

CASSETTE FAN COIL UNITS



Air treatment

42GW

IDROFAN®

Options/accessories

- Two- or four-way valves
- Fresh air inlet
- Conditioned air to adjacent room kit
- Electric heater
- Auxiliary drain pan

Standard controls

Electronic thermostat

- 2 versions, A + B, with potentiometer
- Auto or manual 3-speed selection
- Automatic or manual change-over
- Electric heat control
- Comfort/economy/frost protection modes



HDB controller

- Digital display or infra-red terminal
- Unit grouping capability
- Adjustable settings and parameters
- Timer and daily scheduling



NTC communicating controller

- Network communication
- Aquasmart Evolution compatible
- IAQ and DCV management
- Motorised blinds & lighting control



Features

- Six sizes with integrated, factory-mounted cooling and heating coils, two-pipe or two-pipe with electric heater, and four-pipe applications, with an air flow range from 100 to 440 l/s, a cooling capacity range from 1.6 to 9 kW, and a heating capacity range from 2.2 to 16 kW.
- The 42GW_AC is available with a new-generation three-speed AC motor. The 42GW_LEC is available with a variable-speed Low Energy Consumption EC motor.
- Cassette chilled-water fan coil system designed for installation in false ceilings with an all-in-one air distribution grille integrated in the ceiling panel.
- Reliable and economical cooling and heating for light commercial applications, large offices, shops, restaurants, showrooms, lobbies and meeting rooms.
- Elegant air inlet grille, blends in with any room décor.
- The low-profile 42GW is light and easy to install. The small chassis fits neatly with standard ceiling tiles and is simple to install wherever it is needed.
- Four-way air distribution gives individual comfort while for localised control each diffuser may be adjusted or even shut down completely.
- The 42GW units were designed for extremely quiet operation with sound levels that set new comfort standards. The new design of the centrifugal fan and the fan/motor assembly ensures extra-quiet operation.
- The standard filter for the Idrofan cassette range has a pleated filtration surface, resulting in a 87% larger surface than a conventional filter.
- The special design of the diffuser ensures rapid blending of the supply and room air. Conditioned air is directed along the ceiling then evenly distributed throughout the room. Return air enters the cassette through a large grille.
- High-performance autonomous condensate drain pump encased in a special sound-insulating material for improved fast and quiet condensate removal
- Easy maintenance with direct access from below to all main components.

Physical and electrical data, units with AC motors

| 42GW | 200C | | | 300C | | | 400C | | | 500C | | | 600C | | | 700C*** | | | |
|--|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|-------|------|---------|-------|------|------|
| Coil type | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | |
| Fan speed* | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | |
| Air flow | l/s | 183 | 125 | 100 | 204 | 140 | 89 | 249 | 173 | 134 | 272 | 199 | 147 | 321 | 229 | 139 | 443 | 299 | 166 |
| Cooling mode | | | | | | | | | | | | | | | | | | | |
| Total cooling capacity | kW | 2.40 | 1.80 | 1.55 | 4.00 | 2.90 | 1.90 | 4.70 | 3.50 | 2.85 | 6.30 | 4.50 | 3.40 | 7.20 | 5.50 | 3.70 | 9.60 | 6.60 | 4.05 |
| Sensible cooling capacity | kW | 2.01 | 1.49 | 1.31 | 3.10 | 2.20 | 1.41 | 3.70 | 2.70 | 2.10 | 4.80 | 3.60 | 2.70 | 5.50 | 4.10 | 2.70 | 7.35 | 4.85 | 3.00 |
| Water flow rate | l/s | 0.11 | 0.09 | 0.07 | 0.19 | 0.14 | 0.09 | 0.22 | 0.17 | 0.14 | 0.30 | 0.22 | 0.16 | 0.34 | 0.26 | 0.18 | 0.46 | 0.32 | 0.19 |
| | l/h | 413 | 310 | 267 | 688 | 499 | 327 | 808 | 602 | 490 | 1084 | 774 | 585 | 1238 | 946 | 636 | 1651 | 1135 | 697 |
| Water pressure drop | kPa | 11.1 | 6.5 | 4.9 | 11.0 | 6.2 | 2.9 | 14.7 | 8.6 | 6.0 | 23.3 | 13.6 | 8.7 | 11.6 | 7.0 | 3.4 | 19.8 | 9.9 | 4.0 |
| Heating mode | | | | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 3.20 | 2.50 | 2.20 | 5.00 | 4.00 | 2.50 | 6.20 | 4.60 | 3.70 | 8.11 | 6.00 | 4.50 | 10.00 | 7.40 | 4.60 | 13.00 | 9.30 | 5.20 |
| Water pressure drop | kPa | 10.9 | 5.6 | 4.0 | 11.1 | 5.2 | 1.9 | 16.2 | 8.1 | 5.0 | 18.1 | 10.1 | 6.2 | 10.5 | 6.6 | 3.3 | 17.3 | 9.1 | 3.9 |
| Water content | l | 0.55 | | | 1.1 | | | 1.1 | | | 1.6 | | | 2.4 | | | 2.4 | | |
| Sound power level | dB(A) | 47 | 37 | 32 | 52 | 44 | 32 | 57 | 48 | 42 | 47 | 40 | 34 | 53 | 46 | 37 | 61 | 52 | 40 |
| Sound pressure level** | dB(A) | 38 | 28 | 23 | 43 | 35 | 23 | 48 | 39 | 33 | 38 | 31 | 25 | 44 | 37 | 28 | 52 | 43 | 31 |
| Power input | W | 58 | 35 | 25 | 54 | 32 | 16 | 94 | 55 | 35 | 63 | 39 | 27 | 85 | 59 | 33 | 185 | 130 | 60 |
| Current input | A | 0.27 | 0.17 | 0.12 | 0.24 | 0.14 | 0.07 | 0.41 | 0.24 | 0.16 | 0.30 | 0.17 | 0.12 | 0.46 | 0.27 | 0.14 | 0.85 | 0.58 | 0.26 |
| Eurovent energy class FCEER/FCCOP | D/D | | | | C/C | | | D/D | | | C/C | | | C/C | | | D/D | | |
| Electric heater (high capacity) | W | 1500 | | | 2500 | | | 2500 | | | 3000 | | | 3000 | | | 3000 | | |
| Current input (high capacity) | A | 6.3 | | | 10.4 | | | 10.4 | | | 12.5 | | | 12.5 | | | 12.5 | | |

