Honeywell | Boiler Room Valves



Sludge and Air Separator

for heating systems

APPLICATION

The sludge and air separator serves to separate sludge and air from the heating system. It is equipped with a sludge and contamination reduction feature that functions according to the cyclone principle. This guarantees an effective separation of the particles.

There is an optional phosphate cartridge available to prevent corrosion in aluminium-free heating systems.

SPECIAL FEATURES

- Swivel connection for vertical or horizontal installation
- Integrated magnet for separation of ferromagnetic metals
- Integrated quick bleeder
- Quality insulation shell to prevent heat loss



TECHNICAL DATA

Connections / Sizes				
Connection size:	DN25			
Pressure values				
Max. inlet pressure with clear filter bowl:	16 bar			
Max. inlet pressure with brass filter bow:	25 bar			
Max. operating pressure:	10 bar			
Nominal pressure:	10 bar			
Nominal flow:	3.6 m ³ /h			
Pressure loss during nominal flow rate:	0.2 bar			
Operating temperatures				
Max. operating temperature medium:	90 °C			

CONSTRUCTION



	Components	Materials		
1	Housing	Dezincification-resistant brass		
2	Blind plug including magnetic separator			
3	Insulation shells	PE foam		
4	Quick bleeder	Dezincification-resistant brass		
5	Connection piece	Dezincification-resistant brass		
6	Ball valve			
	Not depicted components:			
	Seals	EPDM		

METHOD OF OPERATION

The heater water separator serves to separate sludge and air from the heater system.

It is equipped with a sludge and contamination reduction that functions according to the cyclone principle. This guarantees an effective separation of the particles.

The heater water separator is equipped with a quick bleeder for the air separation. If there is air in the system, it will rise to the highest point of the heater water separator. The water level drops there, the integrated floater pulls the floater arm down and thereby opens the sealed area. The air bleeds out whereby the water level rises again and the sealed area is closed again.

The optionally available phosphate cartridge counters the corrosion in the heater system. This dosing serves as an additional protection of the heater system; not as a replacement of the basic conditioning of the heater water by inhibitors.

TRANSPORTATION AND STORAGE

Keep parts in their original packaging and unpack them shortly before use.

The following parameters apply during transportation and storage:

Parameter	Value
Environment:	clean, dry and dust free
Min. ambient temperature:	-15 °C
Max. ambient temperature:	+70 °C
Min. ambient relative humidity:	25 % *
Max.ambient relative humidity:	95 % *

*non condensing

INSTALLATION GUIDELINES

Setup requirements

- The sludge and air separator is not suited for:
 - The separation of oils greases, solvents, soaps and other lubricating media
 - The separation of water-solvent materials
- The sludge and air separator is installed in the heating circuit (feed and return line)
- The heating system needs to be rinsed and filled
- The national installation regulations, general guidelines and technical data must be observed during the assembly
- The installation site has to be frost-proof and the protection of the device from chemicals, paints, detergents, solvents and their vapours and environmental influences must be guaranteed
- A course dirt separator needs to be installed up front for water with course dirt particles
- To ensure the bleeding of the air, the sludge and air separator has to be installed with the quick bleeder upwards
- The separator has to stand vertically; the connection piece can be built into horizontal and vertical lines
- Make sure the seals fit properly. The pressure-sealing tightening of the screws has to be done cross-wise
- Install stop valves ahead and following the sludge and air separator
 - This makes it possible to maintain the sludge and air separator easily without draining the heating system
- Mount the sludge and air separator at easily accessible points in the system

Installation Example



Fig. 1 Standard installation example for the sludge and air separator

TECHNICAL CHARACTERISTICS

kvs-Values

Connection sizes:	25
k _{vs} -value (m ³ /h):	7.8

DIMENSIONS



Parameter		Values
Dimensions:	mm	
	Н	330
	h1	310
	L	184
	l ₁	100
	l2	138
	l3	70
Weight:	kg	3.35

ORDERING INFORMATION

The following tables contain all the information you need to make an order of an item of your choice. When ordering, please always state the type, the ordering or the part number.

Options

The value is available in the following sizes: 1/2".

- standard
- not available

		HF49-1A		
Connection type:	Standard version:	•		

Accessories

Description		Dimension	Part No.
PE49	Phospate cartridge		
	Phosphate cartridge for protection of the heater system again only in heater systems without aluminium materials.		orrosion. Use
			PE49

Spare Parts

Refilling combination HF49, from 2008 onwards

Overview		Description	Dimension	Part No.
	1	Venting insert		
				EE49
\bigcirc	2	Venting insert		
(1), (1), (2), (2), (3), (3), (3), (3), (3), (3), (3), (3				KH49
available as				
accessory				

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Manufactured for and on behalf of the Environmental and Combustion Controls Division of Honeywell Technologies Sàrl, Z.A. La Pièce 16, 1180 Rolle, Switzerland by its Authorised Representative Honeywell GmbH ENOH-1549GE23 R0916 Subject to change © 2016 Honeywell GmbH

