

Chilled Beam IQ Star STELLA



- Functions**
- Sprinkler
 - Speaker
 - FPC
 - High air flow
 - Controls
 - Lighting
 - Energy Control
 - Heating

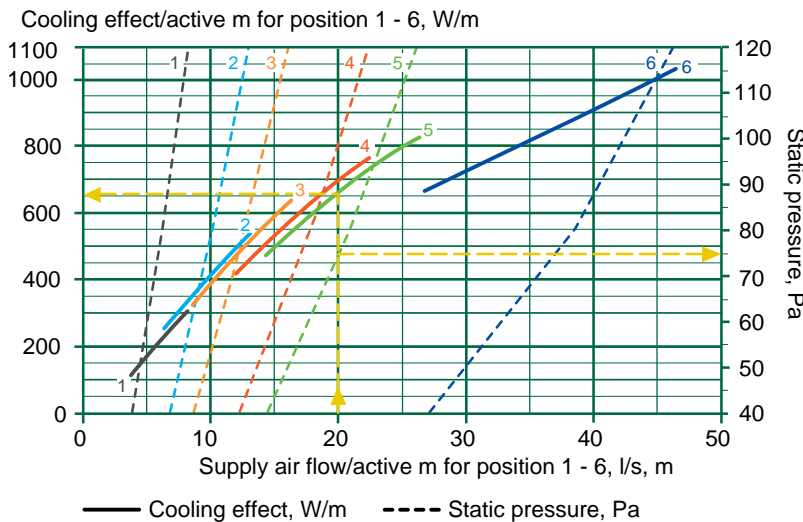


The IQ Star STELLA is a multiservice chilled beam system for ventilation, cooling and heating, fulfilling most needs for indoor climate. The chilled beam is designed to deliver exceptional cooling performance, while effective mixing with the air in the room gives a good level of comfort and low air speeds in the occupied zone. Stella is intended for ceiling mounting and can be equipped with a number of functions to provide a complete, multifunctional chilled beam. The following functions are available for Stella: direct and indirect lighting, control and regulation equipment, Energy Control, Flow Pattern Control (FPC), high air flow and heating functions. It also provides space for sprinkler piping, wiring, loudspeakers, presence detectors, etc. and up to three units can be connected in series. These various functions are described in separate parts in the catalogue.

Product Facts

- Freehanging Chilled Beam iQ Star STELLA.
- Very flexible multiservice Chilled Beam.
- Can be supplied with the functions lighting, Control, Energy control, Flow Pattern Control, High Airflow, and Heating.
- Equipped with Energy Control.

Quick Selection



Product code example

Freehanging Chilled Beam
IQFF-180-0-0-1-1-0

Technical data for cooling effect

Cooling effect for two-way chilled beam at static pressure drop 70 Pa on the air side

Beam length: 1.8 m (Coil length: 1.5 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 5,0$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	8	325	410	495	250	335	420	<20
2	13,5	575	720	870	445	590	740	<20
3	17,5	725	910	1095	555	740	925	<20
4	24,5	920	1150	1380	685	975	1145	<20
5	28,5	1015	1260	1505	740	985	1230	<20
6,boost	54	1475	1790	2110	955	1270	1590	28

Beam length: 2,4 m (Coil length: 2.1 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 6,1$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	13,5	490	610	730	360	480	600	<20
2	21	835	1050	1265	635	850	1065	<20
3	26	1015	1275	1530	765	1025	1280	<20
4	37	1320	1640	1960	965	1285	1605	<20
5	43	1440	1780	2125	1030	1370	1715	<20
6,boost	76	2100	2555	3010	1370	1825	2280	33

Beam length: 3,0 m (Coil length: 2,7 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 7,4$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	20,5	635	780	925	440	585	730	<20
2	31	1080	1340	1600	780	1040	1300	<20
3	37,5	1305	1620	1935	945	1260	1575	<20
4	50	1650	2040	2430	1170	1560	1950	22
5	59	1835	2255	2680	1270	1690	2115	27
6,boost	103	2630	3175	3720	1640	2185	2730	40

Assumptions for cooling effect tables

Total cooling effect of beam $P_{\text{tot}} =$ cooling effect of coil, $P_{\text{coil}} +$ cooling effect of supply air, P_{air} .

The tables assume a static pressure drop on the air side of 70 Pa. The cooling effect of supply air is based on an under-temperature of 8°C for the supply air, when compared to the room temperature. The effects for other water flows than 0.1 l/s or other pressures can be found in the Fläkt Woods product selection program.

NOTE!

The tables here are based on tests done according to EN 15116. This European standard is used by Eurovent for certifying chilled beams.

Heating effect for two-way chilled beam STELLA at static pressure drop 70 Pa on the air side

See catalogue function part Heating.

Definitions

q_l	Supply air flow, l/s
P_{air}	Cooling effect of air, W
P_{tot}	Total cooling effect, W
$P_{\text{coil cool}}$	Cooling effect of coil, W
$P_{\text{coil heat}}$	Heating effect of coil, W
Δt	Difference between room air temperature and average water temperature, °C
Δp_w	Pressure drop, water kPa
Δt_w	Temperature change in coil, °C. Calculated with the formula: $\Delta t_w = P_{\text{coil}} / 208$
L_{A10}	Sound pressure level in a room with 10 m ² room absorption, dB(A)

Technical data for flow patterns, sound, function

Technical data for flow patterns other than two-way flow

Use Fläkt Woods product selection program for chilled beams.

Sound pressure level

STELLA	Correction K _{oct} dB							
	octave band, middle frequency, Hz							
	63	125	250	500	1000	2000	4000	8000
-180	7	6	3	0	-1	-6	-12	-8
-240	7	6	3	0	-1	-6	-12	-8
-300	7	6	3	0	-1	-6	-12	-8
Tol ±	6	3	2	2	2	2	2	3

The sound power levels for every octave band are obtained by adding together the sound pressure level L_{A10} , dB(A), from our product selection program and the corrections K_{oct} given in the table above, according to the following formula:

$$L_W = L_{A10} + K_{oct}$$

The correction K_{oct} is the average value for the area of application of the chilled beam STELLA.

