



Specifications for DC-Inverter BHI/CI Series

| MODEL                                   |                                |                    | KFR-25/BHI/KFR-25/CI            | KFR-35/BHI/KFR-35/CI            | KFR-53/BHI/KFR-53/CI            | KFR-70/BHI/KFR-70/CI            |
|-----------------------------------------|--------------------------------|--------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Type                                    |                                |                    | heating pump                    | heating pump                    | heating pump                    | heating pump                    |
| Control type                            |                                |                    | remote                          | remote                          | remote                          | remote                          |
| Rated cooling capacity                  |                                | Btu/h              | 9000(2400-11500)                | 12000(3410-13000)               | 18000(4400-20000)               | 24000(5100-25600)               |
| Rated cooling capacity                  |                                | W                  | 2640(700-3370)                  | 3520(1000-3810)                 | 5280(1300-5860)                 | 7030(1500-7500)                 |
| Rated heating capacity                  |                                | Btu/h              | 9500(2400-12500)                | 12500(3480-13500)               | 18500(4400-21500)               | 24500(5100-27000)               |
| Rated heating capacity                  |                                | W                  | 2780(700-3660)                  | 3660(1020-3960)                 | 5420(1300-6300)                 | 7180(1500-7900)                 |
| EER for cooling                         |                                | W/W                | 3.21                            | 3.21                            | 3.21                            | 3.21                            |
| Class in Cooling                        |                                |                    | A                               | A                               | A                               | A                               |
| COP for heating                         |                                | W/W                | 3.61                            | 3.61                            | 3.61                            | 3.61                            |
| Class in Heating                        |                                |                    | A                               | A                               | A                               | A                               |
| Moisture removal                        |                                | Liters/h           | 1.0                             | 1.2                             | 1.8                             | 2.0                             |
| Pressure                                | High(DP)                       | MPa                | 4.5                             | 4.5                             | 4.5                             | 4.5                             |
|                                         | Low(SP)                        | MPa                | 1.2                             | 1.2                             | 1.2                             | 1.2                             |
| Indoor noise level(S/H/M/L/Mute)        |                                | dB(A)              | 40/38/34/28/26                  | 40/38/34/28/26                  | 44/41/36/30/28                  | 47/45/42/37/34                  |
| Outdoor noise level                     |                                | dB(A)              | 49                              | 49                              | 54                              | 55                              |
| Electrical Data                         |                                |                    |                                 |                                 |                                 |                                 |
| Power supply                            |                                |                    | 220-240V~/50Hz/1P               | 220-240V~/50Hz/1P               | 220-240V~/50Hz/1P               | 220-240V~/50Hz/1P               |
| Voltage Range                           |                                | V                  | 187-265                         | 187-265                         | 187-265                         | 187-265                         |
| Rated current                           | Cooling                        | A                  | 3.8(1.3-7.1)                    | 5.1(1.4-8.0)                    | 7.8(2.4-12.0)                   | 10.4(3.0-14.0)                  |
|                                         | Heating                        | A                  | 3.6(1.3-7.1)                    | 4.7(1.4-8.0)                    | 7.1(2.4-12.0)                   | 9.4(3.0-14.0)                   |
| Rated input                             | Cooling                        | W                  | 820(200-1600)                   | 1095(300-1800)                  | 1645(420-2500)                  | 2190(530-2800)                  |
|                                         | Heating                        | W                  | 770(200-1600)                   | 1013(300-1800)                  | 1500(420-2500)                  | 1985(530-2700)                  |
| Annual energy consumption(cooling)      |                                | kwh                | 410                             | 548                             | 823                             | 1095                            |
| Max Current                             | Cooling                        | A                  | 7.1                             | 8.0                             | 12.0                            | 14.0                            |
|                                         | Heating                        | A                  | 7.1                             | 8.0                             | 12.0                            | 14.0                            |
| Max Power input                         | Cooling                        | W                  | 1600                            | 1800                            | 2500                            | 2800                            |
|                                         | Heating                        | W                  | 1600                            | 1800                            | 2500                            | 2700                            |
| Refrigerating&Fan System                |                                |                    |                                 |                                 |                                 |                                 |
| Refrigerant/Charge                      |                                | kg                 | R32/0.400                       | R32/0.460                       | R32/0.670                       | R32/1.040                       |
| Compressor                              | Type                           |                    | Rotary                          | Rotary                          | Rotary                          | Rotary                          |
|                                         | Model                          |                    | KSK82D22UEZA31                  | KSK82D22UEZA31                  | GSD113RKQF6JV6B                 | C-1RZ140H3CBF                   |
|                                         | Brand                          |                    | GMCC                            | GMCC                            | HIGHLY                          | SANYO                           |
| Expansion device                        |                                |                    | Capillary tube                  | Capillary tube                  | Capillary tube                  | Capillary tube                  |
| Indoor air circulation(Cooling/Heating) |                                | m³/h               | 460/500                         | 500/550                         | 800/800                         | 1000/1000                       |
| Indoor fan motor                        | type                           |                    | Cross flow 22001-000532         | Cross flow 22001-000532         | Cross flow 22001-000562         | Cross flow 22001-000240         |
|                                         | Output                         | W                  | 16                              | 16                              | 25                              | 45                              |
|                                         | Capacitor                      | uF                 | 1.5                             | 1.5                             | /                               | /                               |
| Indoor fan speed H/M/L                  | Cooling                        | rpm                | 1250/1150/1050/950/850/750/600  | 1280/1200/1100/1000/900/800/700 | 1400/1260/1150/1050/960/870/800 | 1400/1260/1150/1050/960/870/800 |
