

Product catalogue and pricelist UK

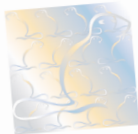
September 2021 - December 2021

Winterwarm heating solutions

With this brochure you can simply select all necessary parts for a Winterwarm heating installation.

Winterwarm-quality

- More than 85 years of experience
- ISO 9001:2015 certified
- Quick delivery
- Reliable



Certificate KSC-K080300834/06

Issued	2020-06-24	Replaces	KSC-K080300834/05
Valid until	2023-06-24	First issued	2005-04-19

CERTIFICATE

ISO 9001

Kiwa has determined that the quality management system applied by
Winterwarm Heating Solutions B.V.
 and its implementation comply with NEN-EN-ISO 9001:2015 for the scope:

The development, production and sales of gas- and oil fired air heaters.

Ron Scheepers
Kiwa

Please contact the certified company for more information about the scope of this certificate in relation to the ISO 9001:2015 standard.

*This certificate consists of 1 page.
 Publication of this certificate is allowed.*

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Prices in this catalogue are gross prices. For net prices you can contact our sales office in Warrington - Tel. +44 (0)192 57 65 799. More specific product information can be found on www.winterwarm.co.uk.

Version: September 2021 - valid until 1st of January 2022

About us
Winterwarm, quality all over
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Winterwarm HR
Condensing unit air heater
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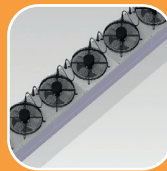
Winterwarm HR-EC
Condensing unit air heater
with EC-fan
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Winterwarm XR+
Indirect fired unit air heater with
modulating burner and fan
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Winterwarm ACM
Air curtain consisting
of separate modules
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Destratification fans
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**Winterwarm
Water heater**
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**Winterwarm
Water heater EC**
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**Winterwarm
Water heater LT**
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Winterwarm EH
electric heater
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Controls
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Winterwarm DXC
Indirect fired air heater
with closed combustion
system for poultry houses
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Winterwarm DXE
Indirect fired air heater
for installation outside the
poultry house
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Winterwarm DXA/DXB
A direct fired heater on
gas or oil, engineered for
the agricultural market
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Radiant Tube
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Flue material
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Winterwarm Boxer
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Winterwarm DX Fan
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Introduction

For more than 85 years, Winterwarm has occupied a leading position in the industrial heating market in the Netherlands. We achieved this by focussing on 3 things: quality, service and innovation. This focus has resulted in the fact that today Winterwarm is one of the leading manufacturers in the industrial heating market throughout Europe.



We believe that such a role brings along with it the responsibility to take the lead regarding product innovation and new international developments. For this reason I, as chairman of Euro-Air, the European organisation of unit air heating manufacturers, attend the Technical Committee (TC180) of the European Community. This committee takes care of the CEN directives for decentralised heating systems. For Winterwarm this has as a positive side-effect in that we are relatively quickly informed about changes in legislation and/or standards. Our R&D department can therefore anticipate expected changes and make adjustments in our product program if necessary.



In addition to the above, it is important to us that we can adequately support our dealers in all countries. In the UK we have had our own sales office in Warrington for many years now where our experienced staff takes care of the UK and Irish customers. They supply support on day-to-day business activities such as order status and can provide advice on new projects or resolving any problems with heaters. Our website provides you with all kind of product information 24/7 and we continuously invest to improve our on-line service. All heaters, accessories and spares can be ordered through our Web Shop.



In short, Winterwarm is a successful international organisation which is happy to provide the heating for any factory, warehouse, greenhouse or poultry house. I am sure that this product catalogue with our comprehensive product range will certainly be a helpful selection tool. In addition, our dedicated team is available to help you anyway they can. Furthermore, we will continue to improve our products in order to continue to provide you with innovative products in the future.

Bart Looman
Director



Bart Looman



High quality product development

Winterwarm has its own R&D department which continuously works on the development of new products and the improvement of existing ones. Our goal is to provide our customers with a reliable product of high quality for a reasonable price. At this moment, our product range consists of 90% heaters which we engineered ourselves in the past 10 years, including 3 new types of heaters for the agricultural market.

Quality from top to bottom

Since 1992, Winterwarm has been ISO certified (ISO 9001:2015). Periodically the whole process of product engineering and development, production, delivery and after-sales service is audited by KIWA (the national gas institute in the Netherlands). Consequently, we continuously work to improve all aspects of our company processes. Before a heater leaves our factory, it is submitted to an extensive final test. This provides extra assurance to the installer and his customer that the heater will function well immediately after installation.