Sound attenuation

The average sound attenuation ΔL of chilled beam STELLA from duct to room includes the end reflection of the connecting duct.

STELLA	Sound attenuation in supply air duct of beam ΔL , dB							
	Octave band, middle frequency Hz							
	63	125	250	500	1000	2000	4000	8000
-180	23	13	7	8	10	11	13	13
-240	23	13	7	8	10	11	13	13
-300	23	13	7	8	10	11	13	13
Tol ±	6	3	2	2	2	2	2	3

Materials and surface finish

The body, side panels, base panels and end panels of beams consist mainly of galvanized sheet steel, while the underside consists mainly of aluminium profiles. Visible components are finished as standard in white RAL 9010, which corresponds to NCS 0502-Y, gloss level 30.

Coils are made of copper pipe with a coupling $\varnothing_y = 15$ mm and with aluminium fins. Maximum working pressure 1.6 MPa.

Construction and function

The chilled beam STELLA is designed for ceiling mounting and is exposed. STELLA is also prepared for installation in series of up to three chilled beams. Dummy sections may also be purchased as options.

The air flow is directed slightly upwards through the vents, encouraging air to flow along the ceiling to ensure draught-free ventilation.

The air flow is easily adjusted using the patented Energy Control function, which also allows different forms of air distribution (two-way, one-way and mid-way position). For even greater flexibility there is also a Motorized Energy Control (MEC) option for load-dependent ventilation. In normal operation the beam is set to the chosen air flow setting. At times of heavy demand (increased supply air demand) the chilled beam is switched to boost mode by means of a pushbutton or CO₂ sensor. If a presence detector or pushbutton is installed in the room the beam can also be programmed to switch to Energy Saving Mode (ESM), which reduces the supply air flow to a minimum.

Different settings of the Energy Control on both sides of the beam requires a damper at each air connection in order to make adjustment of the airflow.

See also the separate catalogue section on EC/MEC.

STELLA is a multifunction chilled beam that allows a variety of optional functions to be chosen over standard, and is designed so that it can be configured for special accessories. In standard specification Stella is prepared for direct and indirect lighting, control and regulation equipment, Energy Control (EC/MEC), Flow Pattern Control (FPC), high air flow, heating and sprinkler functions. It is also designed to provide space for piping, wiring, loudspeakers, smoke detectors, presence detectors, etc.

The bleed nipple can be selected in the product code, but cannot be combined with the series installation option.

The base panel and side panels can be removed to simplify access to connections and controls, and for maintenance.

If chilled beams are to be connected in series they are configured to allow series-coupling of air and parallel-coupling of water, see diagram on product code page.

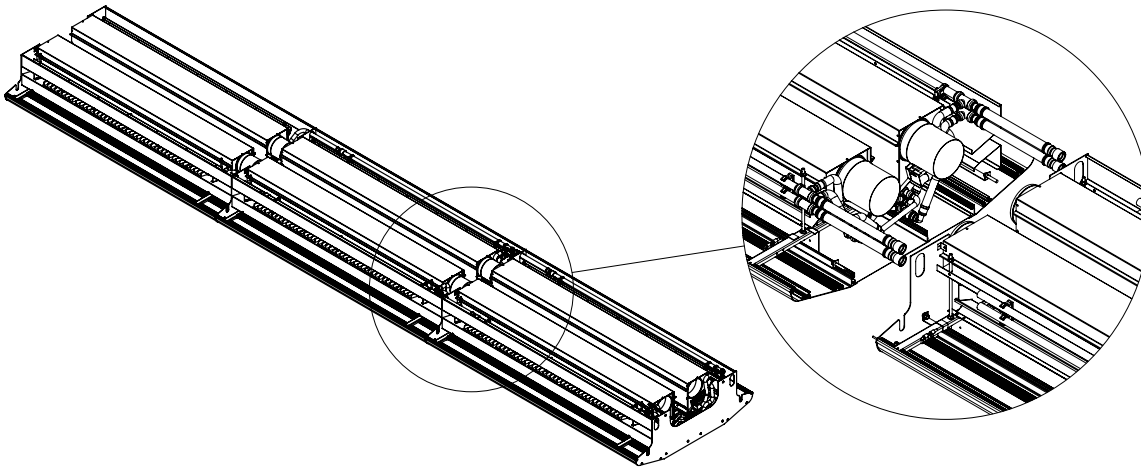
Technical data and dimensions

For information to aid selection of chilled beams please use Fläkt Woods' product selection program. Contact our nearest sales office for further information.

Serial connection of Chilled Beams

Installation of Chilled Beams in series

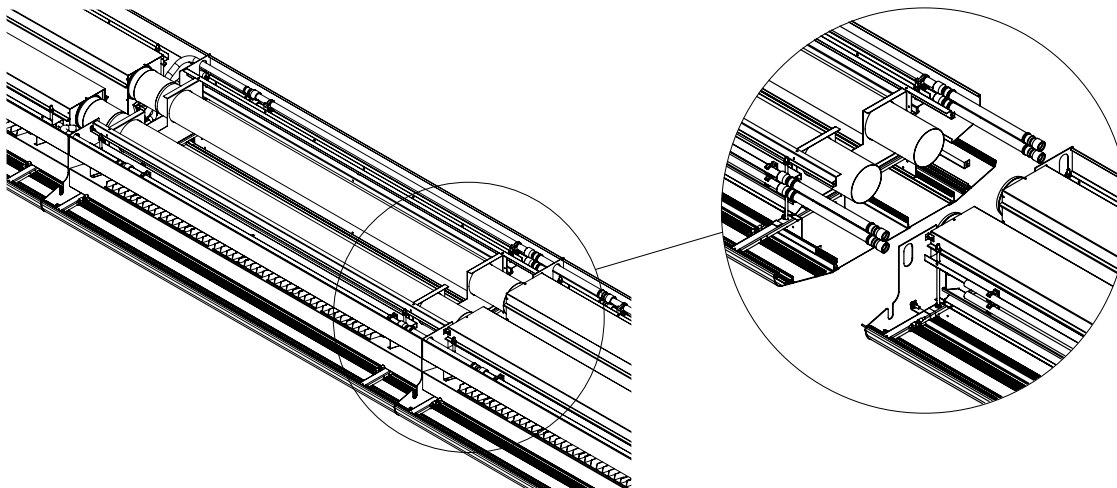
Chilled Beams installed in series must be defined in the product code as the first, middle or last Chilled Beam in the series. The Chilled Beam will be prepared before delivery and can be docked on site. As a standard solution the air can be connected in series between the Chilled Beams with a $\text{Ø}125$ mm circular duct, that is included in delivery. The copper tubes are $\text{Ø}22$ mm and connected with flexible hoses between the sections. The chilled beams are connected in parallel on the water side. All flexible hoses are of the type push on, which means shorter time of installation. Type of purging nipple is selected in the product code, but cannot be combined with installation in series. It is possible to install up to three chilled beams in series and the air flow in the $\text{Ø}125$ mm circular duct should not exceed 3m/s for each connection, to guarantee that LA10 does not exceed 35 dB(A) . This means that there is an air of 37 l/s for each connection, i.e. totally 74 l/s to the beam.



