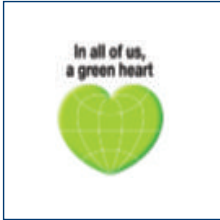


Air-cooled chillers

EUWA*030-095CZ6Y - EUWY*030-095CZ6Y
Applied systems





Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues.

For several years Daikin has had the intention to become a leader in the provision of environmental friendly products. This challenge demands the eco design and development of a wide range of products and an energy management system; which involves energy conservation and reduction of waste.



Flexible application *and easy installation*

11 cooling only (62kW - 265kW) and heat pump (cooling 60kW - 250kW and heating 58kW - 252kW) models are available.

3 different modular design options:

- with hydraulic module
- with hydraulic module and buffer tank
- without hydraulic components

The integrated hydraulic module features all necessary components: pump, expansion vessel, valves, electronic flow switch, pressure gauge, relief valve, strainer. Thanks to these built-in components, installation is easy and you will make considerable savings using any available space on the ground or rooftop, avoiding the use of a dedicated technical room.

Sound

Noise suppression - an important factor of everyday life - is afforded high priority by Daikin. The new scroll chillers come in 2 versions: standard and low noise (sound reduction of 5dBA). Particular attention has been given to any component that can generate noise or vibration:

- compressors are insulated and separated from air flow in order to avoid airborne noise.
- condenser coil heat exchange surface has been optimised
- fan especially designed to improve air flow
- strict design requirements of piping, chassis and panels
- piping has been designed as to minimise vibration transmission

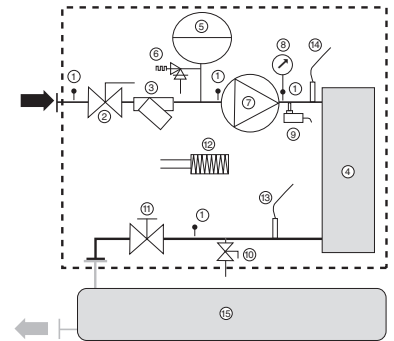




3 different *design options* EUWA*-CZ/EUWY*-CZ (B/P/N)

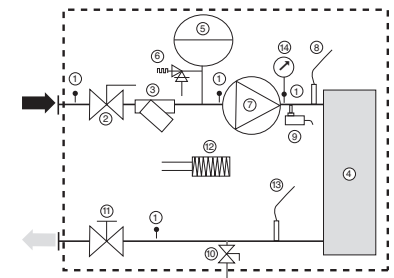
B

B-type: = EUWAB-CZ
EUWYB-CZ



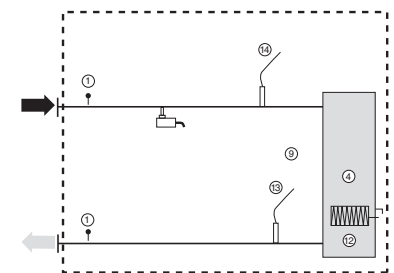
P

P-type: = EUWAP-CZ
EUWYP-CZ



N

N-type: = EUWAN-CZ
EUWYN-CZ



1. Pressure port for water gauge
2. Shut off ball valve
3. Water strainer
4. Evaporator
5. Expansion vessel
6. Relief valve
7. Pump (single or dual)
8. Removable water gauge
9. Electronic flow control
10. Filling and drain valve
11. Balancing valve
12. Freeze protection
13. Leaving water temperature sensor
14. Return water temperature sensor
15. Buffer tank

