

MITSUBISHI HEAVY INDUSTRIES

VRF

INWERTEROWY SYSTEM MULTI KX



SPECYFIKACJA PROJEKTOWA

Project: Wolbórz

System: System domyślny 0

Klient:

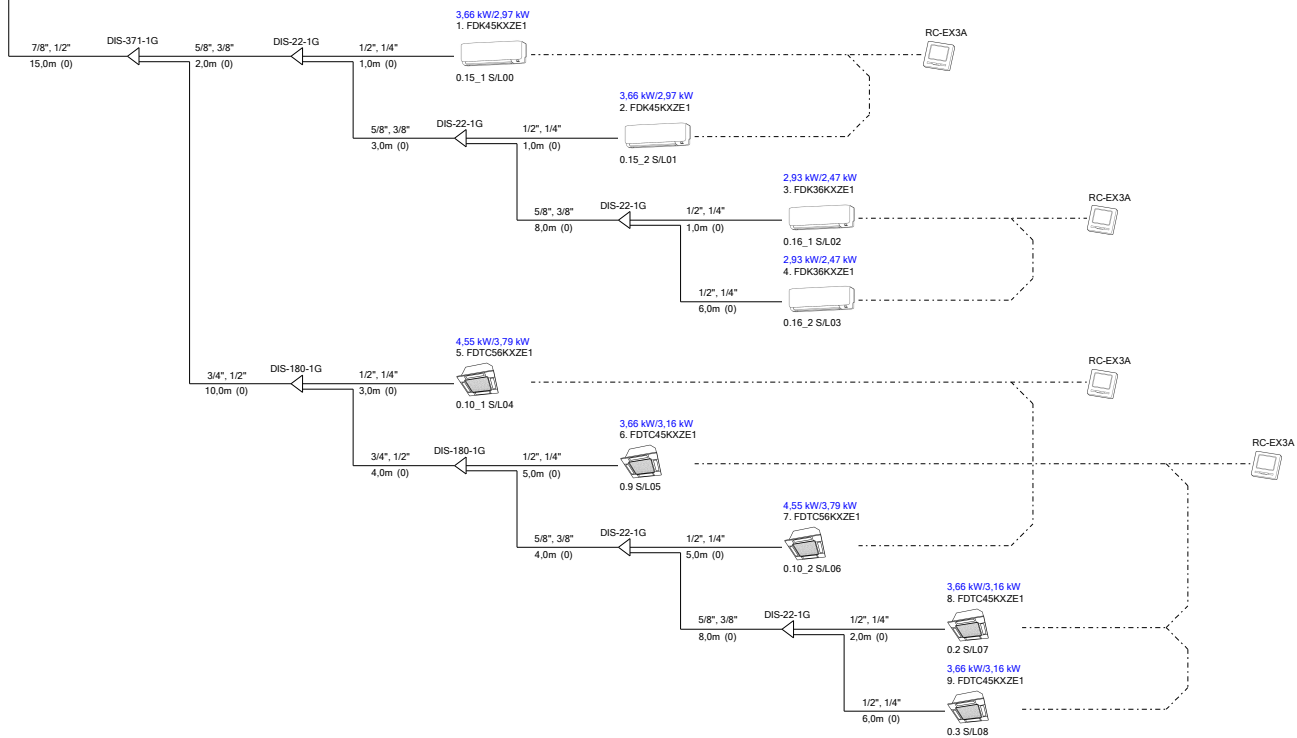
Przygotował:

Lokalizacja:

Data/czas raportu: 2020-02-24 11:30



Projekt : Wolbórz
Nr projektu :
System : System domyślny 0
Warunki projektowe: 27,0°C DB, 19,0°C WB / 35,0°C DB
Całkowita długość rurociągów : 84,0m z 510,0m
Ilość jednostek wewnętrznych : 9
Wydajność chłodnicza (rzeczywista) : 33,24 kW / 27,94 kW
Wydajność chłodnicza (żądana) : 31,46 kW / 0,00 kW
Indeks wydajności jedn. wewn. : 409 / 436
Wsp. niejednoczesności : 30%
Dod. ilość czynnika chl. : 7,7 kg
Całkowita ilość czynnika : 19,2 kg