| 42GW | 200D | | | 300D | | | 400D | | | 600D | | | 700D | | | |
|--|---------|------|------|---------|------|------|---------|------|------|---------|-------|------|---------|-------|-------|------|
| Coil type | 4 pipes | | | 4 pipes | | | 4 pipes | | | 4 pipes | | | 4 pipes | | | |
| Fan speed* | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | |
| Air flow | l/s | 183 | 125 | 100 | 204 | 140 | 89 | 249 | 173 | 134 | 321 | 229 | 139 | 443 | 299 | 166 |
| Cooling mode | | | | | | | | | | | | | | | | |
| Total cooling capacity | kW | 2.20 | 1.65 | 1.45 | 3.50 | 2.70 | 2.00 | 4.10 | 3.25 | 2.60 | 6.70 | 5.00 | 3.00 | 9.10 | 6.80 | 3.80 |
| Sensible cooling capacity | kW | 2.00 | 1.48 | 1.27 | 2.70 | 2.10 | 1.50 | 3.30 | 2.60 | 2.05 | 5.10 | 3.80 | 2.20 | 7.10 | 5.20 | 2.70 |
| Water flow rate | l/s | 0.11 | 0.08 | 0.07 | 0.17 | 0.13 | 0.10 | 0.20 | 0.16 | 0.12 | 0.32 | 0.24 | 0.14 | 0.43 | 0.32 | 0.18 |
| | l/h | 378 | 284 | 249 | 602 | 464 | 344 | 705 | 559 | 447 | 1152 | 860 | 516 | 1565 | 1170 | 654 |
| Water pressure drop | kPa | 13.7 | 8.2 | 6.6 | 10.1 | 6.6 | 4.0 | 13.1 | 8.9 | 6.2 | 23.2 | 14.1 | 5.9 | 39.0 | 23.8 | 8.9 |
| Water content | l | 0.4 | | | 1.1 | | | 1.1 | | | 2.4 | | | 2.4 | | |
| Heating mode | | | | | | | | | | | | | | | | |
| Heating capacity | kW | 1.90 | 1.44 | 1.24 | 6.37 | 5.10 | 3.60 | 6.80 | 5.80 | 5.00 | 11.50 | 8.90 | 6.00 | 16.00 | 11.50 | 7.30 |
| Water flow rate | l/s | 0.05 | 0.03 | 0.03 | 0.15 | 0.12 | 0.09 | 0.16 | 0.14 | 0.12 | 0.27 | 0.21 | 0.14 | 0.38 | 0.27 | 0.17 |
| | l/h | 163 | 124 | 107 | 548 | 439 | 310 | 585 | 499 | 430 | 989 | 765 | 516 | 1376 | 989 | 628 |
| Water pressure drop | kPa | 31.4 | 21.1 | 17.0 | 25.5 | 16.1 | 7.8 | 29.2 | 21.0 | 15.4 | 13.6 | 8.9 | 4.6 | 23.4 | 13.6 | 6.4 |
| Water content | l | 0.1 | | | 0.6 | | | 0.6 | | | 1.2 | | | 1.2 | | |
| Sound power level | dB(A) | 47 | 37 | 32 | 54 | 45 | 33 | 57 | 48 | 42 | 53 | 46 | 37 | 61 | 52 | 40 |
| Sound pressure level** | dB(A) | 38 | 28 | 23 | 45 | 36 | 24 | 48 | 39 | 33 | 44 | 37 | 28 | 52 | 43 | 31 |
| Power input | W | 58 | 35 | 25 | 54 | 32 | 16 | 94 | 55 | 35 | 85 | 59 | 33 | 185 | 130 | 60 |
| Current input | A | 0.27 | 0.17 | 0.12 | 0.24 | 0.14 | 0.07 | 0.41 | 0.24 | 0.16 | 0.46 | 0.27 | 0.14 | 0.85 | 0.58 | 0.26 |
| Eurovent energy class FCEER/FCCOP | E/E | | | | C/B | | | D/C | | | C/B | | | D/C | | |

