



Air Conditioning Technical Data ARXD-A



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ARXD-A

| | | |
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1 Features

1 - 1 ARXD-A

- › Anti-corrosion treated outdoor heat exchanger fin
- › Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A and leads directly to lower energy consumption thanks to its high energy efficiency
- › Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall
- › Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency
- › Outdoor units for pair application

1

Outdoor unit silent operation

2 Specifications

2 - 1 Specifications

| Technical specifications | | | | ATXD25A + ARXD25A | | ATXD35A + ARXD35A | |
|--|---|-------------|--------|-------------------|-------|-------------------|-------|
| Indoor unit | | | | ATXD25A5V1B | | ATXD35A5V1B | |
| Outdoor unit | | | | ARXD25A5V1B | | ARXD35A5V1B | |
| Cooling capacity | Min. | | kW | 1.3 | | 1.4 | |
| | Min. | | Btu/h | 4,435.8 | | 4,777.0 | |
| | Min. | | kcal/h | 1,117.8 | | 1,203.8 | |
| | Nom. | | kW | 2.50 | | 3.30 | |
| | Nom. | | Btu/h | 8,530.4 | | 11,260 | |
| | Nom. | | kcal/h | 2,149.6 | | 2,837.5 | |
| | Max. | | kW | 3.2 | | 3.9 | |
| | Max. | | Btu/h | 10,900.0 | | 13,307.4 | |
| | Max. | | kcal/h | 2,752.0 | | 3,353.4 | |
| Cooling capacity - Low sound mode (Stb. 2020, 189) | Min. | | kcal/h | - | | - | |
| | Max. | | kcal/h | - | | - | |
| Heating capacity | Min. | | kW | 1.30 | | 1.40 | |
| | Min. | | Btu/h | 4,435.8 | | 4,777.0 | |
| | Min. | | kcal/h | 1,117.8 | | 1,203.8 | |
| | Nom. | | kW | 2.80 | | 3.30 | |
| | Nom. | | Btu/h | 9,554.0 | | 11,942 | |
| | Nom. | | kcal/h | 2,407.6 | | 3,009.5 | |
| | Max. | | kW | 4.40 | | 5.00 | |
| | Max. | | Btu/h | 15,013.4 | | 17,060.7 | |
| | Max. | | kcal/h | 3,783.3 | | 4,299.2 | |
| Power input | Cooling | Nom. | kW | 0.660 | | 1.07 | |
| | Heating | Nom. | kW | 0.690 | | 0.990 | |
| Nominal efficiency | EER | | | 4.50 | | 4.23 | |
| | COP | | | 4.60 | | 4.00 | |
| | Energy labeling Directive | Cooling | | | A | | |
| | | Heating | | | A | | |
| Space cooling | Energy efficiency class | | | | A+++ | | |
| | Capacity | Pdesign | kW | 2.50 | | 3.30 | |
| | SEER | | | | 8.50 | | |
| Annual energy consumption | | | kWh/a | 103 | | 136 | |
| Space heating (Average climate) | Capacity | Pdesign | kW | 2.40 | | 2.50 | |
| | Energy efficiency class | | | | A+++ | | |
| | SCOP/A | | | | 5.10 | | |
| SCOPnet/A | | | | 5.14 | | 5.15 | |
| Space heating (Average climate) | PdH Heating capacity at -10° | | kW | 2.12 | | 2.19 | |
| | Annual energy consumption | | | kWh/a | 659 | | 686 |
| | Required back up heating cap at design conditions | | | kW | 0.280 | | 0.310 |
| Space heating (Warm climate) | Capacity | Pdesignh | kW | 1.29 | | 1.35 | |
| | Energy efficiency class | | | | A+++ | | |
| | SCOP | | | | 6.10 | | 5.95 |
| | SCOPnet | | | | 6.21 | | 6.06 |
| | Annual energy consumption | | | kWh/a | 296 | | 317 |
| | Required back up heating cap at design conditions | | | kW | 0.280 | | 0.310 |
| Space cooling | A Condition (35°C - 27/19) | Pdc | kW | 2.50 | | 3.30 | |
| | | EERd | | 4.50 | | 4.23 | |
| | | Power input | kW | 0.556 | | 0.780 | |
| | B Condition (30°C - 27/19) | Pdc | kW | 1.84 | | 2.43 | |
| | | EERd | | 6.66 | | 6.34 | |
| | | Power input | kW | 0.276 | | 0.383 | |
| | C Condition (25°C - 27/19) | Pdc | kW | 1.18 | | 1.56 | |
| | | EERd | | 10.4 | | 10.0 | |
| | | Power input | kW | 0.113 | | 0.156 | |
| | D Condition (20°C - 27/19) | Pdc | kW | 0.980 | | 1.04 | |
| | | EERd | | 13.6 | | 15.2 | |
| | | Power input | kW | 0.072 | | 0.069 | |