*Van Marcke - HVAC wholesaler
Roeselaere, Belgium
4x XR 60 heaters in VAM store*



*Vauxhall garage
Sheffield, United Kingdom
6.900 m² - XR + TR + WCU*



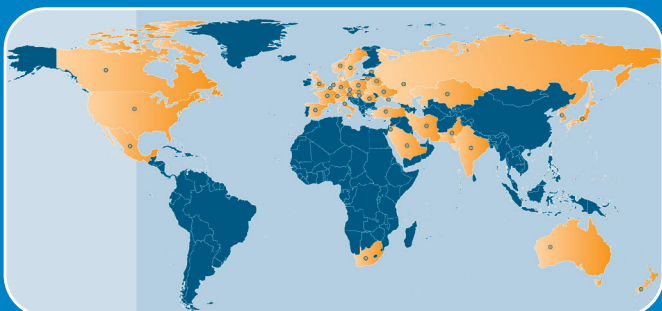
*Hennes & Mauritz
distribution centre Poznan, Poland
80.000 m² - 107x XR + TR*



*Project in Ireland by JF McKenna.
New poultry house with 50.000 chickens
with 4 DXE heaters.*



Winterwarm World Wide



*Jevansa Poultry - Erp (NL)
3 poultry houses with each 4 DXC
heaters for in total 120.000 chickens.*



Winterwarm HR-series

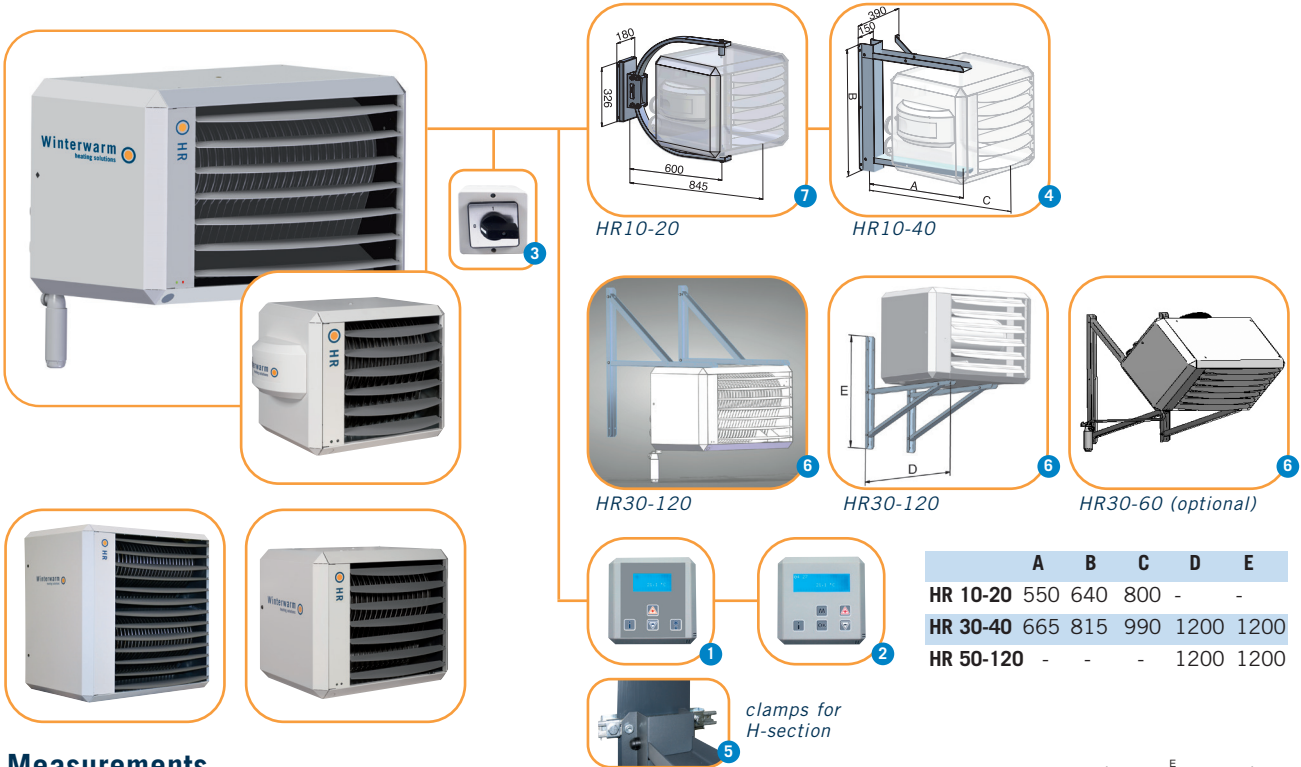
The condensing unit air heater which combines efficient heating with energy savings and high comfort.

The whole series complies already with the strict ErP regulations which come into effect as of 2021.



