









Conforme à VDI 6022



QLI

INDUCTION-TYPE DISPLACEMENT FLOW DIFFUSER IN NOMINAL LENGTHS OF 900, 1200 AND 1500 MM, WITH VERTICAL HEAT EXCHANGER AND CONDENSATE DRIP **TRAY** 

Induction-type displacement flow diffuser with 2-pipe or 4-pipe heat exchanger, for installation under a sill. 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
- Three nozzle variants to optimise induction based on demand
- Two different heat exchanger positions

Optional equipment and accessories

- Control package
- Fixing systems for wall and floor fixing
- Powder coating in many different colours, e.g. RAL CLASSIC or NCS

# Application

#### Application

- Induction-type displacement flow diffusers of Type QLI for installation under a sill
- High comfort levels due to low-turbulence airflow and low airflow velocity in the occupied zone
- 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
- Choice of location for primary air spigot at a narrow side; end cap may have to be changed accordingly

#### Special characteristics

- Low-turbulence 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 connections at the narrow side, G½" external thread and flat seal

# Description [

## Variants

- WVL: Heat exchanger at the front, water connections on the left
- WVR: Heat exchanger at the front, water connections on the right
- WHL: Heat exchanger at the rear, water connections on the left
- WHR: Heat exchanger at the rear, water connections on the right

## Construction

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

#### Accessories

- W0: Wall fixing
- B0: Floor fixing
- WB: 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
- Three nozzle variants to optimise induction based on demand
- Vent valves

#### Materials and surfaces

- Casing, supply air grille, and primary air plenum with punched nozzles are made of galvanised sheet steel
- Heat exchanger with copper tubes and aluminium fins
- Exposed surfaces either galvanised or black (RAL 9005)

# INFORMACIÓN TÉCNICA

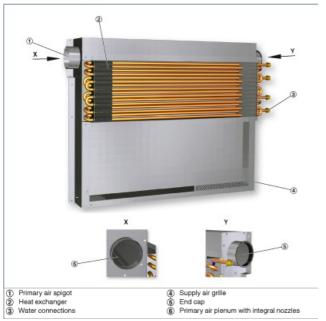
## Functional description

Induction-type displacement flow diffusers 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, causing only very little turbulence.

#### Schematic illustration of QLI



Length         975, 1275, 1575 mm           Width         195 mm           Height         729 mm           Primary air volume flow rate         4 – 50 l/s, 14 – 180 m³/m           Cooling capacity         Up to 1000W           Heating capacity         Up to 750 W           Max. operating pressure, water side         6 bar		
Width         195 mm           Height         728 mm           Primary air volume flow rate         4 – 50 ½s, 14 – 180 m²/h²           Cooling capacity         Up to 1000 W           Heating capacity         Up to 750 W           Max. operating pressure, water side         6 bar	Nominal length	900, 1200, 1500 mm
Height         729 mm           Primary air volume flow rate         4 − 50 ½s, 14 − 180 m³/h           Cooling capacity         Up to 1000 W           Heating capacity         Up to 750 W           Max. operating pressure, water side         6 bar	Length	975, 1275, 1575 mm
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Heating capacity Up to 750 W Max. operating pressure, water side 6 bar	Primary air volume flow rate	4 – 50 l/s, 14 – 180 m³/h
Max. operating pressure, water side 6 bar	Cooling capacity	Up to 1000 W
	Heating capacity	Up to 750 W
Max. operating temperature, water side 75 °C	Max. operating pressure, water side	6 bar
	Max. operating temperature, water side	75 °C

