

Swegon Home Solutions

# CASA<sup>®</sup> duct coils for heating the supply air



## WATERBORNE HEATING DUCT COILS

A separate coil for installation in ducts, uses the water in the heating system. Suitable from an output standpoint as the main source of heating in up to 100 m<sup>2</sup> low-energy buildings. The heating can be completely transferred to the CASA Smart control technology.



Ventilation unit Swegon CASA W3/R3

SDHW 12533W LVI-no 7906558

Ventilation unit Swegon CASA W4/R5/W5

SDHW 16033W LVI-no 7906559

## CASA heating coils

Included in the delivery:

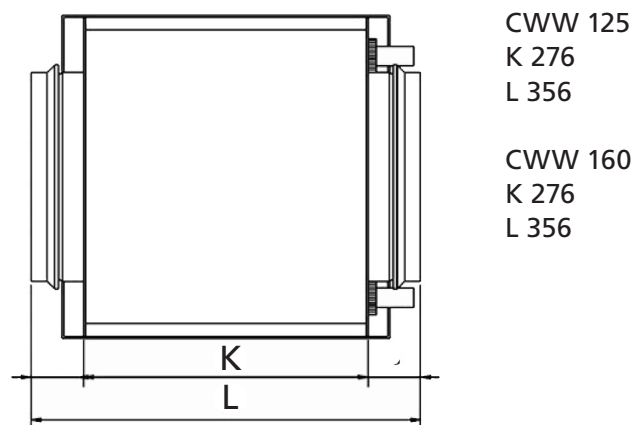
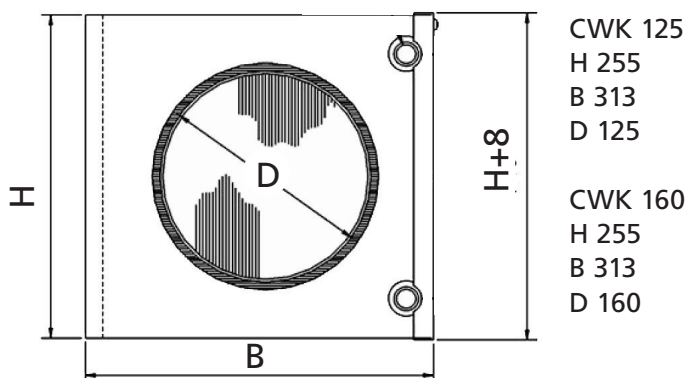
- Heating coil
- Actuator with valves
- Requisite sensors
- Instructions

**Heating coils in two sizes for the supply air duct:** the height is only 255 mm, which permits installation in a suspended ceiling, among others, in a multi-storey buildings:

- CASA CWW 125-3-2.5 (Cu 10 mm)
- CASA CWW 160-3-2.5 (Cu 10 mm)