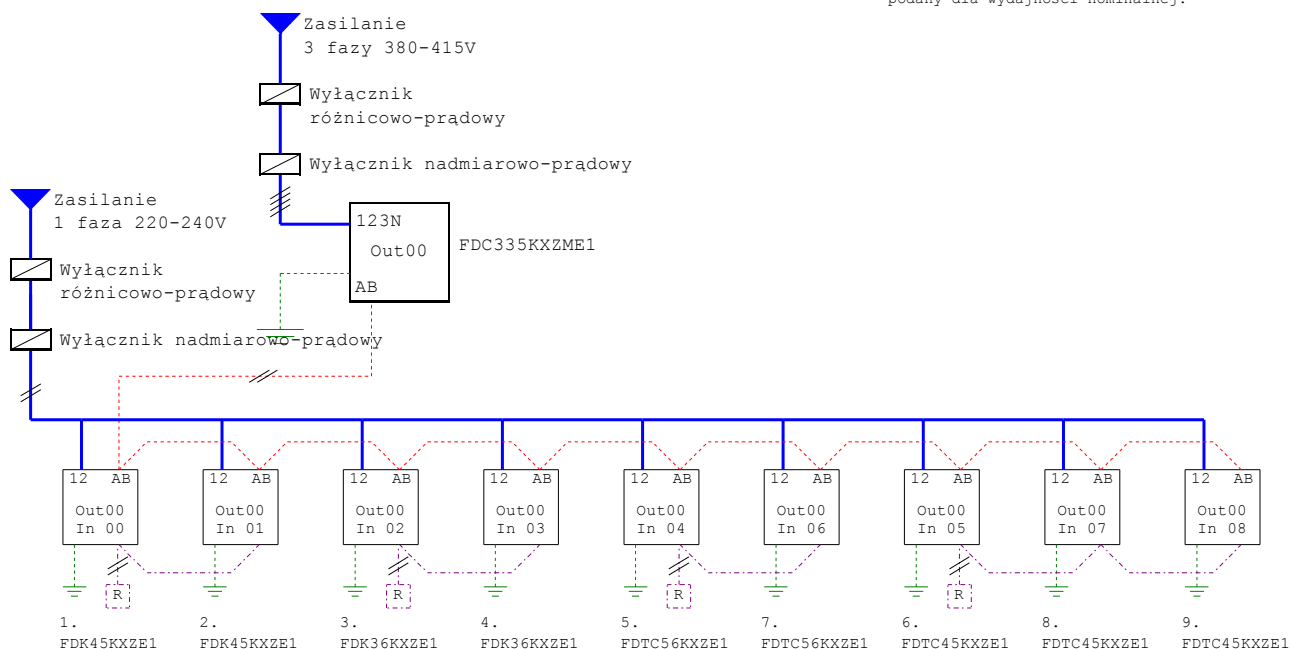


| | |
|--------------|-------------------|
| Projekt: | Wolbórz |
| Nr projektu: | |
| System: | System domyślny 0 |

| | | |
|-----------------------|-------------|-------------|
| Jedn. zewn. | 380v | 415v |
| Prąd pracy (A) | 16,30/13,40 | 14,90/12,30 |
| Współczynnik mocy (%) | 96/96 | 96/96 |
| Prąd rozruchu (A) | 5,00 | |
| Prąd maks. (A) | 23 | |
| Pobór mocy el. (kW) | 10,26/8,44 | |

| | | |
|---------------------------|-----------|-----------|
| Jedn. wewn. (chl./ogrz.) | 220v | 240v |
| Całk. pobór mocy el. (kW) | 0,39/0,39 | 0,39/0,39 |
| Całkowity prąd pracy (A) | 3,45/3,45 | 3,20/3,20 |

Schematy elektryczne mają charakter wyłącznie poglądowy
 Instalację elektryczną wykonać zgodnie z obowiązującymi normami.
 (*) Prąd pracy, współczynnik mocy, pobór mocy jedn. zewn.
 podany dla wydajności nominalnej.



Lista materiałów w projekcie

Projekt : Wolbórz

Nr projektu :

W projekcie nie występują sterowniki centralne i sterowniki BMS

Lista materiałów w systemie

Projekt : Wolbórz

Nr projektu :

System : System domyślny 0

| Jedn. zewn. | Ilość |
|--------------|-------|
| FDC335KXZME1 | 1 |

| Jedn. wewn. | Ilość |
|-------------|-------|
| FDK45KXZE1 | 2 |
| FDK36KXZE1 | 2 |
| FDT56KXZE1 | 2 |
| FDT45KXZE1 | 3 |

| Panel | Ilość |
|--------------|-------|
| TC-PSA-5AW-E | 5 |

| Trójnik | Ilość |
|------------|-------|
| DIS-371-1G | 1 |
| DIS-22-1G | 5 |
| DIS-180-1G | 2 |