EUWA*-CZ6Y

| | | | 030 | 035 | 040 | 045 | 049 | 050 |
|------------------------------|-----------------------------|-------------------|--|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nominal capacity | cooling | kW | 62.2 | 75.5 | 102 | 120.8 | 131.3 | 128.1 |
| Nominal input | cooling | kW | 24.7 | 29.2 | 39.5 | 44.6 | 52.5 | 49.9 |
| EER | | | 2.52 | 2.59 | 2.58 | 2.71 | 2.51 | 2.57 |
| Capacity steps | | | 2 | 2 | 2 | 2 | 2 | 4 |
| Water heat exchanger | type | | Braze plate heat exchanger | | | | | |
| | qty | | 1 | 1 | 1 | 1 | 1 | 1 |
| Refrigerant circuit | type | | R-407C | | | | | |
| | charge | kg | 18 | 21 | 24 | 28 | 28 | 19/19 |
| | oil charge | l | 10.4 | 13.2 | 17 | 10.6 | 11.8 | 10.4 x 2 |
| Compressor | type | | Hermetically sealed scroll | | | | | |
| | No. of circuits/compressors | | 1/2 | 1/2 | 1/3 | 1/2 | 1/2 | 2/4 |
| Air flow rate | | m ³ /h | 19,100 | 26,300 | 37,300 | 37,100 | 37,100 | 38,300 |
| Air heat exchanger | type | | coated aluminium fins with black epoxy coating | | | | | |
| Pressure drop | | kPa | 32 | 36 | 49 | 47 | 53 | 37 |
| Nominal static height (unit) | B / P-unit | kPa | 179 | 172 | 137 | 180 | 170 | 199 |
| Expansion tank | | l | 25 | 25 | 25 | 25 | 25 | 35 |
| Buffer tank | volume | l | 370 | 410 | 410 | 410 | 410 | 570 |
| | height | mm | 400 | 400 | 400 | 400 | 400 | 400 |
| | additional shipping weight | kg | 396 | 437 | 436 | 436 | 436 | 644 |
| Dimensions | H (without buffer tank) | mm | 1,897 | 1,897 | 2,074 | 2,074 | 2,074 | 1,897 |
| | W | mm | 2,800 | 3,200 | 3,200 | 3,200 | 3,200 | 3,400 |
| | D | mm | 1,100 | 1,100 | 1,100 | 1,100 | 1,100 | 2,300 |
| Operation weight | without hydraulic module | kg | 842 | 968 | 1,143 | 1,267 | 1,292 | 1,623 |
| | with hydraulic module | kg | 945 | 1,076 | 1,251 | 1,375 | 1,400 | 1,733 |
| Sound power | | dB(A) | 85 | 86 | 87 | 87 | 87 | 88 |
| Casing | material | | powder painted galvanised steel plate | | | | | |
| | colour | | RAL9002 | | | | | |
| Piping connections | | | ISO R7 - 2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" |
| Operation range | air side | °C | -10 ~ 42°C (-18°C as option) | | | | | |
| | water side | °C | -12°C ~ 12°C | | | | | |
| Power supply | | W1 | 3~ /400V/50Hz | | | | | |

