan speed | kW | 5.80 | 7.10 | 7.70 | 11.30 |
| | | At low fan speed | kW | 5.00 | 5.90 | 6.00 | 9.80 |
| Power input - 50Hz | Cooling | At high fan speed | kW | 0.028 (1) | 0.045 (1) | 0.078 (1) | 0.103 (1) |
| | | At medium high fan speed | kW | 0.022 (1) | 0.036 (1) | 0.054 (1) | 0.081 (1) |
| | | At medium fan speed | kW | 0.018 (1) | 0.028 (1) | 0.036 (1) | 0.062 (1) |
| | | At medium low fan speed | kW | 0.015 (1) | 0.020 (1) | 0.022 (1) | 0.045 (1) |
| | | At low fan speed | kW | 0.012 (1) | 0.015 (1) | | 0.031 (1) |
| | Heating | At high fan speed | kW | 0.028 (1) | 0.045 (1) | 0.078 (1) | 0.103 (1) |
| | | At medium high fan speed | kW | 0.022 (1) | 0.036 (1) | 0.054 (1) | 0.081 (1) |
| | | At medium fan speed | kW | 0.018 (1) | 0.028 (1) | 0.036 (1) | 0.062 (1) |
| | | At medium low fan speed | kW | 0.015 (1) | 0.020 (1) | 0.022 (1) | 0.045 (1) |
| | | At low fan speed | kW | 0.012 (1) | 0.015 (1) | | 0.031 (1) |
| Power input - 60Hz | Cooling | At high fan speed | kW | 0.028 (1) | 0.045 (1) | 0.078 (1) | 0.103 (1) |
| | Heating | At high fan speed | kW | 0.028 (1) | 0.045 (1) | 0.078 (1) | 0.103 (1) |
| Dimensions | Unit | Height | mm | 204 | 246 | | 288 |
| | | Width | mm | 840 | | | |
| | | Depth | mm | 840 | | | |
| | Packed unit | Height | mm | 220 | 260 | | 300 |
| Dimensions | Packed unit | Width | mm | 882 | | | |
| | | Depth | mm | 882 | | | |
| Weight | Unit | | kg | 21 | 24 | | 26 |
| | Packed unit | | kg | 24 | 27 | | 29 |
| Casing | Material | | | Galvanised steel plate | | | |
| Heat exchanger | Inside length | | mm | 2,090 | | | |
| | Outside length | | mm | 2,184 | | | |
| | Rows | Quantity | | 3 | | | |
| | Fin pitch | | mm | 1.20 | | | |
| | Passes | Quantity | | 12 | 14 | | 17 |
| | Face area | | $m^2$ | 0.371 | 0.464 | | 0.556 |
| | Stages | Quantity | | 12 | 15 | | 18 |
| | Empty tubeplate hole | Quantity | | 0 | | | |
| | Tube type | | | Ø5 HI-XA | | | |
| | Fin | Type | | Cross fin coil (Multi slit fins and Ø5HI-XA tubes) | | | |

# 2 Specifications

## 1 - 1 FXFA-A



| Technical specifications | | | | | FXFA63A | FXFA80A | FXFA100A | FXFA125A |
|---|---|---|---|---|---|---|---|---|
| Fan | Type | | | | Turbo fan | | | |
| | Quantity | | | | 1 | | | |
| | Air flow rate - 50Hz | Cooling | At high fan speed | $m^3$/min | 16.6 | 23.3 | 28.8 | 33.0 |
| | | | At medium high fan speed | $m^3$/min | 15.0 | 21.7 | 25.1 | 30.2 |
| | | | At medium fan speed | $m^3$/min | 13.3 | 19.3 | 21.2 | 27.4 |
| | | | At medium low fan speed | $m^3$/min | 12.0 | 16.5 | 17.5 | 24.0 |
| | | | At low fan speed | $m^3$/min | 10.7 | 13.8 | | 20.6 |
| | | Heating | At high fan speed | $m^3$/min | 16.6 | 23.3 | 29.0 | 33.0 |
| | | | At medium high fan speed | $m^3$/min | 15.0 | 21.7 | 25.1 | 30.2 |
| | | | At medium fan speed | $m^3$/min | 13.3 | 19.3 | 21.2 | 27.4 |
| | | | At medium low fan speed | $m^3$/min | 12.0 | 16.5 | 17.5 | 24.0 |
| | | | At low fan speed | $m^3$/min | 10.7 | 13.8 | | 20.6 |
| | Air flow rate - 60Hz | Cooling | At high fan speed | cfm | 586 | 823 | 1,017 | 1,165 |
| | | | At medium high fan speed | cfm | 530 | 766 | 886 | 1,067 |
| | | | At medium low fan speed | cfm | 424 | 583 | 618 | 848 |
| | | | At medium fan speed | cfm | 470 | 682 | 749 | 968 |
| | | | At low fan speed | cfm | 378 | 487 | | 727 |
| | | Heating | At high fan speed | cfm | 586 | 823 | 1,024 | 1,165 |
| | | | At medium high fan speed | cfm | 530 | 766 | 886 | 1,067 |
| | | | At medium fan speed | cfm | 470 | 682 | 749 | 968 |
| | | | At medium low fan speed | cfm | 424 | 583 | 618 | 848 |
| | | | At low fan speed | cfm | 378 | 487 | | 727 |
| Sound power level | Cooling | At high fan speed | | dBA | 53.0 | 55.0 | 60.0 | 61.0 |
| Sound pressure level | Cooling | At high fan speed | | dBA | 35.0 | 38.0 | 43.0 | 45.0 |
| | | At medium high fan speed | | dBA | 34.0 | 36.0 | 41.0 | 43.0 |
| | | At medium fan speed | | dBA | 33.0 | 34.0 | 37.0 | 41.0 |
| | | At medium low fan speed | | dBA | 32.0 | | 34.0 | 39.0 |
| | | At low fan speed | | dBA | 30.0 | | | 36.0 |
| | Heating | At high fan speed | | dBA | 35.0 | 38.0 | 43.0 | 45.0 |
| | | At medium high fan speed | | dBA | 34.0 | 36.0 | 41.0 | 43.0 |
| | | At medium fan speed | | dBA | 33.0 | 34.0 | 37.0 | 41.0 |
| | | At medium low fan speed | | dBA | 32.0 | | 34.0 | 39.0 |
| | | At low fan speed | | dBA | 30.0 | | | 36.0 |
| Fan motor | Quantity | | | | 1 | | | |
| | Speed | Steps | | | 5 | | | |
| Refrigerant | Type | | | | R-32 | | | |
| | GWP | | | | 675.0 | | | |
| Piping connections | Liquid | Type | | | Flare connection | | | |
| | | OD | | mm | 6 | | 10 | |
| | Gas | Type | | | Flare connection | | | |
| | | OD | | mm | 12.70 | | 15.90 | |
| | Drain | | | | VP25 (O.D. 32 / I.D. 25) | | | |
| | Heat insulation | | | | Foamed polystyrene / Foamed polyethylene | | | |
| | Sound absorbing insulation | | | | Foamed polyurethane | | | |
| Decoration panel | Model | | | | BYCQ140E2W1 / BYCQ140E2W1W / BYCQ140E2W1B | | | |
| | Dimensions | Height | | mm | 65 | | | |
| | | Width | | mm | 950 | | | |
| | | Depth | | mm | 950 | | | |
| | Weight | | | kg | 5.5 | | | |
| Decoration panel 2 | Model | | | | BYCQ140E2GFW1 / BYCQ140E2GFW1B | | | |
| | Dimensions | Height | | mm | 148 | | | |
| | | Width | | mm | 950 | | | |
| | | Depth | | mm | 950 | | | |
| | Weight | | | kg | 10.3 | | | |
| Decoration panel 3 | Model | | | | BYCQ140E2P / BYCQ140E2PB | | | |
| | Dimensions | Height | | mm | 106 | | | |
| | | Width | | mm | 950 | | | |
| | | Depth | | mm | 950 | | | |
| | Weight | | | kg | 6.5 | | | |
| Air filter | Type | | | | Resin net | | | |

# 2 Specifications

## 1 - 1 FXFA-A

| Technical specifications | | | FXFA63A | FXFA80A | FXFA100A | FXFA125A |
|---|---|---|---|---|---|---|
| Safety devices | Item | 01 | PC board fuse | | | |
| | | 02 | Fan motor overcurrent protector | | | |
| Control systems | Infrared remote control | | BRC7FA532F / BRC7FB532F / BRC7FA532FB / BRC7FB532FB | | | |
| | Wired remote control | | BRC1H52W/S/K | | | |

Standard accessories: Installation and operation manual;Quantity: 1;

Standard accessories: Drain hose;Quantity: 1;

Standard accessories: Clamp for drain hose;Quantity: 1;

Standard accessories: Washer for hanger bracket;Quantity: 8;

Standard accessories: Screws;Quantity: 4;

Standard accessories: Installation guide;Quantity: 1;

Standard accessories: Insulation for fitting;Quantity: 2;

Standard accessories: Sealing pads;Quantity: 1;

Standard accessories: Wire clamp material;Quantity: 7;

Standard accessories: Clamps;Quantity: 1;

| Electrical specifications | | | FXFA20A | FXFA25A | FXFA32A | FXFA40A | FXFA50A |
|---|---|---|---|---|---|---|---|
| Power supply | Phase | | 1~ | | | | |
| | Frequency | Hz | 50/60 | | | | |
| | Voltage | V | 220-240/220 | | | | |
| Current - 50Hz | Minimum circuit amps (MCA) | A | 0.3 | | | | 0.4 |
| | Maximum fuse amps (MFA) | A | 6 | | | | |
| | Full load amps (FLA) Total | A | 0.2 | | | | 0.3 |
| Current - 60Hz | Minimum circuit amps (MCA) | A | 0.3 | | | | 0.4 |
| | Maximum fuse amps (MFA) | A | 6 | | | | |
| | Full load amps (FLA) Total | A | 0.2 | | | | 0.3 |

| Electrical specifications | | | FXFA63A | FXFA80A | FXFA100A | FXFA125A |
|---|---|---|---|---|---|---|
| Power supply | Phase | | 1~ | | | |
| | Frequency | Hz | 50/60 | | | |
| | Voltage | V | 220-240/220 | | | |
| Current - 50Hz | Minimum circuit amps (MCA) | A | 0.4 | 0.6 | 0.8 | 1.3 |
| | Maximum fuse amps (MFA) | A | 6 | | | |
| | Full load amps (FLA) Total | A | 0.3 | 0.5 | 0.7 | 1.2 |
| Current - 60Hz | Minimum circuit amps (MCA) | A | 0.4 | 0.6 | 0.8 | 1.3 |
| | Maximum fuse amps (MFA) | A | 6 | | | |
| | Full load amps (FLA) Total | A | 0.3 | 0.5 | 0.7 | 1.2 |

(1)Values are valid for the factory setting. |
Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB |
Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB |
The sound power level is an absolute value indicating the power which a sound source generates. |
Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits. |
Maximum allowable voltage range variation between phases is 2%. |
MCA/MFA: MCA = 1.1 x FLA |
Instead of a fuse, use a circuit breaker |
Select wire size based on the value of MCA |
BYCQ140E2W1: pure white standard panel with grey louvers; BYCQ140E2W1W: pure white standard panel with white louvers; BYCQ140E2W1B: black standard panel with black louvers. |
The BYCQ140E2W1W has white insulations. Be informed that formation of dirt on white insulation is visibly stronger and that it is consequently not advised to install the BYCQ140E2W1W decoration panel in enviroments exposed to concentrations of dirt. |
Contains fluorinated greenhouse gases

# 3 Electrical data

## 3 - 1 Electrical Data

**FXFA-A**



| Model name | Power supply | | | | | IFM | Power input [W] | |
|---|---|---|---|---|---|---|---|---|
| Indoor unit | Hz | Voltage | Voltage range | MCA | MFA | FLA | Cooling | Heating |
| FXFA20A2VEB | 50 | 220-240 | Minimum ·50·Hz ·198·V<br>Maximum ·50·Hz ·264·V | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA25A2VEB | | 220-240 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA32A2VEB | | 220-240 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA40A2VEB | | 220-240 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA50A2VEB | | 220-240 | | 0,4 | 6 | 0,3 | 53 | 53 |
| FXFA63A2VEB | | 220-240 | | 0,4 | 6 | 0,3 | 61 | 61 |
| FXFA80A2VEB | | 220-240 | | 0,6 | 6 | 0,5 | 92 | 92 |
| FXFA100A2VEB | | 220-240 | | 0,8 | 6 | 0,7 | 115 | 115 |
| FXFA125A2VEB | | 220-240 | | 1,3 | 6 | 1,2 | 186 | 186 |
| FXFA20A2VEB | 60 | 220 | Minimum ·50·Hz ·198·V<br>Maximum ·60·Hz ·242·V | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA25A2VEB | | 220 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA32A2VEB | | 220 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA40A2VEB | | 220 | | 0,3 | 6 | 0,2 | 38 | 38 |
| FXFA50A2VEB | | 220 | | 0,4 | 6 | 0,3 | 53 | 53 |
| FXFA63A2VEB | | 220 | | 0,4 | 6 | 0,3 | 61 | 61 |
| FXFA80A2VEB | | 220 | | 0,6 | 6 | 0,5 | 92 | 92 |
| FXFA100A2VEB | | 220 | | 0,8 | 6 | 0,7 | 115 | 115 |
| FXFA125A2VEB | | 220 | | 1,3 | 6 | 1,2 | 186 | 186 |

Notes

Voltage range

1) The units are suitable for use with electrical systems in which the voltage supplied to the unit terminals is not below or above the listed range limits.

