



Winterwarm HR 30

The condensing unit air heater which combines efficient heating with energy savings and high comfort.



Winterwarm
heating solutions 

Characteristics Winterwarm HR 30:

- High efficiency (on ECA list)
- Energysaving (up to 25% compared to conventional heaters)
- Variable air distribution
- Compact and reduced weight

For many years now, suspended unit air heaters have been employed worldwide to heat industrial buildings. Research from the 'Gasunie' (NL) regarding various industrial heating systems has confirmed that direct heated gas-fired air heating is one of the most efficient heating methods.

In general

The Winterwarm HR 30 (high system efficiency) combines efficiency, energy savings and total comfort control through several unique design characteristics. Besides, the heater enables an easy and quick installation due to being compact, light, with only 2 suspension points, in combination with the specially developed clock thermo-stat, including many features. The development, production and sales take place under the ISO 9001-2000 quality system, which ensures the famous Winterwarm quality.

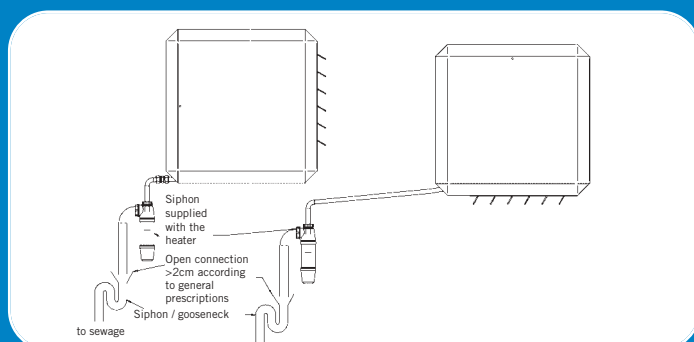
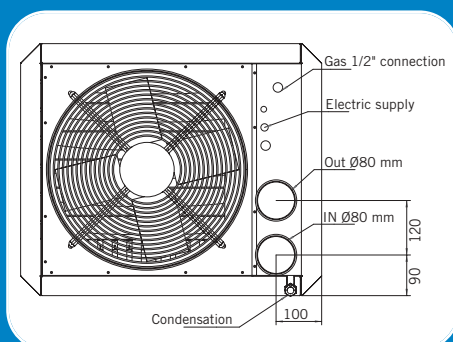
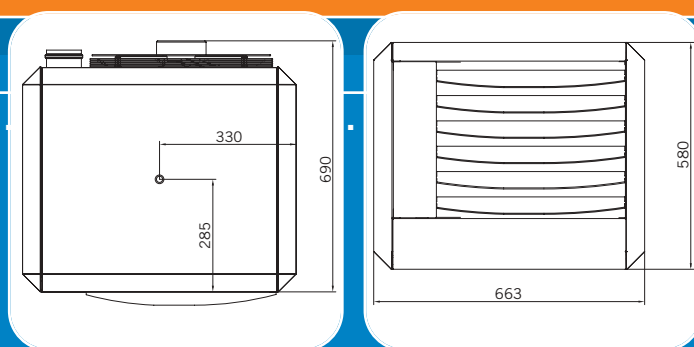
Temperature Gradient Control

The HR 30 series uses an advanced control system to ensure an accurate comfortable room temperature, a good air distribution and minimal energy consumption. In order to realise this, the HR 30 is provided with a gradient control. Two temperature sensors, one in the heater and one in the room thermostat, measure continuously the temperature gradient. Should the temperature gradient increase beyond the set value, the unit will switch on the fan to an adapted speed and circulate the warm air heaped up under the ceiling to the working space. When the heater is installed under the ceiling in the vertical plane, it can then function as a destratification fan. In this instance the transmission loss is reduced to a minimum. The gradient control is present when there is no heat demand.

In addition the appliance can be used in the summer ventilation mode. The system fan then provides a continuous air-circulation; the speed can be set on beforehand (3 stages).

Technical features

One of the unique characteristics of the Winterwarm HR 30 is that the heater can be suspended in any desired position: horizontal, vertical or at any angle in between. Therefore easily directing the airflow in the direction required. When the heater is installed in the vertical plane a minimum distance of 4 m. to the underside of the heater must be maintained in order not to be incomed by the air stream. The maximum vertical throw will highly depend on the vertical temperature gradient. The greater the temperature difference, e.g. in the morning, the greater the resistance for the warm airflow will be and the smaller the vertical throw. In a warmed up situation the vertical throw will be maximum 9 m. In case the unit is installed any higher, additional de-stratification units are required. The above described characteristic is enabled by the cylindrical shaped pre-mix burner. It is fitted at the heart of the heater and burns around its circumference, generating a heat input which is divided optimally over the heat exchanger. The burner can modulate down to 24% of the maximum



output. The steppless systemfan switches simultaneously with the burner so that the heat is added gradually to the exact amount required. The pre-mix fan takes the form of a flue booster. The heat exchanger is made from high grade stainless steel and has a guarantee period of 5 years!