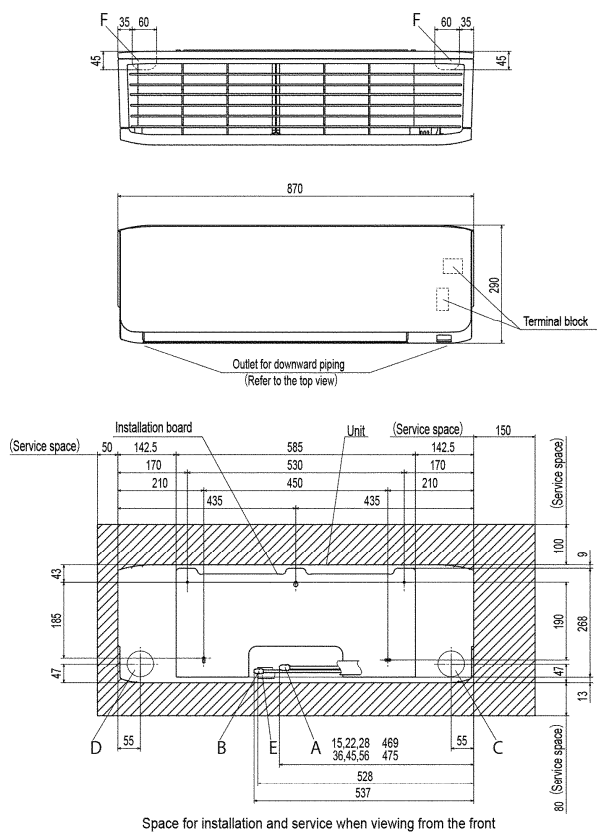
| Sterowniki | Ilość |
|------------|-------|
| RC-EX3A | 4 |

| | |
|--------------------------|--------|
| Dod. ilość czynnika chl. | 7,7 kg |
|--------------------------|--------|

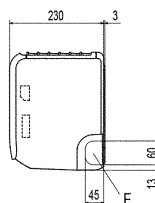
| Średnica rurociągu | Całkowita dł. (m) |
|--------------------|-------------------|
| 1/4" | 30,0 |
| 3/8" | 25,0 |
| 1/2" | 59,0 |
| 5/8" | 25,0 |
| 3/4" | 14,0 |
| 7/8" | 15,0 |

FDK15KXE1, 22KXE1, 28KXE1, 36KXE1, 45KXE1, 56KXE1

Unit:mm



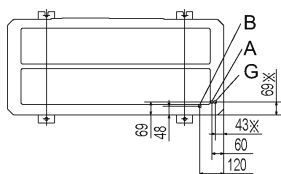
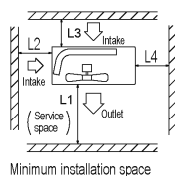
| Symbol | Model | 15,22,28 | 36,45,56 |
|--------|------------------------------------|----------------------|----------------------|
| A | Gas piping | φ9.52 (3/8") (Flare) | φ12.7 (1/2") (Flare) |
| B | Liquid piping | φ6.35 (1/4") (Flare) | |
| C | Hole on wall for right rear piping | (φ65) | |
| D | Hole on wall for left rear piping | (φ65) | |
| E | Drain hose | VP16 | |
| F | Outlet for wiring (on both side) | | |



Note (1) The model name label is attached on the right side of the unit.