2 Specifications

2 - 1 Specifications

| Technical Specifications | | | | | ARXD25A | ARXD35A | |
|--------------------------|-------------------------------|-----------|----------|---------------------|--|-----------------|----|
| Dimensions | Unit | Height | mm | | 550 | | |
| | | Width | mm | | 765 | | |
| | | Depth | mm | | 285 | | |
| | Packed unit | Height | mm | | 612 | | |
| | | Width | mm | | 906 | | |
| | | Depth | mm | | 402 | | |
| Weight | Unit | | kg | | 32 | | |
| | Packed unit | | kg | | 34 | | |
| Heat exchanger | Length | | mm | | 805 | | |
| | Rows | Quantity | | | 2 | | |
| | | Fin pitch | | mm | | 1.40 | |
| | Stages | Quantity | | | | 24 | |
| | | Passes | Quantity | | | 3.0 | |
| | Tube type | | | | | ø7 Hi-XD | |
| | Fin | Type | | | | Waffle fin (PE) | |
| Fan | Type | | | | Propeller fan | | |
| | Air flow rate | Cooling | Nom. | cfm | 28 | 36 | |
| | | | Medium | m ³ /min | 999 | 1,271 | |
| | Heating | Nom. | | m ³ /min | 28.3 | | |
| | | | | cfm | 999 | | |
| | | | | | | | |
| Fan motor | Model | | | | DFC05A3VA | | |
| | Output | | W | | 50 | | |
| | Speed | Cooling | High | rpm | 860 | 920 | |
| | | | Nom. | rpm | 860 | 920 | |
| | | | Low | rpm | | 640 | |
| | Heating | High | rpm | | 860 | | |
| | | Nom. | rpm | | 800 | | |
| Low | | rpm | | 400 | | | |
| Compressor | Model | | | | 1YC25GXD#D | | |
| | Type | | | | Hermetically sealed swing compressor | | |
| | Output | | W | | 800.0 | | |
| Operation range | Cooling | Ambient | Min. | °CDB | -10 | | |
| | | | Max. | °CDB | 50 | | |
| | Heating | Ambient | Min. | °CDB | -20 | | |
| | | | Max. | °CDB | 24 | | |
| Sound power level | Heating | Nom. | | dBa | 59.0 | 61.0 | |
| Sound pressure level | Cooling | Nom. | | dBa | 46 | 49 | |
| | | | Heating | Nom. | dBa | 47 | 49 |
| Refrigerant | Type | | | | R-32 | | |
| | Charge | | kg | | 0.76 | | |
| | Control | | | | Expansion valve | | |
| | GWP | | | | 675.0 | | |
| Piping connections | Liquid | OD | mm | | 6 | | |
| | Gas | OD | mm | | 9.50 | | |
| | Drain | OD | mm | | 18 | | |
| | Piping length | OU - IU | Max. | m | 20 | | |
| | Additional refrigerant charge | | | kg/m | 0.02 (for piping length exceeding 10m) | | |
| | Level difference | IU - OU | Max. | m | 15.0 | | |
| | Heat insulation | | | | Both liquid and gas pipes | | |
| Capacity control | Method | | | | Variable (inverter) | | |

Standard accessories: Drain plug;Quantity: 1;

Standard accessories: Installation manual;Quantity: 1;

Standard accessories: Refrigerant charge label;Quantity: 1;

Standard accessories: Multilingual fluorinated greenhouse gases labels;Quantity: 1;

Standard accessories: General safety precautions;Quantity: 1;

| Electrical Specifications | | | | | ARXD25A | ARXD35A |
|---------------------------|----------------------------|----------|----|--|---------------------|---------|
| Power supply | Phase | | | | 1~ | |
| | Frequency | | Hz | | 50 | |
| | Voltage | | V | | 220-240 | |
| Wiring connections | For power supply | Quantity | | | 3 | |
| | | Remark | | | Earth wire included | |
| | For connection with indoor | Quantity | | | 4 | |
| | | Remark | | | Earth wire included | |
| Current - 50Hz | Maximum fuse amps (MFA) | | A | | 13 | |

Contains fluorinated greenhouse gases |
See separate drawing for operation range |
See separate drawing for electrical data

3 Electrical data

3 - 1 Electrical Data

ATXD-A / ARXD-A

| Unit combination restrictions | | Power supply | | | | | COMP | | OFM | | IFM | |
|-------------------------------|--------------|--------------|---------|-------------------|------|-----|------|-----|-------|------|-------|------|
| Indoor unit | Outdoor unit | Hz | Voltage | Voltage range | MCA | MFA | RHz | RLA | kW | FLA | kW | FLA |
| ATXD25A5V1B | ARXD25A5V1B | 50 | 220 | Maximum 50Hz 264V | 9.52 | 13 | 43.0 | 2.4 | 0.040 | 0.28 | 0.018 | 0.12 |
| | | 50 | 230 | | | | | 2.3 | | | | |
| | | 50 | 240 | Minimum 50Hz 198V | | | | 2.2 | | | | |
| ATXD35A5V1B | ARXD35A5V1B | 50 | 220 | Maximum 50Hz 264V | 9.60 | 13 | 60.0 | 3.3 | 0.048 | 0.32 | 0.023 | 0.16 |
| | | 50 | 230 | | | | | 3.1 | | | | |
| | | 50 | 240 | Minimum 50Hz 198V | | | | 3.0 | | | | |

Symbols

- MCA: Minimum Circuit Ampere [A]
- MFA: Maximum Fuse Ampere [A]
- RLA: Rated load amps [A]
- OFM: Outdoor fan motor
- IFM: Indoor fan motor
- RHz: Rated operating frequency [Hz]
- FLA: Full Load Ampere [A]
- kW: Fan motor rated output [kW]

Notes

- 1) The RLA is based on the following conditions.
Outdoor temperature 35°C DB
Indoor temperature 27°C DB / 19°C WB
- 2) Select the wire size according to the MCA.
- 3) The maximum allowable voltage that is unbalanced between phases is 2%.
- 4) Use a circuit breaker instead of a fuse.