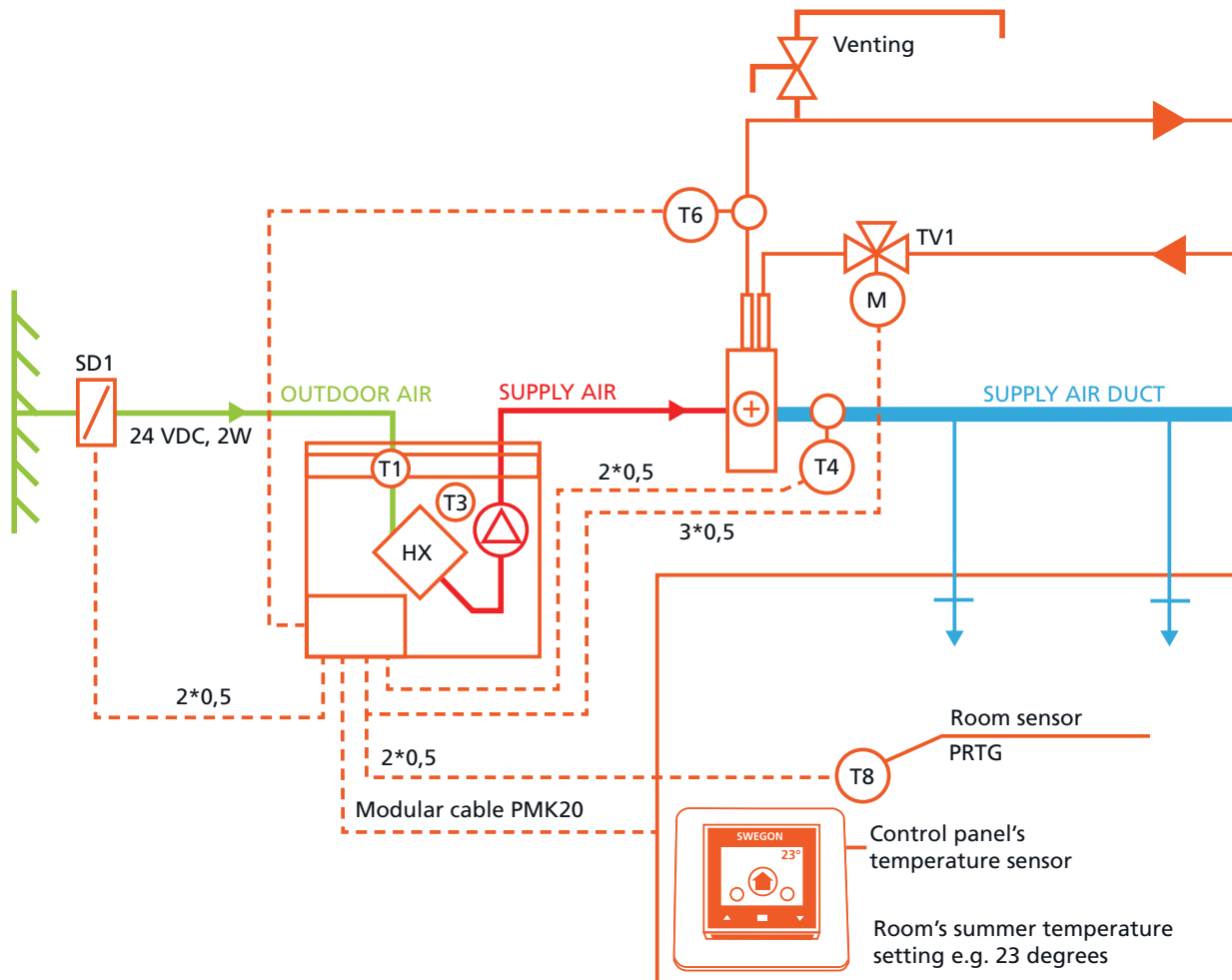
### TECHNICAL DATA

- Three row copper/aluminium coil, fin spacing 2.5 mm
- 3-way valve (½" int. g., kvs 0.4) Belimo R3015-P4-S1
- Actuator Belimo HRYD24-SR
- Temperature sensor T4 604930 cable length 3 m
- Freeze protection sensor T6 603048 cable length 3 m
- Casing of aluminium galvanized sheet steel
- Removable side covers, which facilitates service and cleaning
- Can be installed in both horizontal and vertical airflows
- Rubber seals in connection collars
- Maximum operating temperature of 150 degrees
- Maximum operating pressure of 1.0 MPa (10 bar)



Leave at least 40 cm service space in front of the door.

## Function



The function of the duct coil is controlled from a control panel via an adjustable room temperature setting. Valve TV1 is controlled by the room temperature, according to the options:

1. By a temperature sensor comprised by a CASA Smart control panel.
2. By a separate room temperature sensor T8 (accessory).
3. By unit's internal extract air temperature sensor T3.

The cable for freeze protection T6 is routed from the unit to the heating system's return pipe. The sensor cable for the temperature after heating T4 is routed and can, for example, be read on a Smart panel.

