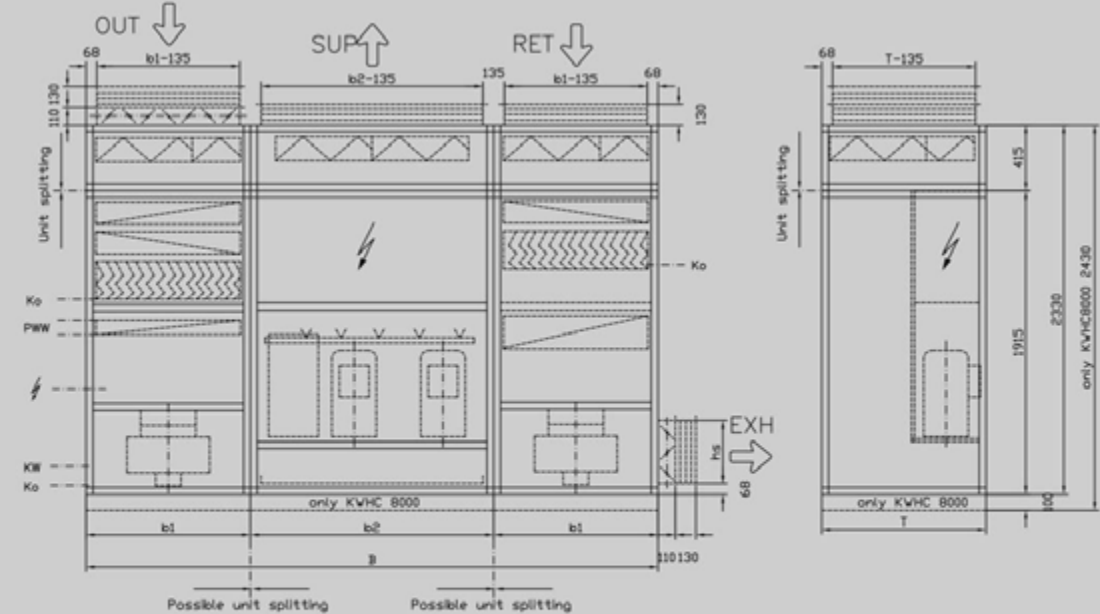


Let's talk about energy saving



Ko Drain connection DN40  
 PW PHW-in/out  
 KW Water for humidifier RJ/B\*  
 ⚡ Electr. connections



KWHC Energy		2000 ZA	4000 ZA	6000 ZA	8000 ZA
Width B	mm	2995	3245	3620	4370
b1	mm	790	915	1040	1290
b2	mm	1415	1415	1540	1790
Depth T	mm	790	790	1040	1040
flex.conn. hs	mm	310	310	410	410

# multiCOMPACT Energy

## Application

The compact unit is ready for installation, energy saving and designed for operation theatres, hygienic areas, intensive cares and other applications, where hygienic climate is required according to DIN 1946/4 or ON H6020 standard.

## Design

Frame design made of galvanized sheet-steel profiles RAL 5008 coated, corners made of PE. Casing panels in double wall construction made of galvanized steel, insulated with mineral wool. Inside RAL 9010 coated and sealed, outside coated in RAL 5012.

### Outside and supply air section consisting of:

- Filter section with cassette filter optional G4 till F7 incl. diff. pressure switch,
- Energy recovery section for heating and cooling with Cu/Al heat exchanger,
- Cooling section with Cu/Al heat exchanger as direct evaporator with drop eliminator,
- Heating section with Cu/Al heat exchanger, frost protection thermostat and control valve,
- Fan section with single inlet high efficiency radial fan, backward curved blades, without casing, incl. energy saving EC-motor and constant air volume control system,
- Humidifier section with electrical steam humidifier, steam distribution pipe and drain pain
- Filter section with cassette filter optional F8

or F9 incl. diff. pressure switch.

### Return and exhaust air section consisting of:

- Filter section with cassette filter G4 till F6 incl. diff. pressure switch,
- Energy recovery section for heating and cooling with Cu/Al heat exchanger, incl. drop eliminator,
- Condenser section with Cu/Al heat exchanger.
- Fan section with single inlet high efficiency radial fan, backward curved blades, without casing, incl. energy saving EC-motor and constant air volume control system.