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4 Capacity tables

4 - 1 Cooling/Heating Capacity Tables

ATXD25A / ARXD25A

Cooling 50Hz 220-240V

| | |
|-----|------|
| AFR | 9,52 |
| BF | 0,20 |

| Indoor air temperature [° C WB] | Indoor air temperature [° C DB] | Outdoor temperature [° C DB] | | | | | | | | | | | | | | | | | |
|---------------------------------|---------------------------------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 20 | | | 25 | | | 30 | | | 32 | | | 35 | | | 40 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14 | 20 | 2,56 | 1,90 | 0,43 | 2,44 | 1,86 | 0,47 | 2,33 | 1,82 | 0,51 | 2,28 | 1,81 | 0,52 | 2,21 | 1,79 | 0,55 | 2,10 | 1,77 | 0,59 |
| 16 | 22 | 2,68 | 1,81 | 0,43 | 2,56 | 1,77 | 0,47 | 2,44 | 1,73 | 0,51 | 2,40 | 1,72 | 0,53 | 2,33 | 1,70 | 0,55 | 2,21 | 1,67 | 0,59 |
| 18 | 25 | 2,79 | 1,90 | 0,43 | 2,68 | 1,87 | 0,47 | 2,56 | 1,84 | 0,51 | 2,51 | 1,83 | 0,53 | 2,44 | 1,82 | 0,55 | 2,33 | 1,81 | 0,60 |
| 19 | 27 | 2,85 | 2,05 | 0,43 | 2,73 | 2,03 | 0,47 | 2,62 | 2,02 | 0,51 | 2,57 | 2,02 | 0,53 | 2,50 | 2,02 | 0,56 | 2,38 | 2,03 | 0,60 |
| 22 | 30 | 3,02 | 1,86 | 0,44 | 2,91 | 1,83 | 0,48 | 2,79 | 1,81 | 0,52 | 2,74 | 1,80 | 0,53 | 2,67 | 1,80 | 0,56 | 2,56 | 1,79 | 0,60 |
| 24 | 32 | 3,14 | 1,74 | 0,44 | 3,02 | 1,71 | 0,48 | 2,90 | 1,69 | 0,52 | 2,86 | 1,68 | 0,54 | 2,79 | 1,67 | 0,56 | 2,67 | 1,66 | 0,60 |

Heating 50Hz 220-240V

| | |
|-----|-------|
| AFR | 10,54 |
|-----|-------|

| Indoor air temperature [° C DB] | Outdoor temperature [° C WB] | | | | | | | | | | | |
|---------------------------------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | -15 | | -10 | | -5 | | 0 | | 7 | | 10 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15 | 1,33 | 0,39 | 1,60 | 0,41 | 1,87 | 0,44 | 2,09 | 0,57 | 2,90 | 0,60 | 3,15 | 0,62 |
| 20 | 1,25 | 0,40 | 1,52 | 0,42 | 1,79 | 0,45 | 1,98 | 0,58 | 2,80 | 0,61 | 3,05 | 0,63 |
| 22 | 1,22 | 0,40 | 1,49 | 0,44 | 1,76 | 0,46 | 1,95 | 0,58 | 2,76 | 0,62 | 3,01 | 0,64 |
| 24 | 1,19 | 0,41 | 1,45 | 0,44 | 1,72 | 0,46 | 1,92 | 0,59 | 2,72 | 0,62 | 2,98 | 0,64 |
| 25 | 1,17 | 0,41 | 1,44 | 0,44 | 1,71 | 0,46 | 1,90 | 0,59 | 2,70 | 0,62 | 2,96 | 0,64 |
| 27 | 1,14 | 0,42 | 1,41 | 0,45 | 1,67 | 0,46 | 1,88 | 0,60 | 2,66 | 0,63 | 2,92 | 0,65 |

Symbols

- AFR: Air flow rate [m³/min]
- BF: Bypass factor
- TC: Total capacity [kW]
- SHC: Sensible heat capacity [kW]
- PI: Power input [kW]

Notes

- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
- | |
|--|
| |
|--|

 Nominal capacity and nominal input
- The total capacity, power input and sensible heat capacity must be calculated by interpolation, using the figures in the table (figures not in the table may not be used in the calculation).
- In case the sensible heat capacity is not mentioned in the table, please calculate it using an approximation between two values in direct proportion.
- The capacities are based on the following conditions:
Corresponding refrigerant piping length: 5· m
Level difference: 0· m
- The air flow rate and bypass factor are mentioned in the table.