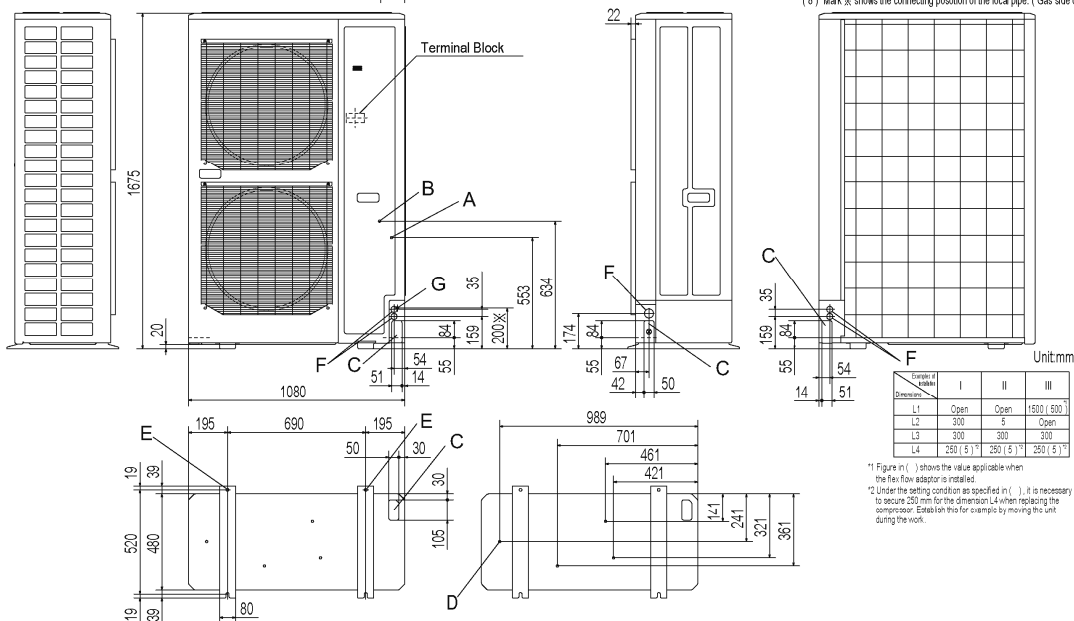
FDC335KXZME1

Unit:mm



| Symbol | Content |
|--------|---|
| A | Service valve connection of the attached connecting pipe (gas side) φ 19.05 (3 / 4") (Flare) |
| B | Service valve connection (liquid side) φ 12.7 (1 / 2") (Flare) |
| C | Pipe / cable draw-out hole 4 places |
| D | Drain discharge hole φ 20+4 places |
| E | Anchor bolt hole M10+4 places |
| F | Cable draw-out hole φ 30+2 places (front) φ 45 (side) φ 30+2 places (back) |
| G | Connecting position of the local pipe (gas side) φ 25.4 (1") (Bracing) |

- Notes
- (1) It must not be surrounded by walls on the four sides.
 - (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more the 15mm.
 - (3) Where the unit is subject to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
 - (4) Leave 1m or more space above the unit.
 - (5) A wall in front of the blower outlet must not exceed the units height.
 - (6) The model name label is attached on the lower right corner of the front.
 - (7) Connect the Service valve with local pipe by using the pipe of the attachment.
(Gas side only)
 - (8) Mark X shows the connecting position of the local pipe. (Gas side only)



| Dimension | I | II | III |
|-----------|-------------------------|-------------------------|----------------------------|
| L1 | Open | Open | 1600 (500) ¹⁾ |
| L2 | 300 | 5 | Open |
| L3 | 300 | 300 | 300 |
| L4 | 250 (5) ²⁾ | 250 (5) ²⁾ | 250 (5) ²⁾ |

¹⁾ Figure in () shows the value applicable when the flex flow adaptor is installed.
²⁾ Under the setting condition as specified in () , it is necessary to secure 250 mm for the dimension L4 when replacing the compressor. Establish this for example by moving the unit during the work.

Wall Mounted type (FDK)

| Models | | | FDK45KXZE1 |
|---|------|--------|---|
| Nominal cooling capacity*1 | kW | | 4.5 |
| Nominal heating capacity*2 | | | 5.0 |
| Power source | | | 220-240V ~ 50Hz / 220V ~ 60Hz |
| Power consumption | Cool | kW | 0.03 |
| | Heat | | 0.03 |
| Running current | Cool | A | 0.27 - 0.25 / 0.27 |
| | Heat | | 0.27 - 0.25 / 0.27 |
| Sound Pressure Level | Cool | dB(A) | P-Hi : 43 Hi : 41 Me : 36 Lo : 33 |
| | Heat | | P-Hi : 43 Hi : 41 Me : 36 Lo : 33 |
| Sound Power Level | Cool | dB(A) | 58 |
| | Heat | | 58 |
| Exterior dimensions Height x Width x Depth | | mm | 290 × 870 × 230 |
| Exterior appearance (Munsell color) | | | Fine Snow (8.0Y9.3/0.1) near equivalent |
| Net weight | | kg | 11.5 |
| Refrigerant equipment | | | |
| Heat exchanger | | | Louver fin & inner grooved tubing |
| Refrigerant control | | | Electronic Expansion Valve |
| Air handling equipment | | | |
| Fan type & Q'ty | | | Tangential fan × 1 |
| Motor | | W | 42 |
| Starting method | | | Direct line start |
| Air flow(Standard) | Cool | m³/min | P-Hi : 12 Hi : 11 Me : 9 Lo : 8 |
| | Heat | | P-Hi : 12 Hi : 11 Me : 9 Lo : 8 |
| Available static pressure | | Pa | 0 |
| Outside air intake | | | Not possible |
| Air filter, Q'ty | | | Polypropylene net × 2 (Washable) |
| Shock & vibration absorber | | | Rubber sleeve(for fan motor) |
| Insulation (noise & heat) | | | Polyurethane form |
| Operation control | | | Remote control switch wired: RC-EX3,RC-E5,RCH-E3 wireless:RCN-K-E2 |
| Room temperature control | | | Thermostat by electronics |
| Safety equipment | | | Overload protection for fan motor Frost protection thermostat |
| Installation data | | | Liquid line: ϕ 6.35 (1/4") |
| Refrigerant piping size | | | Gas line: ϕ 12.7 (1/2") |
| Connecting method | | | Flare piping |
| Refrigerant | | | R410A |
| Drain hose | | | Connectable with VP16 |
| Insulation for piping | | | Necessary(both Liquid & Gas line) |
| Standard Accessories | | | Mounting kit |

Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item | Indoor air temperature | | Outdoor air temperature | | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| | DB | WB | DB | WB | |
| Cooling*1 | 27 °C | 19 °C | 35 °C | 24 °C | ISO-T1 |
| Heating*2 | 20 °C | | 7 °C | 6 °C | |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

Wall Mounted type (FDK)

| Models | | | FDK36KXZE1 | | | |
|---|------|--------|---|--|--|--|
| Nominal cooling capacity*1 | | kW | 3.6 | | | |
| Nominal heating capacity*2 | | | 4.0 | | | |
| Power source | | | 220-240V ~ 50Hz / 220V ~ 60Hz | | | |
| Power consumption | Cool | kW | 0.03 | | | |
| | Heat | | 0.03 | | | |
| Running current | Cool | A | 0.27 - 0.25 / 0.27 | | | |
| | Heat | | 0.27 - 0.25 / 0.27 | | | |
| Sound Pressure Level | Cool | dB(A) | P-Hi : 40 Hi : 38 Me : 33 Lo : 28 | | | |
| | Heat | | P-Hi : 40 Hi : 38 Me : 33 Lo : 28 | | | |
| Sound Power Level | Cool | dB(A) | 58 | | | |
| | Heat | | 58 | | | |
| Exterior dimensions Height x Width x Depth | | mm | 290 × 870 × 230 | | | |
| Exterior appearance (Munsell color) | | | Fine Snow (8.0Y9.3/0.1) near equivalent | | | |
| Net weight | | kg | 11.5 | | | |
| Refrigerant equipment | | | | | | |
| Heat exchanger | | | Louver fin & inner grooved tubing | | | |
| Refrigerant control | | | Electronic Expansion Valve | | | |
| Air handling equipment | | | | | | |
| Fan type & Q'ty | | | Tangential fan × 1 | | | |
| Motor | | W | 42 | | | |
| Starting method | | | Direct line start | | | |
| Air flow(Standard) | Cool | m³/min | P-Hi : 11 Hi : 10 Me : 8 Lo : 7 | | | |
| | Heat | | P-Hi : 11 Hi : 10 Me : 8 Lo : 7 | | | |
| Available static pressure | | Pa | 0 | | | |
| Outside air intake | | | Not possible | | | |
| Air filter, Q'ty | | | Polypropylene net × 2 (Washable) | | | |
| Shock & vibration absorber | | | Rubber sleeve(for fan motor) | | | |
| Insulation (noise & heat) | | | Polyurethane form | | | |
| Operation control | | | Remote control switch wired: RC-EX3,RC-E5,RCH-E3 wireless:RCN-K-E2 | | | |
| Room temperature control | | | Thermostat by electronics | | | |
| Safety equipment | | | Overload protection for fan motor Frost protection thermostat | | | |
| Installation data | | | Liquid line: ϕ 6.35 (1/4") | | | |
| Refrigerant piping size | | | Gas line: ϕ 12.7 (1/2") | | | |
| Connecting method | | | Flare piping | | | |
| Refrigerant | | | R410A | | | |
| Drain hose | | | Connectable with VP16 | | | |
| Insulation for piping | | | Necessary(both Liquid & Gas line) | | | |
| Standard Accessories | | | Mounting kit | | | |

Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item | Indoor air temperature | | Outdoor air temperature | | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| | DB | WB | DB | WB | |
| Cooling*1 | 27 °C | 19 °C | 35 °C | 24 °C | ISO-T1 |
| Heating*2 | 20 °C | | 7 °C | 6 °C | |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

Ceiling Cassette -4way- Compact type (FDTC)