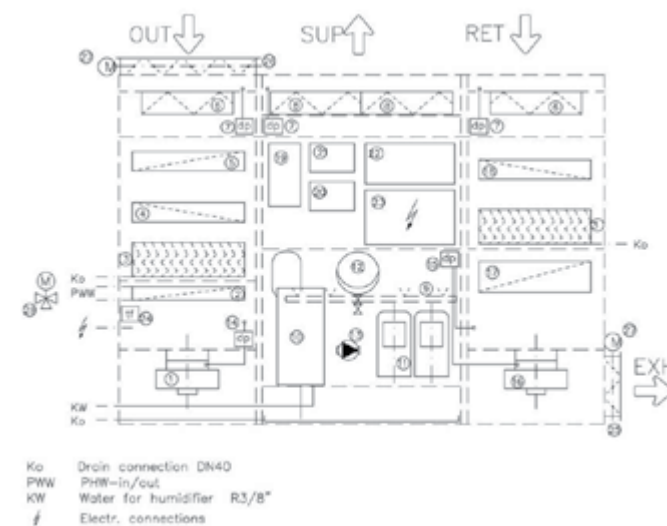
### Mechanical section consisting of:

- Compressor in Scroll-design for refrigerant R407C or R134a, including all necessary refrigeration accessories and safety devices
- Armature controls for heat recovery system with pump, expansion tank, pressure gauge and safety valve

### Electrical and control section consisting of:

- Digital control system for temperature and humidity, controller for humidifier and speed controller for supply and exhaust fans

**Applications without return/exhaust air sections but including external air cooled condenser, refrigeration circuit for R134a as well as external humidifier for the duct system on request!**



### Functional sketch KWHC Energy

- |  |  |
|--|--|
| 1 EC Supply air fan                      | 18 Energy recovery system exhaust air coil |
| 2 Heater PHW                             | 19 Humidifier controller                   |
| 3 Drip eliminator cassette               | 20 EC controller for supply fan            |
| 4 Evaporator                             | 21 EC controller for exhaust fan           |
| 5 Energy recovery system supply air coil | 22 Microprocessor control system           |
| 6 Filter G4... F6/F7                     | 23 Main and control circuits               |
| 7 Diff. pressure switch                  | 24 Frost protection thermostat             |
| 8 Filter F8...F9                         | 25 Damper (optional airtight)              |
| 9 Steam distributor                      | 26 Damper (optional airtight)              |
| 10 Steam humidifier                      | 27 Damper actuator                         |
| 11 Scroll compressor                     | 28 3-way-controlvalve                      |
| 12 Expansion tank                        |  |
| 13 Pump for ERS                          |  |
| 14 Diff. pressure sensor                 |  |
| 15 Diff. pressure sensor                 |  |
| 16 EC Exhaust air fan                    |  |
| 17 Condenser                             |  |

Unit	KWHC Energy	2000 ZA	4000 ZA	6000 ZA	8000 ZA	
Outside / Supply air volume	m³/h	2000	3500	6000	8000	
External static pressure max	Pa	800	800	800	800	
Fan motor power cons.	kW	1,4	2,3	4,2	5,5	
Pre filter		optional G4 ... F7				
Fine filter		optional F8 or F9				
Return / Exhaust air volume	m³/h	1800	3150	5400	7200	
External static pressure max	Pa	400	400	400	400	
Fan motor power cons.	kW	0,67	1,3	2,1	2,8	
Filter		optional G4 ... F6				
Energy recovery heating <sup>1</sup>	kW	11,6	17,9	30,6	39,7	
Energy recovery cooling <sup>2</sup>	kW	1,8 / 2,7	2,8 / 4,3	4,8 / 7,3	6,4 / 9,6	
Pump motor capacity	kW	0,41	0,41	0,59	0,59	
Cooling capacity <sup>2</sup>	kW	10,6	19,6	33,2	46,2	
Compressor power cons. <sup>2</sup>	kW	4,3	7,3	12,5	2 x 8,8	
Refrigerant		R407C optional R134a				
Heating capacity PHW <sup>3</sup>	kW	22,4	39,2	67,1	89,5	
Heating media	°C	PHW 80/60				
Humidifying capacity	kg/h	15	23	45	65	
Power consumption	kW	11,4	17,5	34,2	49,4	
Power supply		3 x 400 V / 50 Hz				
Electrical power consumption	kVA	25,6	38,1	69,9	99,1	
Dimensions	Width	mm	2995	3245	3620	4370
	Depth	mm	790	790	1040	1040
	Height	mm	2330	2330	2330	2430
Weight approx.	kg	1050	1300	1900	2200	

**Techn. Datas are subject to change without prior notice!**

<sup>1</sup>at return air condition 23 °C / 40 %rh and outside air temperature -16 °C

<sup>2</sup>at outside air condition 32 / 35 °C / 40 %rh and return air temperature 26 °C

<sup>3</sup>at air entering temperature -8 °C