EUWA*-CZ6Y

| | | | 060 | 070 | 080 | 090 | 095 |
|------------------------------|-----------------------------|-------------------|--|-------------|-------------|-------------|-------------|
| Nominal capacity | cooling | kW | 156 | 181.7 | 212.7 | 239.6 | 265.3 |
| Nominal input | cooling | kW | 59 | 69.5 | 79.4 | 90 | 101.2 |
| EER | | | 2.64 | 2.61 | 2.68 | 2.66 | 2.62 |
| Capacity steps | | | 4 | 4 | 4 | 4 | 4 |
| Water heat exchanger | type | | Braze plate heat exchanger | | | | |
| | qty x model | | 1 | 1 | 1 | 1 | 1 |
| Refrigerant circuit | type | | R-407C | | | | |
| | charge | kg | 22/22 | 27/27 | 27/27 | 34/34 | 31/31 |
| | oil charge | l | 13.2 x 2 | 14.2 x 2 | 17.2 x 2 | 19.8 x 2 | 11.8 x 2 |
| Compressor | type | | hermetically sealed scroll | | | | |
| | No. of circuits/compressors | | 2/4 | 2/6 | 2/6 | 2/6 | 2/4 |
| Air flow rate | | m ³ /h | 52,700 | 55,400 | 86,300 | 83,000 | 79,300 |
| Air heat exchanger | type | | coated aluminium fins with black epoxy coating | | | | |
| Pressure drop | | kPa | 45 | 37 | 44 | 44 | 53 |
| Nominal static height (unit) | B / P-unit | kPa | 177 | 189 | 164 | 128 | 115 |
| Expansion tank | | l | 35 | 35 | 35 | 35 | 35 |
| Buffer tank | volume | l | 570 | 570 | 570 | 570 | 570 |
| | height | mm | 400 | 400 | 400 | 400 | 400 |
| | additional shipping weight | kg | 644 | 644 | 644 | 644 | 644 |
| Dimensions | H (without buffer tank) | mm | 1,897 | 2,100 | 2,100 | 2,100 | 2,100 |
| | W | mm | 3,400 | 3,400 | 3,400 | 3,400 | 3,400 |
| | D | mm | 2,300 | 2,300 | 2,300 | 2,300 | 2,300 |
| Operation weight | without hydraulic module | kg | 1,818 | 2,087 | 2,245 | 2,423 | 2,456 |
| | with hydraulic module | kg | 1,928 | 2,201 | 2,359 | 2,612 | 2,645 |
| Sound power | | dB(A) | 89 | 89 | 94 | 95 | 95 |
| Casing | material | | powder painted galvanised steel plate | | | | |
| | colour | | RAL9002 | | | | |
| Piping connections | | | ISO R7 - 2 1/2" | ISO R7 - 3" | ISO R7 - 3" | ISO R7 - 3" | ISO R7 - 3" |
| Operation range - air side | | °C | -10 ~ 42°C (-18°C as option) | | | | |
| Operation range - water side | | °C | -12°C ~ 12°C | | | | |
| Power supply | | | 3~ /400V/50Hz | | | | |

EUWY*-CZ6Y

| | | | 030 | 035 | 040 | 045 | 049 | 050 |
|------------------------------|-----------------------------|-------|---|-----------------|-----------------|-----------------|-----------------|-----------------|
| Nominal capacity | cooling | kW | 60.5 | 73.2 | 93.8 | 115.5 | 123.9 | 125.2 |
| | heating | kW | 57.8 | 70.5 | 96.3 | 115.5 | 123.9 | 115.6 |
| Nominal input | cooling | kW | 25.6 | 30.5 | 40.6 | 43.7 | 51.7 | 51.8 |
| | heating | kW | 23.1 | 27.9 | 38.1 | 42.5 | 45.9 | 46.4 |
| EER | | | 2.36 | 2.4 | 2.31 | 2.64 | 2.4 | 2.42 |
| COP | | | 2.5 | 2.53 | 2.53 | 2.72 | 2.7 | 2.49 |
| Capacity steps | | | 2 | 2 | 2 | 2 | 2 | 4 |
| Water heat exchanger | type | | Brased plate heat exchanger | | | | | |
| | qty | | 1 | 1 | 1 | 1 | 1 | 1 |
| Refrigerant circuit | type | | R-407C | | | | | |
| | charge | kg | 18 | 21 | 24 | 28 | 28 | 19/19 |
| | oil charge | l | 10.4 | 13.2 | 17 | 10.6 | 11.8 | 10.4 x 2 |
| Compressor | type | | hermetically sealed scroll | | | | | |
| | No. of circuits/compressors | | 1/2 | 1/2 | 1/3 | 1/2 | 1/2 | 2/4 |
| Air flow rate | | m3/h | 19,100 | 26,300 | 37,300 | 37,100 | 37,100 | 38,300 |
| Air heat exchanger | type | | coated aluminium fins with black epoxy coating | | | | | |
| Pressure drop | cooling/heating | kPa | 32 | 36 | 49 | 47 | 53 | 37 |
| Nominal static height (unit) | B / P-unit | kPa | 179 | 172 | 137 | 180 | 170 | 199 |
| Expansion tank | | l | 25 | 25 | 25 | 25 | 25 | 35 |
| Buffer tank | volume | l | 370 | 410 | 410 | 410 | 410 | 570 |
| | height | mm | 400 | 400 | 400 | 400 | 400 | 400 |
| | additional shipping weight | kg | 396 | 437 | 436 | 436 | 436 | 644 |
| Dimensions | H (without buffer tank) | mm | 1,897 | 1,897 | 2,074 | 2,074 | 2,074 | 1,897 |
| | W | mm | 2,800 | 3,200 | 3,200 | 3,200 | 3,200 | 3,400 |
| | D | mm | 1,100 | 1,100 | 1,100 | 1,100 | 1,100 | 2,300 |
| Operation weight | without hydraulic module | kg | 870 | 996 | 1,182 | 1,302 | 1,331 | 1,677 |
| | with hydraulic module | kg | 973 | 1,104 | 1,290 | 1,410 | 1,439 | 1,787 |
| Sound power | | dB(A) | 85 | 86 | 87 | 87 | 87 | 88 |
| Casing | material | | powder painted galvanised steel plate | | | | | |
| | colour | | RAL9002 | | | | | |
| Piping connections | | | ISO R7 - 2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" | ISO R7 - 2 1/2" |
| Operation range - air side | | °C | COOLING: -10 ~ 42°C (-18°C as option) - HEATING: -10°C ~ 20°C | | | | | |
| Operation range - water side | | °C | COOLING: -12°C ~ 12°C - HEATING: 25°C ~ 50°C | | | | | |
| Power supply | | W1 | 3 ~ /400V/50Hz | | | | | |