2) Use a circuit breaker instead of a fuse.

3) Select the wire size according to the MCA.

4) The maximum allowable voltage that is unbalanced between phases is ·2·%.

5) MCA = 1.1 × FLA

Symbols

MCA: Minimum Circuit Ampere [A]

MFA: Maximum Fuse Ampere [A]

IFM: Indoor fan motor

FLA: Full Load Ampere [A]

**3D128806**

# 4 Safety device settings

## 4 - 1 Safety Device Settings

**FXFA-A**



| Safety devices | | FXFQ20-63BVEB<br>FXFA20-63A2VEB | FXFQ80-125BVEB<br>FXFA80-125A2VEB<br>FXFN50-112A2VEB |
|---|---|---|---|
| PCB fuse | | 250V, 3.15A | 250V, 3.15A |
| Fan motor overcurrent protection | Nominal | 0.92A | 1.49A |
| Fan motor thermal protector | Maximum | --- | --- |
| Drain pump fuse | | --- | --- |

**4D121692B**

# 5 Options

## 5 - 1 Options



**FXFA-A**

| Option kit | | | Product name | Availability FXFA20 - 125A2VEB |
|---|---|---|---|---|
| Decoration panel | Standard | | BYCQ140E2W1 | ✓ |
| | White | | BYCQ140E2W1W ② | ✓ |
| | Black | | BYCQ140E2W1B | ✓ |
| Designer decoration panel | | | BYCQ140E2P | ✓ |
| Designer decoration panel | | Black | BYCQ140E2PB | ✓ |
| Self-cleaning decoration panel (with fine filter) | | | BYCQ140E2GFW1 ③④⑤ | ✓ |
| Self-cleaning decoration panel (with fine filter) | | Black | BYCQ140E2GFW1B ③④⑤ | ✓ |
| Long-life replacement filter | | | KAF5511D160 | ✓ |
| Chamber [part of fresh air intake kit (·20·% fresh air)] | | | KDDP55C160-1 ⑥⑦ | ✓ |
| Diffuser from chamber to duct [part of fresh air intake kit (·20·% fresh air)] | | | KDDP55D160-2 ⑥⑦ | ✓ |
| Air discharge outlet sealing member | | | KDBHQ56B140 ⑥ | ✓ |
| Sensor kit | | | BRYQ140B8 ⑧ | ✓ |
| Sensor kit | | Black | BRYQ140B8B ⑨ | ✓ |
| Sensor kit (for designer decoration panel) | | | BRYQ140C8 ⑮ | ✓ |
| Sensor kit (for designer decoration panel) | | Black | BRYQ140C8B ⑯ | ✓ |
| Wireless remote control | | | BRC7FA532F ⑥⑩⑭⑰ | ✓ |
| Wireless remote control | | Black | BRC7FA532FB ⑥⑪⑭⑰ | ✓ |
| Wireless remote control (for designer decoration panel) | | | BRC7FB532F ⑥⑭⑮⑰ | ✓ |
| Wireless remote control (for designer decoration panel) | | Black | BRC7FB532FB ⑥⑭⑯⑰ | ✓ |
| Wired remote control | | | BRC1H52W/S/K | ✓ |
| Wiring adaptor for electrical appendices ·1· | | | KRP1BA58 ⑥⑬ | ✓ |
| Wiring adaptor for electrical appendices ·2· | | | KRP4A53 ⑥⑬ | ✓ |
| Wiring adaptor (hour meter) | | | EKRP1C12 ⑥⑬ | ✓ |
| Remote sensor | | | KRCS01-7B | ✓ |
| Installation box for adaptor PCB | | | KRP1H98A ⑥ | ✓ |
| Installation box for adaptor PCB | | | KRP1BC101 | ✓ |
| Central remote control | | | DCS302C51 | ✓ |
| Unified ON/OFF controller | | | DCS301B51 | ✓ |
| Electrical box with earth terminal (·2· blocks) | | | KJB212AA | ✓ |
| Electrical box with earth terminal (·3· blocks) | | | KJB311AA | ✓ |
| Schedule timer | | | DST301BA51 | ✓ |
| iTouch Controller | | | DCS601C51 | ✓ |
| Digital input adaptor | | | BRP7A53 ⑬⑭ | ✓ |
| Intelligent Touch Manager | | | DCM601A51 | ✓ |
| Intelligent Tablet Controller | | | DCC601A51 | ✓ |
| Optional output PCB | | | ERP01A51 ⑫ | ✓ |
| Wire harness for external wireless temperature sensor | | | EKEWTSC-2 ⑱ | ✓ |
| WLAN adaptor for smartphones | | | BRP069C51 ⑭ | ✓ |
| PCB for multi-tenant indoor units | | | DTA114A61 ⑫⑲ | ✓ |

Notes

① All options are kits

② This option has white insulation.
Be aware that dirt formation is more easily visible on white insulation.
It is recommended not to install this option in environments with a high concentration of dirt.

③ To be able to control option ·BYCQ140E2GFW1 / BYCQ140E2GFW1B·, controller ·BRC1H52· is

④ This option cannot be used with multi, and non-inverter split outdoor units.

⑤ This option is suitable for all applications, except for use in environments that are greasy, or have high

⑥ This option cannot be combined with ·BYCQ140E2GFW1 / BYCQ140E2GFW1B·.

⑦ Both parts of the fresh air intake kit are required for each unit.

⑧ Only possible in combination with ·BYCQ140E2W1 / BYCQ140E2W1W / BYCQ140E2GFW1·

⑨ Only possible in combination with ·BYCQ140E2W1B / BYCQ140E2GFW1B·

⑩ Only possible in combination with ·BYCQ140E2W1 / BYCQ140E2W1W·

⑪ Only possible in combination with ·BYCQ140E2W1B·

⑫ Requires installation box for adaptor PCB ·KRP1BC101

⑬ Requires installation box for adaptor PCB ·KRP1H98A·.

⑭ Only possible in combination with remote control ·BRC1H52·.

⑮ Only possible in combination with ·BYCQ140E2P·

⑯ Only possible in combination with ·BYCQ140E2PB·

⑰ The active airflow circulation function is not available for this controller.

⑱ ·EKEWTSC-2· is a wire harness for the connection of option ·K.RSS·.
·K.RSS· is not an official option. Sales for this option are an SBU responsibility.

⑲ This option cannot be combined with ·BYCQ140E2GFW1 / BYCQ140E2GFW1B·.

**3D128835F**

# 6 Capacity tables

## 6 - 1 Cooling Capacity Tables

**FXFA-A**



| | | Indoor air temperature | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 14,0 [°C WB] | | 16,0 [°C WB] | | 18,0 [°C WB] | | 19,0 [°C WB] | | 20,0 [°C WB] | | 22,0 [°C WB] | | 24,0 [°C WB] | |
| | | 20,0 [°C DB] | | 23,0 [°C DB] | | 26,0 [°C DB] | | 27,0 [°C DB] | | 28,0 [°C DB] | | 30,0 [°C DB] | | 32,0 [°C DB] | |
| Unit size | Fan speed | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC | TC | SHC |
| 20 | H | 1,3 | 1,1 | 1,6 | 1,3 | 2,0 | 1,5 | 2,2 | 1,5 | 2,4 | 1,6 | 2,8 | 1,7 | 3,2 | 1,8 |
| | HM | Correction factor ·0.94 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.89 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.83 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.77 × H· | | | | | | | | | | | | | |
| 25 | H | 1,6 | 1,6 | 2,1 | 1,7 | 2,6 | 1,9 | 2,8 | 2,0 | 3,0 | 2,0 | 3,6 | 2,1 | 4,1 | 2,1 |
| | HM | Correction factor ·0.94 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.89 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.83 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.77 × H· | | | | | | | | | | | | | |
| 32 | H | 2,1 | 1,8 | 2,7 | 2,1 | 3,3 | 2,5 | 3,6 | 2,5 | 3,9 | 2,6 | 4,6 | 2,8 | 5,3 | 2,9 |
| | HM | Correction factor ·0.95 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.89 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.83 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.77 × H· | | | | | | | | | | | | | |
| 40 | H | 2,6 | 2,1 | 3,3 | 2,6 | 4,1 | 3,0 | 4,5 | 3,1 | 4,9 | 3,2 | 5,8 | 3,4 | 6,7 | 3,6 |
| | HM | Correction factor ·0.94 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.88 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.82 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.76 × H· | | | | | | | | | | | | | |
| 50 | H | 3,1 | 2,6 | 4,1 | 3,1 | 5,1 | 3,6 | 5,6 | 3,8 | 6,2 | 3,9 | 7,3 | 4,2 | 8,5 | 4,5 |
| | HM | Correction factor ·0.93 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.87 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.80 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.73 × H· | | | | | | | | | | | | | |
| 63 | H | 4,0 | 3,3 | 5,2 | 3,9 | 6,4 | 4,6 | 7,1 | 4,8 | 7,8 | 5,0 | 9,2 | 5,4 | 10,8 | 5,7 |
| | HM | Correction factor ·0.91 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.83 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.75 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.67 × H· | | | | | | | | | | | | | |
| 80 | H | 5,1 | 4,2 | 6,6 | 5,0 | 8,2 | 5,8 | 9,0 | 6,1 | 9,9 | 6,3 | 11,7 | 6,8 | 13,6 | 7,3 |
| | HM | Correction factor ·0.91 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.82 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.71 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.61 × H· | | | | | | | | | | | | | |
| 100 | H | 6,1 | 5,3 | 8,2 | 6,4 | 10,2 | 7,4 | 11,2 | 7,7 | 12,2 | 8,0 | 14,4 | 8,6 | 16,7 | 9,1 |
| | HM | Correction factor ·0.89 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.78 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.66 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.53 × H· | | | | | | | | | | | | | |
| 125 | H | 8,0 | 6,7 | 10,3 | 8,0 | 12,7 | 9,3 | 14,0 | 9,7 | 15,3 | 10,0 | 18,0 | 10,7 | 20,9 | 11,4 |
| | HM | Correction factor ·0.89 × H· | | | | | | | | | | | | | |
| | M | Correction factor ·0.83 × H· | | | | | | | | | | | | | |
| | ML | Correction factor ·0.74 × H· | | | | | | | | | | | | | |
| | L | Correction factor ·0.64 × H· | | | | | | | | | | | | | |

Notes

1) TC: Total capacity [kW]
SHC: Sensible heat capacity [kW]

2) Outdoor temperature ·35·°C DB

**3D129252**

# 6 Capacity tables

## 6 - 2 Heating Capacity Tables

**FXFA-A**



| Unit size | Fan speed | Indoor air temperature | | | | | |
|---|---|---|---|---|---|---|---|
| | | 16,0 [°C DB] | 18,0 [°C DB] | 20,0 [°C DB] | 21,0 [°C DB] | 22,0 [°C DB] | 24,0 [°C DB] |
| | | TC | TC | TC | TC | TC | TC |
| 20 | H | 2,9 | 2,7 | 2,5 | 2,4 | 2,3 | 2,1 |
| | MH | Correction factor ·0.93 × H· | | | | | |
| | M | Correction factor ·0.86 × H· | | | | | |
| | ML | Correction factor ·0.79 × H· | | | | | |
| | L | Correction factor ·0.72 × H· | | | | | |
| 25 | H | 3,7 | 3,5 | 3,2 | 3,1 | 2,9 | 2,7 |
| | MH | Correction factor ·0.93 × H· | | | | | |
| | M | Correction factor ·0.86 × H· | | | | | |
| | ML | Correction factor ·0.79 × H· | | | | | |
| | L | Correction factor ·0.72 × H· | | | | | |
| 32 | H | 4,7 | 4,3 | 4,0 | 3,8 | 3,7 | 3,3 |
| | MH | Correction factor ·0.93 × H· | | | | | |
| | M | Correction factor ·0.86 × H· | | | | | |
| | ML | Correction factor ·0.79 × H· | | | | | |
| | L | Correction factor ·0.72 × H· | | | | | |
| 40 | H | 5,8 | 5,4 | 5,0 | 4,8 | 4,6 | 4,2 |
| | MH | Correction factor ·0.93 × H· | | | | | |
| | M | Correction factor ·0.87 × H· | | | | | |
| | ML | Correction factor ·0.80 × H· | | | | | |
| | L | Correction factor ·0.73 × H· | | | | | |
| 50 | H | 7,4 | 6,8 | 6,3 | 6,0 | 5,8 | 5,3 |
| | MH | Correction factor ·0.93 × H· | | | | | |
| | M | Correction factor ·0.86 × H· | | | | | |
| | ML | Correction factor ·0.79 × H· | | | | | |
| | L | Correction factor ·0.72 × H· | | | | | |
| 63 | H | 9,4 | 8,7 | 8,0 | 7,7 | 7,3 | 6,7 |
| | MH | Correction factor ·0.90 × H· | | | | | |
| | M | Correction factor ·0.81 × H· | | | | | |
| | ML | Correction factor ·0.73 × H· | | | | | |
| | L | Correction factor ·0.65 × H· | | | | | |
| 80 | H | 11,7 | 10,8 | 10,0 | 9,6 | 9,2 | 8,3 |
| | MH | Correction factor ·0.92 × H· | | | | | |
| | M | Correction factor ·0.83 × H· | | | | | |
| | ML | Correction factor ·0.72 × H· | | | | | |
| | L | Correction factor ·0.60 × H· | | | | | |
| 100 | H | 14,6 | 13,5 | 12,5 | 12,0 | 11,5 | 10,4 |
| | MH | Correction factor ·0.87 × H· | | | | | |
| | M | Correction factor ·0.75 × H· | | | | | |
| | ML | Correction factor ·0.62 × H· | | | | | |
| | L | Correction factor ·0.50 × H· | | | | | |
| 125 | H | 18,7 | 17,3 | 16,0 | 15,3 | 14,7 | 13,4 |
| | MH | Correction factor ·0.88 × H· | | | | | |
| | M | Correction factor ·0.81 × H· | | | | | |
| | ML | Correction factor ·0.71 × H· | | | | | |
| | L | Correction factor ·0.62 × H· | | | | | |