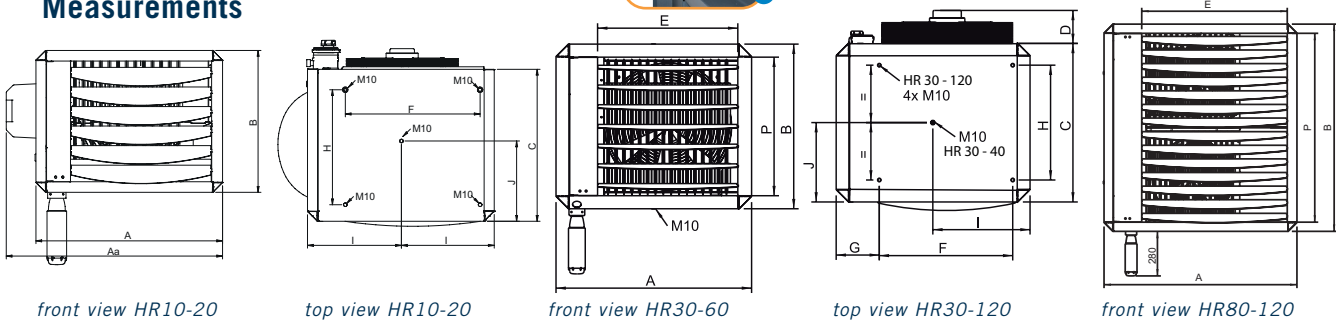
Characteristics

- high efficiency • energy saving (up to 25% compared to conventional heaters) • SS Heatexchanger as standard • modulating burner
- compact • option to suspend the heater under an angle of max. 45° (HR10- HR60) • easy to install • modulating clock thermostat • optional: control by 0-10 V or by modbus • delivery incl. siphon for condensate • IPOOB



	A	B	C	D	E
HR 10-20	550	640	800	-	-
HR 30-40	665	815	990	1200	1200
HR 50-120	-	-	-	1200	1200

Measurements



front view HR10-20

top view HR10-20

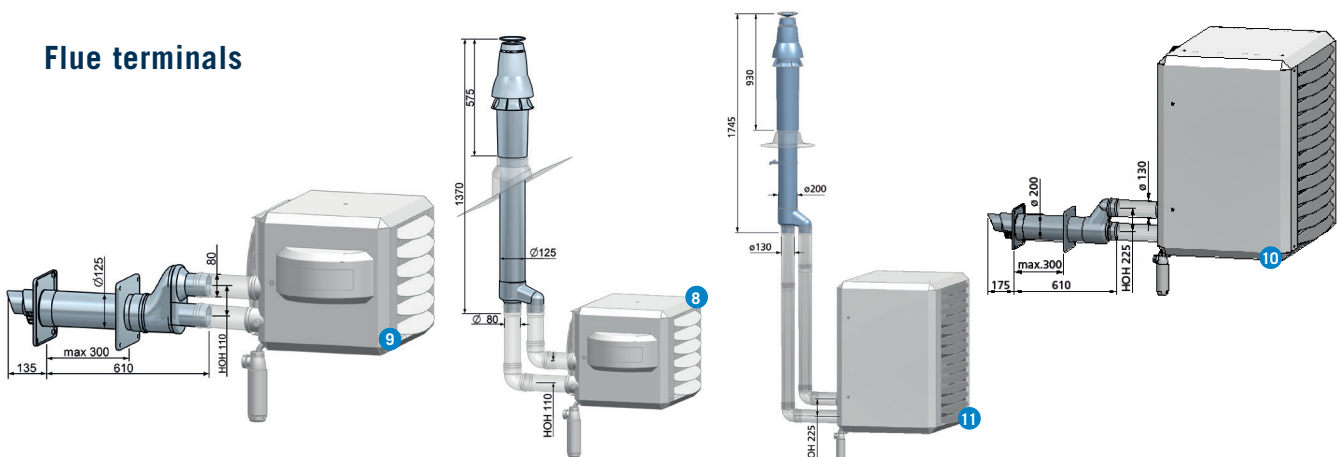
front view HR30-60

top view HR30-120

front view HR80-120

	A	Aa	B	C	D	E	F	G	H	I	J	M	N	O	P
HR10-20	650	755	495	530	122	n/a	470	n/a	400	325	280	ø80	ø80	1/2"	n/a
HR 30	795	-	670	650	122	575	545	180	470	400	325	ø80	ø80	3/4"	565
HR 40	795	-	670	650	134	575	545	180	470	400	325	ø80	ø80	3/4"	565
HR50-60	1065	-	670	650	143	840	815	180	470	n/a	n/a	ø80	ø80	3/4"	565
HR80	1115	-	1195	812	134	840	815	227	600	n/a	n/a	ø130	ø130	1"	1090
HR100-120	1115	-	1195	812	143	840	815	227	600	n/a	n/a	ø130	ø130	1"	1090

