



HIDEN Protocol

# INDOOR UNITS

## 'HIDEN' Series MVH

### Wall Split



NT-03A  
Included  
(CL95113)



#### TECHNICAL SPECIFICATIONS

Model			MVH-H22GDN1	MVH-H36GDN1	MVH-H56GDN1
Code			CL23840	CL23842	CL23844
Power supply		Ph / V / Hz	1N- / 220 - 240 / 50	1N- / 220 - 240 / 50	1N- / 220 - 240 / 50
Cooling <sup>(1)</sup>	Capacity	kW	2.2	3.6	5.6
	Power Consumption	W	15.0	18.0	23.0
Heating <sup>(2)</sup>	Capacity	kW	2.5	4.0	6.3
	Power Consumption	W	15.0	18.0	23.0
Fan	Type		DC	DC	DC
	Model		DR-310-13-8	DR-310-13-8	DR-310-30G-8
	Air flow rate	m³/h	440 / 380 / 360 / 350	500 / 440 / 415 / 380	720 / 645 / 580 / 560
	Sound pressure <sup>(3)</sup>	dB (A)	33 / 30 / 27 / 24	36 / 33 / 30 / 27	42 / 39 / 36 / 32
Indoor Unit	Dim. (W x H x D)	mm	864 x 300 x 200	864 x 300 x 200	1060 x 400 x 310
	Weight	kg	9.5	9.5	11.5
Drainage	Connection	mm	Ø 20	Ø 20	Ø 20
Refrigerant	Type		R410A	R410A	R410A
Design pressure	High	MPa	4.5	4.5	4.5
Refrigerant connexions	Liquid Line	mm	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Line	mm	9.53 (3/8")	12.7 (1/2")	12.7 (1/2")
Electrical connections <sup>(4)</sup>	Power wiring	mm²	2 x 2.5 + T (L < 20 m)		
	Signal wiring	mm²	3 x 0.75 (shielded)		

Note: <sup>(1)</sup> Nominal cooling conditions: Indoor 27 °C Dry Bulb, 19 °C Wet Bulb and outdoor 35 °C DB, 24 °C WB; for a pipe length of 8 m with no height difference.

<sup>(2)</sup> Nominal heating conditions: Indoor 20 °C DB, 15 °C WB and outdoor 7 °C DB, 6 °C WB, for a pipe length of 8 m with no height difference.

<sup>(3)</sup> Sound pressure level measured in a semi-anechoic chamber at 1 m frontal distance and 1.4 m high.

<sup>(4)</sup> Power wiring recommended for L < 20 m, for longer distances it should be calculated.

\* Data and specifications can be changed without previous notice.

More information on the options can be found in the "CONTROL SYSTEMS" section.

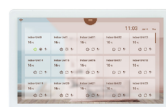
#### OPTIONALS

##### Wired control with WIFI



ZKX-C/T/A-06TW  
(CL09206)

##### Centralized controller WIFI



CPJ-JKQ-013  
(CL09310)

# Features Description

## Comfort



**WEEKLY TIMER**  
Sets the weekly operation of the unit.



**FOLLOW ME FUNCTION (IFEEL)**  
The remote control incorporates an ambient temperature sensor.



**AUTOMATIC RESTART**  
Recovery of the parameters before the electrical cut.



**EMERGENCY OPERATION**  
Possibility of manually operating the unit with the button in case of any alarms sounding.



**COLD AIR PRECAUTION**  
When heating, the initial fan speed is adjusted according to the battery temperature.



**TURBO OPERATION**  
Maximum reduction of the cooling/heating time.



**LOW SOUND LEVEL**  
Thanks to the Silence mode and its new design, the sound level is reduced to the minimum.



**TEMPERATURE COMPENSATION**  
The remote control allows you to adjust the compensation temperature for the heating and cooling mode.



**FRESH AIR (ION)**  
The equipment incorporates an ionizer to generate OH(-) and thus purify the air by deactivating bacteria, viruses and other contaminants in the environment, providing a very pleasant feeling of freshness.



**BREEZE AWAY**  
Function that allows the air flow to be diverted to another place to prevent the equipment from blowing directly on people.



**QUIETER OUTDOOR UNIT**  
Optimized design of air outlet grille with noise reduction of 3.3 dB(A) compared to previous models.



**WIDE WORKING RANGE**  
Cooling operation until 50 °C and -15 °C in heating.



**NIGHT MODE**  
Makes the unit operate according to the preset nighttime temperature curve, which creates an ideal nighttime environment and improves sleep quality.