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ATXD35A / ARXD35A

Cooling 50Hz 220-240V

| | |
|-----|-------|
| AFR | 10,98 |
| BF | 0,20 |

| Indoor air temperature [° C WB] | Indoor air temperature [° C DB] | Outdoor temperature [° C DB] | | | | | | | | | | | | | | | | | |
|---------------------------------|---------------------------------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| | | 20 | | | 25 | | | 30 | | | 32 | | | 35 | | | 40 | | |
| °C | °C | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI | TC | SHC | PI |
| 14 | 20 | 3,38 | 2,47 | 0,60 | 3,23 | 2,41 | 0,66 | 3,07 | 2,35 | 0,72 | 3,01 | 2,33 | 0,74 | 2,92 | 2,31 | 0,78 | 2,77 | 2,27 | 0,83 |
| 16 | 22 | 3,53 | 2,36 | 0,60 | 3,38 | 2,30 | 0,66 | 3,23 | 2,24 | 0,72 | 3,16 | 2,22 | 0,74 | 3,07 | 2,19 | 0,78 | 2,92 | 2,15 | 0,84 |
| 18 | 25 | 3,68 | 2,46 | 0,61 | 3,53 | 2,41 | 0,67 | 3,38 | 2,37 | 0,72 | 3,32 | 2,35 | 0,75 | 3,22 | 2,33 | 0,78 | 3,07 | 2,31 | 0,84 |
| 19 | 27 | 3,76 | 2,63 | 0,61 | 3,61 | 2,60 | 0,67 | 3,45 | 2,58 | 0,73 | 3,39 | 2,57 | 0,75 | 3,30 | 2,56 | 0,78 | 3,15 | 2,57 | 0,84 |
| 22 | 30 | 3,99 | 2,40 | 0,62 | 3,84 | 2,36 | 0,67 | 3,68 | 2,33 | 0,73 | 3,62 | 2,32 | 0,75 | 3,53 | 2,48 | 0,79 | 3,37 | 2,28 | 0,85 |
| 24 | 32 | 4,14 | 2,26 | 0,62 | 3,99 | 2,22 | 0,68 | 3,83 | 2,18 | 0,73 | 3,77 | 2,16 | 0,76 | 3,68 | 2,15 | 0,79 | 3,53 | 2,12 | 0,85 |

Heating 50Hz 220-240V

| | |
|-----|-------|
| AFR | 11,46 |
|-----|-------|

| Indoor air temperature [° C DB] | Outdoor temperature [° C WB] | | | | | | | | | | | |
|---------------------------------|------------------------------|------|------|------|------|------|------|------|------|------|------|------|
| | -15 | | -10 | | -5 | | 0 | | 7 | | 10 | |
| °C | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI | TC | PI |
| 15 | 2,02 | 0,67 | 2,40 | 0,71 | 2,74 | 0,74 | 2,93 | 0,78 | 3,68 | 0,83 | 3,91 | 0,86 |
| 20 | 1,84 | 0,71 | 2,21 | 0,75 | 2,59 | 0,79 | 2,77 | 0,83 | 3,50 | 0,88 | 3,73 | 0,90 |
| 22 | 1,76 | 0,73 | 2,14 | 0,77 | 2,52 | 0,81 | 2,70 | 0,85 | 3,43 | 0,90 | 3,65 | 0,92 |
| 24 | 1,69 | 0,75 | 2,07 | 0,79 | 2,45 | 0,83 | 2,63 | 0,86 | 3,35 | 0,90 | 3,58 | 0,94 |
| 25 | 1,65 | 0,76 | 2,03 | 0,80 | 2,41 | 0,84 | 2,60 | 0,87 | 3,32 | 0,91 | 3,54 | 0,95 |
| 27 | 1,58 | 0,78 | 1,96 | 0,82 | 2,34 | 0,85 | 2,54 | 0,89 | 3,24 | 0,92 | 3,47 | 0,97 |

Symbols

- AFR: Air flow rate [m³/min]
- BF: Bypass factor
- TC: Total capacity [kW]
- SHC: Sensible heat capacity [kW]
- PI: Power input [kW]

Notes

- The ratings shown are net capacities which include a deduction for indoor fan motor heat.
- | |
|--|
| |
|--|

 Nominal capacity and nominal input
- The total capacity, power input and sensible heat capacity must be calculated by interpolation, using the figures in the table (figures not in the table may not be used in the calculation).
- In case the sensible heat capacity is not mentioned in the table, please calculate it using an approximation between two values in direct proportion.
- The capacities are based on the following conditions:
Corresponding refrigerant piping length: 5· m
Level difference: 0· m
- The air flow rate and bypass factor are mentioned in the table.

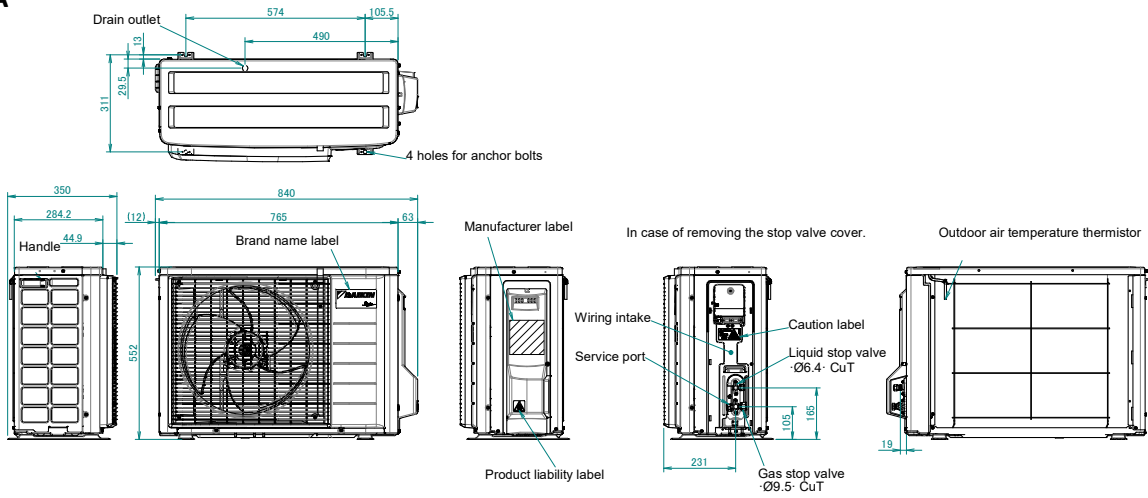
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5 Dimensional drawings