Flue terminals



Technical data HR-series

Type	Unit	HR 10	HR 20	HR 30	HR 40	HR 50	HR 60	HR 80	HR 100	HR 120
Price horizontal airflow, natural gas	£	2375	2660	3009	3666	4166	4712	5563	6343	7611
Price horizontal airflow, propane	£	2440	2757	3105	3781	4339	4892	5620	6405	7687
6 Price airflow 45° max. downwards, natural gas	£	2447	2740	3099	3777	4291	4852	-	-	-
6 Price airflow 45° max. downwards, propane	£	2514	2840	3198	3894	4470	5039	-	-	-
Maximum nominal heat input (H.I.)	kW	12.5	20.0	30.0	40.0	50.0	60.0	80.0	100.0	120.0
Minimum nominal heat input (H.I.)	kW	4.0	6.0	9.0	12.0	15.0	18.0	24.0	30.0	36.0
Efficiency max. power	%	96.0	96.0	96.5	97.0	96.5	96.6	97.0	96.8	96.5
Efficiency 30% power	%	106	106	106	106	106	106	105	105	105
Maximum heat output	kW	12.0	19.2	29.0	38.8	48.3	58.0	77.6	96.8	115.8
Minimum heat output	kW	4.2	6.4	9.5	12.8	15.9	19.1	25.2	31.5	37.8
Max air output (warm)	m ³ /h	2000	2600	3000	4500	6000	7500	9000	13000	14500
Throw horizontal (max)	m	15	20	23	26	28	30	30	30	33
Electrical Voltage (50 Hz)	V	230	230	230	230	230	230	230	230	230
Electrical power	W	250	250	275	450	450	600	900	1000	1050
Electrical current	A	1.1	1.1	1.2	2.0	2.6	2.6	3.9	4.4	4.7
Sound level (@ 4 meter), range	dB(A)	56-58	56-58	56-58	57-61	61-64	61-64	60-64	64-66	64-66
Weight	kg	45	50	75	85	105	110	180	195	205
Max gas consumption (G20)	m ³ /h	1.3	2.1	3.2	4.2	5.3	6.3	8.4	10.6	12.6
Max gas consumption (G31)	kg/h	1.0	1.6	2.4	3.2	4.0	4.8	6.4	8.0	9.6
Gas connection	G"	1/2	1/2	3/4	3/4	3/4	3/4	1	1	1
Minimum suspension height horizontal throw	m	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
Max. length flue*	m	9	9	9	9	9	9	9	9	9

*) for each 90° elbow, 1.5m. less; for each 45° elbow, 1 m. less.

Accessories HR-series

	Controls (more information on page 24)	applicable on	article no.	price £
1	Multitherm S roomthermostat for 1-8 heaters HR10-60 / 1-4 heaters HR80-120	HR10-HR120	IX3911	124
2	Multitherm C clockthermostat for 1-8 heaters HR10-60 / 1-4 heaters HR80-120	HR10-HR120	IX3912	242
	Remote Sensor, optional with MTC	HR10-HR120	GA3929	91
	Interface Board for connection to a BMS (max. 8 heaters)	HR10-HR120	IB5902	242
3	Power isolation switch, 230 V - 400 V, 25 Amp.	HR10-HR120	IK5282	48
	Modbus Interface Set (incl. cable set)	HR10-HR120	GA5904	301
	Modbus control set	HR10-HR120	GA5903	55
	0-10 V. input control set	HR10-HR120	GA5906	55
	Service parts box for HR	HR10-HR120	GA4002-1	687
	Suspension			
4	Suspension brackets	HR10-HR20	GA8610	129
7	Design suspension	HR10-HR20	GA8630	198
4	Suspension brackets	HR30-HR40	GA8620	144
5	Clampset for mounting to H-profile (combined with GA8610, GA8620, GA8630)	HR10-HR40	GA8680	91
6	Cantilever brackets (per set)	HR30-HR120	GA8580	133
5	Clampset for mounting to H-profile (combined with GA8580)	HR30-HR120	GA8685	155
	Set vertical louvres (4 pcs.)	HR10-HR20	GX2001	85
	Set vertical louvres (4 pcs.)	HR30-HR40	GX4001	102
	Set vertical louvres (6 pcs.)	HR50-HR60	GX6002	117
	Set vertical louvres (6 pcs.)	HR80-HR120	GX8001	127
	Condensate pump set incl. sifon adapter, hose connector, hose to waste soil pipe, and 6 m. hose for condensate discharge	HR10-HR120	GX8002	213
	Hose for condensate discharge 30m., ø10mm	HR10-HR120	IK5785	39
	Flue material (see page 35 for extra flue material)			
8	DDV 80/125 HR Roof terminal	HR10-HR60	IA8214	183
9	CT 80/125 HR Wall terminal	HR10-HR60	IA8216	150
11	DDV 130/210 HR Roof terminal	HR80-HR120	IA8307	364
10	CT 130/210 HR Wall terminal	HR80-HR120	IA8314	267

Winterwarm HR EC-series



The most durable unit air heater from Winterwarm is the HR EC-series. These heaters have not only high efficiencies as far as gas consumption is concerned but also have a low electricity consumption because of the EC fan motor. In addition this means a very low sound level.