When installing chilled beams in series the side panels must be removed and the chilled beams placed in line on a flat surface. The chilled beams are docked by pushing them together and making sure that the pin bolts are fixed in the tracks of the connecting beam. Thereafter the flexible water hoses are connected to the pipes on the next chilled beam and the circular ducts are connected to the opposite nipples. Finally the units are bolted together with a small splice by using two screws.

Dummy section

For installations where an inactive part is necessary, a dummy can be ordered as an accessory. The dummy can be placed either as the first, middle or last section in the series and should be specified in the ordering code. It is possible to order the dummy prepared for serial connection of the air and it will then have a mounted circular ducts. The water side can also be prepared with $\text{Ø}22$ mm Cu-pipes with flexible hoses for docking onto the next chilled beam or dummy in the series. The docking is carried out in the same way as for serial connected chilled beams with pin bolts and screws.

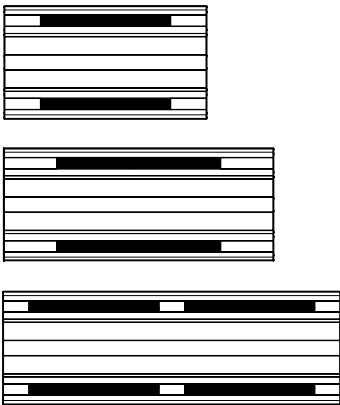


Lighting, dimensions and weight information

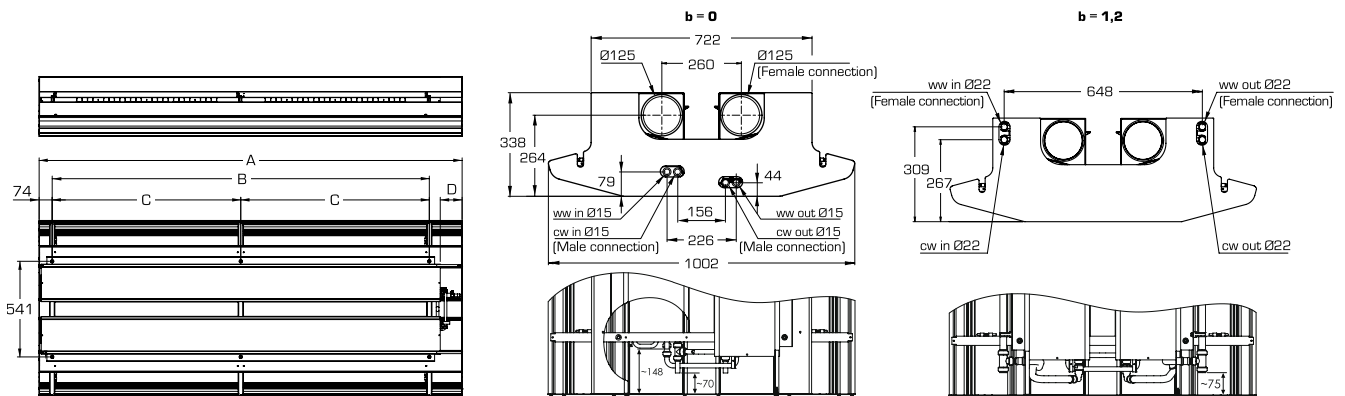
STELLA with direct and indirect lighting

Coil length, m	Light fitting length, mm	No. of light fittings	Power, W
1.8	1169	2	28/54
2.4	1469	2	35/49
3.0	1169	4	28/54

Light fittings are supplied complete with 800 mm long cable at both ends, fitted with Wieland connectors to allow wiring in series. Connecting cable is complete with 6-pole Wieland GST connector at both ends, with cable gland.



Dimensions and weights

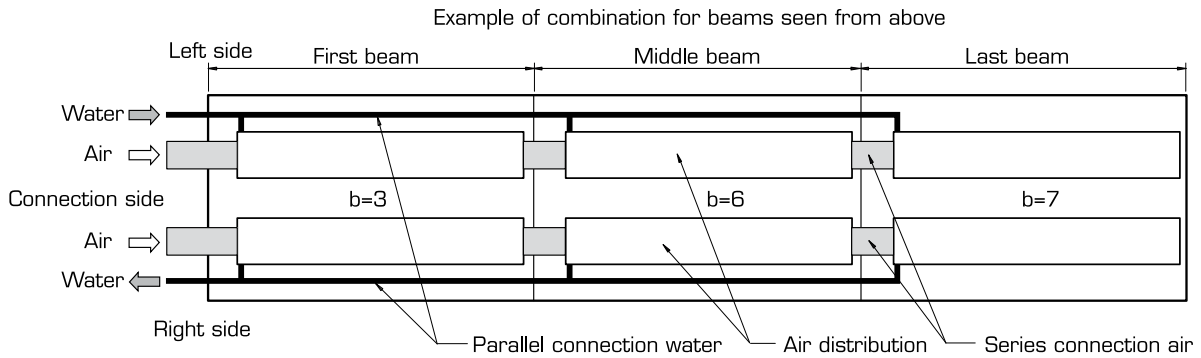


aaa	A	B	C	D
180	1798	1546	-	116
240	2398	2138	1069	124
300	2998	2730	1365	132

Weight per metre, chilled beam	Kg/m
Dry weight	42.0
Water-filled, cooling	43.4
Water-filled, cooling and heating	43.8