Suspension

The HR 30 is provided with only 2 suspension points. Two special suspension systems are developed for this.

- Bracket for horizontal or vertical air distribution, consisting of 3 U-sections, 2 of which are mounted to the heater and 1 to the wall or to the ceiling. Also available are extension pieces of 1 m. and clamps for mounting the bracket to a steel "H"-section.
- Design bracket, this bracket can rotate in both the horizontal and vertical direction, consequently, the heater can blow in any desired direction. Suitable for mounting on a wall or ceiling (types XR 10-30).
- The HR 30 has 4 recessed suspension points in the corner for

M10 threaded bar. This allows the heaters to be suspended in the conventional manner.

Controls

Especially for the HR-series Winterwarm has developed the MultiTherm thermostat. This thermostat optimizes the gradient control and the modulating burner and fan regulation. Both these regulations together realize optimal energy consumption. For the user, the operation of the thermostat is simple. The user can observe various information and make any necessary adjustments using the on screen prompts, or detect any recent failures.

The MultiTherm is available in 2 models: **Standard** and **Comfort** (with various programming possibilities).



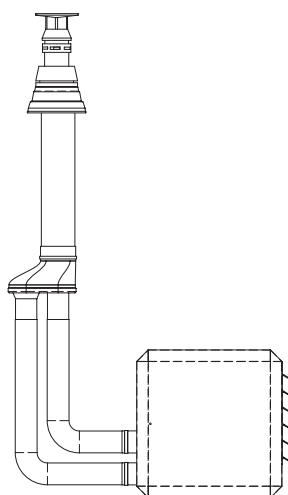
MultiTherm S



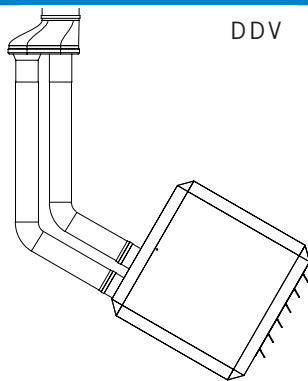
MultiTherm C

Features:

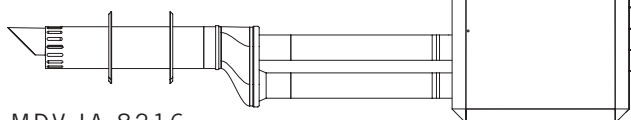
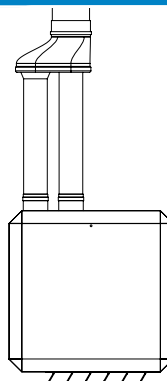
	MultiTherm S	MultiTherm C
7 day program		x
10 different on/off programs		x
Manual override		x
Summer/winter time		x
Modulates the heater according to the room temperature	x	x
Summer ventilation	x	x
Compensation wall influence	x	x
Keyboard locking		x
Frost protection	x	x
Failure diagnosis and reset per unit air heater	x	x
Wired in twisted pair screened cable	x	x
Controls 1-8 heaters	x	x



DDV-IA.8214



DDV



MDV-IA.8216

Technical data

Description	unit	HR 30
Nominal heat input maximum	kW	30,5
Nominal heat input minimum	kW	7,3
Efficiency max. heat input	%	98,4
Efficiency heat input 30%	%	107,6
Nominal heat output maximum	kW	30,0
Nominal heat output minimum	kW	7,9
Maximum air output 31° C	m3/h	3200
Throw (horizontal)	m	19
Throw (vertical / maximum)	m	6
Noise level	dB	44
Electrical supply	V	230
Electrical supply thermostat	V	24
Power consumption maximum	W	250
Gas connection	G"	1/2"
Minimum suspension height (horizontal air distribution)	m	1,7
Minimum suspension height (vertical air distribution)	m	4
Minimum supply pressure G20	mbar	20
Maximum gas consumption G20	m3/h	3,6
Weight	kg	45
Gascategory I2H, I2L, I2E(R)B, I2ELL, I2Esi, I2ELwLs, I2E(S)B, I2R, IEr		

*) 4 m. from unit

Winterwarm: leading

Winterwarm has been engaged in the development, production and sales of industrial heating in Europe since 1936. The company not only specialises in indirect fired unit air heaters, but also sells radiant tubes, rooftops, water heaters and destratification fans.



Winterwarm 
heating solutions

Winterwarm BV

Industrieweg 8 Winterswijk The Netherlands
P.O.Box 36 NL-7100 AA Winterswijk The Netherlands
Tel. +31 (0)543 54 63 00 Fax +31 (0)543 54 63 10
www.winterwarm.nl info@winterwarm.nl

Winterwarm UK Ltd.

Unit H3, Taylor Business Park, Warrington Road,
Risley, Warrington, Cheshire WA3 6BL
Tel. +44 (0)870 90 89 906 Fax +44 (0)192 57 62 996
www.winterwarmuk.com enquiries@winterwarmuk.com

Famous Winterwarm quality

- 70 years of experience
- ISO 9001-2000 certified
- Quick delivery
- Reliable