

Conforme à VDI 6022

IDB

UNDER SILL INDUCTION UNIT IN NOMINAL LENGTHS OF 600, 900, AND 1200 MM, WITH VERTICAL HEAT EXCHANGER AND CONDENSATE DRIP TRAY

Under sill induction unit with 2-pipe or 4-pipe heat exchanger, of compact height, for installation under a sill or on a wall. The condensate drip tray is useful if the temperature temporarily falls below the dew point.

- High heating and cooling capacity with a low conditioned primary air volume flow rate and low sound power level
- High comfort levels due to low airflow velocity in the occupied zone
- Four nozzle variants to optimise induction based on demand

Optional equipment and accessories

- Control package

- Lint screen to protect the heat exchanger from contamination
- Powder coating in many different colours, e.g. RAL CLASSIC or NCS

Application

Application

- Induction units of Type IDB for installation under a sill or on a wall
- 2-pipe or 4-pipe heat exchangers enable good comfort levels with a low conditioned primary air volume flow rate
- Energy-efficient solution since water is used as a medium for heating and cooling
- Inducing displacement flow

Special characteristics

- Supply air discharge as inducing displacement flow
- Vertical heat exchanger as 2-pipe or 4-pipe system, optional condensate drip tray including condensate drain that can be connected to a condensate pipe (to be provided by others)
- Water connection at the narrow side, Ø12 mm Cu pipe, either with plain tails or with G½" external thread and flat seal

Description

Construction

- Galvanised
- P1: Powder-coated RAL 9005, black, gloss level 70 %

Accessories

- Lint screen
- Wall and floor fixing
- Condensate drip tray

Useful additions

- Connecting hoses
- Control equipment consisting of a control panel including a controller with integral room temperature sensor; valves and valve actuators; and compression couplers

Construction features

- Spigot is suitable for circular ducts to EN 1506 or EN 13180
- Four nozzle variants to optimise induction based on demand

Materials and surfaces

- Casing, primary air plenum and feet made of galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Lint screen made of stainless steel
- Exposed surfaces either untreated or powder-coated black (RAL 9005)
- Heat exchanger also in black (RAL 9005)

INFORMACIÓN TÉCNICA

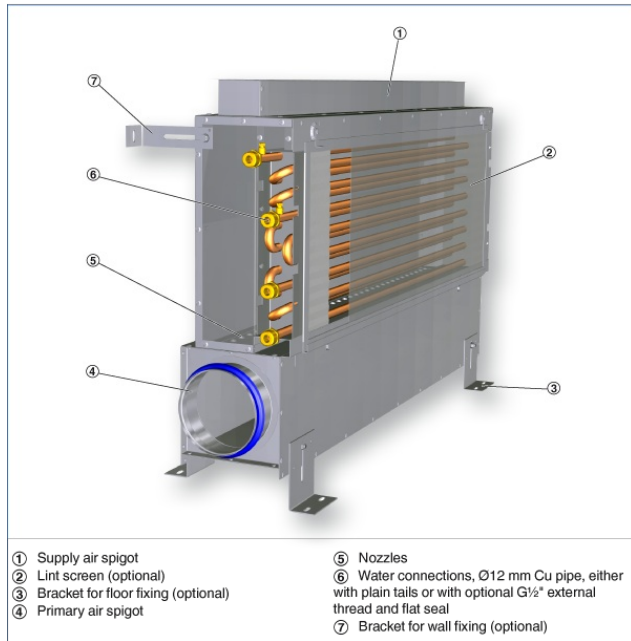
Functional description

Under sill induction units provide centrally conditioned primary air (fresh air) to the room and use heat exchangers for cooling and/or heating.

The primary air is discharged through nozzles and induces secondary air (room air), which passes through the heat exchanger.

Primary and secondary air mix and are then supplied to the room as an inducing displacement flow.

Schematic illustration of the IDB



Nominal length	600, 900, 1200 mm
Length	643, 943, 1243 mm
Width	155 mm
Height	Min. 555 mm, max. 605 mm
Primary air volume flow rate	4 – 40 l/s or 14 – 144 m³/h
Cooling capacity	Up to 950 W
Heating capacity	Up to 470 W
Max. operating pressure, water side	6 bar
Max. operating temperature, water side	75 °C