Based on Eurovent conditions:

Cooling mode (2 and 4-pipe coil): entering air temperature 27°C db/19°C wb, entering/leaving water temperature 7/12°C, high fan speed.

Heating mode (2-pipe coil): entering air temperature 20°C, entering water temperature 50°C, high fan speed, water flow rate as cooling mode.

Heating mode (4-pipe coil): entering air temperature 20°C, entering water temperature 70°C, high fan speed, water Δt = 10 K

* Fan speeds: 1 = high, 2 = medium, 3 = low

** Sound pressure level and NR values are based on a hypothetical sound attenuation for the room of -9 dB(A).

Note: Electrical heater version is available on all 2-pipe units.

Physical and electrical data, units with LEC motors

Note: All other data is the same as for the units with AC motors

| 42GW | 209C | | | 309C | | | 409C | | | 509C | | | 609C | | | 709C | | | |
|--|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|------|
| Coil type | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | 2 pipes | | | |
| Voltage (d.c.) | V | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 |
| Air flow | l/s | 183 | 125 | 100 | 204 | 140 | 89 | 249 | 173 | 134 | 272 | 199 | 147 | 321 | 229 | 139 | 443 | 299 | 166 |
| Power input | W | 23 | 10 | 7 | 33 | 14 | 7 | 57 | 23 | 13 | 25 | 12 | 7 | 46 | 23 | 9 | 115 | 40 | 11 |
| Current input | A | 0.19 | 0.10 | 0.08 | 0.27 | 0.13 | 0.08 | 0.46 | 0.20 | 0.12 | 0.23 | 0.12 | 0.08 | 0.40 | 0.22 | 0.10 | 0.89 | 0.35 | 0.12 |
| Eurovent energy class FCEER/FCCOP | A/A | | | | A/A | | | B/B | | | A/A | | | A/A | | | A/A | | |

| 42GW | 209D | | | 309D | | | 409D | | | 609D | | | 709D | | | |
|--|---------|------|------|---------|------|------|---------|------|------|---------|------|------|---------|------|------|------|
| Coil type | 4 pipes | | | 4 pipes | | | 4 pipes | | | 4 pipes | | | 4 pipes | | | |
| Voltage (d.c.) | V | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 | 10 | 6 | 2 |
| Air flow | l/s | 183 | 125 | 100 | 204 | 140 | 89 | 249 | 173 | 134 | 321 | 229 | 139 | 443 | 299 | 166 |
| Power input | W | 23 | 10 | 7 | 32 | 14 | 7 | 57 | 22 | 13 | 46 | 23 | 9 | 115 | 40 | 11 |
| Current input | A | 0.19 | 0.10 | 0.08 | 0.29 | 0.14 | 0.08 | 0.46 | 0.21 | 0.12 | 0.40 | 0.22 | 0.10 | 0.89 | 0.35 | 0.12 |
| Eurovent energy class FCEER/FCCOP | B/B | | | | A/A | | | B/A | | | A/A | | | A/A | | |

Dimensions and weights

| All units | 42GW 200/209 | 42GW 300/309 | 42GW 400/409 | 42GW 500/509 | 42GW 600/609 | 42GW 700/709 |
|-------------------------------|--------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| Dimensions (H x L x D) | mm | 298 x 569/627 x 569/627 | 298 x 569/627 x 569/627 | 298 x 569/627 x 569/627 | 302 x 822/879 x 822/879 | 302 x 822/879 x 822/879 |
| Grille dimensions (H x L x D) | mm | 36 x 720 x 720 | 36 x 720 x 720 | 36 x 720 x 720 | 37 x 960 x 960 | 37 x 960 x 960 |
| Weight unit/weight grille | kg | 14.8/3 | 16.5/3 | 16.5/3 | 37/5 | 39.6/5 |

Where two values are given the second value applies to units with two or four-way valves.