

# Vento



**Vacuum degassing system**

Engineering  
**GREAT** Solutions

# Vento

Pressure drop degasser according to the vacusplit principle. Through the atomizing process of the water in a special vacuum vessel, the gases are separated completely from the water. A water makeup system may be integrated as an option. It is used in heating, solar and cooling water systems to facilitate central venting of the system and minimise corrosion.

## Key features

- > **BrainCube control**  
Self-optimising with memory function.
- > **Fillsafe water make-up monitoring**  
With possibility to control water make-up through a Pleno P.



## Technical description

### Applications:

Heating, solar and chilled water systems. For systems according to EN 12828, EN 12976, ENV 12977, EN 12952, EN 12953.

### Pressure:

Min. admissible pressure, PSmin: -1 bar  
Max. admissible pressure, PS: see Articles

### Media:

Non-aggressive and non-toxic system media.  
Addition of antifreeze agent up to 50%.

### Temperature:

Max. admissible temperature, TS: see Articles  
Min. admissible temperature, TSmin: 0 °C  
Max. admissible ambient temperature, TU: 40 °C  
Min. admissible ambient temperature, TUmin: 0 °C  
Max. admissible temperature for water make-up, TW: 30 °C (VP)

### Supply voltage:

230 V/50 Hz and 60 Hz  
3 x 400 V/50 Hz (VP...PEC)

### Enclosure class:

IP 54 according to EN 60529

### Sound pressure level:

65 dB(A)  
74 dB(A) (VP .2 EC)

### Material:

In essence: steel, brass and gunmetal.

### Transportation and storing:

In frostless, dry places.

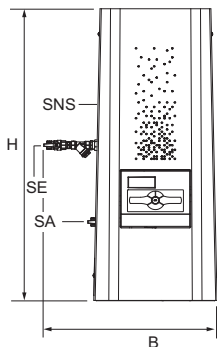
### Approvals:

CE-tested according to the requirements of the European Directives PED/DEP 97/23/EC, 2004/108/EC, 2006/95/EC.

## Function, Equipment, Features

- BrainCube control. Self-optimising with memory function.
- Vacusplit spray-type degassing of the system and make-up water in a vacuum vessel.
- Gas-content dependent eco-automatic operation (V...E(C), VP...E(C), VP...PEC).
- Eco-interval operation for interval degassing and continuous degassing (V3, V...F).
- Fillsafe water make-up monitoring. With possibility to control water make-up through a Pleno P (V). With contact water meter and a break tank type AB according to EN 1717, SVGW-tested (VP, VP...PEC).
- Cooling version insulated and vapor sealed (V...C, V...EC, VP...EC, VP...PEC).
- Isolating valves to the system.
- Floor standing (V 3, V...E(C), VP...E(C), VP...PEC).
- With integrated wall mounted bracket (V...F).
- High quality metal cover. (V 3, V...E(C), VP...E(C), VP...PEC): With handles.

## Vento V



### Vento V .1 F EcoEfficient

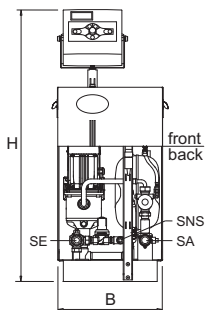
Degassing.

Eco-interval operation for interval degassing and continuous degassing.

1 pump. With integrated wall mounting bracket.

Connections: in (SE) Rp1/2, out (SA) Rp1/2, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	EAN	Article No
<b>6 bar (PS) / 70°C (TS)</b>									
V 2.1 F	550	930	325	29	0,6	10	1,0-2,5	7640153570420	812 1005



### Vento V .1

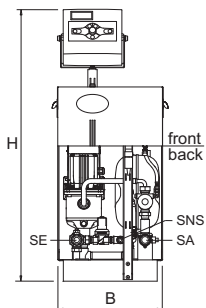
Degassing.

Eco-interval operation for interval degassing and continuous degassing.

1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>									
V 3.1	390	1000	490	29	0,6	100	1,0-3,0	7640148632218	812 1004



### Vento V .1 E

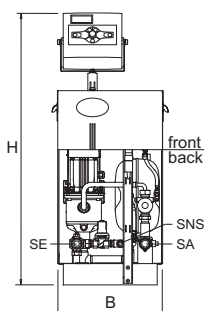
Degassing.