Product code, special versions, accessories

Product code



Main code

Freehanging supply air beam

IQFF-aaa-b-c-d-e-f

Beam type (b) for explanation see b in table below

- 0 = Single
- 1 = First
- 2 = First
- 3 = First
- 4 = Middle
- 5 = Middle
- 6 = Middle
- 7 = Last

Extension (c)

- 0 = Standard, no extension

Coil type (d)

- 1 = Cooling
- 2 = Cooling with purging nipple on the right side (only b = 0 - 3)
- 3 = Cooling and heating
- 4 = Cooling and heating with purging nipple on the right side (only b = 0 - 3)

Comfort control (e)

- 1 = With EC, normal air flow
- 2 = With EC, normal air flow and FPC
- 3 = With EC, high air flow
- 4 = With EC, high air flow and FPC

Duct connection (f) mm

- 1 = Ø125
- 2 = Ø160

Single	First	Middle	Last
 b = 0	 b = 1	 b = 4	 b = 7
	 b = 2	 b = 5	
	 b = 3	 b = 6	

Product code, special versions, accessories

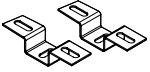
Accessories

Fastening bracket

QFAZ-21-bbb-cc

Length (bbb)
(aaa in beam code)

Model (cc)
01 = STELLA (IQFF)



Hanging lug

QFAZ-22-bbb-cc

Length (bbb)
(aaa in beam code)

Model (cc)
01 = STELLA (IQFF)



Motorized Energy Control

IQAZ-23-01-c-d-e-f

Connected sides (c)

- 1 = Both side
- 2 = Right side
- 3 = Left side

Design (d)

- 1 = 24 V, 2-modes On/Off
- 2 = 230 V, 2-modes On/Off
- 3 = 24 V, 3-modes variable (e = 0; f = 0)

Factory set hole adjustment for normal operating conditions (e)

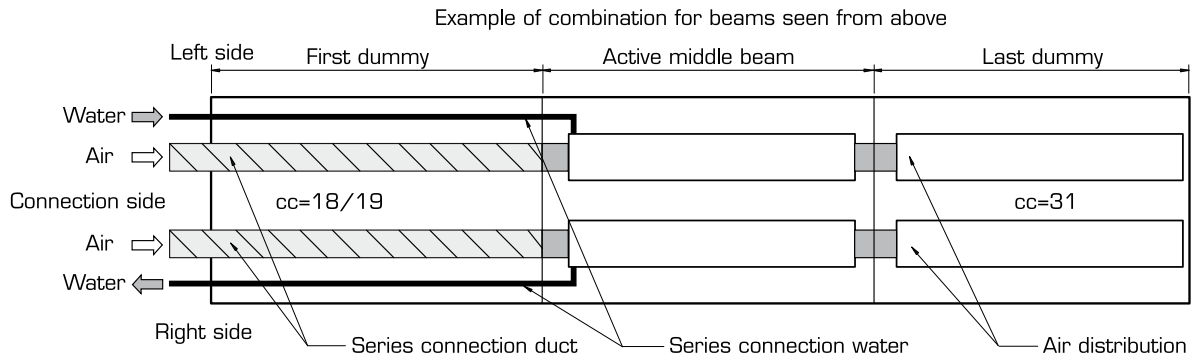
1-6 Hole adjustment

Factory set hole adjustment for activated operating conditions (f)

1-6 Hole adjustment

Product code, special versions, accessories

Main code



Dummy

IGAZ-25-bbb-cc-d-e

Nom. length (bbb) in cm
180, 240, 300

Execution (cc) see explanation for cc in table below

- 00 = Single d = 0,5
- 01 = Single d = 0,5
- 10 = First d = 0,5
- 11 = First d = 0,5
- 12 = First d = 0,5
- 13 = First d = 1, 2, 6, 7
- 14 = First d = 3, 4, 8, 9
- 15 = First d = 1, 2, 6, 7
- 16 = First d = 3, 4, 8, 9
- 20 = Middle d = 0,5
- 21 = Middle d = 0,5
- 22 = Middle d = 0,5
- 23 = Middle d = 1, 6
- 24 = Middle d = 3, 8
- 25 = Middle d = 1, 6
- 26 = Middle d = 3, 8
- 27 = Middle d = 0,5
- 28 = Middle d = 1, 6
- 29 = Middle d = 3, 8
- 30 = Last d = 0,5
- 31 = Last d = 0,5

Connections (d) in mm

- 0 = Ø125, without water connection
- 1 = Ø125, Piping for cooling
- 2 = Ø125, Piping for cooling with purging nipple on the right side (only cc = 13, 15, 18)
- 3 = Ø125, Piping for cooling and heating
- 4 = Ø125, Piping for cooling and heating with purging nipple on the right side (only cc = 14, 16, 19)
- 5 = Ø160, without water connection
- 6 = Ø160, Piping for cooling
- 7 = Ø160, Piping for cooling with purging nipple on the right side (only cc = 13, 15, 18)
- 8 = Ø160, Piping for cooling and heating
- 9 = Ø160, Piping for cooling and heating with purging nipple on the right side (only cc = 14, 16, 19)

Comfort control (e)

- 1 = With EC, normal airflow
- 2 = With EC, normal airflow and FPC
- 3 = With EC, high airflow
- 4 = With EC, high airflow and FPC
- 5 = Without EC (only cc = 00, 10, 20, 30, 17-19, 27-29)
- 6 = Without EC but with FPC (only cc = 00, 10, 20, 30, 17-19, 27-29)

