

IBH-2 Indirect Blow Heaters

Technical Info



1 Product description

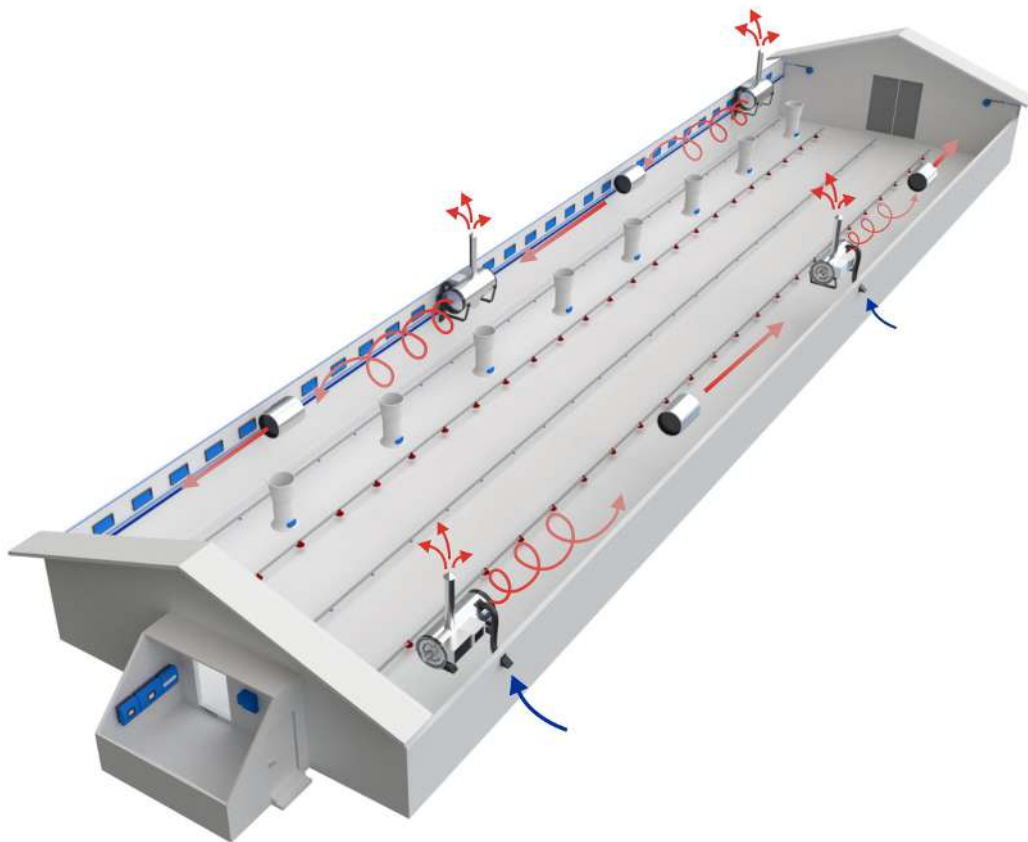
This Technical user guide is a supplement to the manuals supplied by the manufacturer of the product. Manuals are included with the gas/oil blow heaters. This guide does not replace the manuals supplied by the manufacturer. Contact SKOV A/S in case of deviations between information in this guide and the manuals supplied by the manufacturer. As a rule, the manual supplied by the manufacturer of the product is applicable.

This guide shows the variants of gas/oil blow heaters used by SKOV A/S and includes a short, general functional description and directions for mounting blow heaters integrated in a ventilation system.

Gas/oil blow heaters are designed for heating medium-sized or large houses.

Blow heaters heat up and circulate the housing air by means of built-in fans. Gas/oil blow heaters are indirectly fired, where combustion of gas/oil does not take place inside the actual house section, but in a separate combustion chamber. The blow heater is connected to a snorkel that supplies fresh air to the combustion and a chimney that leads moisture and combustion gases out of the house. Thereby considerably reducing heat consumption compared to direct-fired blow heaters.

Indirect blow heaters can also be used as ON/OFF air circulators when heating is not required.

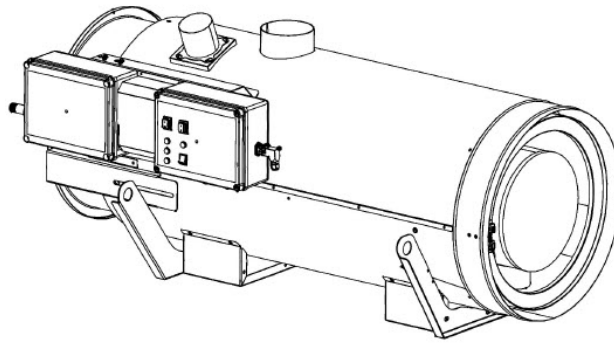


1.1 Manuals supplied by the manufacturer

This guide is a supplement to the manuals supplied by the manufacturer. Among other things, the manual supplied by the manufacturer describes exactly how to adjust the blow heater and how to troubleshoot.