Notes

1) TC: Total capacity [kW]
2) Outdoor temperature ·7·°C DB / ·6·°C WB

**3D129278**

# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

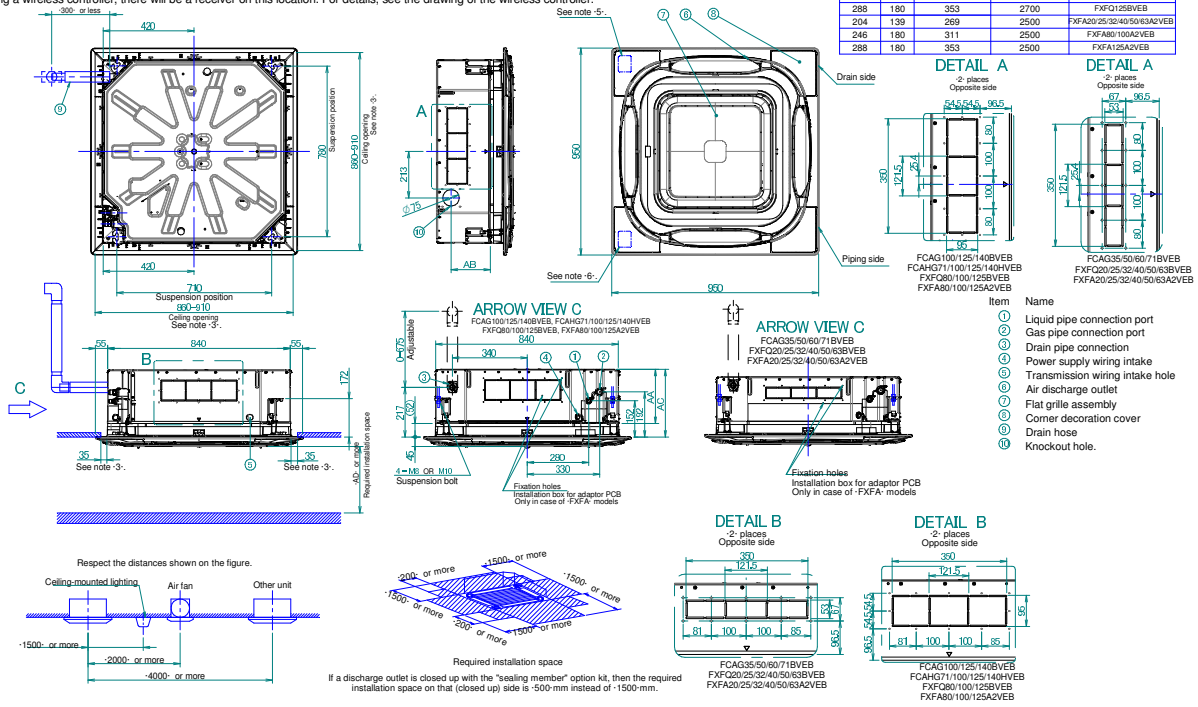


**FXFA-A**

Notes

1. Location of nameplate
   The unit nameplate is located on the control box cover.
   The decoration panel nameplate is located on the piping-side panel frame, under the corner cover.
2. When installing optional accessories, refer to their respective documentation.
3. Make sure the distance between the ceiling and the cassette does not exceed ·35·mm.
   The maximum ceiling opening is ·910·mm.
4. When the conditions in the ceiling exceed 30°C ambient temperature and 80% relative humidity, or when fresh air is inducted into the ceiling, additional insulation is required (polyethylene foam, thickness ≥·10·mm).
5. When installing a sensor kit, there will be a sensor on this location. For details, see the drawing of the sensor kit.
6. When installing a wireless controller, there will be a receiver on this location. For details, see the drawing of the wireless controller.

| Cassette height | | Minimal installation height | Required installation space | |
|---|---|---|---|---|
| AA | AB | AC | AD | Model |
| 204 | 139 | 269 | 2700 | FCAG35/50/60/71BVEB |
| 246 | 180 | 311 | 2700 | FCAG100/125/140BVEB |
| 288 | 180 | 353 | 2700 | FCAHG71/100/125/140HVEB |
| 204 | 139 | 269 | 2700 | FXFQ20/25/32/40/50/63BVEB |
| 246 | 180 | 311 | 2700 | FXFQ80/100BVEB |
| 288 | 180 | 353 | 2700 | FXFQ125BVEB |
| 204 | 139 | 269 | 2500 | FXFA20/25/32/40/50/63A2VEB |
| 246 | 180 | 311 | 2500 | FXFA80/100A2VEB |
| 288 | 180 | 353 | 2500 | FXFA125A2VEB |




| Item | Name |
|---|---|
| ① | Liquid pipe connection port |
| ② | Gas pipe connection port |
| ③ | Drain pipe connection |
| ④ | Power supply wiring intake |
| ⑤ | Transmission wiring intake hole |
| ⑥ | Air discharge outlet |
| ⑦ | Flat grille assembly |
| ⑧ | Corner decoration cover |
| ⑨ | Drain hose |
| ⑩ | Knockout hole. |

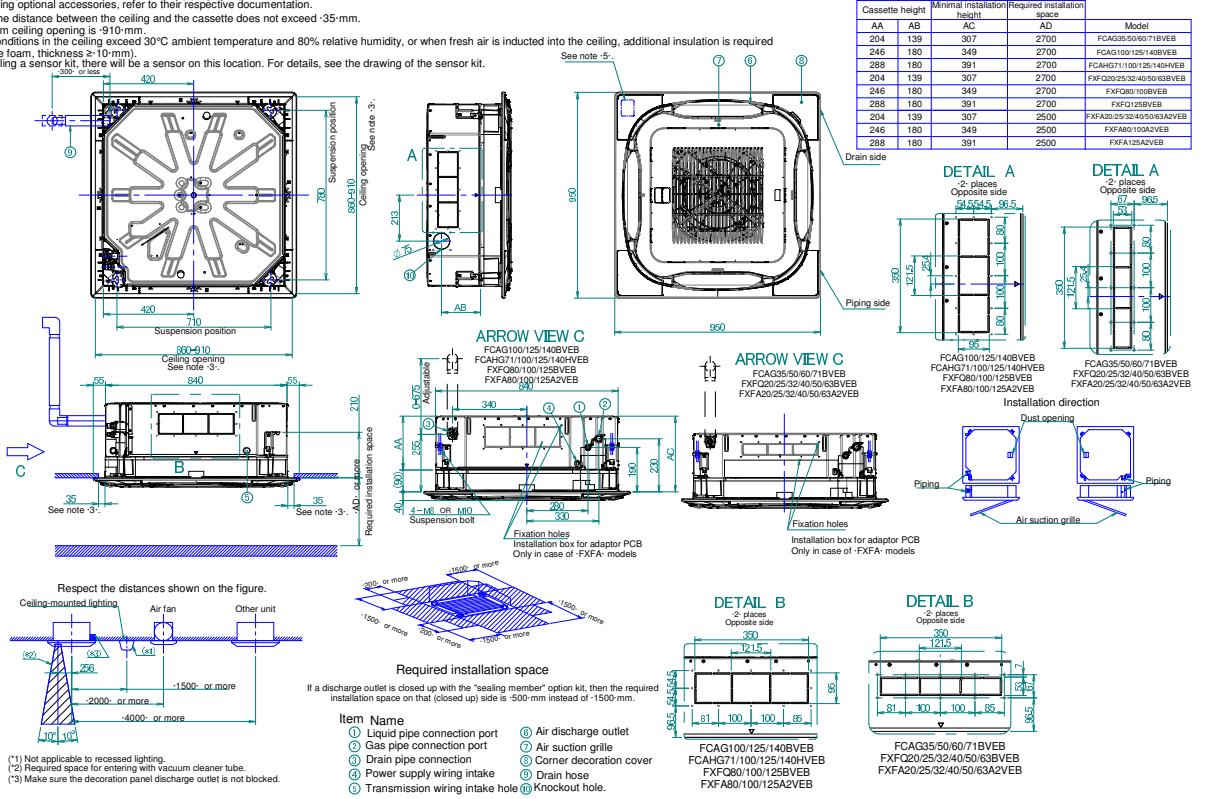
2D121703D

**FXFA-A**

Notes

1. Location of nameplate
   The unit nameplate is located on the control box cover.
   The decoration panel nameplate is located on the piping-side panel frame, under the corner cover.
2. When installing optional accessories, refer to their respective documentation.
3. Make sure the distance between the ceiling and the cassette does not exceed ·35·mm.
   The maximum ceiling opening is ·910·mm.
4. When the conditions in the ceiling exceed 30°C ambient temperature and 80% relative humidity, or when fresh air is inducted into the ceiling, additional insulation is required (polyethylene foam, thickness ≥·10·mm).
5. When installing a sensor kit, there will be a sensor on this location. For details, see the drawing of the sensor kit.

| Cassette height | | Minimal installation height | Required installation space | |
|---|---|---|---|---|
| AA | AB | AC | AD | Model |
| 204 | 139 | 307 | 2700 | FCAG35/50/60/71BVEB |
| 246 | 180 | 349 | 2700 | FCAG100/125/140BVEB |
| 288 | 180 | 391 | 2700 | FCAHG71/100/125/140HVEB |
| 204 | 139 | 307 | 2700 | FXFQ20/25/32/40/50/63BVEB |
| 246 | 180 | 349 | 2700 | FXFQ80/100BVEB |
| 288 | 180 | 391 | 2700 | FXFQ125BVEB |
| 204 | 139 | 307 | 2500 | FXFA20/25/32/40/50/63A2VEB |
| 246 | 180 | 349 | 2500 | FXFA80/100A2VEB |
| 288 | 180 | 391 | 2500 | FXFA125A2VEB |




| Item | Name |
|---|---|
| ① | Liquid pipe connection port |
| ② | Gas pipe connection port |
| ③ | Drain pipe connection |
| ④ | Power supply wiring intake |
| ⑤ | Transmission wiring intake hole |
| ⑥ | Air discharge outlet |
| ⑦ | Air suction grille |
| ⑧ | Corner decoration cover |
| ⑨ | Drain hose |
| ⑩ | Knockout hole. |

(*1) Not applicable to recessed lighting.
(*2) Required space for entering with vacuum cleaner tube.
(*3) Make sure the decoration panel discharge outlet is not blocked.

2D121658D

# 7 Dimensional drawings

## 7 - 1 Dimensional Drawings

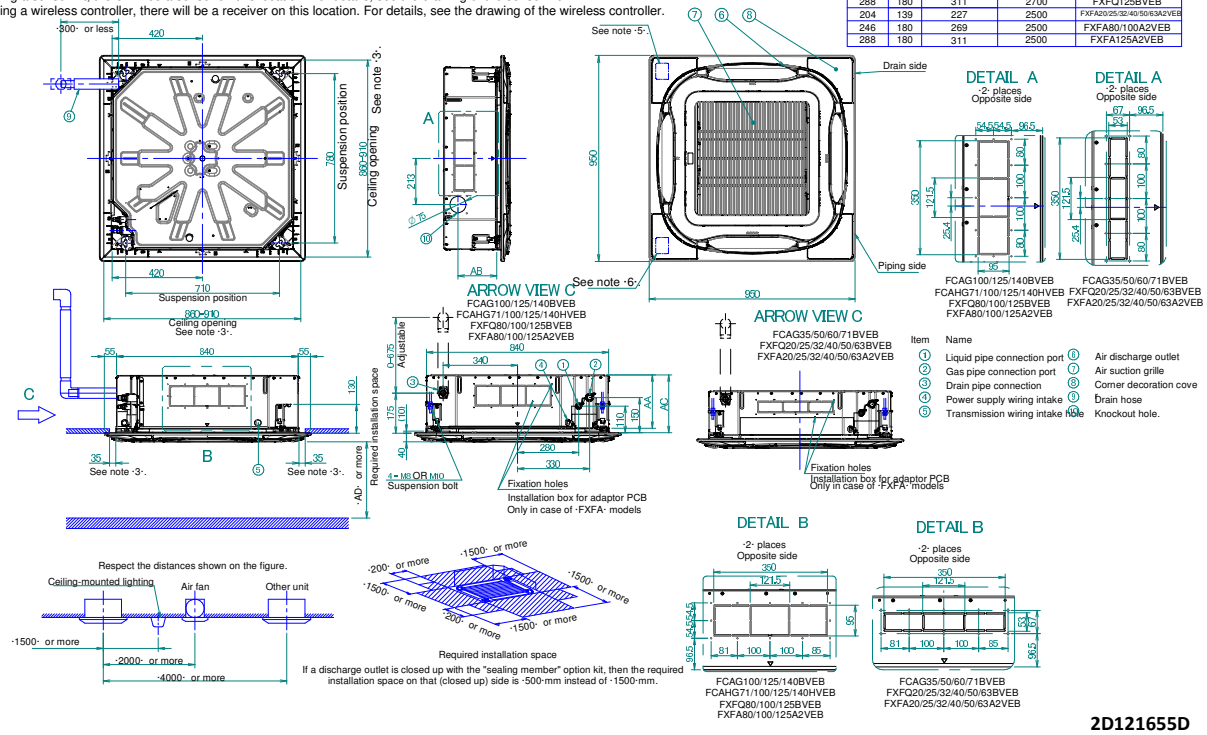


**FXFA-A**

Notes

1. Location of nameplate
   The unit nameplate is located on the control box cover.
   The decoration panel nameplate is located on the piping-side panel frame, under the corner cover.
2. When installing optional accessories, refer to their respective documentation.
3. Make sure the distance between the ceiling and the cassette does not exceed ·35·mm.
   The maximum ceiling opening is ·910·mm.
4. When the conditions in the ceiling exceed 30°C ambient temperature and 80% relative humidity, or when fresh air is inducted into the ceiling, additional insulati on is required (polyethylene foam, thickness ≥·10·mm).
5. When installing a sensor kit, there will be a sensor on this location. For details, see the drawing of the sensor kit.
6. When installing a wireless controller, there will be a receiver on this location. For details, see the drawing of the wireless controller.