5 - 1 Dimensional Drawings

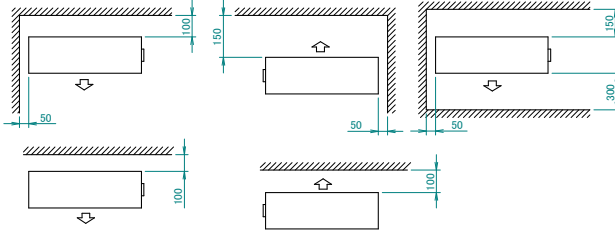
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ARXD-A



Minimum space for air passage

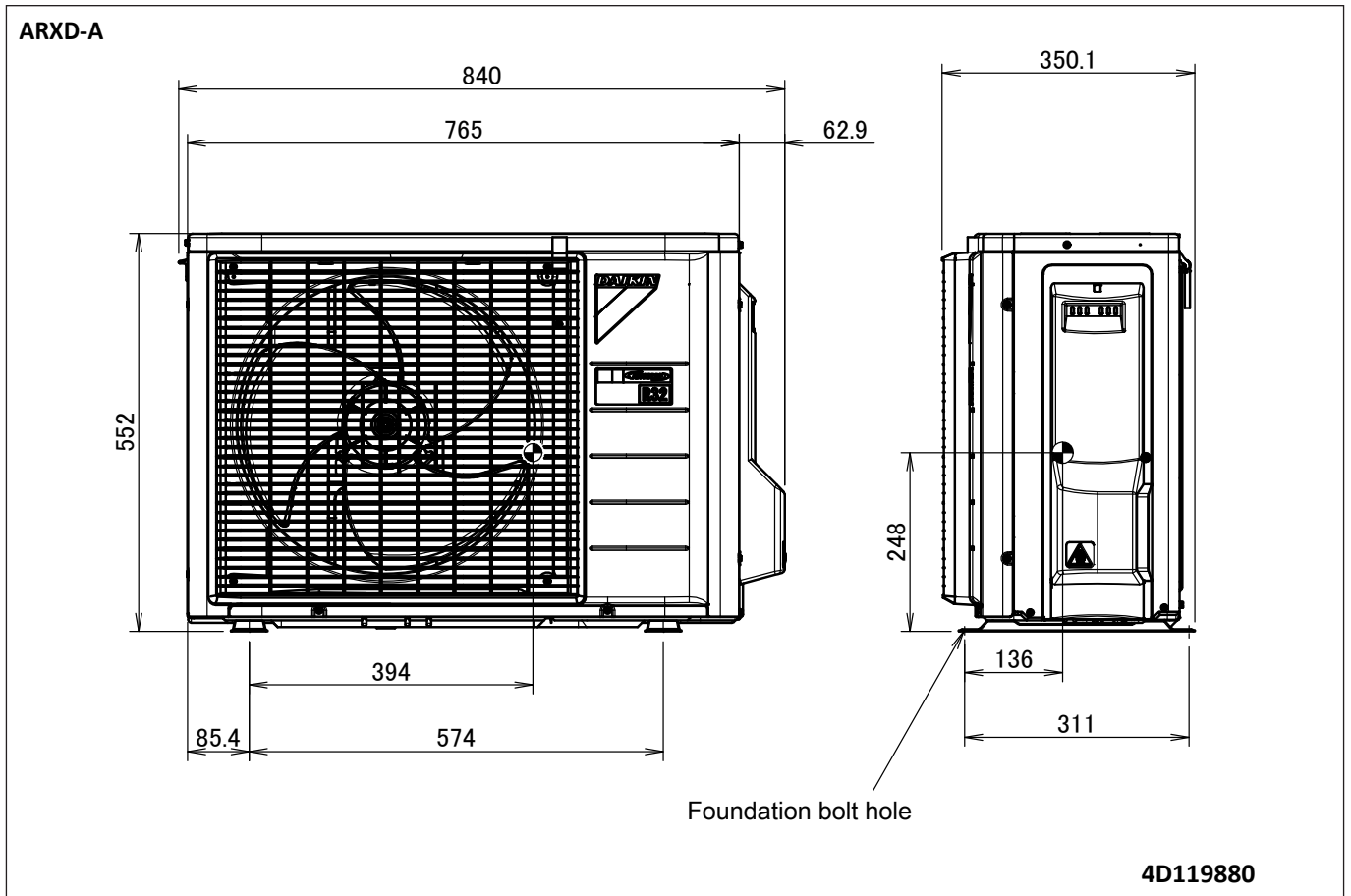
Wall height on air outlet side < 1200 mm