Gas-content dependent eco-automatic operation.

1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel kW	VNd [m³]	dpu [bar]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>									
V 4.1 E	390	1000	490	29	0,6	200	1,0-3,0	7640148632225	812 1000
V 6.1 E	390	1000	490	33	1,1	200	1,5-4,5	7640148632232	812 1001
<b>10 bar (PS) / 90°C (TS)</b>									
V 8.1 E	500	1000	490	40	1,5	200	2,0-5,7	7640148632249	812 1002
V 10.1 E	500	1000	490	42	1,5	200	3,5-7,5	7640148632256	812 1003



### Vento V .1 C – Cooling version

Degassing.

Eco-interval operation for interval degassing and continuous degassing.

1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

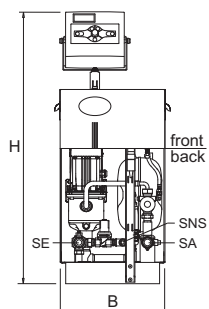
Type	B	H	T	m [kg]	PA [kW]	VNd [m³]	dpu [bar]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>									
V 3.1C	390	1000	490	30	0,6	100	1,0-3,0	7640148632263	812 1024

T = Depth of the device

Pel = Electric load

VNd = Water capacity for which a device is rated

dpu = Working pressure range

**Vento V.1 EC – Cooling version**

Degassing.

Gas-content dependent eco-automatic operation.

1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>									
V 4.1 EC	390	1000	490	30	0,6	200	1,0-3,0	7640148632270	812 1020
V 4.1 EC 60 Hz	390	1000	490	30	0,6	200	1,0-3,0		878 1052
V 6.1 EC	390	1000	490	34	1,1	200	1,5-4,5	7640148632287	812 1021
V 6.1 EC 60 Hz	390	1000	490	34	1,1	200	1,5-4,5		878 1053
<b>10 bar (PS) / 90°C (TS)</b>									
V 8.1 EC	500	1000	490	41	1,5	200	2,0-5,7	7640148632294	812 1022
V 10.1 EC	500	1000	490	43	1,5	200	3,5-7,5	7640148632300	812 1023

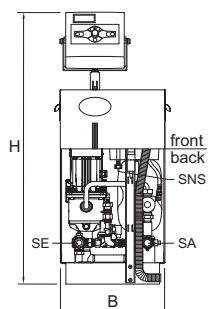
T = Depth of the device

Pel = Electric load

VNd = Water capacity for which a device is rated

dpu = Working pressure range

**Accessories for control modules:** Communication module.

**Vento VP****Vento VP.1 E**

Degassing, water make-up. Gas-content dependent eco-automatic operation.

1 pump. Floorstanding.

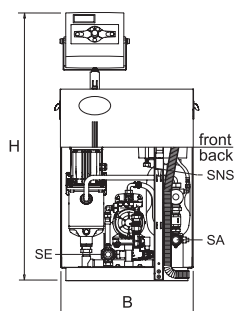
Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	qNwm [l/h]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>										
VP 4.1 E	390	1000	490	32	0,6	200	1,0-3,0	200	7640148632317	812 1010
VP 6.1 E	390	1000	490	36	1,1	200	1,5-4,5	200	7640148632324	812 1011
<b>10 bar (PS) / 90°C (TS)</b>										
VP 8.1 E	500	1000	490	43	1,5	200	2,0-5,7	200	7640148632331	812 1012
VP 10.1 E	500	1000	490	45	1,5	200	3,5-7,5	200	7640148632348	812 1013

**Vento VP.2 E**

Degassing, water make-up. 2 pumps. Including a reserve pump for water make up. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.



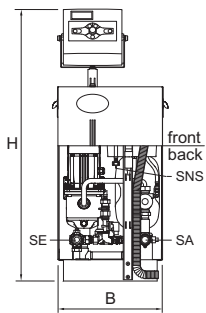
Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	qNwm [l/h]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>										
VP 6.2 E	500	1000	490	44	1,8	200	1,5-4,5	200	7640148632355	812 1041
<b>10 bar (PS) / 90°C (TS)</b>										
VP 10.2 E	500	1000	490	53	2,2	200	3,5-7,5	200	7640148632362	812 1043