Single	First	Middle	Last
cc = 00	cc = 10	cc = 20	cc = 30
cc = 01	cc = 11	cc = 21	cc = 31
	cc = 12	cc = 22	
	cc = 13, 14	cc = 23, 24	
	cc = 15, 16	cc = 25, 26	
	cc = 17	cc = 27	
	cc = 18, 19	cc = 28, 29	

Part code IGAZ - cc

Beam (the first c)

- 0 = Single
- 1 = First
- 2 = Middle
- 3 = Last

Type (the last c)

- 0 = Without air distribution
- 1 = Stop at air distribution rear
- 2 = Air distribution with series connection
- 3, 4 = Stop at air distributor rear and water
- 5, 6 = Stop at air distribution rear with water connection
- 7 = Series connection with water
- 8, 9 = Series connection duct with water

Product code, special versions, accessories

Pre-setup Energy Control

IQAZ-26-bb-c-d

Model (bb)

01 = Stella (IQFF)

Default right side (c)

1-6 = Hole setting

Default left side (d)

1-6 = Hole setting

Technical data for cooling effect

Cooling effect for two-way chilled beam at static pressure drop 70 Pa on the air side

Beam length: 1.8 m (Coil length: 1.5 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 5,0$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	8	325	410	495	250	335	420	<20
2	13,5	575	720	870	445	590	740	<20
3	17,5	725	910	1095	555	740	925	<20
4	24,5	920	1150	1380	685	975	1145	<20
5	28,5	1015	1260	1505	740	985	1230	<20
6,boost	54	1475	1790	2110	955	1270	1590	28

Beam length: 2,4 m (Coil length: 2.1 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 6,1$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	13,5	490	610	730	360	480	600	<20
2	21	835	1050	1265	635	850	1065	<20
3	26	1015	1275	1530	765	1025	1280	<20
4	37	1320	1640	1960	965	1285	1605	<20
5	43	1440	1780	2125	1030	1370	1715	<20
6,boost	76	2100	2555	3010	1370	1825	2280	33

Beam length: 3,0 m (Coil length: 2,7 m)

Water flow, $q_w = 0,1$ l/s

Pressure drop water, $\Delta p_w = 7,4$ kPa

Nozzle	$q_l, \text{l/s}$	P_{tot}, W			$P_{\text{coil}}, \text{W}$			$L_{A10}, \text{dB(A)}$
		6	8	10	6	8	10	
1,esm	20,5	635	780	925	440	585	730	<20
2	31	1080	1340	1600	780	1040	1300	<20
3	37,5	1305	1620	1935	945	1260	1575	<20
4	50	1650	2040	2430	1170	1560	1950	22
5	59	1835	2255	2680	1270	1690	2115	27
6,boost	103	2630	3175	3720	1640	2185	2730	40

Assumptions for cooling effect tables

Total cooling effect of beam $P_{\text{tot}} =$ cooling effect of coil, $P_{\text{coil}} +$ cooling effect of supply air, P_{air} .

The tables assume a static pressure drop on the air side of 70 Pa. The cooling effect of supply air is based on an under-temperature of 8°C for the supply air, when compared to the room temperature. The effects for other water flows than 0.1 l/s or other pressures can be found in the Fläkt Woods product selection program.

NOTE!

The tables here are based on tests done according to EN 15116. This European standard is used by Eurovent for certifying chilled beams.

Heating effect for two-way chilled beam STELLA at static pressure drop 70 Pa on the air side

See catalogue function part Heating.

Definitions

q_l	Supply air flow, l/s
P_{air}	Cooling effect of air, W
P_{tot}	Total cooling effect, W
$P_{\text{coil cool}}$	Cooling effect of coil, W
$P_{\text{coil heat}}$	Heating effect of coil, W
Δt	Difference between room air temperature and average water temperature, °C
Δp_w	Pressure drop, water kPa
Δt_w	Temperature change in coil, °C. Calculated with the formula: $\Delta t_w = P_{\text{coil}} / 208$
L_{A10}	Sound pressure level in a room with 10 m ² room absorption, dB(A)

Technical data for flow patterns, sound, function

Technical data for flow patterns other than two-way flow

Use Fläkt Woods product selection program for chilled beams.

Sound pressure level

STELLA	Correction K oct dB							
	octave band, middle frequency, Hz							
	63	125	250	500	1000	2000	4000	8000
-180	7	6	3	0	-1	-6	-12	-8
-240	7	6	3	0	-1	-6	-12	-8
-300	7	6	3	0	-1	-6	-12	-8
Tol ±	6	3	2	2	2	2	2	3

The sound power levels for every octave band are obtained by adding together the sound pressure level L_{A10} , dB(A), from our product selection program and the corrections K_{oct} given in the table above, according to the following formula:

$$L_W = L_{A10} + K_{oct}$$

The correction K_{oct} is the average value for the area of application of the chilled beam STELLA.

Sound attenuation

The average sound attenuation ΔL of chilled beam STELLA from duct to room includes the end reflection of the connecting duct.

STELLA	Sound attenuation in supply air duct of beam ΔL , dB							
	Octave band, middle frequency Hz							
	63	125	250	500	1000	2000	4000	8000
-180	23	13	7	8	10	11	13	13
-240	23	13	7	8	10	11	13	13
-300	23	13	7	8	10	11	13	13
Tol ±	6	3	2	2	2	2	2	3

Materials and surface finish

The body, side panels, base panels and end panels of beams consist mainly of galvanized sheet steel, while the underside consists mainly of aluminium profiles. Visible components are finished as standard in white RAL 9010, which corresponds to NCS 0502-Y, gloss level 30.

Coils are made of copper pipe with a coupling $\varnothing y = 15$ mm and with aluminium fins. Maximum working pressure 1.6 MPa.

Construction and function

The chilled beam STELLA is designed for ceiling mounting and is exposed. STELLA is also prepared for installation in series of up to three chilled beams. Dummy sections may also be purchased as options.