The manuals supplied by the manufacturer have A4 format and look like this:

IT	GENERATORE D'ARIA CALDA
FR	GENERATEUR D'AIR CHAUD
DE	WARMLUFTERZEUGER
EN	SPACE HEATER
ES	GENERADOR DE AIRE CALIENTE
RU	ТЕПЛОГЕНЕРАТОР



BH 100

2 Product survey



410204 Blow heater IBH-2 100kW NG 240V 50Hz

410202 Blow heater IBH-2 100kW LPG 240V 50Hz

- Range with external air circulator 55 m
- Range without external air circulator 45 m
- Weight 140 kg



410203 Blow heater IBH-2 100kW LPG 240V 50Hz AUS

Approved for the Australian market.

- Range with external air circulator 55 m
- Range without external air circulator 45 m
- Weight 140 kg



410188 Blow heater IBH 100kW Diesel 240V 50Hz

410189 Blow heater IBH 100kW Diesel 240V 60Hz

- Range with external air circulator 55 m
- Range without external air circulator 45 m
- Weight 135 kg



410117 Blow heater IBH 50kW Diesel 230V 50Hz

410118 Blow heater IBH 50kW Diesel 220V 60Hz

- Range with external air circulator 45 m
- Range without external air circulator 35 m
- Weight 80 kg

2.1 Accessories



410183 Suspension bracket for IBH 100 blow heater

410195 Suspension bracket for IBH 50 blow heater

The suspension bracket is used when the blow heater is mounted suspended from the ceiling

Order one suspension bracket per blow heater.



410169 Suspension kit for IBH heater

Contains mounting rails and mounting set for mounting blow heater suspended from ceiling.

Order one mounting set per blow heater.



410164 Chimney/snorkel kit IBH blow heater

Complete chimney and snorkel kit for IBH blow heater.

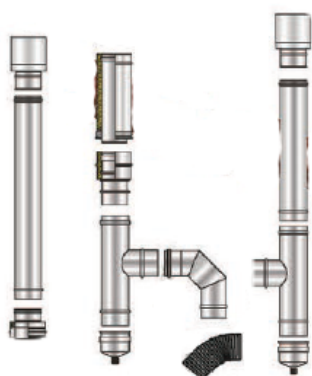
Contains 5 meters of snorkel, 2 x 1 meter uninsulated, 2 x ½ meter insulated chimney, pipe kit, T-shape, elbow and chimney cap.

The kit can be used if the chimney needs to be led through a wall or roof.

For lead-through the wall, add the number of 410196 chimney 1 meter extensions necessary for the chimney cap to be at least 1 m above the roof.

Suspension chimney wall (410119) and roof pass plate (410168) must be ordered separately.

Order one kit per blow heater.



410111 Chimney/snorkel kit roof IBH blow heater

Complete chimney and snorkel kit for IBH blow heater.

Contains 5 meters of snorkel duct, roof duct, draining kit, T-shape, and chimney cap.

The chimney consists of 1 meter uninsulated chimney duct and ½ a meter of insulated chimney duct, draining kit, T-shape, elbow, and chimney cap.

The kit can be used if the chimney and the snorkel need to be led through the roof.

Roof pass plate (410168) must be ordered separately.

Order one kit per blow heater.



410196 Chimney 1 meter extension for IBH blow heater

Used as extension for chimney.



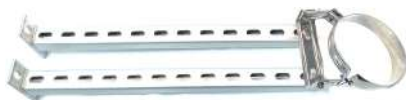
410168 Roof pass plate for IBH heater chimney

Used when chimney led through the roof.

Contains rubber roof pass plate, sealant and screws for steel roof.

Can be fitted on most roof profiles and roofs with pitches between 0 and 45°.

Order one pass plate per blow heater.



410119 Suspension chimney wall for IBH heater

Used to hold and stabilize chimney on the side of houses when the chimney is led through a wall.

Contains suspension and mounting set.

Order one suspension per blow heater.

**410198 Gas regulator IBH NG**

Must be used for regulating natural gas.

Contains gas regulator (DN 25 - 1") max. 2 bar. 20 mBar preset.

Order one regulator per natural gas blow heater.

**410199 Gas regulator IBH LPG**

Must be used for regulating LPG.

Contains gas regulator (DN 25 - 1") max. 2 bar. 30 mBar preset.

Order one regulator per LPG blow heater.

**410197 Connection kit with oil de-aerator + filter**

The oil de-aerator/tiger loop is used to eliminate the need for an oil return pipe to the tank.