	1	Primary air			2	Cooling				Heating			
L <sub>N</sub>		Ů <sub>Pr</sub>		Δр,	L <sub>WA</sub>	2-pipe and 4-pipe systems			4-pipe system				
						Q <sub>tot</sub>	Q <sub>wk</sub>	Δt <sub>w</sub>	$\Delta p_w$	$\dot{Q}_{WH} = \dot{Q}_{tot}$	Δt <sub>w</sub>	$\Delta p_w$	
		I/s	m³/h	Pa	dB (A)	W		K	kPa	W	K	kPa	
900	М	4	14	53	<20	237	188	1.5	3.1	228	3.9	0.2	
		6	22	121	24	332	260	2.0	3.1	314	5.4	0.2	
		8	29	217	32	415	318	2.5	3.1	386	6.6	0.2	
	G	7	25	40	<20	317	233	1.8	3.1	281	4.8	0.3	
		11	40	102	22	456	323	2.5	3.1	392	6.7	0.3	
		15	54	191	31	571	391	3.1	3.1	474	8.2	0.3	
		17	43	42	<20	387	242	1.9	3.1	293	5.0	0.3	
	U	19	68	108	28	550	321	2.5	3.1	389	6.7	0.3	
		26	94	204	37	677	364	2.8	3.1	441	7.6	0.3	
1200	М	5	18	45	<20	293	233	1.8	3.8	281	4.8	0.3	
		8	29	117	23	431	335	2.6	3.8	406	7.0	0.3	
		11	40	222	32	548	416	3.3	3.8	505	8.7	0.3	
		9	32	37	<20	401	293	2.3	3.8	355	6.1	0.3	
	G	15	54	106	23	601	420	3.3	3.8	510	8.8	0.3	
		21	46	208	33	761	508	4.0	3.8	618	10.6	0.3	
		16	58	45	<20	506	313	2.4	3.8	379	6.5	0.3	
	U	25	90	112	31	709	408	3.2	3.8	495	8.5	0.3	
		34	122	207	40	871	461	3.6	3.8	560	9.6	0.0	
	М	6	22	41	<20	347	275	2.2	4.5	333	5.7	0.4	
1500		10	36	115	23	526	405	3.2	4.5	492	8.5	0.4	
		14	50	228	33	674	505	3.9	4.5	614	10.6	0.4	
	G	11	40	36	<20	483	350	2.7	4.5	424	7.3	0.4	
		19	68	111	25	737	508	4.0	4.5	618	10.6	0.4	
		27	97	225	35	939	613	4.8	4.5	747	12.9	0.4	
	U	20	72	49	23	621	380	3.0	4.5	461	7.9	0.4	
		28	101	98	33	802	464	3.6	4.5	564	9.7	0.4	
		36	130	163	41	956	521	4.1	4.5	634	10.9	0.4	

Parameter	Cooling	Heating
t <sub>R</sub>	26 °C	22 °C
t <sub>pr</sub>	16 °C	22 °C
t <sub>wv</sub>	16 °C	50 °C
Ý <sub>w</sub>	110 l/h	50 l/h

Induction-type displacement flow diffuser of Type QLI, with one-way discharge and high thermal output, providing high thermal comfort levels.

For installation on a wall or under the sill

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

- Low-turbulence 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 connections at the narrow side, G½" external thread and flat seal

## Materials and surfaces

- Casing, supply air grille, and primary air plenum with punched nozzles are made of galvanised sheet steel
   Heat exchanger with copper tubes and aluminium fins
- Exposed surfaces either galvanised or black (RAL 9005)

## Construction

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

#### Technical data

- Nominal length: 900, 1200, 1500 mmLength: 975, 1275, 1575 mm
- Width: 195 mm
- Height: 729 mm
- Primary air volume flow rate: 4 50 l/s or 14 180 m<sup>3</sup>/h
- Cooling capacity: up to 1000 W Heating capacity: up to 750 W Max. operating pressure: 6 bar • Max. operating temperature: 75 °C

QLI - 2 - M - WVR - KW / 900 / W0 / P1 / VS 1 2 3 4 5 6 7 8 9

1 Type
QLI Under sill induction unit

2 Heat exchanger 2 2-pipe 4 4-pipe 2-pipe 4-pipe

3 Nozzle variants
M Medium
G Large
U Extra large

Arrangement of heat exchanger and water connections

WVL Heat exchanger at the front, water connections on the left

WWR Heat exchanger at the front, water connections on the right

WHL Heat exchanger at the rear, water connections on the left

WHR Heat exchanger at the rear, water connections on the left

WHR Heat exchanger at the rear, water connections on the left

5 Condensate drip tray
No entry: none
KW With

# 6 Nominal length [mm] 900 1200 1500

| Tixing material (supplied separately)
No entry: none
W0 Wall fixing
B0 Floor fixing
WB Wall and floor fixing

## 8 Surface

No entry: galvanised steel Powder-coated RAL 9005, black, gloss level 70 %