The air flow is directed slightly upwards through the vents, encouraging air to flow along the ceiling to ensure draught-free ventilation.

The air flow is easily adjusted using the patented Energy Control function, which also allows different forms of air distribution (two-way, one-way and mid-way position). For even greater flexibility there is also a Motorized Energy Control (MEC) option for load-dependent ventilation. In normal operation the beam is set to the chosen air flow setting. At times of heavy demand (increased supply air demand) the chilled beam is switched to boost mode by means of a pushbutton or CO2 sensor. If a presence detector or pushbutton is installed in the room the beam can also be programmed to switch to Energy Saving Mode (ESM), which reduces the supply air flow to a minimum.

Different settings of the Energy Control on both sides of the beam requires a damper at each air connection in order to make adjustment of the airflow.

See also the separate catalogue section on EC/MEC.

STELLA is a multifunction chilled beam that allows a variety of optional functions to be chosen over standard, and is designed so that it can be configured for special accessories. In standard specification Stella is prepared for direct and indirect lighting, control and regulation equipment, Energy Control (EC/MEC), Flow Pattern Control (FPC), high air flow, heating and sprinkler functions. It is also designed to provide space for piping, wiring, loudspeakers, smoke detectors, presence detectors, etc.

The bleed nipple can be selected in the product code, but cannot be combined with the series installation option.

The base panel and side panels can be removed to simplify access to connections and controls, and for maintenance.

If chilled beams are to be connected in series they are configured to allow series-coupling of air and parallel-coupling of water, see diagram on product code page.

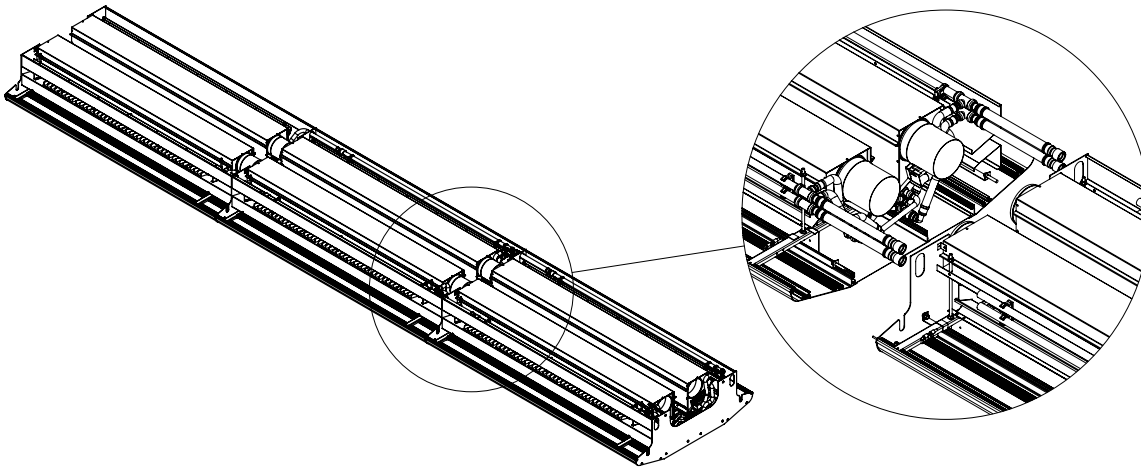
Technical data and dimensions

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Serial connection of Chilled Beams

Installation of Chilled Beams in series

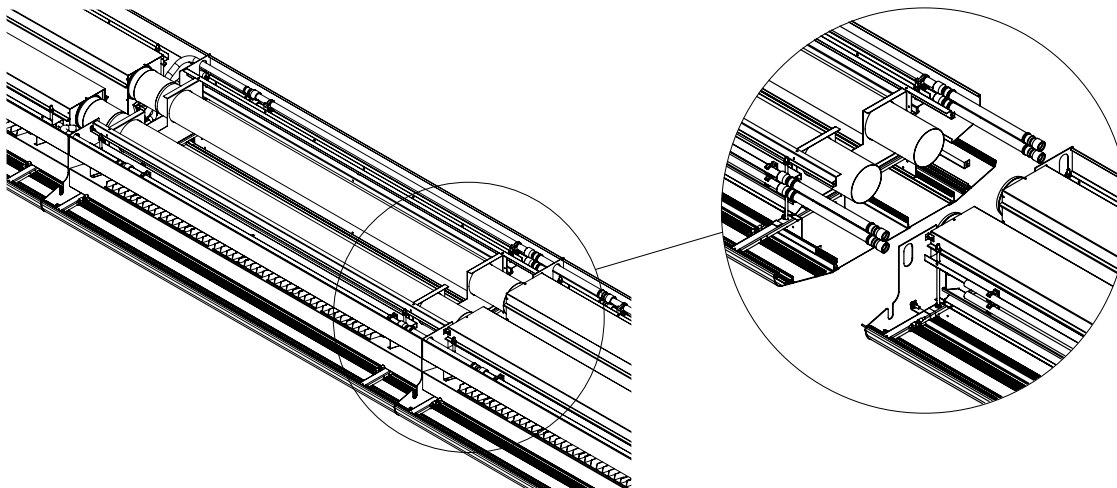
Chilled Beams installed in series must be defined in the product code as the first, middle or last Chilled Beam in the series. The Chilled Beam will be prepared before delivery and can be docked on site. As a standard solution the air can be connected in series between the Chilled Beams with a $\text{Ø}125$ mm circular duct, that is included in delivery. The copper tubes are $\text{Ø}22$ mm and connected with flexible hoses between the sections. The chilled beams are connected in parallel on the water side. All flexible hoses are of the type push on, which means shorter time of installation. Type of purging nipple is selected in the product code, but cannot be combined with installation in series. It is possible to install up to three chilled beams in series and the air flow in the $\text{Ø}125$ mm circular duct should not exceed 3m/s for each connection, to guarantee that LA10 does not exceed 35 dB(A) . This means that there is an air of 37 l/s for each connection, i.e. totally 74 l/s to the beam.