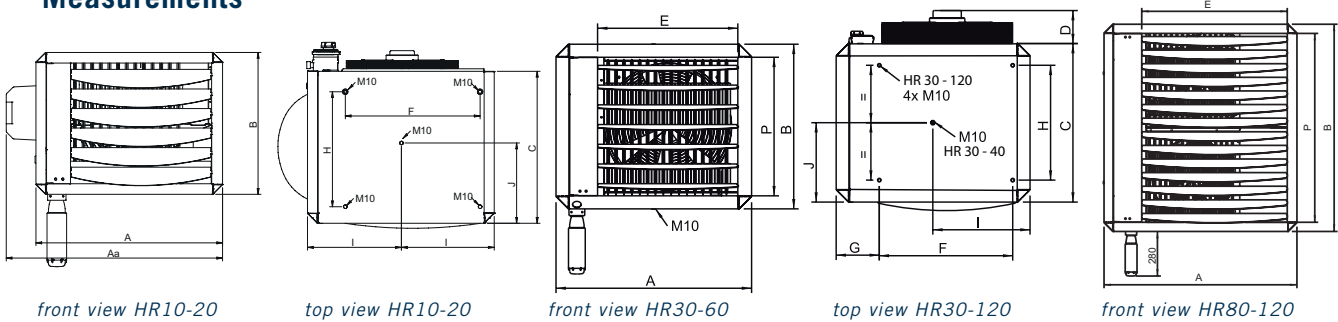
Characteristics

- high efficiency • energy saving (low gas consumption and low electricity consumption) • SS Heatexchanger as standard • modulating burner
- compact • option to suspend the heater under an angle of max. 45° (HR10 - HR60) • easy to install • modulating clock thermostat • optional: control by 0-10 V or by modbus • delivery incl. siphon for condensate • IPOOB • very quiet

	A	B	C	D	E
HR 10-20	550	640	800	-	-
HR 30-40	665	815	990	1200	1200
HR 50-120	-	-	-	1200	1200

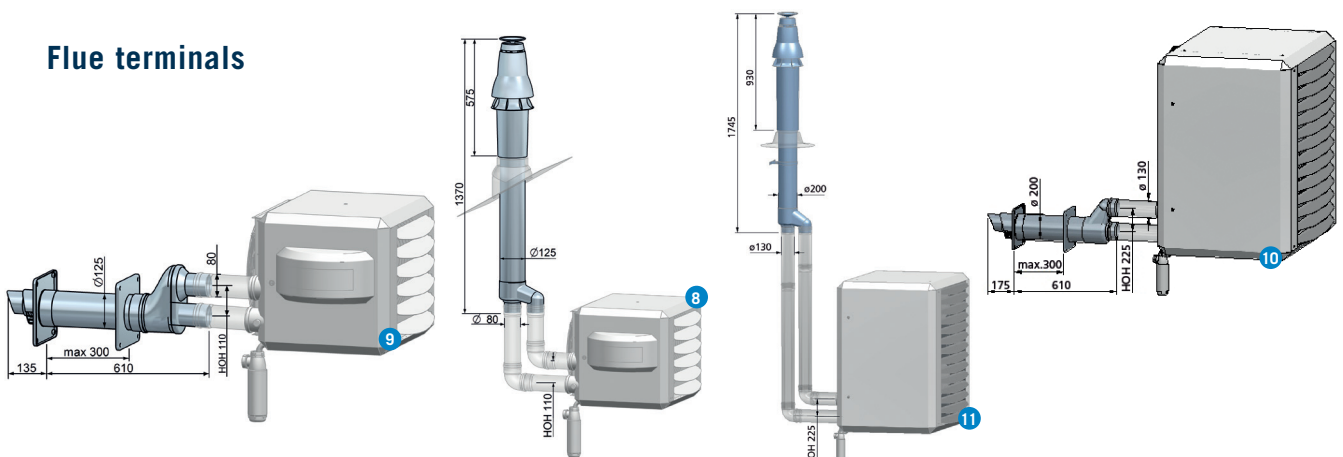
clamps for H-section

Measurements



	A	Aa	B	C	D	E	F	G	H	I	J	M	N	O	P
HR10-20	650	755	495	530	122	n/a	470	n/a	400	325	280	ø80	ø80	1/2"	n/a
HR 30	795	-	670	650	122	575	545	180	470	400	325	ø80	ø80	3/4"	565
HR 40	795	-	670	650	134	575	545	180	470	400	325	ø80	ø80	3/4"	565
HR50-60	1065	-	670	650	143	840	815	180	470	n/a	n/a	ø80	ø80	3/4"	565
HR80	1115	-	1195	812	134	840	815	227	600	n/a	n/a	ø130	ø130	1"	1090
HR100-120	1115	-	1195	812	143	840	815	227	600	n/a	n/a	ø130	ø130	1"	1090