The following applies to the ventilation unit and system:

- Unit equipped with a Smart control system
- Smart control panel with 20 m long modular cable
- At least one, in the outside air duct positioned shut-off damper SD1, control signal is obtained from the circuit board 24 VDC, max. 2 W
- Remember the unit and duct insulation
- Venting of the pipe system

## CASA heating coils for the supply air duct:

### CASA heating coils

	ØD mm	B mm	H mm	Øo.d. mm	F	G mm	K mm	L mm	Pipe sys- tem's int. volume l	Weight, kg
CWW 125	125	313	255	10	175	40	276	356	0.20	5.5
CWW 160	160	313	255	10	175	40	276	356	0.42	5.4

### CWW 125

Water temperature			In/out 80 °C/60 °C				In/out 60 °C/40 °C				In/out 55 °C/45 °C			
Air flow	Pres- sure loss air	Air in	Air out	Power	Water flow	Pres- sure loss air	Air out	Power	Water flow	Pres- sure loss air	Air out	Power	Water flow	Pressure loss air
l/s m³/h	Pa	°C	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa
25 90	4	0	63.7	2.0	0.02	2.6	45.2	1.4	0.02	1.5	44.9	1.4	0.03	5.1
25 90	4	7.5	65.0	1.7	0.02	1.7	46.0	1.1	0.01	1.0	46.0	1.1	0.03	3.6
25 90	4	15	66.9	1.5	0.02	1.5	46.6	0.9	0.01	0.7	47.0	0.9	0.02	2.5
40 140	10	0	57.4	3.1	0.04	5.9	40.4	2.2	0.03	3.3	40.7	2.2	0.05	11.9
40 140	9	7.5	59.2	2.7	0.03	4.7	42.0	1.8	0.02	2.3	42.4	1.8	0.04	8.5
40 140	9	15	60.9	2.3	0.03	3.6	43.3	1.4	0.02	1.6	43.9	1.5	0.04	5.7
60 210	18	0	52.8	4.1	0.05	9.9	37.1	2.9	0.03	5.4	37.5	2.9	0.07	19.8
60 210	17	7.5	55.1	3.6	0.04	7.7	39.1	2.4	0.03	3.8	39.7	2.4	0.06	14.1
60 210	17	15	57.2	3.1	0.04	5.9	40.9	1.9	0.02	2.5	41.7	1.9	0.05	9.5

### CWW 160

Water temperature			In/out 80 °C/60 °C				In/out 60 °C/40 °C				In/out 55 °C/45 °C			
Air flow	Pressure loss air	Air in	Air out	Power	Water flow	Pres- sure loss air	Air out	Power	Water flow	Pres- sure loss air	Air out	Power	Water flow	Pressure loss air
l/s m³/h	Pa	°C	°C	kW	l/s	kPa	°C	kW	l/s	kPa	°C	kW	l/s	kPa
40 90	9	0	57.8	3.0	0.04	5.7	40.7	2.1	0.03	3.1	40.9	2.1	0.05	11.3
40 90	9	7.5	59.6	2.6	0.03	4.4	42.3	1.8	0.02	2.2	42.6	1.8	0.04	8.1
40 90	9	15	61.2	2.3	0.03	3.4	43.5	1.4	0.02	1.5	44.1	1.4	0.03	5.5
70 250	23	0	50.8	4.6	0.06	12.2	35.6	3.2	0.04	6.6	36.1	3.3	0.08	24.4
70 250	22	7.5	53.2	4.0	0.05	9.5	37.8	2.7	0.03	4.7	38.5	2.7	0.07	17.4
70 250	22	15	55.6	3.4	0.04	7.2	39.8	2.1	0.03	3.1	40.7	2.2	0.05	11.7
100 360	41	0	45.8	5.9	0.07	19.3	32.0	4.1	0.05	10.3	32.7	4.2	0.10	39.0
100 360	40	7.5	48.8	5.1	0.06	15.0	34.7	3.4	0.04	7.3	35.5	3.5	0.08	27.7
100 360	39	15	51.6	4.4	0.05	11.4	37.3	2.7	0.03	4.8	35.1	2.4	0.06	24.0