|                                         | Heating                        | rpm                | 1250/1150/1080/1000/920/820/750 | 1150/1080/1020/950/900/820/750  | 1300/1200/1100/1000/900/800/750 | 1300/1200/1100/1000/900/800/750 |
|                                         | Dry                            | rpm                | 750                             | 800                             | 870                             | 870                             |
|                                         | Sleep                          | rpm                | 750/820                         | 800/820                         | 870/800                         | 870/800                         |
|                                         |                                |                    |                                 |                                 |                                 |                                 |
| Evaporator                              | a.Number of rows               |                    | 1                               | 1                               | 2                               | 2                               |
|                                         | c.Fin spacing                  | mm                 | 1.3                             | 1.3                             | 1.4                             | 1.4                             |
|                                         | e.tube outside dia.and type    | mm                 | Φ7,innergroove tube             | Φ7,innergroove tube             | Φ7,innergroove tube             | Φ7,innergroove tube             |
| Outdoor fan motor                       | type                           |                    | Propeller 22001-000552          | Propeller 22001-000552          | Propeller 22001-000555          | Propeller 22001-000493          |
|                                         | Output                         | W                  | 25                              | 25                              | 33                              | 33                              |
|                                         | Capacitor                      | uF                 | 2.0                             | 2.0                             | /                               | /                               |
|                                         | Speed                          | r/min              | 895                             | 895                             | 1000                            | 1000                            |
| Condenser                               | a.Number of rows               |                    | 1                               | 1                               | 1                               | 2                               |
|                                         | b.tube pitch(a) x row pitch(b) | mm                 | 21×18.2                         | 21×18.2                         | 21×18.2                         | 21×18.2                         |
|                                         | c.Fin spacing                  | mm                 | 1.2                             | 1.2                             | 1.1                             | 1.4                             |
|                                         | d.Fin type                     |                    | Corrugated                      | Corrugated                      | Corrugated                      | Corrugated                      |
|                                         | e.tube outside dia.and type    | mm                 | Φ7,innergroove tube             | Φ7,innergroove tube             | Φ7,innergroove tube             | Φ7,innergroove tube             |
| Connections                             |                                |                    |                                 |                                 |                                 |                                 |
| Connecting Pipe                         | Gas                            | mm                 | Φ9.52(3/8")                     | Φ9.52(3/8")                     | Φ9.52(3/8")                     | Φ12(1/2")                       |
|                                         | Liquid                         | mm                 | Φ6(1/4")                        | Φ6(1/4")                        | Φ6(1/4")                        | Φ6(1/4")                        |
| Connecting Wiring                       |                                | Core number x Size | 4×1.0                           | 4×1.0                           | 4×0.75                          | 4×0.75                          |
| Others                                  |                                |                    |                                 |                                 |                                 |                                 |
| Suitable area                           |                                | m²                 | 9-16                            | 15-23                           | 20-35                           | 27-45                           |
| Max. refrigerant pipe length            |                                | m                  | 15                              | 15                              | 15                              | 15                              |
| Max. difference in level                |                                | m                  | 5                               | 5                               | 5                               | 5                               |
| Operation temperature range             |                                | ℃                  | 16-31                           | 16-31                           | 16-31                           | 16-31                           |
| Ambient temperature range               | Outdoor                        | ℃                  | Cooling:0-53/Heating:-15-30     | Cooling:0-53/Heating:-15-30     | Cooling:0-53/Heating:-15-30     | Cooling:0-53/Heating:-15-30     |
|                                         | Indoor                         | ℃                  | Cooling:17-32/Heating:0-30      | Cooling:17-32/Heating:0-30      | Cooling:17-32/Heating:0-30      | Cooling:17-32/Heating:0-30      |
| Net dimensions (W x D x H)              | Indoor                         | mm                 | 698×255×190                     | 777×250×201                     | 910×294×206                     | 1010×315×220                    |
|                                         | Outdoor                        | mm                 | 712×276×459                     | 712×276×459                     | 795×305×549                     | 853×349×602                     |
| Net weight                              | Indoor                         | kg                 | 6.5                             | 7.5                             | 10                              | 12                              |
|                                         | Outdoor                        | kg                 | 19.5                            | 20                              | 24.5                            | 31                              |
| Packing dimensions (W x D x H)          | Indoor                         | mm                 | 764×325×257                     | 840×315×260                     | 979×372×277                     | 1096×390×297                    |
|                                         | Outdoor(w/o pipe)              | mm                 | 765×310×481                     | 765×310×481                     | 835×328×575                     | 890×385×628                     |
|                                         | Outdoor(w/i pipe)              | mm                 | 775×325×530                     | 775×325×530                     | 835×340×585                     | 890×385×628                     |
| Gross weight                            | Indoor                         | kg                 | 8.5                             | 9.5                             | 13                              | 14.5                            |
|                                         | Outdoor(w/o pipe)              | kg                 | 21                              | 21.5                            | 27.5                            | 33.5                            |
|                                         | Outdoor(w/i pipe)              | kg                 | 22                              | 22.5                            | 29                              | 35                              |
| Loading Capacity w/o pipe               |                                | 20'/40'GP/40'HQ    | 372                             | 355                             | 258                             | 196                             |
| Loading Capacity w/i pipe               |                                | 20'/40'GP/40'HQ    | 336                             | 320                             | 248                             | 196                             |