Flue terminals



Technical data HR EC-series

Type	Unit	HR10EC	HR20EC	HR30EC	HR40EC	HR50EC	HR60EC	HR80EC	HR100EC	HR120EC
Price horizontal* throw natural gas	£	2711	3000	3359	4022	4608	5218	6407	7242	8569
Price horizontal* throw propane	£	2776	3098	3446	4136	4781	5400	6464	7303	8645
Maximum nominal heat input (H.I.)	kW	12,5	20,0	30,0	40,0	50,0	60,0	80,0	100,0	120,0
Minimum nominal heat input (H.I.)	kW	4,0	6,0	9,0	12,0	15,0	18,0	24,0	30,0	36,0
Efficiency max. power	%	96,0	96,0	96,5	97,0	96,5	96,6	97,0	96,8	96,5
Efficiency 30% power	%	106,0	106,0	106,0	106,5	106,0	106,0	105,0	105,0	105,0
Maximum heat output	kW	12,0	19,2	29,0	38,8	48,3	58,0	77,6	96,8	115,8
Minimum heat output	kW	4,2	6,4	9,5	12,8	15,9	19,1	25,2	31,5	37,8
Throw horizontal	m	15	20	23	26	28	30	30	30	33
Voltage (50Hz)	V	230	230	230	230	230	230	230	230	230
Electrical power	W	160	160	175	260	475	500	520	950	1000
Electrical current	A	1,3	1,3	1,6	1,2	2,3	2,5	2,4	5,0	4,8
Air output high (warm)	m ³ /h	2200	2650	3150	4500	6700	6700	9000	13400	14000
Air output low (warm)	m ³ /h	1600	1700	1900	2500	4000	4000	5000	8000	9000
Sound level (@ 4 meter)	dB(A)	42-54	42-54	43-55	47-61	48-64	48-64	50-64	51-66	52-66
Weight	kg	45	50	75	85	105	110	180	195	205
Gas consumption natural gas (G20)	m ³ /h	1.3	2.1	3.2	4.2	5.3	6.3	8.4	10.6	12.6
Gas consumption propane (G31)	kg/h	1,0	1,6	2,4	3,2	4,0	4,8	6,4	8,0	9,6
Gas connection	G"	1/2	1/2	3/4	3/4	3/4	3/4	1	1	1
Min. suspension height hor. throw	m	1,7	1,7	1,7	1,7	1,7	1,7	1,7	1,7	1,7
Max. length flue vertical and horizontal**	m	9	9	9	9	9	9	9	9	9

*) HR, gasfired condensing air heater, 45 degrees downwards, on request

**) for each 90° elbow, 1.5m. less; for each 45° elbow, 1 m. less.

Accessories HR EC-series

	Controls (more information on page 24)	applicable on	article no.	price £
1	Multitherm S roomthermostat for 1-8 heaters HR10-60 / 1-4 heaters HR80-120	HR10-HR120	IX3911	141
2	Multitherm C clockthermostat for 1-8 heaters HR10-60 / 1-4 heaters HR80-120	HR10-HR120	IX3912	271
	Remote Sensor, optional with MTC	HR10-HR120	GA3929	105
	Interface Board for connection to a BMS (max. 8 heaters)	HR10-HR120	IB5902	271
3	Power isolation switch, 230 V - 400 V, 25 Amp.	HR10-HR120	IK5282	61
	Modbus Interface Set (incl. cable set)	HR10-HR120	GA5904	331
	Modbus control set	HR10-HR120	GA5903	60
	0-10 V. input control set	HR10-HR120	GA5906	60
	Service parts box for HR	HR10-HR120	GA4002-1	791
	Suspension			
4	Suspension brackets	HR10-HR20	GA8610	124
7	Design suspension	HR10-HR20	GA8630	198
4	Suspension brackets	HR30-HR40	GA8620	144
5	Clampset for mounting to H-profile (combined with GA8610, GA8620, GA8630)	HR10-HR40	GA8680	91
6	Cantilever brackets (per set)	HR30-HR120	GA8580	133
5	Clampset for mounting to H-profile (combined with GA8580)	HR30-HR120	GA8685	155
	Set vertical louvres (4 pcs.)	HR10-HR20	GX2001	85
	Set vertical louvres (4 pcs.)	HR30-HR40	GX4001	102
	Set vertical louvres (6 pcs.)	HR50-HR60	GX6002	117
	Set vertical louvres (6 pcs.)	HR80-HR120	GX8001	127
	Condensate pump set incl. sifon adapter, hose connector, hose to waste soil pipe, and 6 m. hose for condensate discharge	HR10-HR120	GX8002	213
	Hose for condensate discharge 30m., ø10mm	HR10-HR120	IK5785	39
	Flue material (see page 35 for extra flue material)			
8	DDV 80/125 HR Roof terminal	HR10-HR60	IA8214	183
9	CT 80/125 HR Wall terminal	HR10-HR60	IA8216	150
11	DDV 130/210 HR Roof terminal	HR80-HR120	IA8307	364
10	CT 130/210 HR Wall terminal	HR80-HR120	IA8314	267

Winterwarm XR+ series

Winterwarm presents the new XR+ range: a complete upgrade from the well-known XR unit air heaters which comply with the ErP2021 directive. A non-condensing gas fired heater with improved performance for a comfortable and efficient heating of industrial and commercial buildings.