| Models | | | FDTCS56KXZE1 |
|---|------|-------|--|
| Panel model (Option) | | | Standard :TC-PSA-5AW-E Draft prevention : TC-PSAE-5AW-E |
| Nominal cooling capacity*1 | kW | | 5.6 |
| Nominal heating capacity*2 | | | 6.3 |
| Power source | | | 220-240V ~ 50Hz / 220V ~ 60Hz |
| Power consumption | Cool | kW | 0.06 - 0.06 / 0.06 |
| | Heat | | 0.06 - 0.06 / 0.06 |
| Running current | Cool | A | 0.54 - 0.50 / 0.54 |
| | Heat | | 0.54 - 0.50 / 0.54 |
| Sound Pressure Level | Cool | dB(A) | P-Hi : 47 Hi : 43 Me : 39 Lo : 31 |
| | Heat | | P-Hi : 47 Hi : 43 Me : 39 Lo : 31 |
| Sound Power Level | Cool | | 60 |
| | Heat | | 60 |
| Exterior dimensions Height x Width x Depth | | mm | Unit : 248 × 570 × 570 Panel : 10 × 620 × 620 |
| Exterior appearance (Munsell color) (RAL color) | | | Fine snow (8.0Y9.3/0.1) near equivalent (RAL 9001) near equivalent |
| Net weight*3 | | kg | Unit : 14 Standard panel : 2.5 |
| Refrigerant equipment Heat exchanger | | | Louver fin & inner grooved tubing |
| Refrigerant control | | | Electronic Expansion Valve |
| Air handling equipment Fan type & Q'ty | | | Turbo fan × 1 |
| Motor | | W | 50 |
| Starting method | | | Direct line start |
| Air flow(Standard) | Cool | CMM | P-Hi : 14 Hi : 12 Me : 10 Lo : 8 |
| | Heat | | P-Hi : 14 Hi : 12 Me : 10 Lo : 8 |
| Available static pressure | | Pa | 0 |
| Outdoor air intake | | | Possible |
| Air filter, Q'ty | | | Pocket plastic net × 1 (Washable) |
| Shock & vibration absorber | | | Rubber sleeve(for fan motor) |
| Insulation (noise & heat) | | | Polyurethane form |
| Operation control | | | Wired : RC-E5, RC-EX3A, RCH-E3 |
| Remote control switch (option) | | | Wireless : RCN-TC-5AW-E2 |
| Room temperature control | | | Thermostat by electronics |
| Safety equipment | | | Overload protection for fan motor Frost protection thermostat |
| Installation data | | | Liquid line: φ 6.35 (1/4") |
| Refrigerant piping size | | | Gas line: φ 12.7 (1/2") |
| Connecting method | | | Flare piping |
| Refrigerant | | | R410A |
| Drain pump | | | Built-in Drain pump |
| Drain hose | | | Connectable with V P 2 5 |
| Insulation for piping | | | Necessary(both Liquid & Gas line) |
| Accessories | | | Mounting kit,Drain hose |

Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item | Indoor air temperature | | Outdoor air temperature | | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| Operation | DB | WB | DB | WB | |
| Cooling*1 | 27 °C | 19 °C | 35 °C | 24 °C | |
| Heating*2 | 20 °C | | 7 °C | 6 °C | |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-5W-E)

Ceiling Cassette -4way- Compact type (FDTC)

| Models | | | FDTC45KXZE1 | |
|---|------|-------|--|--|
| Panel model (Option) | | | Standard :TC-PSA-5AW-E Draft prevention :TC-PSAE-5AW-E | |
| Nominal cooling capacity*1 | kW | | 4.5 | |
| Nominal heating capacity*2 | | | 5.0 | |
| Power source | | | 220-240V ~ 50Hz / 220V ~ 60Hz | |
| Power consumption | Cool | kW | 0.05 - 0.05 / 0.05 | |
| | Heat | | 0.05 - 0.05 / 0.05 | |
| Running current | Cool | A | 0.43 - 0.40 / 0.43 | |
| | Heat | | 0.43 - 0.40 / 0.43 | |
| Sound Pressure Level | Cool | dB(A) | P-Hi : 43 Hi : 39 Me : 36 Lo : 28 | |
| | Heat | | P-Hi : 43 Hi : 39 Me : 36 Lo : 28 | |
| Sound Power Level | Cool | | 58 | |
| | Heat | | 57 | |
| Exterior dimensions Height x Width x Depth | | | mm | Unit : 248 × 570 × 570 Panel : 10 × 620 × 620 |
| Exterior appearance (Munsell color) (RAL color) | | | Fine snow (8.0Y9.3/0.1) near equivalent (RAL 9001) near equivalent | |
| Net weight*3 | | | kg | Unit : 14 Standard panel : 2.5 |
| Refrigerant equipment Heat exchanger | | | Louver fin & inner grooved tubing | |
| Refrigerant control | | | Electronic Expansion Valve | |
| Air handling equipment Fan type & Q'ty | | | Turbo fan × 1 | |
| Motor | | W | 50 | |
| Starting method | | | Direct line start | |
| Air flow(Standard) | Cool | CMM | P-Hi : 12 Hi : 10 Me : 9 Lo : 7 | |
| | Heat | | P-Hi : 12 Hi : 10 Me : 9 Lo : 7 | |
| Available static pressure | | Pa | 0 | |
| Outdoor air intake | | | Possible | |
| Air filter, Q'ty | | | Pocket plastic net × 1 (Washable) | |
| Shock & vibration absorber | | | Rubber sleeve(for fan motor) | |
| Insulation (noise & heat) | | | Polyurethane form | |
| Operation control | | | Wired : RC-E5, RC-EX3A, RCH-E3 | |
| Remote control switch (option) | | | Wireless : RCN-TC-5AW-E2 | |
| Room temperature control | | | Thermostat by electronics | |
| Safety equipment | | | Overload protection for fan motor Frost protection thermostat | |
| Installation data | | | Liquid line: ϕ6.35 (1/4") | |
| Refrigerant piping size | | | Gas line: ϕ12.7 (1/2") | |
| Connecting method | | | Flare piping | |
| Refrigerant | | | R410A | |
| Drain pump | | | Built-in Drain pump | |
| Drain hose | | | Connectable with V P 2 5 | |
| Insulation for piping | | | Necessary(both Liquid & Gas line) | |
| Accessories | | | Mounting kit,Drain hose | |