**DAILY TIMER**  
The timer can be set to start and stop at any point in a 24-hour period.



**360° DESIGN**  
Thanks to the 360° panel design, the air is more evenly distributed.



**HORIZONTAL AND VERTICAL FLAP ROTATION**  
Better air distribution thanks to the flap's horizontal and vertical automatic swing.



**GEAR**  
Allows to set the equipment capacity to 50 %, 75 % or 100 % (default).



**COLD CATALYST FILTER**  
The equipment features a purifying filter that can absorb formaldehyde without needing ultra-violet light.



**SPRINT START**  
Like a sprinter, this function allows the compressor to reach 65 Hz in just 6 s.



**HUMIDITY CONTROL**  
In dehumidification mode, the relative humidity control can be set between 35 % and 85 %.



**VENTILATION FUNCTION**  
Allows operation with only ventilation.



**THERMOSTAT**  
It automatically maintains the set temperature.



**DEHUMIDIFICATION**  
Humidity reduction helps restore an optimum temperature in wet areas.



**MULTI-SPEED INDOOR FAN**  
The fan has up to 12 different speeds that are automatically adjusted if the automatic ventilation is activated.



**SILENCE**  
This function allows you to select the ultra-quiet speed, so that the sound level of the equipment is very low.



**CONTROL PANEL**  
A control panel is added to run the machine without any wireless remote control.



**DUAL AIR FLOW**  
Top and bottom air outlet. In cooling mode only the upper outlet works, and in heating mode both outlets work, thus heating from ground level.



**CORE GENIUS**  
The frequency of traditional Inverter equipment has a fluctuation of  $\pm 1$  °C of the ambient temperature during operation. However, with the new "CORE GENIUS" Inverter technology that adjusts 0.6 Hz for each step, the frequency variation of the Inverter is so smooth that the  $\pm 0.5$  °C fluctuation of the ambient temperature is not noticeable.



**INDIVIDUAL FLAP CONTROL**  
Possibility to adjust the angle of the 4 flaps independently.



**120°**  
The upper slat allows an adjustment at 120°.



**BACKLIT WALL CONTROL**  
The new KJR-120N wired wall controller features a backlit screen for easy reading.



**HEATING 8 °C**  
The unit automatically switches to heating mode when the ambient temperature is below 8 °C, thus preventing the room temperature from being too low when we are not at home.

## Connectivity



**WIFI**  
Possibility for the unit to be controlled via WIFI, through an APP.



**CENTRALIZED CONTROLLER**  
Possibility of controlling several units with the same controller.



**DOMOTICS**  
Possibility of connection with the main manufacturers of home automation systems (Consult).

## Energy efficiency



**ENERGY LABELLING FOR COOLING A+++**



**ENERGY LABELLING FOR HEATING A+++**



**ENERGY LABELLING FOR COOLING A++**



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**ENERGY LABELLING FOR COOLING A**



**ENERGY LABELLING FOR HEATING A**



**STANDBY FUNCTION (ONLY 1W IN STANDBY)**  
The outdoor unit is automatically disconnected from the power supply when the unit is in standby, that way the consumption in standby mode is only 1W.



**PRESENCE SENSOR**  
Detects inactivity (30 min) in the room to reduce the operating frequency and thus save energy.

## Refrigerant



**R410A**  
Equipment using refrigerant R410A with a GWP of 2088.



**R32**  
Equipment using the most environmentally friendly refrigerant R32 with a GWP of 675. In order to install equipment with R32 refrigerant gas, you must review the current legislation.



**R290**  
Equipment using the new refrigerant R290 which has a GWP of only 3.



## REMOVABLE FILTERS

New filter fastening system with tabs to ensure correct fastening without vibrations.



## OUTSIDE AIR INLET

Possibility of supplying outdoor air directly on the indoor unit.



## DRAINAGE PUMP

Incorporates drainage pump to facilitate the drainage of the indoor unit.



## REMINDER OF FILTER'S CLEANING

The equipment tells us when to clean and/or replace the air filter of the indoor unit.



## PIPE COMPATIBILITY

Possibility of increasing one size over the standard diameter in the gas or liquid pipe or both.



## DIGITAL LED DISPLAY

Equipment with a digital display showing the set temperature during normal operation or the ambient temperature in ventilation mode.



## LESS SCREWS

Both the indoor unit and the outdoor unit have less screws, to make the disassembly easier.



## REFRIGERANT LEAK DETECTION

The unit automatically detects the existence of possible leaks of refrigerant in the circuit.



## SELF-CLEANING

This function performs a self cleaning on the indoor unit. When the "SELF-CLEANING" function is activated (SelfClean or iClean buttons), the unit initially operates in cooling mode with the fan at low speed, during this period the condensation water drags the dust from the battery. The unit then switches to heating mode with the fan at low speed, to dry the battery and the inside of the unit. Finally the unit changes to ventilation mode to finish drying completely.