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6 Centre of gravity

6 - 1 Centre of Gravity

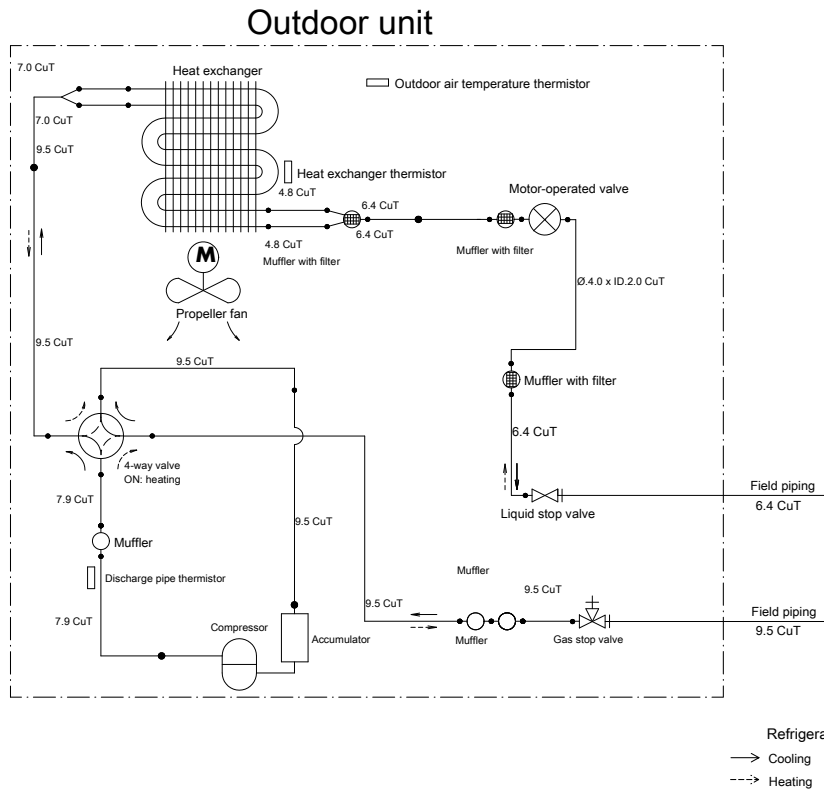


7 Piping diagrams

7 - 1 Piping Diagrams

7

ARXD-A



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8 Wiring diagrams

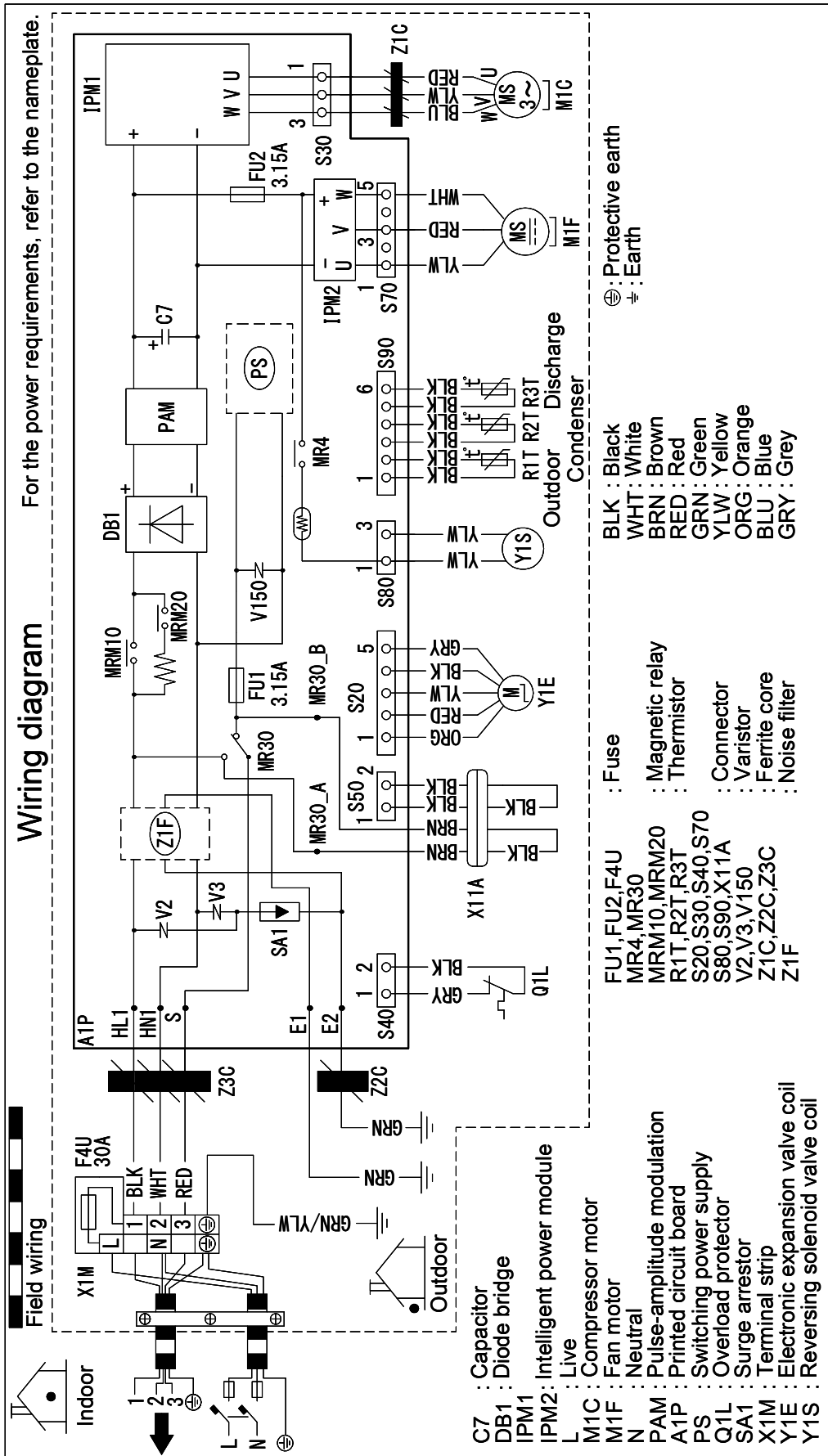
8 - 1 Wiring Diagrams - Three Phase

ARXD-A

Notes

Size: 140 x 80

Refer to purchasing specification AS303002, unless otherwise specified.



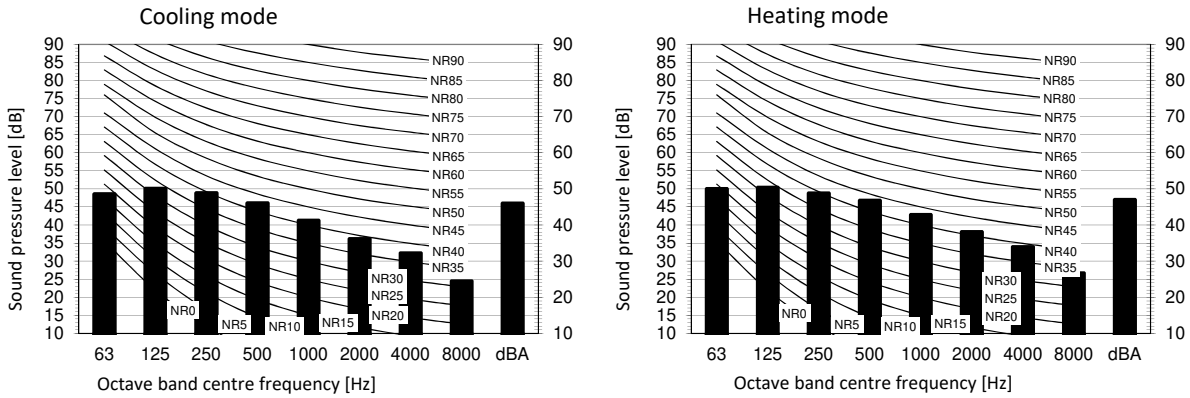
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9 Sound data

9 - 1 Sound Pressure Spectrum

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ARXD25A

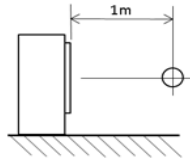


Legend

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

- A Scale
- B Fan speed: High

Location of microphone



Notes

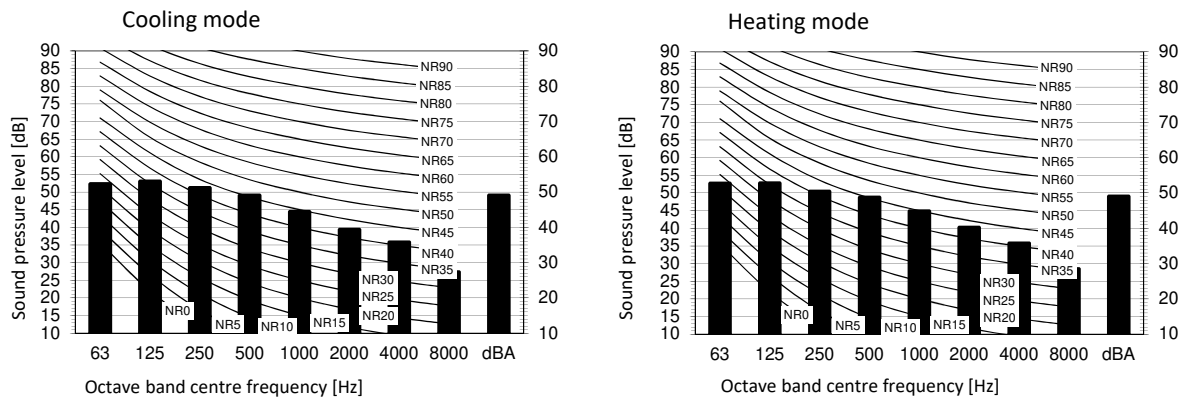
- 1 Background noise already taken into account.
- 2 Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 3 Operating noise varies depending on operation and ambient conditions.
- 4 The operation noise measuring method is in accordance with JISC9612.
- 5 Measuring location: anechoic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

| Cooling | | Total dBA | |
|---------|---|-----------|--|
| A | B | | |
| dBA | | 46 | |

| Heating | | Total dBA | |
|---------|---|-----------|--|
| A | B | | |
| dBA | | 47 | |

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ARXD35A

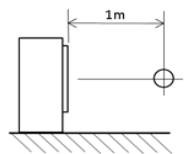


Legend

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

- A Scale
- B Fan speed: High

Location of microphone



Notes

- 1 Background noise already taken into account.
- 2 Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 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