EUWY*-CZ6Y

| | | | 060 | 070 | 080 | 090 | 095 | |
|------------------------------|-----------------------------|-------|---|-------------|-------------|-------------|-------------|--|
| Nominal capacity | cooling | kW | 152.1 | 166.5 | 194.0 | 219.4 | 250.0 | |
| | heating | kW | 141.1 | 166.8 | 192.7 | 213.5 | 251.6 | |
| Nominal input | cooling | kW | 61.7 | 70.6 | 79.3 | 91.4 | 105.9 | |
| | heating | kW | 56.3 | 65.2 | 78.1 | 86.2 | 93.8 | |
| EER | | | 2.47 | 2.36 | 2.45 | 2.4 | 2.36 | |
| COP | | | 2.51 | 2.56 | 2.47 | 2.48 | 2.68 | |
| Capacity steps | | | 4 | 4 | 4 | 4 | 4 | |
| Water heat exchanger | type | | Brased plate heat exchanger | | | | | |
| | qty x model | | 1 | 1 | 1 | 1 | 1 | |
| Refrigerant circuit | type | | R-407C | | | | | |
| | charge | kg | 22/22 | 27/27 | 27/27 | 34/34 | 31/31 | |
| | oil charge | l | 13.2 x 2 | 14.2 x 2 | 17.2 x 2 | 19.8 x 2 | 11.8 x 2 | |
| Compressor | type | | hermetically sealed scroll | | | | | |
| | No. of circuits/compressors | | 2/4 | 2/6 | 2/6 | 2/6 | 2/4 | |
| Air flow rate | | m3/h | 52,700 | 55,400 | 86,300 | 83,000 | 79,300 | |
| Air heat exchanger | type | | coated aluminium fins with black epoxy coating | | | | | |
| Pressure drop | cooling/heating | kPa | 45 | 37 | 44 | 44 | 53 | |
| Nominal static height (unit) | B / P-unit | kPa | 177 | 189 | 164 | 128 | 115 | |
| Expansion tank | | l | 35 | 35 | 35 | 35 | 35 | |
| Buffer tank | volume | l | 570 | 570 | 570 | 570 | 570 | |
| | height | mm | 400 | 400 | 400 | 400 | 400 | |
| | additional shipping weight | kg | 644 | 644 | 644 | 644 | 644 | |
| Dimensions | H (without buffer tank) | mm | 1,897 | 2,100 | 2,100 | 2,100 | 2,100 | |
| | W | mm | 3,400 | 3,400 | 3,400 | 3,400 | 3,400 | |
| | D | mm | 2,300 | 2,300 | 2,300 | 2,300 | 2,300 | |
| Operation weight | without hydraulic module | kg | 1,872 | 2,166 | 2,324 | 2,502 | 2,535 | |
| | with hydraulic module | kg | 1,982 | 2,280 | 2,438 | 2,691 | 2,724 | |
| Sound power | | dB(A) | 89 | 89 | 94 | 95 | 95 | |
| Casing | material | | powder painted galvanised steel plate | | | | | |
| | colour | | RAL9002 | | | | | |
| Piping connections | | | ISO R7 - 2 1/2" | ISO R7 - 3" | ISO R7 - 3" | ISO R7 - 3" | ISO R7 - 3" | |
| Operation range - air side | | °C | COOLING: -10 ~ 42°C (-18°C as option) - HEATING: -10°C ~ 20°C | | | | | |
| Operation range - water side | | °C | COOLING: 0 ~ 12°C (-12°C as option)- HEATING: 25°C ~ 50°C | | | | | |
| Power supply | | | 3 ~ /400V/50Hz | | | | | |