## ULTRA-REINFORCED MOUNTING PLATE

Reinforced mounting plate with measuring range and spirit level included.



## POWER SUPPLY ONLY TO OUTDOOR UNIT

The indoor unit is powered by the same interconnection cable with the outdoor unit.



## SINGLE-FAN OUTDOOR UNITS

Optimize outdoor space thanks to outdoor units with lower height.



## HIGH STATIC PRESSURE

Wide static pressure range.



## SET TEMPERATURES RANGE ADJUSTMENT

The remote control is able to adjust: minimum cooling from 16 °C up to 24 °C; maximum heating from 30 °C down to 25 °C.



## LEG IN U FORM

Thanks to the new back leg in the outdoor unit, the installation is easier.



## LOW VOLTAGE START

The equipment can start up and operate normally up to a supply voltage lower than the nominal voltage.



## PROBLEM SOLVING

Error codes are displayed on the indoor panel, on the wall control or on the outdoor PCB.



## REMOTE SIGNALS (CP)

The indoor unit has an ON/OFF input.



## CONFIGURABLE STATIC PRESSURE

From the PCB (or any model with the wireless or wired remote control) the static pressure of the fan can be adjusted, so that the machine can be adapted to each installation.



## CONFIGURABLE RETURN

The air intake can be set up either at the rear or at the bottom of the unit. By default, it is set up at the rear.



## TWIN FUNCTION (2x1)

Two indoor units can be connected to the same outdoor unit. Both indoor units will function identically as if they were one single unit. It is perfect for open rooms.



## REVERSE ROTATION

When the unit is stopped, the outdoor unit fan rotates backwards to remove leaves or other external elements from the coil.



## ROTATION & BACK UP

This function allows redundant operation in installations with 2 units connected to the same KJR-120N wired controller, in the event that one machine does not reach the set temperature, the two machines will automatically start operating together at 24 °C in the selected mode. At the same time a rotation in the operation of the 2 machines is carried out so that both machines operate for the same amount of time.



## AUTO ROUTING

The outdoor unit can assign addresses to the indoor units automatically.



## ENGINEERING MODE

Function adjustment and operating parameters query using the control.



## EXTRA FLAT DUCT

Indoor unit height between 200 and 300 mm.



## DELIVERY OUTLET TO ADJACENT ROOM

The unit has pre-drilled outlets for connecting a small duct to climatize an adjacent room.



## AIR DISCHARGE TUBE TO THE OUTSIDE

Easy and quick to install, it allows the use of the air conditioner immediately.



## CONDENSATE REMOVAL

Removes condensate water so it is not necessary to connect the air conditioner to a drain. In dehumidification mode and in very humid environments, it is recommended to connect the equipment to a drain.



## PANEL OF COMPACT SIZE

The grid panel of the cassette type unit measures 600x600 mm.



## GOLDEN FIN

Heat exchanger with special treatment, which protects the equipment against atmospheric phenomena and the effects of aggressive environments. It also prevents the proliferation of bacteria and mold.



## BLUE FIN

Heat exchanger with treatment that protects the equipment against corrosion and the growth of bacteria and mold.



## AUTOMATIC REFRIGERANT REFILL

Allows the system to be refilled with refrigerant gas without having to do any additional calculation.



## HORIZONTAL / VERTICAL

Equipment that can be installed in both horizontal and vertical position.



## META FUNCTION

Advanced air conditioning technology that optimizes temperature, refrigerant and air flow to save energy and maximize the comfort.

## Technology



## SUPER DC

Equipment that has both, DC Inverter compressor and DC fan motors.



## COOLING AT LOW TEMPERATURES

Cooling operation down to -15 °C outside.



## HEATING AT LOW TEMPERATURES

Heating operation down to -25 °C outside.



## CONSTANT AIR FLOW CONTROL

The indoor fan adjusts to the required static pressure to ensure a constant air supply at all times.



## DC

Unit with DC fan motor, low noise and low-energy consumption.



## EVI COMPRESSOR

High efficiency asymmetric scroll compressor with steam injection technology.



## 0-10V INPUT

Unit with DC fan motor with 0-10V regulation.



## 0-10V OUTPUT

Equipment with 0-10V output for the control of an auxiliary valve.



## 7 SPEED FAN

Unit with DC fan motor with 7 speeds.



## EXTERNAL FAN DIFFERENT SPEEDS

Accurate adjustment of fan speed thanks to the DC motor.



## EXV

Equipment with an electronic expansion valve that adjusts the capacity of the equipment in a more stable way.