| Cassette height | | Minimal installation height | Required installation space | |
|---|---|---|---|---|
| AA | AB | AC | AD | Model |
| 204 | 139 | 227 | 2700 | FCAG35/50/60/71BVEB |
| 246 | 180 | 269 | 2700 | FCAG100/125/140BVEB |
| 288 | 180 | 311 | 2700 | FCAHG71/100/125/140HVEB |
| 204 | 139 | 227 | 2700 | FXFQ20/25/32/40/50/63BVEB |
| 246 | 180 | 269 | 2700 | FXFQ80/100BVEB |
| 288 | 180 | 311 | 2700 | FXFQ125BVEB |
| 204 | 139 | 227 | 2500 | FXFA20/25/32/40/50/63A2VEB |
| 246 | 180 | 269 | 2500 | FXFA80/100A2VEB |
| 288 | 180 | 311 | 2500 | FXFA125A2VEB |







**2D121655D**

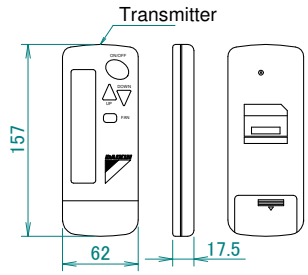
# 7 Dimensional drawings

## 7 - 2 Dimensional Drawings with Accessories



**FXFA-A**

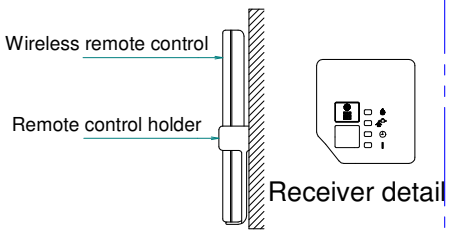
### Remote control dimensions



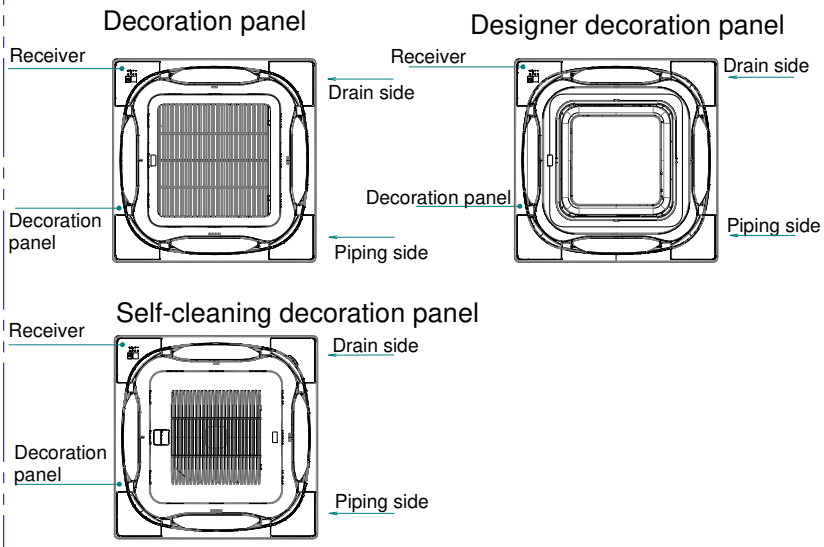

### Remote control holder

Installation methods

Installation to wall surface




### Installation methods

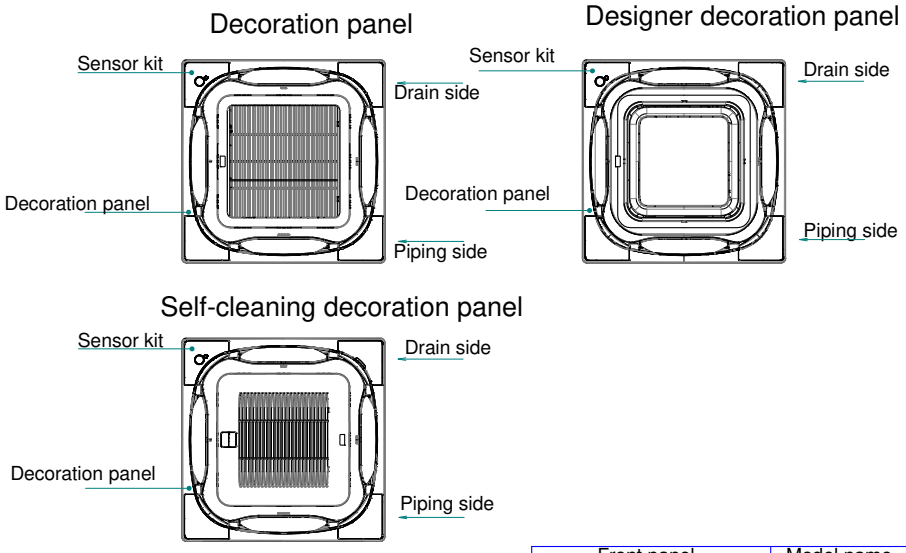



| Front panel | Model name | Option |
|---|---|---|
| Decoration panel | BYCQ140E2W1(W) | BRC7FA532F |
| | BYCQ140E2W1B | BRC7FA532FB |
| Self-cleaning decoration panel | BYCQ140E2GFW1 | BRC7FA532F |
| | BYCQ140E2GFW1B | BRC7FA532FB |
| Designer decoration panel | BYCQ140E2P | BRC7FB532F |
| | BYCQ140E2PB | BRC7FB532FB |

**3D121750**

**FXFA-A**

### Installation methods




| Front panel | Model name | Option |
|---|---|---|
| Decoration panel | BYCQ140E2W1(W) | BRYQ140B8 |
| | BYCQ140E2W1B | BRYQ140B8B |
| Self-cleaning decoration panel | BYCQ140E2GFW1 | BRYQ140B8 |
| | BYCQ140E2GFW1B | BRYQ140B8B |
| Designer decoration panel | BYCQ140E2P | BRYQ140C8 |
| | BYCQ140E2PB | BRYQ140C8B |

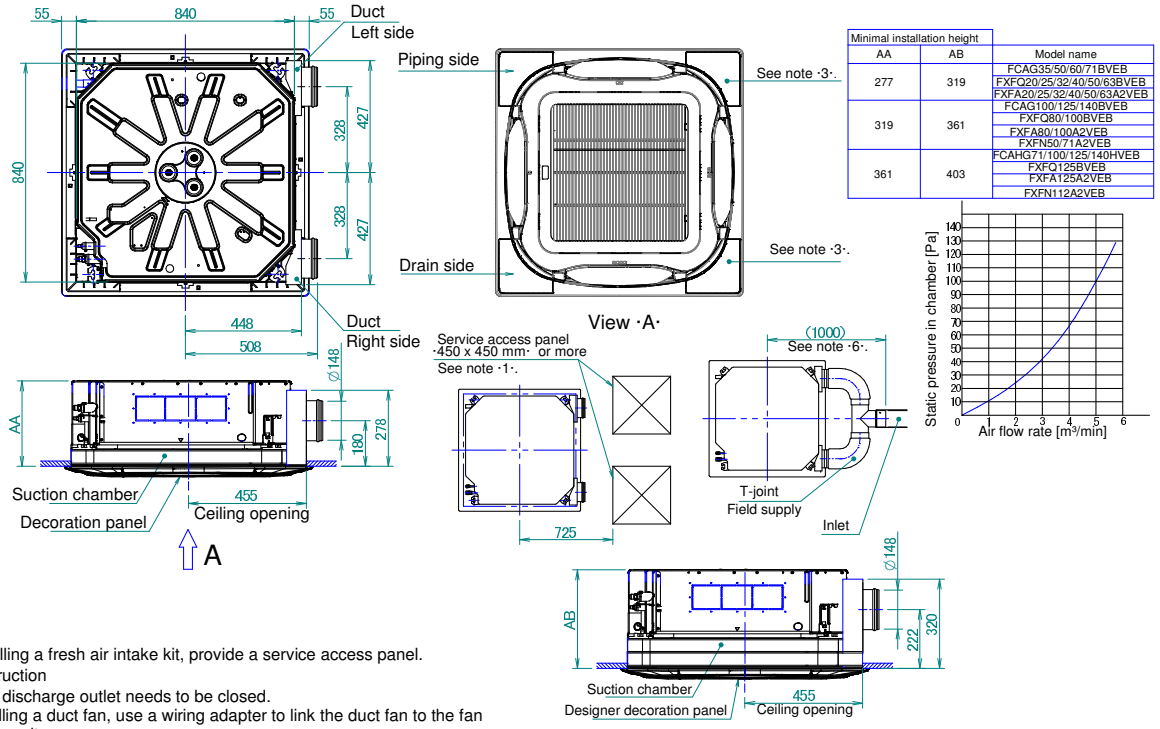
**3D121755**

# 7 Dimensional drawings

## 7 - 3 Dimensional Drawings with Fresh Air Intake



**FXFA-A**




| Minimal installation height | | |
|---|---|---|
| AA | AB | Model name |
| 277 | 319 | FCAG35/50/60/71BVEB |
| | | FXFQ20/25/32/40/50/63BVEB |
| | | FXFA20/25/32/40/50/63A2VEB |
| 319 | 361 | FCAG100/125/140BVEB |
| | | FXFQ80/100BVEB |
| | | FXFA80/100A2VEB |
| | | FXFN50/71A2VEB |
| 361 | 403 | FCAHG71/100/125/140HVEB |
| | | FXFQ125BVEB |
| | | FXFA125A2VEB |
| | | FXFN112A2VEB |

Notes

1. When installing a fresh air intake kit, provide a service access panel.
2. Field construction
3. This corner discharge outlet needs to be closed.
4. When installing a duct fan, use a wiring adapter to link the duct fan to the fan of the indoor unit.
5. The intake air flow rate is recommended to be ≤20% of the air flow rate at high fan speed. If the intake air flow rate is too large, the operating sound may increase, and the detection of the indoor unit suction temperature may be affected.
6. This indicates the distance between the T-joint inlet and the indoor unit inlet when the T-tube is connected.

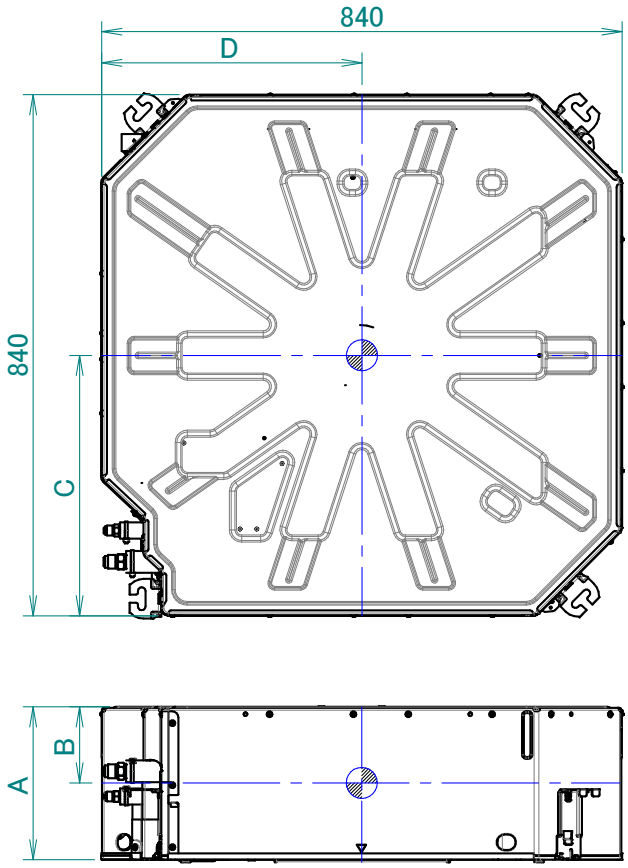
**3D121741C**

# 8 Centre of gravity

## 8 - 1 Centre of Gravity

### FXFA-A






| Model | A | B | C | D |
|---|---|---|---|---|
| FCAG35～71BVEB | 204 | 70 | 400 | 405 |
| FCAG100～140BVEB | 246 | 100 | 400 | 405 |
| FCAHG71～140HVEB | 288 | 135 | 400 | 405 |
| FXFQ20～63BVEB, FXFA20～63A2VEB | 204 | 70 | 395 | 400 |
| FXFQ80～100BVEB, FXFA80～100A2VEB | 246 | 100 | 395 | 400 |
| FXFQ125BVEB, FXFA125A2VEB | 288 | 135 | 395 | 400 |
| FXFN50～71A2VEB | 246 | 113 | 408 | 412 |
| FXFN112A2VEB | 288 | 120 | 403 | 415 |