When installing chilled beams in series the side panels must be removed and the chilled beams placed in line on a flat surface. The chilled beams are docked by pushing them together and making sure that the pin bolts are fixed in the tracks of the connecting beam. Thereafter the flexible water hoses are connected to the pipes on the next chilled beam and the circular ducts are connected to the opposite nipples. Finally the units are bolted together with a small splice by using two screws.

Dummy section

For installations where an inactive part is necessary, a dummy can be ordered as an accessory. The dummy can be placed either as the first, middle or last section in the series and should be specified in the ordering code. It is possible to order the dummy prepared for serial connection of the air and it will then have a mounted circular ducts. The water side can also be prepared with $\text{Ø}22$ mm Cu-pipes with flexible hoses for docking onto the next chilled beam or dummy in the series. The docking is carried out in the same way as for serial connected chilled beams with pin bolts and screws.

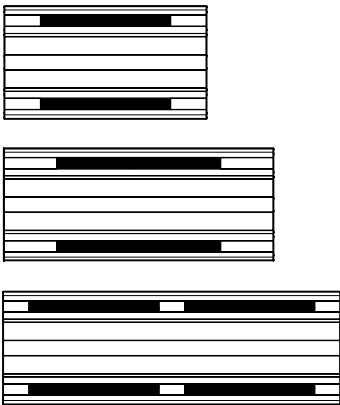


Lighting, dimensions and weight information

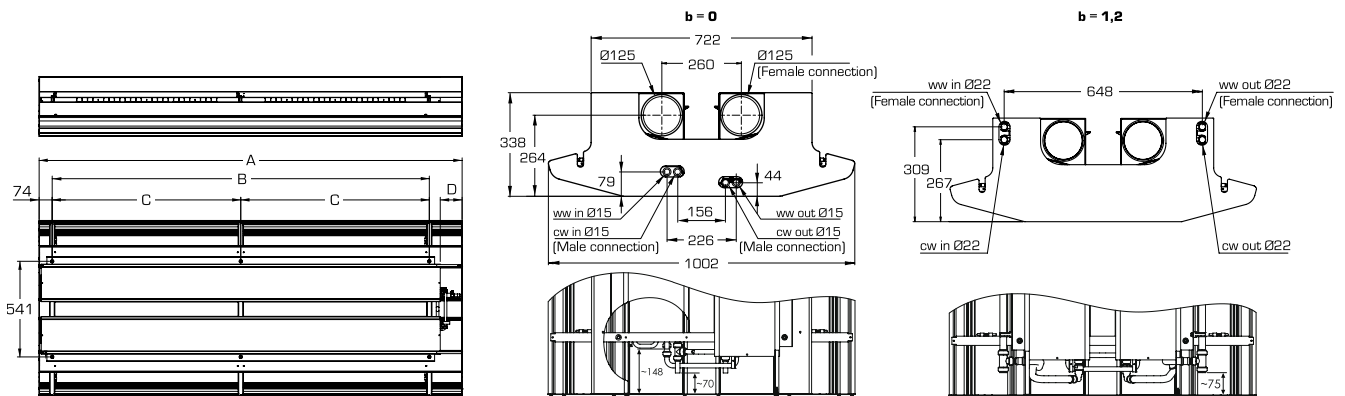
STELLA with direct and indirect lighting

Coil length, m	Light fitting length, mm	No. of light fittings	Power, W
1.8	1169	2	28/54
2.4	1469	2	35/49
3.0	1169	4	28/54

Light fittings are supplied complete with 800 mm long cable at both ends, fitted with Wieland connectors to allow wiring in series. Connecting cable is complete with 6-pole Wieland GST connector at both ends, with cable gland.



Dimensions and weights

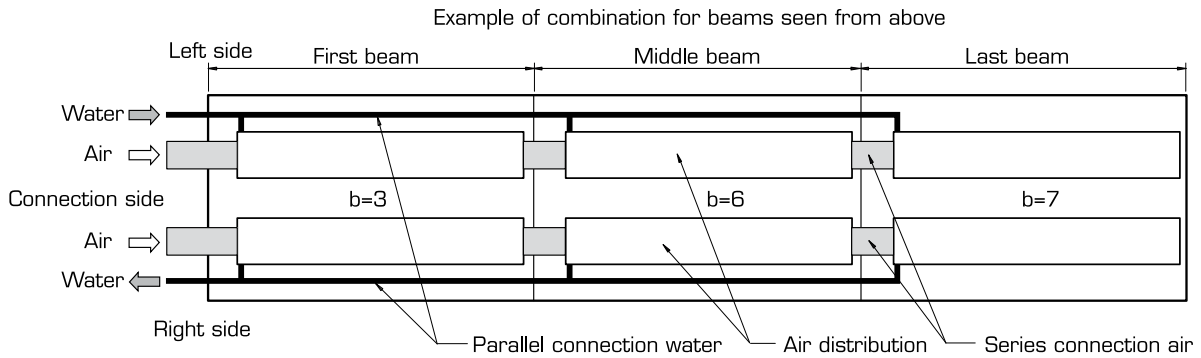


aaa	A	B	C	D
180	1798	1546	-	116
240	2398	2138	1069	124
300	2998	2730	1365	132

Weight per metre, chilled beam	Kg/m
Dry weight	42.0
Water-filled, cooling	43.4
Water-filled, cooling and heating	43.8

Product code, special versions, accessories

Product code



Main code

Freehanging supply air beam

IQFF-aaa-b-c-d-e-f

Beam type (b) for explanation see b in table below

- 0 = Single
- 1 = First
- 2 = First
- 3 = First
- 4 = Middle
- 5 = Middle
- 6 = Middle
- 7 = Last

Extension (c)

- 0 = Standard, no extension

Coil type (d)

- 1 = Cooling
- 2 = Cooling with purging nipple on the right side (only b = 0 - 3)
- 3 = Cooling and heating
- 4 = Cooling and heating with purging nipple on the right side (only b = 0 - 3)