T = Depth of the device

Pel = Electric load

VNd = Water capacity for which a device is rated

dpu = Working pressure range

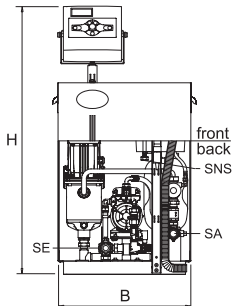


### Vento VP .1 EC – Cooling version

Degassing, water make-up. 1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	qNwm [l/h]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>										
VP 4.1 EC	390	1000	490	33	0,6	200	1,0-3,0	200	7640148632379	812 1030
VP 4.1 EC 60 Hz	390	1000	490	33	0,6	200	1,0-3,0	200		878 1050
VP 6.1 EC	390	1000	490	37	1,1	200	1,5-4,5	200	7640148632386	812 1031
VP 6.1 EC 60 Hz	390	1000	490	37	1,1	200	1,5-4,5	200		878 1051
<b>10 bar (PS) / 90°C (TS)</b>										
VP 8.1 EC	500	1000	490	44	1,5	200	2,0-5,7	200	7640148632393	812 1032
VP 10.1 EC	500	1000	490	46	1,5	200	3,5-7,5	200	7640148632409	812 1033



### Vento VP .2 EC – Cooling version

Degassing, water make-up. 2 pumps. Including a reserve pump for water make up. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	VNd [m³]	dpu [bar]	qNwm [l/h]	EAN	Article No
<b>8 bar (PS) / 70°C (TS)</b>										
VP 6.2 EC	500	1000	490	45	1,8	200	1,5-4,5	200	7640148632416	812 1051
<b>10 bar (PS) / 90°C (TS)</b>										
VP 10.2 EC	500	1000	490	54	2,2	200	3,5-7,5	200	7640148632423	812 1053

T = Depth of the device

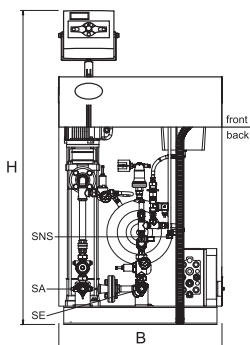
Pel = Electric load

VNd = Water capacity for which a device is rated

dpu = Working pressure range

**Accessories for control modules:** Communication module.

## Vento VP...PEC



### Vento VP .1 PEC – Cooling version

Degassing, water make-up. 1 pump. Floorstanding.

Connections: in (SE) Rp1, out (SA) Rp1, water make-up (SNS) Rp1/2.

Type	B	H	T	m [kg]	Pel [kW]	SPL [dB(A)]	VNd [m³]	dpu [bar]	qNwm [l/h]	EAN	Article No
<b>20 bar (PS) / 90°C (TS)</b>											
VP 13.1 PEC	700	1300	540	70	2,0	65	200	4,0-10,0	200	7640148632430	812 1034
VP 19.1 PEC	700	1300	540	74	3,0	65	200	5,0-16,0	200	7640148632447	812 1035

T = Depth of the device

Pel = Electric load

VNd = Water capacity for which a device is rated

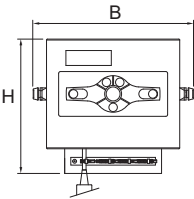
dpu = Working pressure range

**Accessories for control modules:** Communication module.

Accessories for control modules

Communication module for BrainCube control

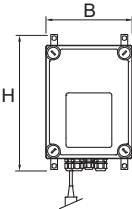
Max. admissible ambient temperature, TU: 40°C  
Enclosure class: IP 54  
Supply voltage: 230 V/50 Hz



ComCube DCD

RS 485 interface for communicating with BrainCube, 6 digital inputs for the use of external volt free signals (NO), 9 volt free digital outputs, freely programmable; all outputs can be inversed. Wall mounted, fixing elements for cable management.

Type	B	H	T	m [kg]	Pel [kW]	EAN	Article No
DCD	270	230	260	0,5	0,1	7640148638715	814 1000



ComCube DCA

2 separated analogue outputs 4-20 mA for connection to BMS, isolation voltage 2.5 kVAC. All cabeling inside the casing, wall mounted.

Type	B	H	T	m [kg]	Pel [kW]	EAN	Article No
DCA	190	260	180	0,5	0,1	7640148638739	814 1010

T = Depth of the device  
Pel = Electric load

**Additional information**  
**System design:** Calculation software *HySelect*  
**Abbreviations and terminology:** Datasheet *Planning and calculation*.