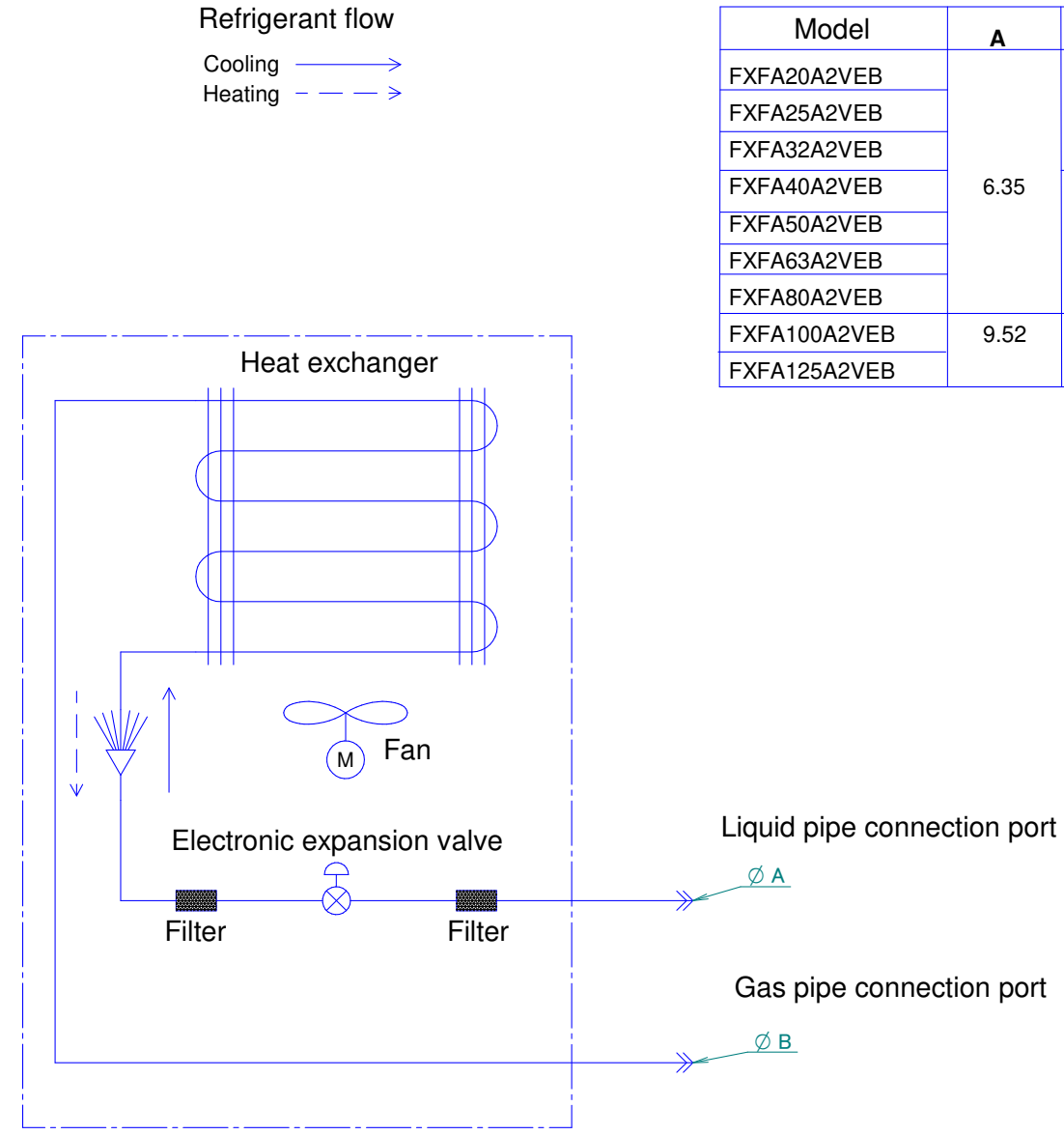
**4D121659B**

# 9 Piping diagrams

## 9 - 1 Piping Diagrams

**FXFA-A**






| Model | A | B |
|---|---|---|
| FXFA20A2VEB | 6.35 | 9.52 |
| FXFA25A2VEB | | |
| FXFA32A2VEB | | |
| FXFA40A2VEB | | 12.7 |
| FXFA50A2VEB | | |
| FXFA63A2VEB | | |
| FXFA80A2VEB | | |
| FXFA100A2VEB | 9.52 | 15.9 |
| FXFA125A2VEB | | |

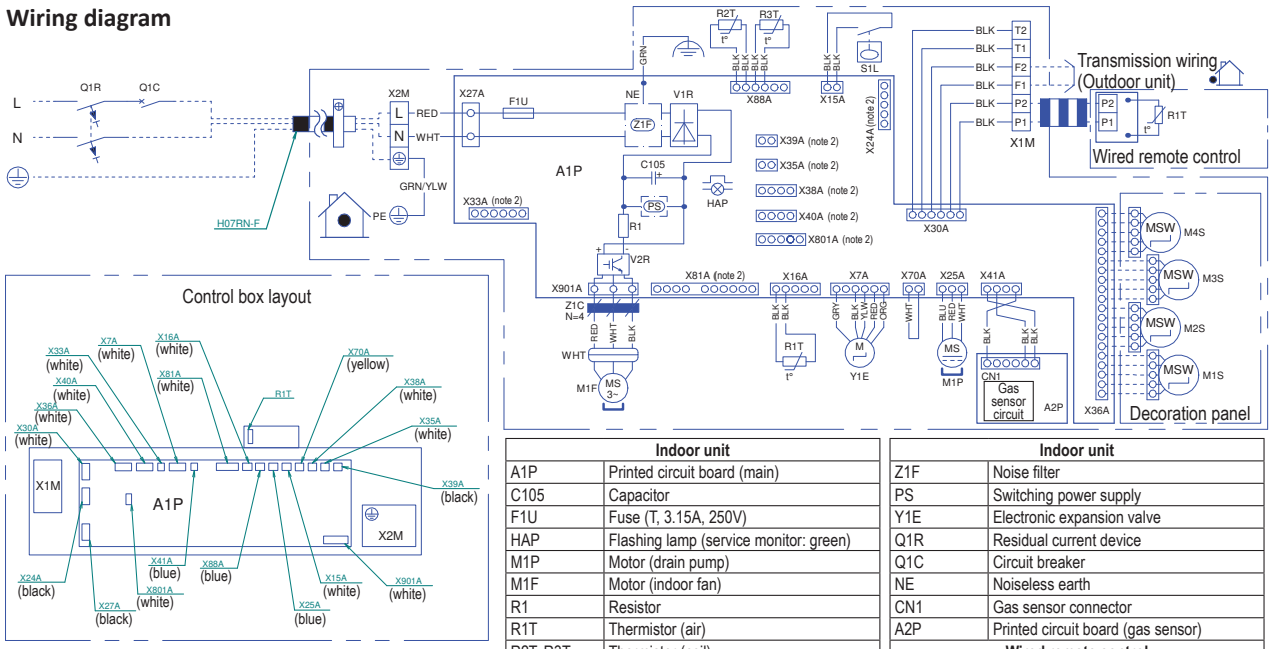
**4D126209**

# 10 Wiring diagrams

## 10 - 1 Wiring Diagrams - Single Phase

**FXFA-A**

**Wiring diagram**




| Indoor unit | |
|---|---|
| A1P | Printed circuit board (main) |
| C105 | Capacitor |
| F1U | Fuse (T, 3.15A, 250V) |
| HAP | Flashing lamp (service monitor: green) |
| M1P | Motor (drain pump) |
| M1F | Motor (indoor fan) |
| R1 | Resistor |
| R1T | Thermistor (air) |
| R2T, R3T | Thermistor (coil) |
| S1L | Float switch (drain pump) |
| V1R | Diode bridge |
| V2R | Igbt power module |
| X7A-X901A | Connector |
| X1M | Terminal block (remote controller) |
| X2M | Terminal block (power supply) |
| Z1C | Ferrite core |

| Indoor unit | |
|---|---|
| Z1F | Noise filter |
| PS | Switching power supply |
| Y1E | Electronic expansion valve |
| Q1R | Residual current device |
| Q1C | Circuit breaker |
| NE | Noiseless earth |
| CN1 | Gas sensor connector |
| A2P | Printed circuit board (gas sensor) |
| **Wired remote control** | |
| R1T | Thermistor (air) |
| **Decoration panel** | |
| M1S-M4S | Motor (swing blade) |

**NOTES**

1. □□□: terminal block, ⊡⊡: connector, ▮▮▮: field wiring
2. X24A, X33A, X35A, X38A, X39A, X40A, X81A, X801A are connected when optional accessories are being used, see wiring diagram of this accessory.

**WIRE COLOURS**

BLK: black, RED: red, BLU: blue, WHT: white, YLW: yellow, GRN: green, BRN: brown, PNK: pink, GRY: grey, ORG: orange