| Option Number | Option description | | unit size | | | | | | | | | | | | | | | |
|---------------|------------------------------|--------------------------------------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|---|---|---|
| | | | 030 | 035 | 040 | 045 | 049 | 050 | 060 | 070 | 080 | 090 | 095 | | | | | |
| OPSTEK | Approval | STEK | | | | | | | | | | | | | | | | |
| OPLN | Low noise | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OPHP | Low ambient | -18°C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OPZH | Glycol application | 0 to -4°C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OPZL | | -4 to -12°C | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPCu | Copper condenser fins | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OPHF | Fan motor size up | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | |
| OPSPC | Hydraulic Module | Single pump contactor (only N model) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPTPC | | Twin pump contactor (only N model) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPTP | | Twin pump (only B/P model) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPAC | Communication Card | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPGA | Pressure Gauges | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPCG | Condenser protection grilles | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| OPSS | Soft Starter | | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | | 0 | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

Note : All options are factory mounted
Following options can not be combined:
OPLN + OPHF
OPHP + OPSS

Measuring *conditions*

1. Nominal cooling capacities are based on: evaporator 12°C/7°C • ambient 35°C
2. Nominal heating capacities are based on: ambient: 7°CDB/6°CWB; condenser: 40°C/50°C
3. The sound power level is an absolute value indicating the "power" which a sound source generates.

A range to rely on.

Scroll *compressor*

The heart of the unit is a hermetic scroll compressor, optimised for use with R-407C refrigerant and designed to the very highest technical standards.

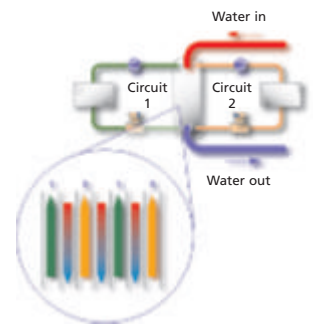
- fewer moving parts (64% less than reciprocating compressors)
- optimised suction, discharge and oil distribution
- decreased pressure losses
- high volumetric efficiencies
- excellent lubrication



Heat *exchanger*

The use of brased, stainless steel plate heat exchanger for the evaporator ensures maximum heat transfer between refrigerant & water circuits.

- only 1 evaporator for 2 refrigerant circuits
- counter flow design
- low water pressure drop
- more stable leaving water temperature
- better part load operation and less freezing risk at part load operation



The use of straight condenser coils results in an increased heat surface and thus higher ambient temperature limits. The straight coil has several advantages:

- interdependent fins for a better heat exchange
- constant fin spacing
- no air flow restriction
- easy to clean
- better resistance to corrosion
- better rigidity

Electronic *control*

- 6-key keypad along with liquid crystal display will allow the user to interact very simply with the system, and to quickly diagnose eventual problems
- weatherproof control panel, containing starters, power and control wiring, mounted on the chiller, and include primary and secondary fused control power transformer with 2 secondary control circuits
- power panel door locked by a main switch
- control of operating and safety parameters
- programmable features such as scheduled start/stop, water temperature reset
- remote starts/stop
- default signalling capabilities
- anti-freeze protection
- defrost control

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Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



Daikin units comply with the European regulations that guarantee the safety of the product.



Daikin Europe NV participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

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