Characteristics XR+:

- compact and reduced weight
- non-condensing (no condensate drain necessary)
- flexible airflow direction, incl. vertical
- inverted heat exchanger gives more even air temperature
- increased air volume
- delta-T control
- modulating premix burner and fan
- control up to 8 heaters with one thermostat
- optional: control by 0-10 V or by modbus

7 & 4 vertical and horizontal suspension possible.

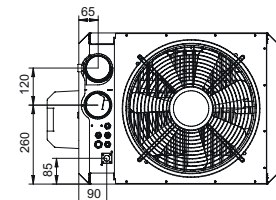
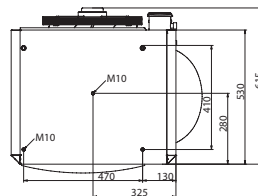
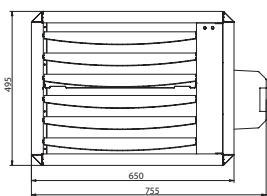
clamps for H-section

more information on controls on page 24

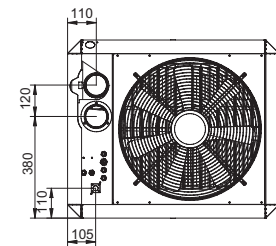
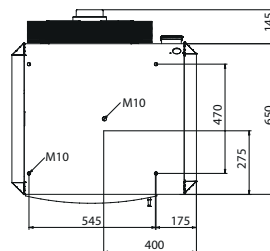
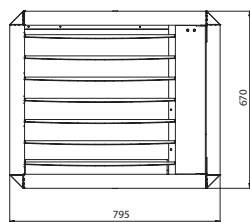
	A	B	C	D
XR 10+/30+	550	640	830	540
XR 40+/60+	665	815	990	720

Measurements

XR10+ - XR30+



XR40+ - XR60+



Flue terminals

Easy Fix: fits exactly. No extra parts necessary

	ød	øD	A	B	C	HOH
XR10+ / XR60+	80	125	1200	500	500	120

Technical data XR+ series

Type	Unit	XR 10+	XR 20+	XR 30+	XR 40+	XR 50+	XR 60+
Price natural gas	£	1901	2127	2407	2933	3333	3769
Price propane	£	1953	2206	2484	3025	3470	3915
Nominal heat input max. (h.i.)	kW	14.0	22.8	32.0	44.0	55.0	66.0
Nominal heat input min. (h.i.)	kW	8.5	13.5	18.0	26.4	33.0	39.6
Maximum efficiency	%	93.8	94.6	94.6	95.8	95.6	95.6
Maximum heat output	kW	12.7	20.5	28.8	41.1	50.7	61.2
Minimum heat output	kW	8.0	12.8	17.0	25.3	31.5	37.9
Air output (warm)	m ³ /h	2,950	4,000	4,200	6,000	8,500	8,500
Throw horizontal	m	22	30	31	32	46	46
Throw vertical (warm)	m	5	7	7	8	11	11
Voltage (50Hz)	V	230	230	230	230	230	230
Electrical power	W	200	300	300	325	750	750
Electrical current	A	0.9	1.4	1.4	1.5	3.5	3.5
Sound level (@ 5 meter, high)	dB(A)	56.5	58.0	57.5	59.0	64.0	64.0
Sound level (@ 5 meter, low)	dB(A)	54	56.5	56	54.5	58	58
Weight	kg	46	50	53	78	86	90
Gas consumption natural gas (G20)	m ³ /h	1.5	2.4	3.4	4.7	5.8	7.0
Gas consumption propane (G31)	kg/h	1.1	1.8	2.5	3.5	4.4	5.3
Gas connection	G"	1/2	1/2	1/2	3/4	3/4	3/4
Min. suspension height horizontal throw	m	1.7	1.7	1.7	2.7	2.7	2.7
Min. suspension height vertical throw	m	4	4	4	5	6	6

*) for each 90° elbow, 1.5m. less; for each 45° elbow, 1 m. less. Condensation exhaust necessary when flue > 4m