Comfort control (e)

- 1 = With EC, normal air flow
- 2 = With EC, normal air flow and FPC
- 3 = With EC, high air flow
- 4 = With EC, high air flow and FPC

Duct connection (f) mm

- 1 = Ø125
- 2 = Ø160

Single	First	Middle	Last
 b = 0	 b = 1	 b = 4	 b = 7
	 b = 2	 b = 5	
	 b = 3	 b = 6	

Product code, special versions, accessories

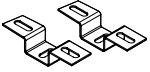
Accessories

Fastening bracket

QFAZ-21-bbb-cc

Length (bbb)
(aaa in beam code)

Model (cc)
01 = STELLA (IQFF)



Hanging lug

QFAZ-22-bbb-cc

Length (bbb)
(aaa in beam code)

Model (cc)
01 = STELLA (IQFF)



Motorized Energy Control

IQAZ-23-01-c-d-e-f

Connected sides (c)

- 1 = Both side
- 2 = Right side
- 3 = Left side

Design (d)

- 1 = 24 V, 2-modes On/Off
- 2 = 230 V, 2-modes On/Off
- 3 = 24 V, 3-modes variable (e = 0; f = 0)

Factory set hole adjustment for normal operating conditions (e)

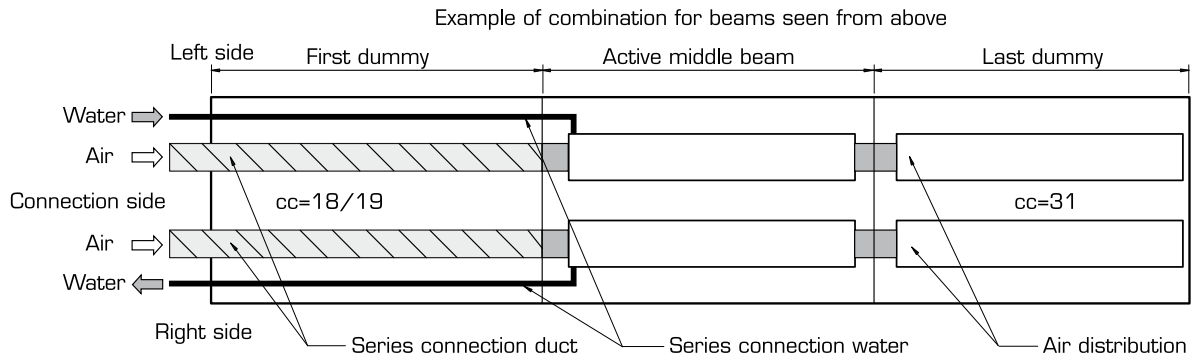
1-6 Hole adjustment

Factory set hole adjustment for activated operating conditions (f)

1-6 Hole adjustment

Product code, special versions, accessories

Main code



Dummy

IQAZ-25-bbb-cc-d-e

Nom. length (bbb) in cm
180, 240, 300

Execution (cc) see explanation for cc in table below



















- 00 = Single d = 0,5
- 01 = Single d = 0,5
- 10 = First d = 0,5
- 11 = First d = 0,5
- 12 = First d = 0,5
- 13 = First d = 1, 2, 6, 7
- 14 = First d = 3, 4, 8, 9
- 15 = First d = 1, 2, 6, 7
- 16 = First d = 3, 4, 8, 9
- 20 = Middle d = 0,5
- 21 = Middle d = 0,5
- 22 = Middle d = 0,5
- 23 = Middle d = 1, 6
- 24 = Middle d = 3, 8
- 25 = Middle d = 1, 6
- 26 = Middle d = 3, 8
- 27 = Middle d = 0,5
- 28 = Middle d = 1, 6
- 29 = Middle d = 3, 8
- 30 = Last d = 0,5
- 31 = Last d = 0,5

Connections (d) in mm

- 0 = Ø125, without water connection
- 1 = Ø125, Piping for cooling
- 2 = Ø125, Piping for cooling with purging nipple on the right side (only cc = 13, 15, 18)
- 3 = Ø125, Piping for cooling and heating
- 4 = Ø125, Piping for cooling and heating with purging nipple on the right side (only cc = 14, 16, 19)
- 5 = Ø160, without water connection
- 6 = Ø160, Piping for cooling
- 7 = Ø160, Piping for cooling with purging nipple on the right side (only cc = 13, 15, 18)
- 8 = Ø160, Piping for cooling and heating
- 9 = Ø160, Piping for cooling and heating with purging nipple on the right side (only cc = 14, 16, 19)

Comfort control (e)

- 1 = With EC, normal airflow
- 2 = With EC, normal airflow and FPC
- 3 = With EC, high airflow
- 4 = With EC, high airflow and FPC
- 5 = Without EC (only cc = 00, 10, 20, 30, 17-19, 27-29)
- 6 = Without EC but with FPC (only cc = 00, 10, 20, 30, 17-19, 27-29)

Single	First	Middle	Last
 cc = 00	 cc = 10	 cc = 20	 cc = 30
 cc = 01	 cc = 11	 cc = 21	 cc = 31
	 cc = 12	 cc = 22	
	 cc = 13, 14	 cc = 23, 24	
	 cc = 15, 16	 cc = 25, 26	
	 cc = 17	 cc = 27	
	 cc = 18, 19	 cc = 28, 29	

Part code IQAZ - cc

Beam (the first c)

- 0 = Single
- 1 = First
- 2 = Middle
- 3 = Last

Type (the last c)

- 0 = Without air distribution
- 1 = Stop at air distribution rear
- 2 = Air distribution with series connection
- 3, 4 = Stop at air distributor rear and water
- 5, 6 = Stop at air distribution rear with water connection
- 7 = Series connection with water
- 8, 9 = Series connection duct with water

Product code, special versions, accessories

Pre-setup Energy Control

IQAZ-26-bb-c-d

Model (bb)

01 = Stella (IQFF)

Default right side (c)

1-6 = Hole setting

Default left side (d)

1-6 = Hole setting