**3D128222**

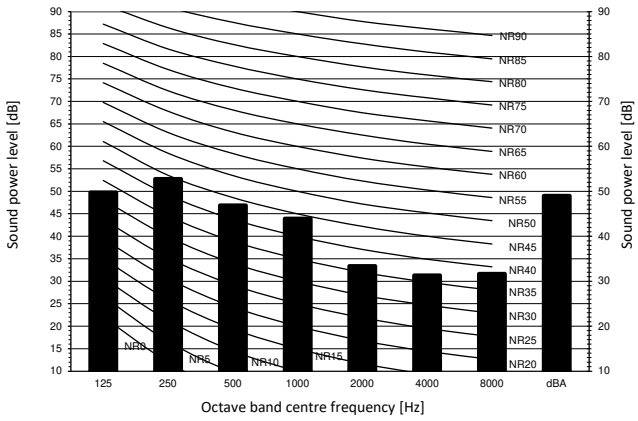
# 11 Sound data

## 11 - 1 Sound Power Spectrum

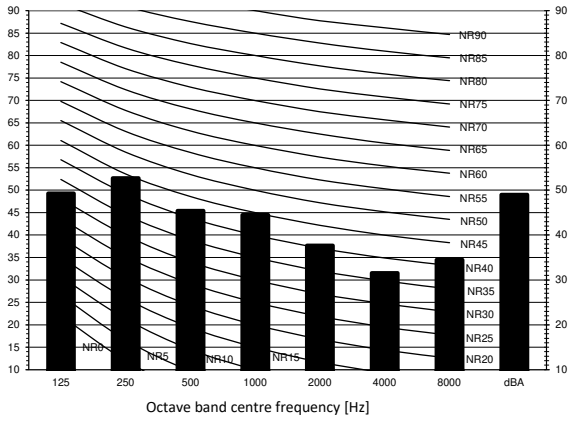


**FXFA20-32A**

Cooling mode




Heating mode




Notes

Fan speed

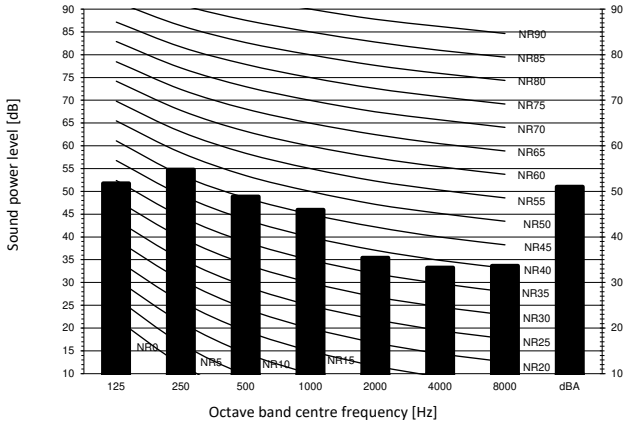
High

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

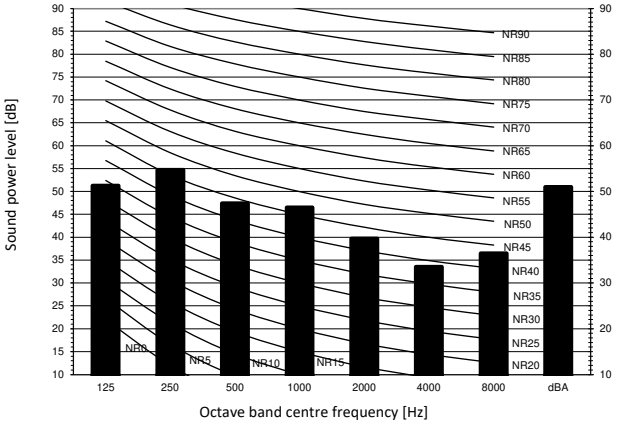
**3D131809**

**FXFA40-50A**

Cooling mode




Heating mode




Notes

Fan speed

High

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

**3D131810**

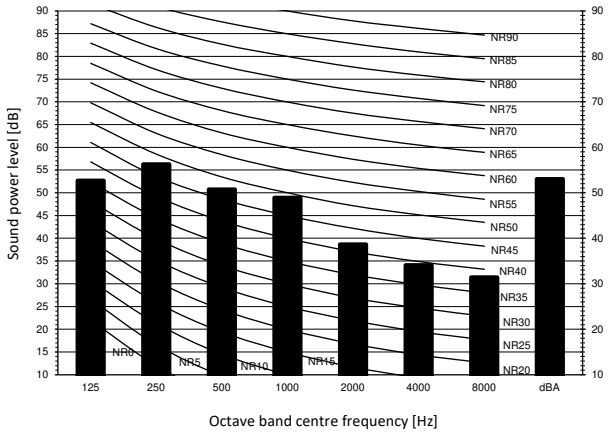
# 11 Sound data

## 11 - 1 Sound Power Spectrum

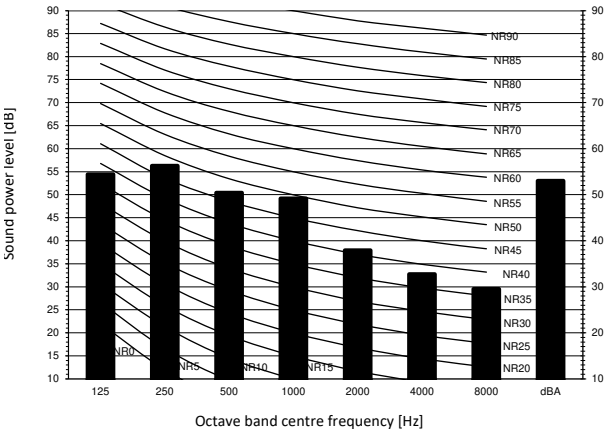
**FXFA63A**



Cooling mode




Heating mode




Notes

Fan speed

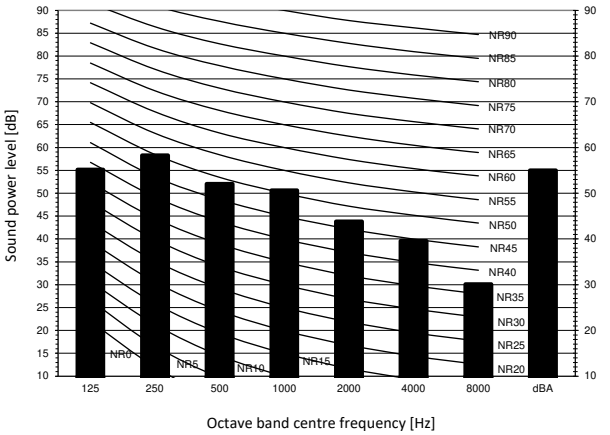
High

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

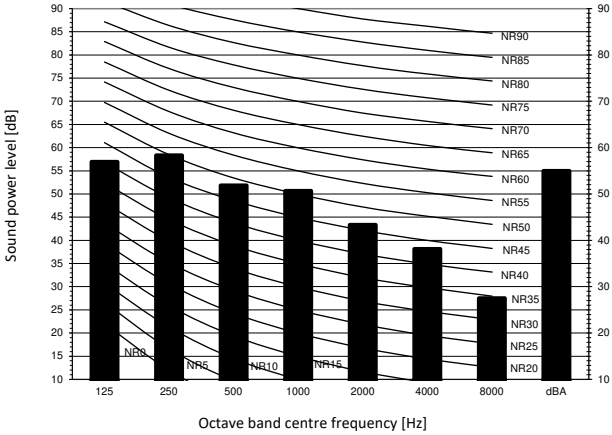
**3D131811**

**FXFA80A**

Cooling mode




Heating mode




Notes

Fan speed

High

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

**3D131812**

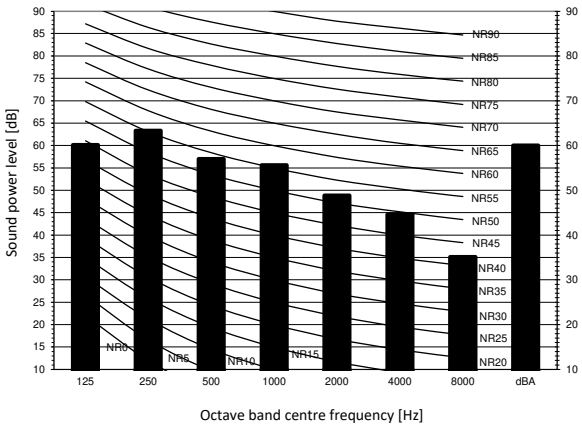
# 11 Sound data

## 11 - 1 Sound Power Spectrum

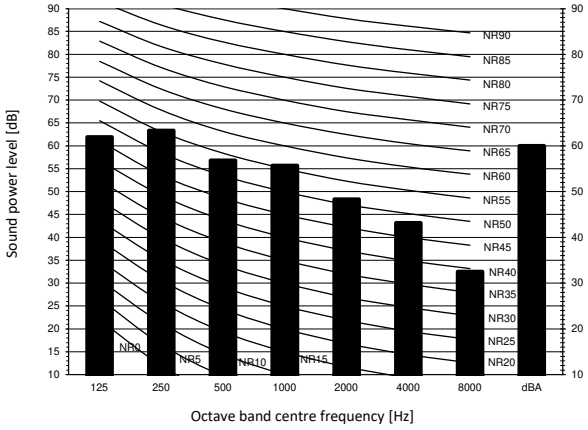


**FXFA100A**

Cooling mode




Heating mode




Fan speed

High

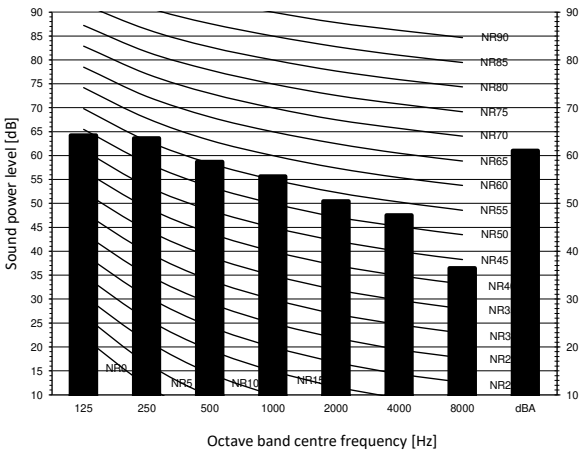
Notes

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

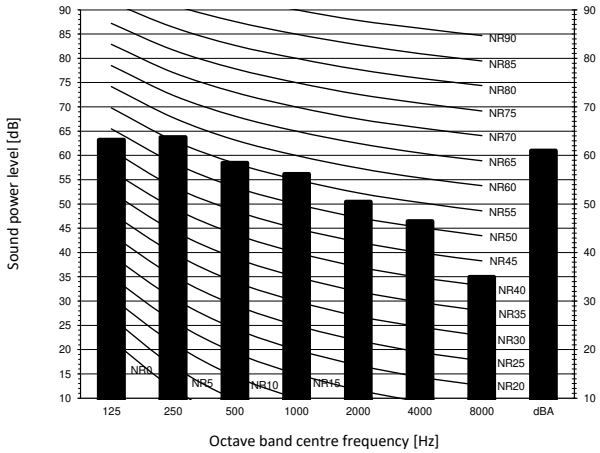
**3D131813**

**FXFA125A**

Cooling mode




Heating mode




Fan speed

High

Notes

1. dBA = A-weighted sound power level (A scale according to IEC).
2. Reference acoustic power 0 dB = ·10E-6·µW
3. Measured according to ISO 3744

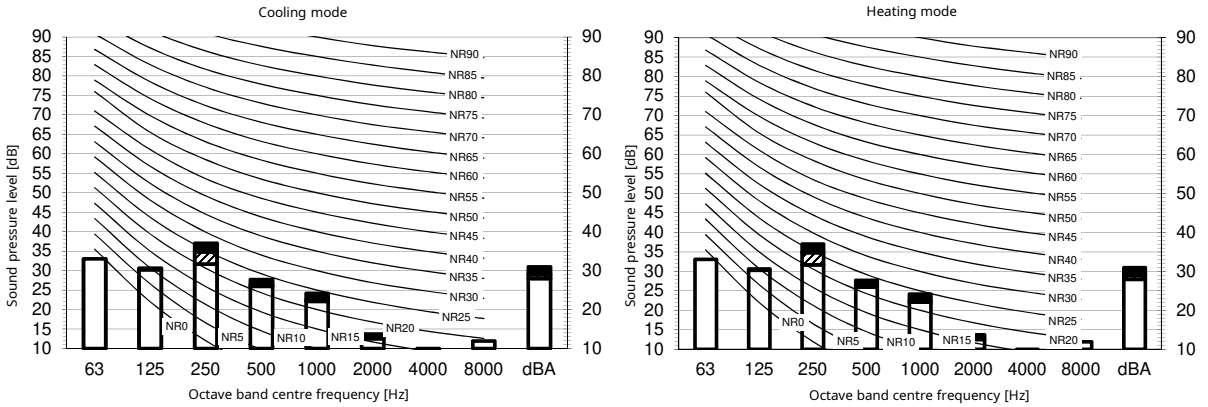
**3D131814**

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum



### FXFA20A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

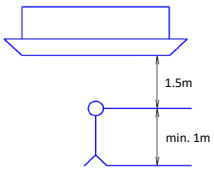
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 31,0 | 29,0 | 28,0 |

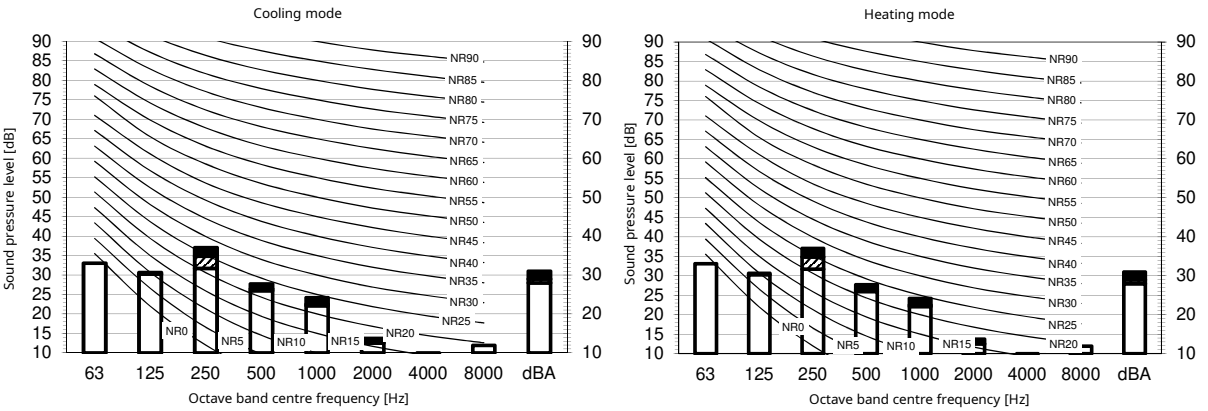
| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 31,0 | 29,0 | 28,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121671A**

### FXFA25A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

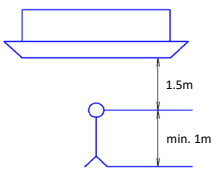
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 31,0 | 29,0 | 28,0 |

| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 31,0 | 29,0 | 28,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

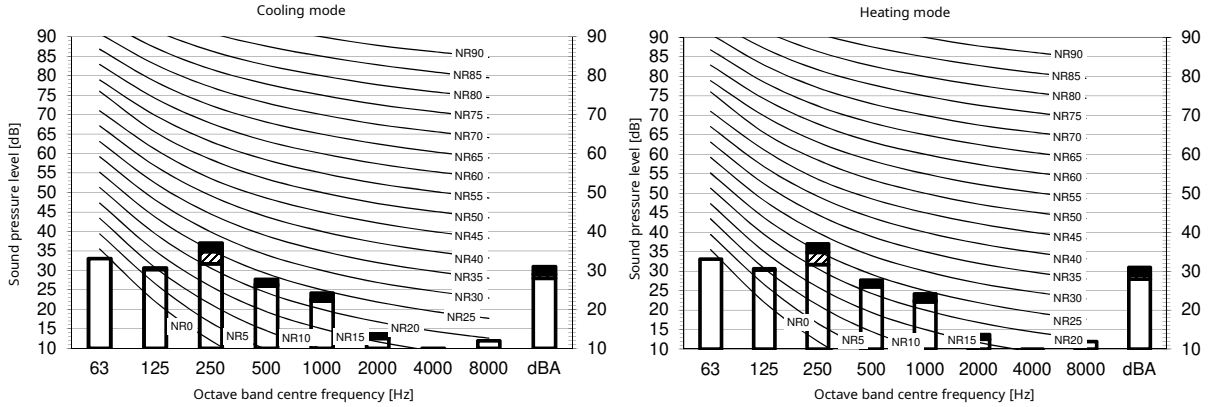
**3D121672A**

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum



### FXFA32A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

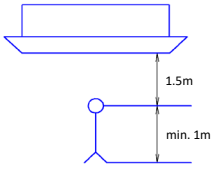
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