Quick sizing – spigot diameter 98 mm

L _N	①	Primary air				Cooling				Heating		
		V _{Pr}		Δp _i	L _{WA}	2-pipe and 4-pipe systems				4-pipe system		
		l/s	m ³ /h	Pa		Q _{tot}	Q _{WK}	Δt _W	Δp _W	Q _{WH} = Q _{tot}	Δt _W	Δp _W
600	M	3	10.8	71	<20	193	157	-1.2	2.44	180	3.1	0.19
		5	18.0	199	22	275	214	-1.7	2.44	246	4.2	0.19
		7	25.2	389	32	346	262	-2.0	2.44	301	5.2	0.19
	G	5	18.0	51	<20	238	178	-1.4	2.44	203	3.5	0.19
		9	32.4	166	23.5	365	256	-2.0	2.44	294	5.1	0.19
		12	43.2	295	32	450	305	-2.4	2.44	351	6.0	0.19
	U	10	36.0	67	<20	346	226	-1.8	2.44	259	4.5	0.19
		15	54.0	152	27	473	292	-2.3	2.44	336	5.8	0.19
		20	72.0	270	35	590	349	-2.7	2.44	403	6.9	0.19
900	M	5	18.0	83	<20	304	243	-1.9	3.13	279	4.8	0.24
		7.5	27.0	187	24	399	308	-2.4	3.13	355	6.1	0.24
		10	36.0	333	32	484	362	-2.8	3.13	420	7.2	0.24
	G	10	36.0	86	<20	427	307	-2.4	3.13	353	6.1	0.24
		15	54.0	194	29	570	389	-3.0	3.13	449	7.7	0.24
		20	72.0	345	38	699	458	-3.6	3.13	531	9.1	0.24
	U	15	54.0	94	<20	505	324	-2.5	3.13	374	6.4	0.24
		20	72.0	115	28	628	366	-3.0	3.13	446	7.7	0.24
		25	90.0	180	35	743	441	-3.4	3.13	511	8.8	0.24
1200	M	5	18.0	45	<20	326	266	-2.1	3.83	306	5.3	0.29
		10	36.0	182	25	516	395	-3.1	3.83	457	7.9	0.29
		15	54.0	410	37	674	493	-3.9	3.83	572	9.8	0.29
	G	10	36.0	47	<20	453	332	-2.6	3.83	383	6.6	0.29
		15	54.0	107	23	601	320	-3.3	3.83	486	8.4	0.29
		20	72.0	190	32	735	494	-3.9	3.83	573	9.9	0.29
	U	20	72.0	64	25	656	415	-3.2	3.83	460	8.3	0.29
		30	108.0	145	37	895	524	-4.1	3.83	609	10.5	0.29
		40	144.0	257	46	1097	614	-4.8	3.83	717	12.3	0.29

① Nozzle variant

② Air-regenerated noise

Reference values

Parameter	Cooling	Heating
t _a	26 °C	22 °C
t _{Pr}	16 °C	22 °C
t _{ev}	16 °C	50 °C
V _W	110 l/h	50 l/h

Induction units of Type IDB, for under sill or wall installation, with one-way discharge and high thermal output, providing high thermal comfort levels.

For installation under the sill or on a wall.

The units consist of a casing with a primary air plenum, spigot, non-combustible nozzles, and vertical heat exchanger; a condensate drip tray is optional.

Special characteristics

- Supply air discharge as inducing displacement flow
- Vertical heat exchanger as 2-pipe or 4-pipe system, optional condensate drip tray including condensate drain that can be connected to a condensate pipe (to be provided by others)
- Water connection at the narrow side, Ø12 mm Cu pipe, either with plain tails or with G½" external thread and flat seal

Materials and surfaces

- Casing, primary air plenum and feet made of galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Lint screen made of stainless steel
- Exposed surfaces either untreated or powder-coated black (RAL 9005)
- Heat exchanger also in black (RAL 9005)

Construction

- Galvanised
- P1: Powder-coated RAL 9005, black, gloss level 70 %

Technical data

- Nominal length: 1200 mm
- Primary air volume flow rate: 4 – 40 l/s or 14 – 144 m³/h
- Cooling capacity: up to 950 W
- Heating capacity: up to 470 W
- Max. operating pressure: 6 bar
- Max. operating temperature: 75 °C

IDB

IDB – 2 – G – RE – A1 – SL – KW / 1200x123 / WB / G1 / FS / VS

1 2 3 4 5 6 7 8 9 10 11 12 13

1] Type

IDB Under sill induction units

2] Heat exchanger

2 2-pipe

4 4-pipe

3] Nozzle variants

M Medium

G Large

U Extra large

2U 2 rows, extra large

4] Arrangement of the water connection

RE Right side

LI Left side

5] Water connections

No entry: Ø12 mm pipe with plain tails

A1 With G½" external thread and flat seal

6] Arrangement of air connections

SL Left side

SR Right side

VM Front, centre

7] Condensate drip tray

No entry: none

KW With

8] Nominal length [mm]

600

900

1200

1350

9] Spigot diameter [mm]

98

123

10] Fixing material (supplied separately)

No entry: none

W0 Wall fixing

B0 Floor fixing

WB Wall and floor fixing

11] Surface of casing and heat exchanger

No entry: untreated

G1 RAL 9005, black

G3 RAL 9005, black, heat exchanger only

12] Lint screen

No entry: none

FS With

13] Valves and actuators

No entry: none

VS With