



Products

WE INCREASE
UPTIME AND EFFICIENCY
IN THE REFRIGERATION INDUSTRY



We invest in innovation and meticulous testing to develop products that improve your business.



HBCP compressor protection



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Damage prevention... with HBCP compressor protection

New and revolutionary sensor technology that protects the compressor against liquid hammer.

Detects the following refrigerant types:
types: R717, R718, R22, R134a, R410a, R507, R407C, R502, R404A

Flexible installation:
Can be mounted both in cocurrent and countercurrent flows.

Smart split design:
Makes it easy to install and service. Fault detection on the electronics and/or replacement of the electronics can be carried out without releasing pressure on the system.

The sensor has built-in data logs:
All alarms are saved, so the sensor also functions as a "black box". The data logger can save up to 16,000 figures, with programmable time intervals.

Can be used on all types of compressors:
Including rotary twin screw and piston, as well as for any compressor manufacturer e.g. GEA, Howden, Johnson Control, Daikien, McQuay, etc.

Plug and play:
Easy to fit on the compressor suction line. Can be used on existing compressor installations and on new compressor installations.

Damage prevention:
In the event of liquid hammer, an instantaneous alarm is sent to the compressor control, which must signal an emergency stop to the compressor.

Configuration by PC:
The HBCP tool makes it possible to change the type of output between NO or NC, set-up the data logger, read the data logging file, or adjusting the alarm level.

Patent-pending technology:
HBCP is a new revolutionary, patent-pending sensor technology and it is the first sensor in the world capable of measuring the condition of gas and liquid refrigerant in a refrigeration system.

HBCP Management configuration tool

Get status of log module: 13:03:50 10/06/2013

Total numbers of logs: Knocking alarm logs: Gas alarm logs: Gas level logs: 33 0 10 23

Status of receiving logs: No receiving data...

Select below which data display on the graph:
Values in % or pF: % pF

Log module not active: 13:16:26 24/06/2013

Log module last started: Select log interval: HH:mm:ss dd/MM/yyyy Startup mode (1 sec int.)

Log interval: 1 Minute

Reset log module

Data

Date	Value
13:14:40	10
13:14:45	40
13:14:50	30
13:14:55	50
13:15:00	20
13:15:05	50
13:15:10	20
13:15:15	10

Patent-pending sensor technology

HBCP is a new revolutionary, patent-pending sensor technology and it is the first sensor in the world capable of measuring the condition of gas and liquid refrigerant in a refrigeration system. HBCP is used for detecting gas quality at the intake of refrigeration compressors. The sensor thereby ensures that liquid refrigerant does not enter the compressor and cause damage to the moving parts. The sensor has a high sensitivity and even detects small liquid droplets before they become critical for the compressor.

Liquid overflow is the system owner's biggest nightmare!

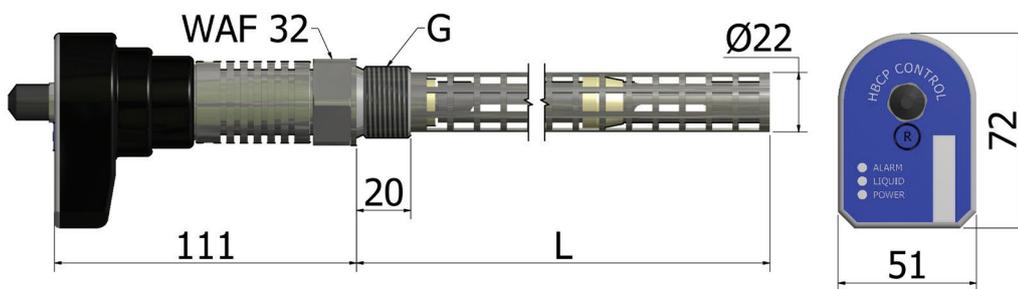
The costs associated with compressor damage can vary between 10,000 and 60,000 Euro, depending on the extent of the liquid overflow from the liquid separator as well as the make of the compressor. Liquid overflow is the system owner's biggest nightmare! Once a liquid overflow begins, so does the discussion with the system manufacturer and/or the compressor manufacturer on the apportionment of liability. Apart from the servicing costs, additional costs can easily add up for the days when the refrigeration system is out of order.

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Ordering code:

Pipe size (compressor line)	Length (L)	Connection	Ordering code
< 2"	150 mm	3/4" NPT	HBCP-R-1.5-2
< 2"	150 mm	3/4" BSPP	HBCP-R-1.5-6
> 2"	300 mm	1" BSPP	HBCP-R-3-8
> 2"	300 mm	1" NPT	HBCP-R-3-9

Dimension:**Specification:**

Supply		Mechanical specifications	
Voltage	24 V DC + 10%	Thread connection	3/4" NPT and 1" BSPP
Power usage	Max 30 mA	Material contact with liquid	AISI 304
Output		Configuration & indication	
Transistor PNP	NO or NC	Configuration	PC tool – "HBCP TOOL"
Alarm indication	Warning / Alarm	LED Indication	LED (green, yellow, and red)
Data logging	Read using PC	Data logging	Read using PC
Cable (included)		Accessories	
5m cable with M12 plug	HBxC-M12/5	Software tool	HBCP TOOL
Cable specifications	PUR -5m x 0,34mm ²	Programing cable	HBxC-USB

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HB Products A/S
 Bøgekildevej 21
 DK-8361 Hasselager

Phone: +45 8747 6200
 Fax: +45 8747 6209
www.hbproducts.dk