Cooling Total dB

| A | B | C | D |
|---|---|---|---|
| dBA | 31,0 | 29,0 | 28,0 |

Heating Total dB

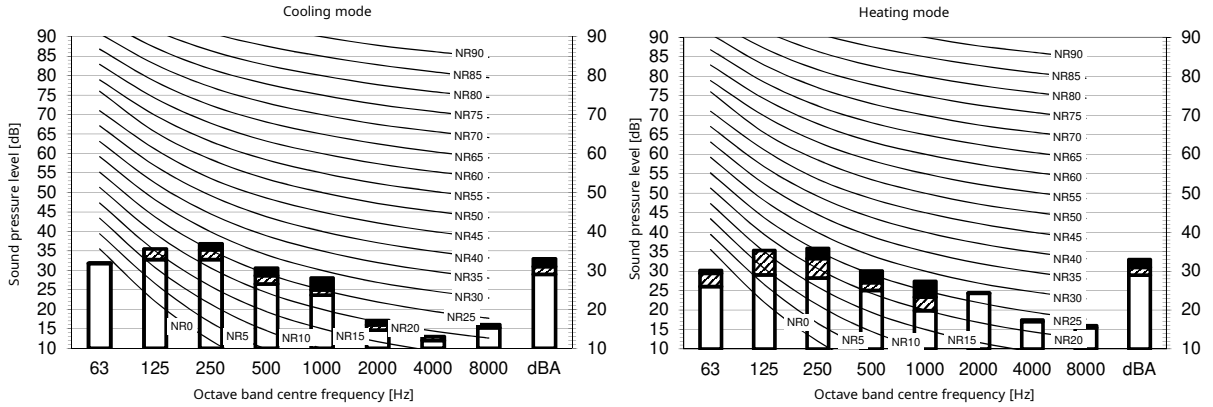
| A | B | C | D |
|---|---|---|---|
| dBA | 31,0 | 29,0 | 28,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121673A**

### FXFA40A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

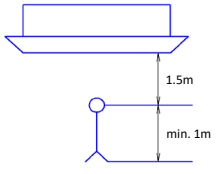
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




Cooling Total dB

| A | B | C | D |
|---|---|---|---|
| dBA | 33,0 | 31,0 | 29,0 |

Heating Total dB

| A | B | C | D |
|---|---|---|---|
| dBA | 33,0 | 31,0 | 29,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

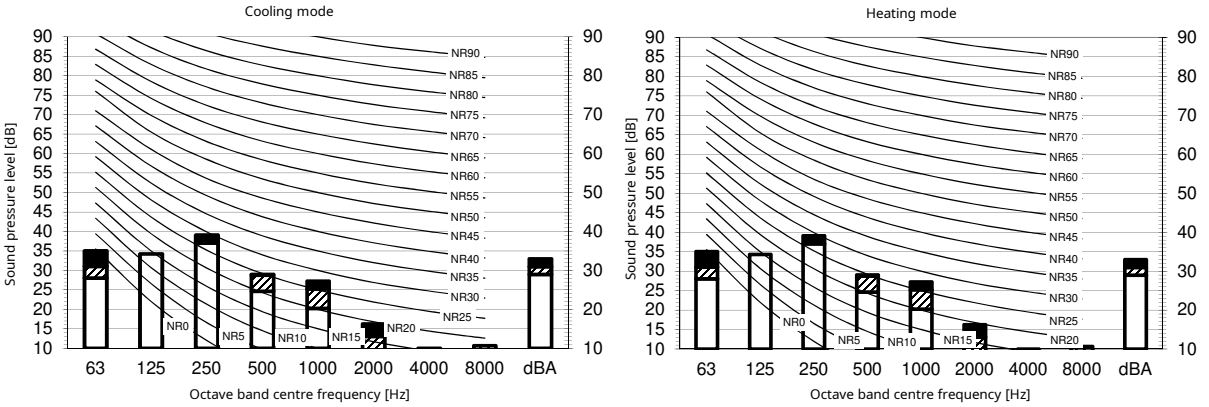
**3D121674A**

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum



### FXFA50A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

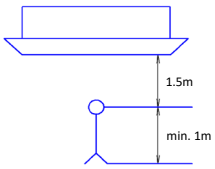
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 33,0 | 31,0 | 29,0 |

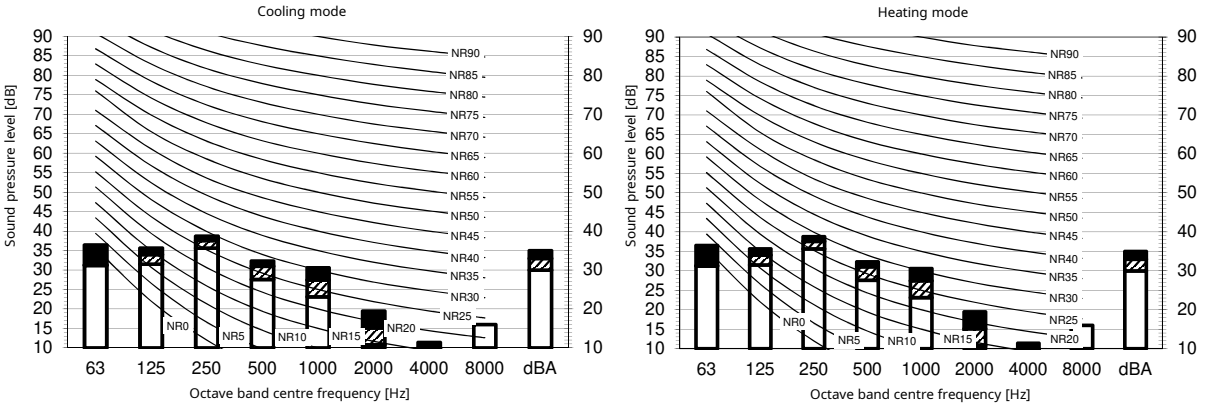
| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 33,0 | 31,0 | 29,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121675A**

### FXFA63A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

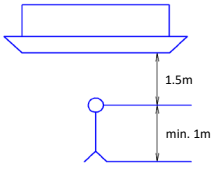
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 35,0 | 33,0 | 30,0 |

| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 35,0 | 33,0 | 30,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

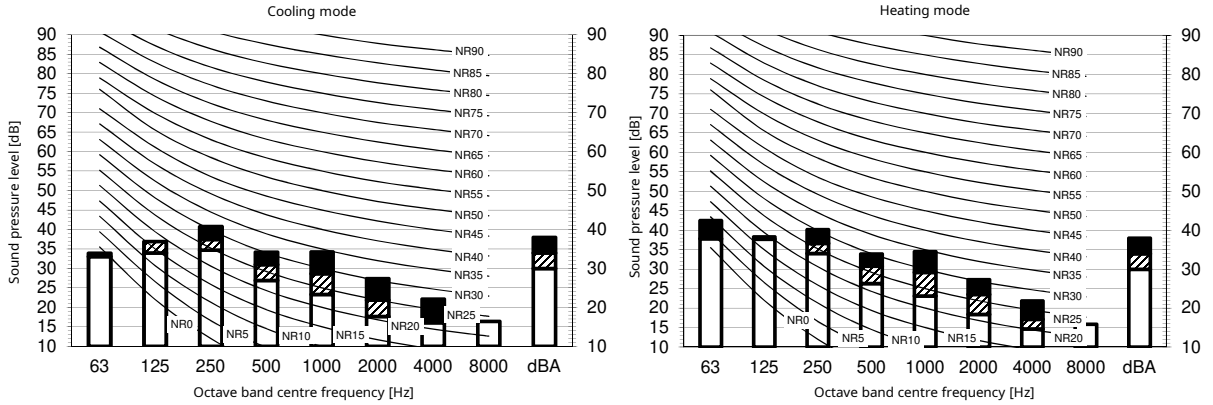
**3D121676A**

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum



### FXFA80A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

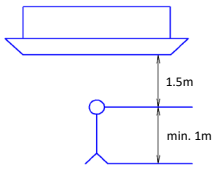
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 38,0 | 34,0 | 30,0 |

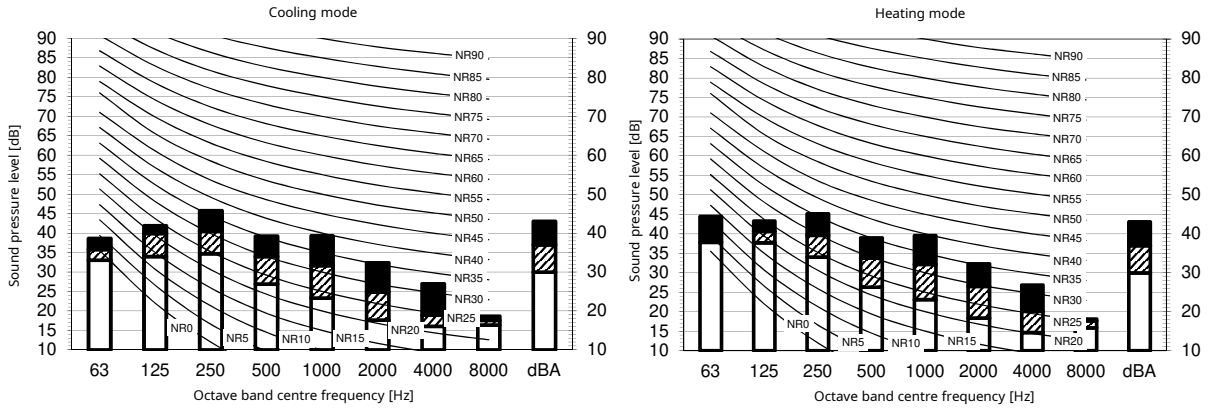
| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 38,0 | 34,0 | 30,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121677A**

### FXFA100A




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

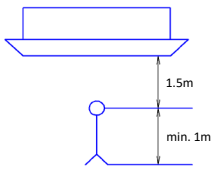
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




| Cooling | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 43,0 | 37,0 | 30,0 |

| Heating | Total dB | | |
|---|---|---|---|
| A | B | C | D |
| dBA | 43,0 | 37,0 | 30,0 |

Notes

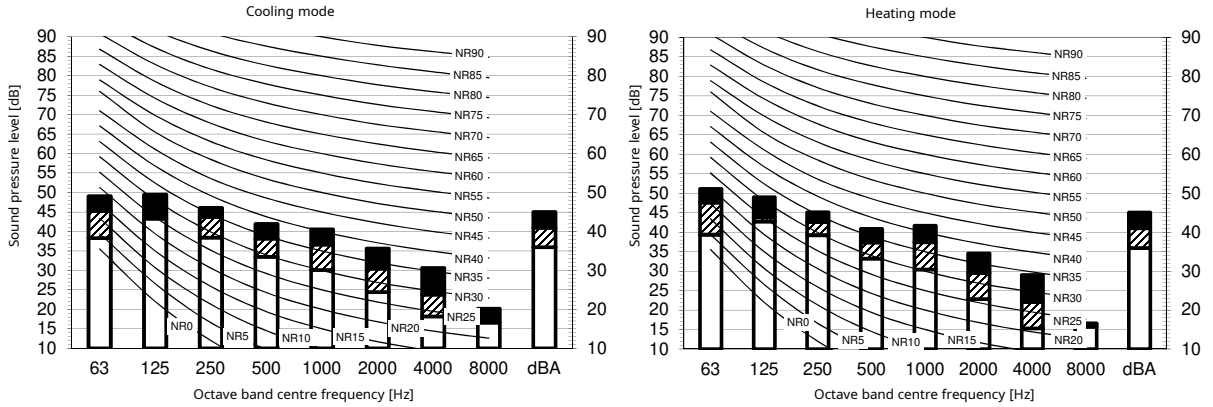
1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121678A**

# 11 Sound data

## 11 - 2 Sound Pressure Spectrum

**FXFA125A**




Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

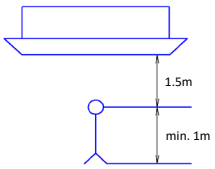
A Scale Fan speed

B High

C Medium

D Low

Location of microphone




Cooling Total dB

| A | B | C | D |
|---|---|---|---|
| dBA | 45,0 | 41,0 | 36,0 |

Heating Total dB

| A | B | C | D |
|---|---|---|---|
| dBA | 45,0 | 41,0 | 36,0 |

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic chamber

**3D121679A**

# 12 Air flow patterns

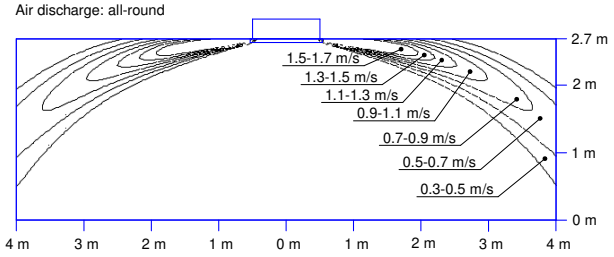
## 12 - 1 Air flow pattern - Cooling and Heating



**FXFA20-32A**

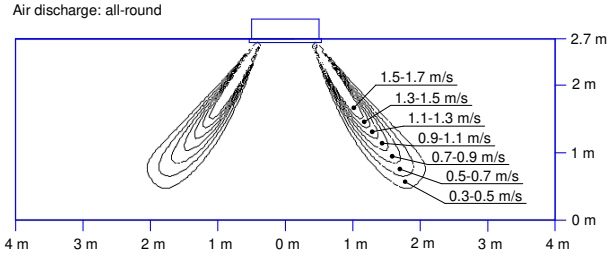
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