Notes

Adapted to **RoHS** directive

(1) The data are measured at the following conditions.

| Item | Indoor air temperature | | Outdoor air temperature | | Standards |
|-----------|------------------------|-------|-------------------------|-------|-----------|
| Operation | DB | WB | DB | WB | |
| Cooling*1 | 27 °C | 19 °C | 35 °C | 24 °C | |
| Heating*2 | 20 °C | | 7 °C | 6 °C | |

(2) This packaged air-conditioner is manufactured and tested in conformity with the following standard.

ISO-T1 "UNITARY AIR-CONDITIONERS"

(3) Draft prevention panel weight*3 : 3.0kg (4) Option : Motion sensor kit (LB-TC-5W-E)

FDC224KXZME1, 280KXZME1, 335KXZME1

(50/60 Hz)

| Models | | | FDC224KXZME1 | FDC280KXZME1 | FDC335KXZME1 |
|---|------------------|---------|---|----------------|-----------------------------------|
| Nominal cooling capacity*1 | | kW | 22.4 | 28.0 | 33.5 |
| Nominal heating capacity*2 | | | 22.4 | 28.0 | 33.5 |
| Maximum heating capacity | | | 25.0 | 31.5 | 37.5 |
| Power source | | | 3 Phase 380/415V 50Hz / 380 | | |
| Power consumption | Cooling | kW | 5.59 | 7.90 | 10.26 |
| | Heating | | 4.97 | 6.53 | 8.44 |
| Running current | Cooling | A | 9.4/8.6 | 12.8/11.8 | 16.3/14.9 |
| | Heating | | 7.8/7.2 | 10.5/9.6 | 13.4/12.3 |
| Power factor | Cooling | % | 91/91 | 94/94 | 96/96 |
| | Heating | | 97/97 | 95/95 | 96/96 |
| EER | | | 4.00 | 3.54 | 3.26 |
| COP | | | 4.50 | 4.28 | 3.96 |
| Sound pressure level (Cooling/Heating) | | dB (A) | 58/59 | 60/60 | 60/60 |
| Sound power level (Cooling/Heating) | | dB (A) | 73/75 | 75/76 | 75/76 |
| Starting current | | A | 5 | | |
| Maximum current | | | 20.0 | 20.0 | 23.0 |
| Exterior dimensions Height × Width × Depth | | mm | 1675×1080×480 | | |
| Exterior appearance (Munsell color) | | | Stucco w (4.2Y7.5/1.1) near equivalent | | |
| Net weight | | kg | 221 | | 224 |
| Compressor type & Q'ty | | | GTC5150NH40K × 1 | | |
| Compressor motor | | kW | 4.69 | 6.78 | 8.91 |
| Starting method | | | Direct line starting | | |
| Capacity control | | % | 24-100 | 18-100 | 18-100 |
| Crankcase heater | | W | 33 | | |
| Heat exchanger | | | Straight fin & inner grooved tubing | | |
| Refrigerant control | | | Electronic expansion valve | | |
| Refrigerant type | | | R410A | | |
| Refrigerant amount | | kg | 11.5 | | |
| Refrigerant oil | | ℓ | 1.7 (M-MA32R) | | |
| Defrost control | | | Microcomputer controlled De-Icer | | |
| Fan type & Q'ty | | | Propeller fan × 2 | | |
| Fan motor | | W | 144 × 2 | | |
| Starting method | | | Direct start | | |
| Air flow (Standard) | | m³/min | 200 | | |
| Available external static pressure | | Pa | Max.35 | | |
| Shock & vibration absorber | | | Rubber mount (for compressor) | | |
| Safety equipment | | | Compressor overheat protection, Overcurrent protection, Power transistor overheating protection, Abnormal high pressure protection | | |
| Refrigerant piping size | Liquid line | mm (in) | φ 9.52 (3/8") | | φ 12.7 (1/2") |
| | Suction gas line | mm (in) | φ 19.05 (3/4") | φ 22.22 (7/8") | φ 25.4 (1") (φ 22.22 (7/8")) |
| Connecting method | | | Gas line : Brazing / Liquid line : Flare | | |
| MAX. Pressure | | MPa | High 4.15, Low 2.21 | | |
| Drain | | | Hole for drain (φ 20 × 4pcs) | | |
| Insulation for piping | | | Necessary (both Liquid & Gas) | | |
| IP number | | | IP24 | | |
| Accessories | | | - | - | - |