Contains de-aerator and filter for IBH oil blow heaters.

Order one connection kit per oil blow heater.

3 Technical data

3.1 IBH-2 100 kW gas

		410204 100kW NG	410202 100kW LPG
Electrical			
Rated voltage	V AC	1 x 230	
Frequency	Hz	50	
Max. power consumption	A	5.5	
Max. power	W	1150	
Gas			
Gas		Natural gas	LPG/Propane
Normal supply pressure	mbar	20	
Thermal input	kW	99.45	97.24
Output power	kW	89.10	88.54
Efficiency	%	89.6	91.1
Natural gas consumption	m ³ /h	9.102	-
LPG/Propane	kg/h	-	3.594
Mechanical			
Air output	m ³ /h	8500	
Max. distance	m	60	
Max. distance without external air circulator	m	45	
Max. distance with external air circulator	m	55	
Max. length of fresh air intake	m	5	
Environment			
Temperature, operation	°C	-10 – 40	
Category		II2H3B/ P	
Type		B23P – B53P	
Gas burner type		Ecoflam MAX120	
Protection class	IP	65	
Noise level at 1 m	dB (A)	70	
Shipment			
Dimensions LxWxH	mm	1776x866x768	
Packing dimensions LxWxH	mm	1830x925x901	
Weight	g	140000	
Shipping weight	g	158000	

3.2 IBH-2 100 kW gas AUS

		410203 100kW LPG AUS
Electrical		
Rated voltage	V AC	1 x 230
Frequency	Hz	50
Max. power consumption	A	5.5
Max. power	W	1150
Gas		
Gas		LPG/Propane
Normal supply pressure	mbar	30
Burner settings	N°	6
Thermal input	kW	97.24
Output power	kW	88.54
Efficiency	%	91.1
LPG/Propane	kg/h	3.594
Mechanical		
Air output	m ³ /h	8500
Max. distance	m	60
Max. distance without external air circulator	m	45
Max. distance with external air circulator	m	55
Max. length of fresh air intake	m	5
Environment		
Temperature, operation	°C	-10 – 40
IAPMO certificate number		GMK10652
Category		II2H3B/ P
Type		B23P – B53P
Gas burner type		Ecoflam MAX120
Protection class	IP	65
Noise level at 1 m	dB (A)	70
Shipment		
Dimensions LxWxH	mm	1776x866x768
Packing dimensions LxWxH	mm	1830x925x901
Weight	g	140000
Shipping weight	g	158000

3.3 IBH 100 kW oil

		410188 100 kW	410189 100 kW
Electrical			
Rated voltage	V AC	1 x 230	
Frequency	Hz	50	60
Max. current consumption	A	5.8	6.0
Max. power	W	1000	1350
Oil			
Oil type		Diesel	
Normal supply pressure	bar	9	9
Thermal input	kW	99.8	99.8
Output power	kW	89.9	89.9
Efficiency	%	90	90
Consumption diesel	kg/h	7.9	7.9
Mechanical			
Air output	m ³ /h	7700	7700
Max. distance	m	55	
Max. distance without external air circulator	m	45	
Max. distance with external air circulator	m	55	
Max. length of fresh air intake	m	6	
Environment			
Temperature, operation	°C	-10 - 40	
Type		B23P – B53P	
Gas burner type		RIELLO RDB4	
Protection class	IP	IP X4D	
Noise level at 1 m	dB (A)	70	
Shipment			
Dimensions LxWxH	mm	1781x831x776	
Packing dimensions LxWxH	mm	1830x860x915	
Weight	g	135000	
Shipping weight	g	150000	

3.4 IBH 50 kW oil

		410117 50 kW	410118 50 kW
Electrical			
Rated voltage	V AC	1 x 230	1 x 220
Frequency	Hz	50	60
Max. current consumption	A	3.5	4.0
Max. power	W	750	1020
Oil			
Oil type		Diesel	
Normal supply pressure	bar	13.00	13.00
Thermal input	kW	49.8	49.8
Output power	kW	45.6	45.6
Efficiency	%	91.5	91.5
Consumption diesel	kg/h	3.94	3.94
Mechanical			
Air output	m ³ /h	4500	4800
Max. distance	m	45	
Max. distance without external air circulator	m	35	
Max. distance with external air circulator	m	45	
Max. length of fresh air intake	m	6	
Environment			
Temperature, operation	°C	-10 - 40	
Type		B23P – B53P	
Gas burner type		RIELLO RDB4	
Protection class	IP	IP X4D	
Noise level at 1 m	dB (A)	70	
Shipment			
Dimensions LxWxH	mm	1351x625x643	
Packing dimensions LxWxH	mm	1440x780x761	
Weight	g	80000	
Shipping weight	g	105000	

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