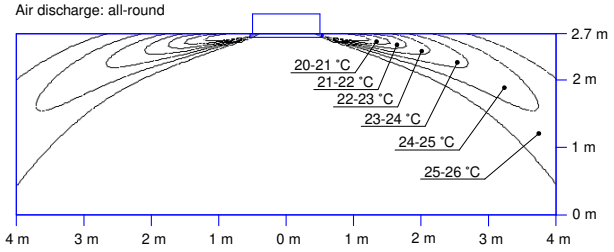

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



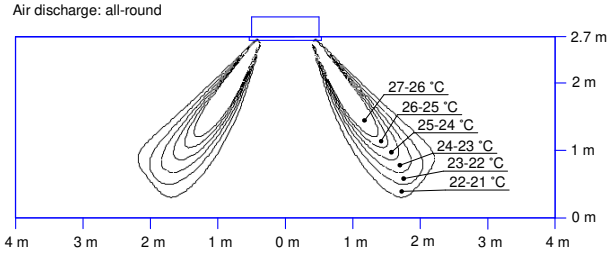

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round

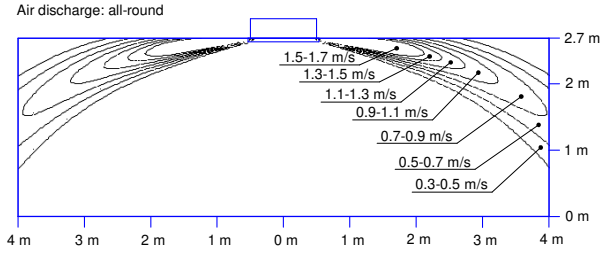



**3D121627A**

**FXFA40A**

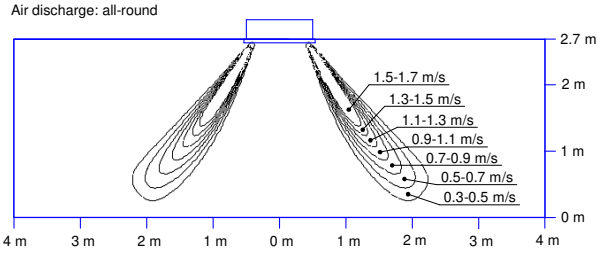
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



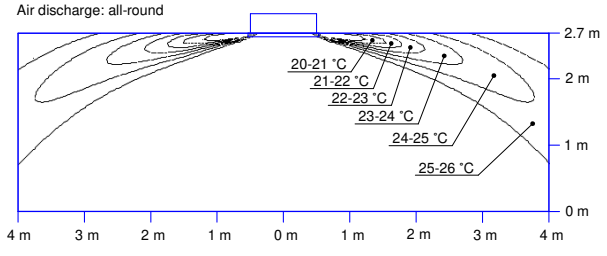

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



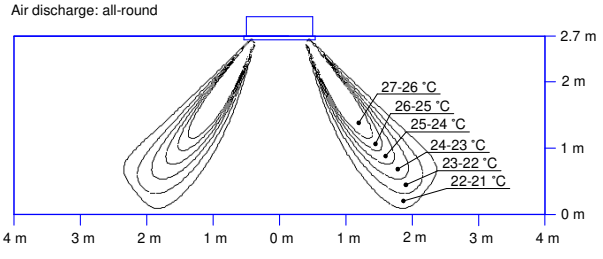

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round




**3D121620A**

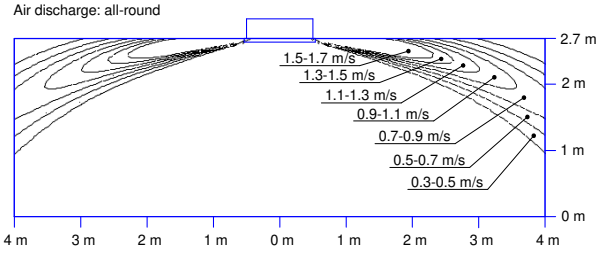
# 12 Air flow patterns

## 12 - 1 Air flow pattern - Cooling and Heating

**FXFA50A**

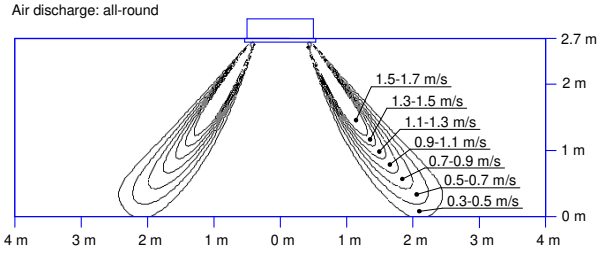
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



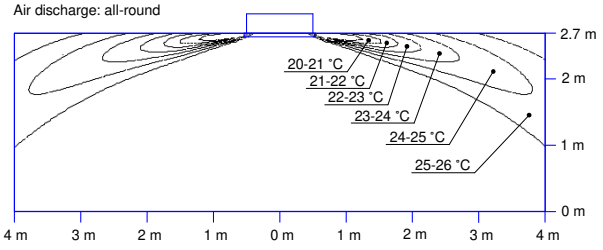

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



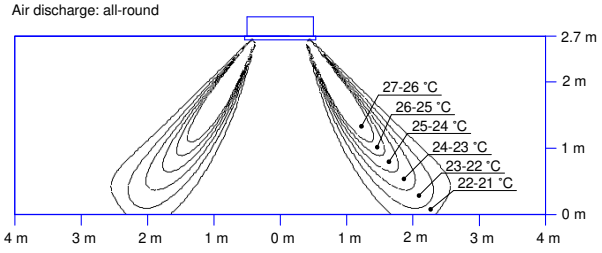

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round

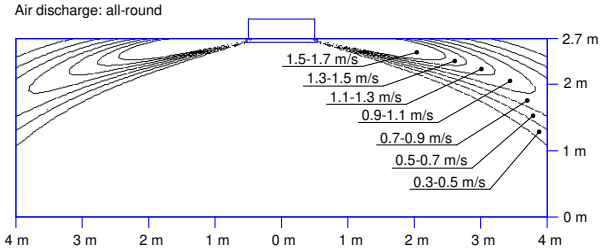



**3D121621A**

**FXFA63A**

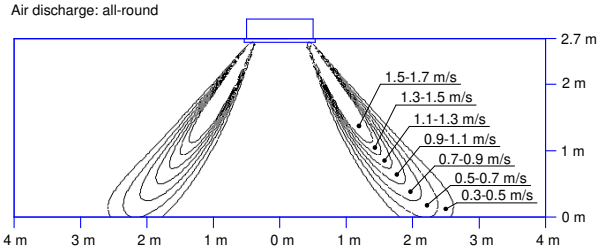
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



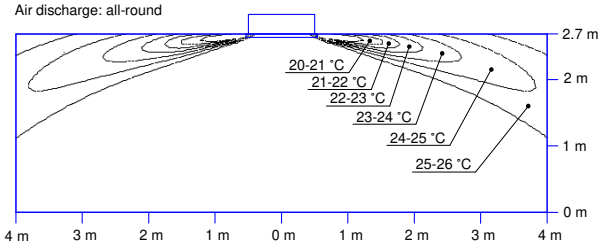

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



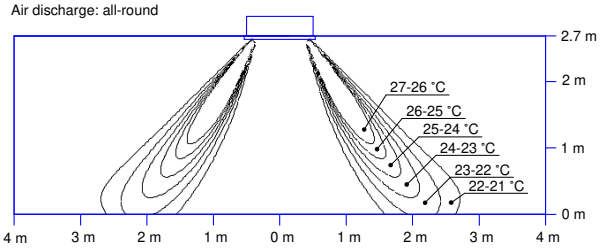

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round




**3D121628A**

# 12 Air flow patterns

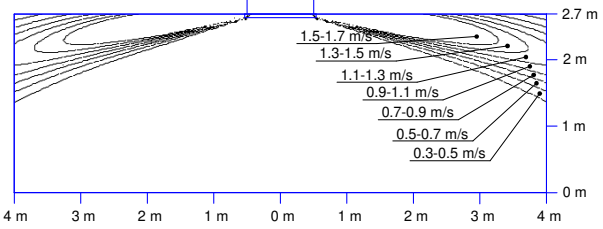
## 12 - 1 Air flow pattern - Cooling and Heating

**FXFA80A**



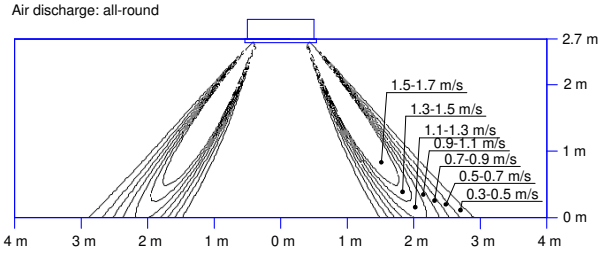
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



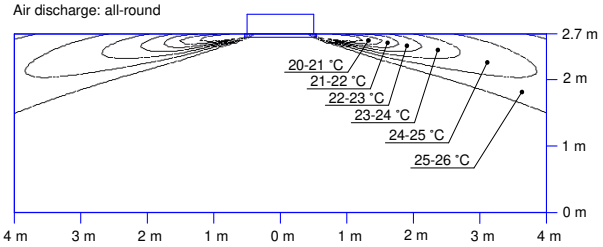

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



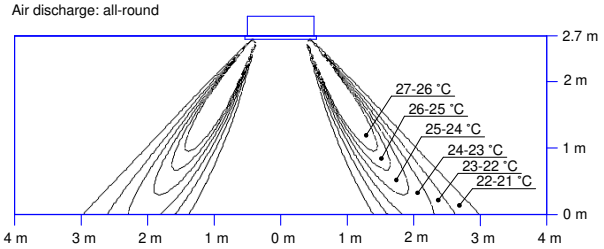

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round

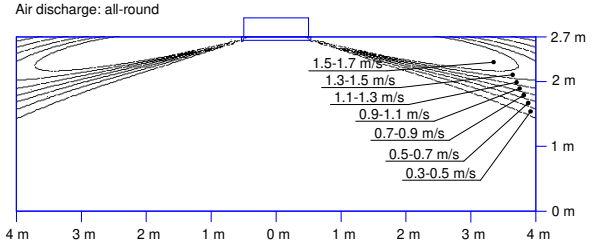



**3D121622A**

**FXFA100A**

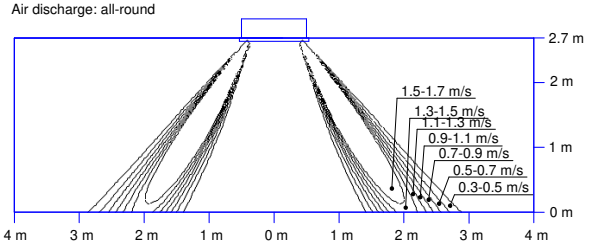
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



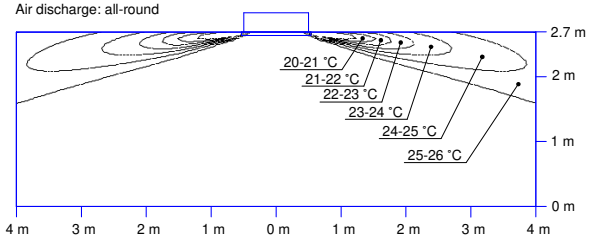

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



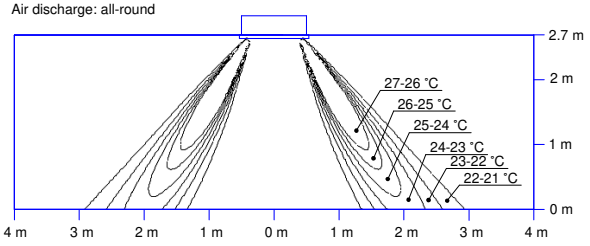

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round




**3D121629A**

# 12 Air flow patterns

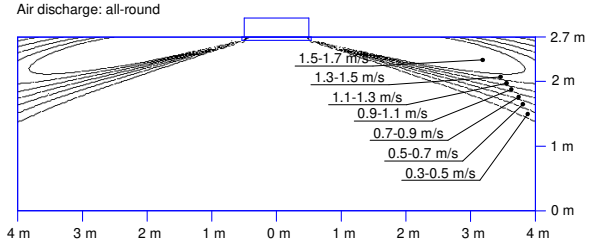
## 12 - 1 Air flow pattern - Cooling and Heating

**FXFA125A**



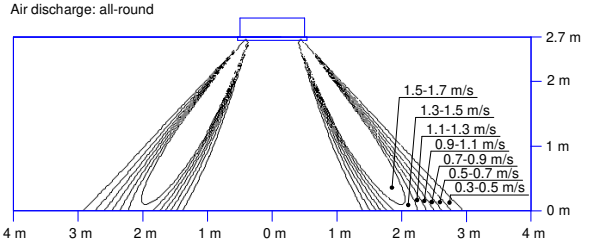
Air velocity distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round



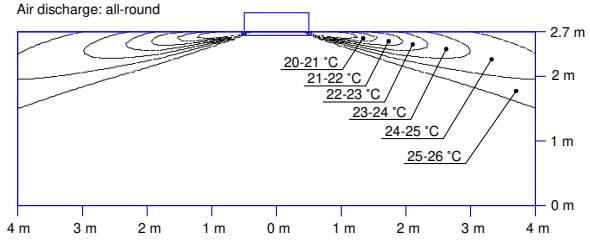

Air velocity distribution (heating)

Air flow direction: vertical
Air discharge: all-round



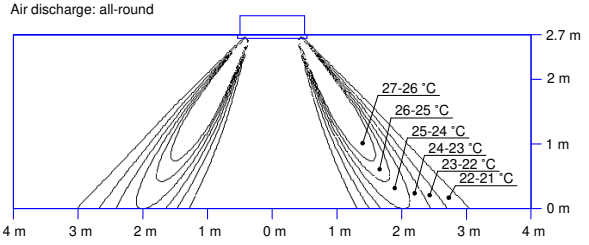

Air temperature distribution (cooling)

Air flow direction: horizontal
Air discharge: all-round




Air temperature distribution (heating)

Air flow direction: vertical
Air discharge: all-round




**3D121630A**

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