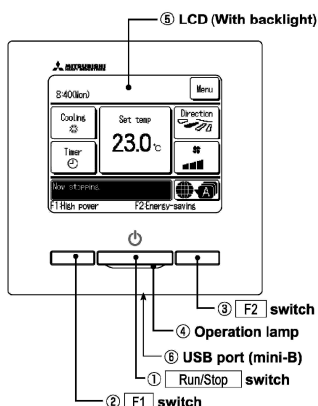
Notes (1) The data are measured at the following conditions.

| Operation | Indoor air temperature | | Outdoor air temperature | | Standards |
|-----------|------------------------|------|-------------------------|------|---------------|
| | DB | WB | DB | WB | |
| Cooling | 27°C | 19°C | 35°C | 24°C | ISO5151-T1,H1 |
| Heating | 20°C | — | 7°C | 6°C | |

- (2) This air-conditioner is manufactured and tested in conformity with the ISO.
- (3) Sound level indicates the value in an anechoic chamber.
During operation these values are somewhat higher due to ambient conditions.
- (4) Refrigerant piping size applicable to European installations are shown in parentheses.
- (5) This air-conditioner is adapted RoHS directive.

RC-EX3A

Unit:mm



Touch panel system, which is operated by tapping the LCD screen with a finger, is employed for any operations other than the ① Run/Stop, ② F1 ③ F2 switches.

① Run/Stop switch

One push on the button starts operation and another push stops operation.

② F1 switch ③ F2 switch

This switch starts operation that is set in F1F2 function setting.

④ Operation lamp

This lamp lights in green (yellow green) during operation. It changes to red (orange) if any error occurs. Operation lamp luminance can be changed.

⑤ LCD (With backlight)

A tap on the LCD lights the backlight. The backlight turns off automatically if there is no operation for certain period of time. Lighting period of the backlight lighting can be

changed.

If the backlight is ON setting, when the screen is tapped while the backlight is turned off, the backlight only is turned on. (Operations with switches ①, ② and ③ are excluded.)

⑥ USB port

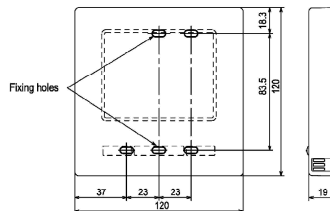
USB connector (mini-B) allows connecting to a personal computer.

For operating methods, refer to the instruction manual attached to the software for personal computer (remote control utility software).

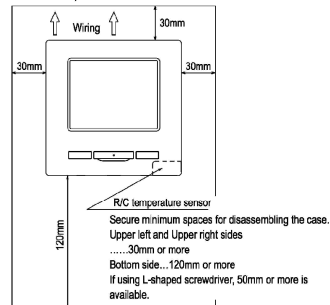
Note

• When connecting to a personal computer, do not connect simultaneously with other USB devices. Please be sure to connect to the computer directly, without going through a hub, etc.

Dimensions (Viewed from front)



Installation space



• Do not install the remote control at following places.

- (1) It could cause break-down or deformation of remote control.
 - Where it is exposed to direct sunlight
 - Where the ambient temperature becomes 0 °C or below, or 40 °C or above
 - Where the surface is not flat
 - Where the strength of installation area is insufficient
- (2) Moisture may be attached to internal parts of the remote controller, resulting in a display failure.
 - Place with high humidity where condensation occurs on the remote controller
 - Where the remote controller gets wet
- (3) Accurate room temperature may not be detected using the temperature sensor of the remote controller.
 - Where the average room temperature cannot be detected
 - Place near the equipment to generate heat
 - Place affected by outside air in opening/closing the door
 - Place exposed to direct sunlight or wind from air conditioner
 - Where the difference between wall and room temperature is large
- (4) When you are using the automatic grille up and down panel in the IU, you may not be able to confirm the up and down motion.
 - Where the IU cannot be visually confirmed

• When installing the unit at a hospital, telecommunication facility, etc., take measures to suppress electric noises. It could cause malfunction or break-down due to hazardous effects on the inverter, private power generator, high frequency medical equipment, radio communication equipment, etc. The influences transmitted from the remote control to medical or communication equipment could disrupt medical activities, video broadcasting or cause noise interference.

R/C cable: 0.3 mm² × 2-core

When the cable length is longer than 100 m, the max size for wires used in the R/C case is 0.5 mm². Connect them to wires of larger size near the outside of R/C. When wires are connected, take measures to prevent water, etc. from entering inside.

| | |
|---------|-------------------------------|
| ≤ 200 m | 0.5 mm ² × 2-core |
| ≤ 300 m | 0.75 mm ² × 2-core |
| ≤ 400 m | 1.25 mm ² × 2-core |
| ≤ 600 m | 2.0 mm ² × 2-core |

Adapted to RoHS directive