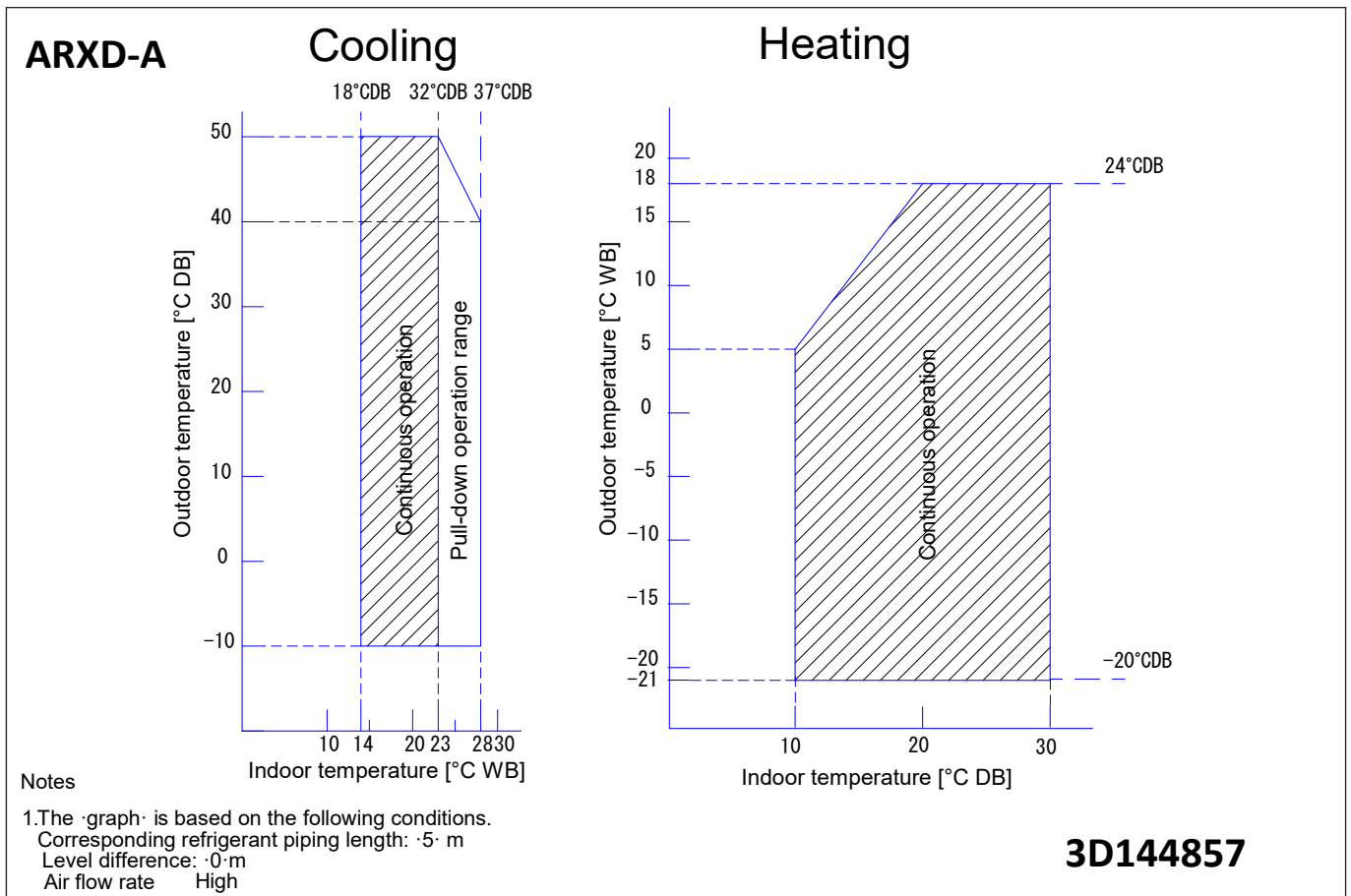
| Cooling | | Total dBA | |
|---------|---|-----------|--|
| A | B | | |
| dBA | | 49 | |

| Heating | | Total dBA | |
|---------|---|-----------|--|
| A | B | | |
| dBA | | 49 | |

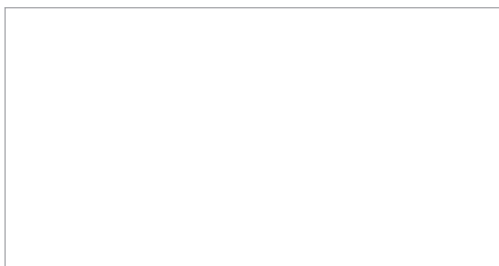
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10 Operation range

10 - 1 Operation Range



Daikin Europe N.V. Naamloze Vennootschap · Zandvoordestraat 300 · 8400 Oostende · Belgium · www.daikin.eu · BE 0412 120 336 · RPR Oostende (Responsible Editor)



Daikin Europe N.V. participates in the ECP programmes for Fan Coil Units and Variable Refrigerant Flow systems. Daikin Applied Europe S.p.A. participates in the ECP programmes for Liquid Chilling Packages and Hydronic Heat Pumps. Check ongoing validity of certificate: www.eurovent-certification.com

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