Accessories XR+ series

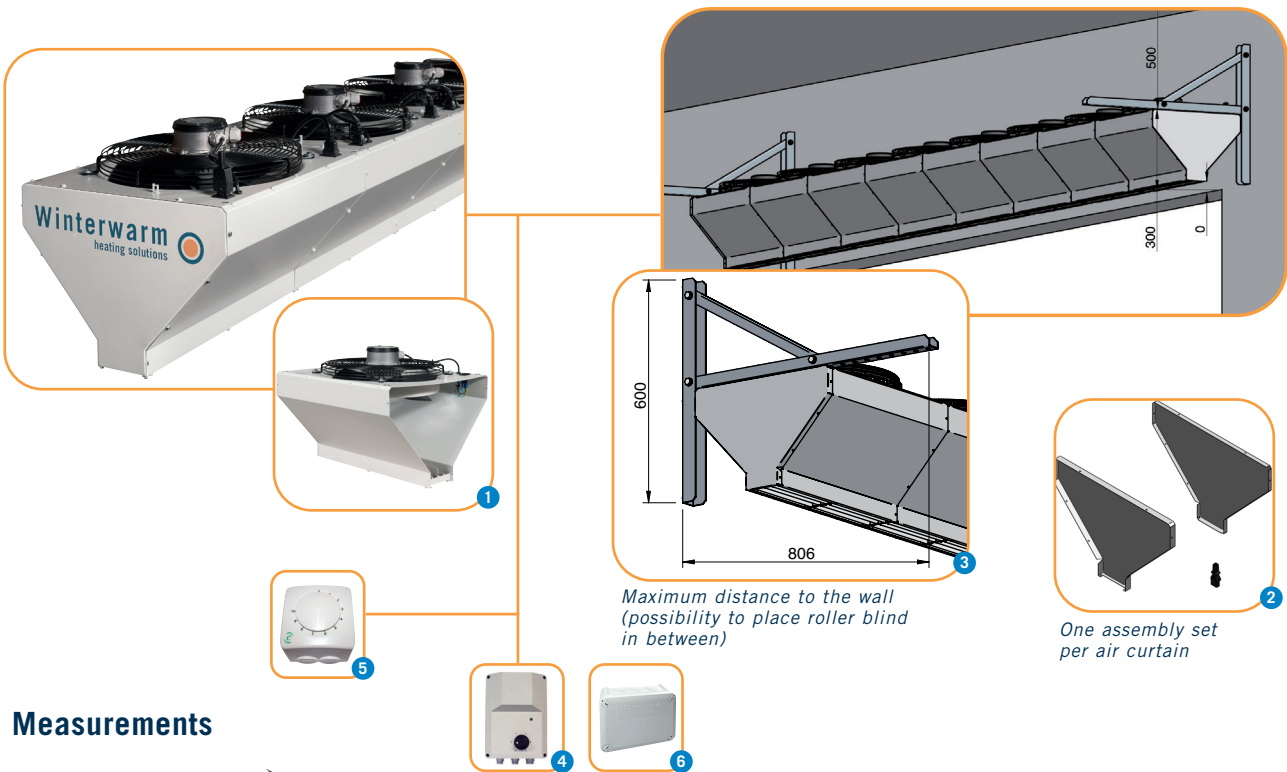
	Controls (more information on page 24)	applicable on	article no.	price £
1	MultiTherm S thermostat for 1-8 unit air heaters with external enable/disable option	XR10+ - XR60+	IX3911	124
2	MultiTherm C clock thermostat for 1-8 unit air heaters	XR10+ - XR60+	IX3912	242
	Remote sensor, optional with MTC	XR10+ - XR60+	GA3929	91
	Interface board for connection to a BMS (max. 8 heaters)	XR10+ - XR60+	IB5902	242
	Modbus Interface Set (incl. cable set)	XR10+ - XR60+	GA5904	301
	MTS with extra input relay	XR10+ - XR60+	GX3955	242
	MTC with extra input relay	XR10+ - XR60+	GX3956	336
3	Power isolation switch, 230 V - 400 V, 25 Amp.	XR10+ - XR60+	IK5282	48
	Service parts box for XR	XR10+ - XR60+	GA4002-1	687
	Modbus control set	XR10+ - XR60+	GA5903	55
	0-10 V. input control set	XR10+ - XR60+	GA5906	55
Suspension				
4	Consoles (U-sections)	XR10+ - XR30+	GA8610	129
4	Consoles (U-sections)	XR40+ - XR60+	GA8620	144
5	Clamps for H-section	XR10+ - XR60+	GA8680	91
6	Vertical suspension kit 80-165 cm	XR10+ - XR60+	GA8645	144
7	Design console	XR10+ - XR30+	GA8630	198
	Set vertical louvres (4 pcs)	XR10+ - XR30+	GX2001	85
	Set vertical louvres (4 pcs)	XR40+ - XR60+	GX4001	102
Flue material (see page 35 for extra flue material)				
8	Roof terminal DDV 80/125	XR10+ - XR60+	IA8202	145
	Wall terminal MDV 80 (2-pipes)	XR10+ - XR60+	IA8212	112
9	Easy Fix wall terminal	XR10+ - XR60+	GA8201	152
10	Concentric wall terminal CT 80/125	XR10+ - XR60+	IA8113	103

Winterwarm ACM

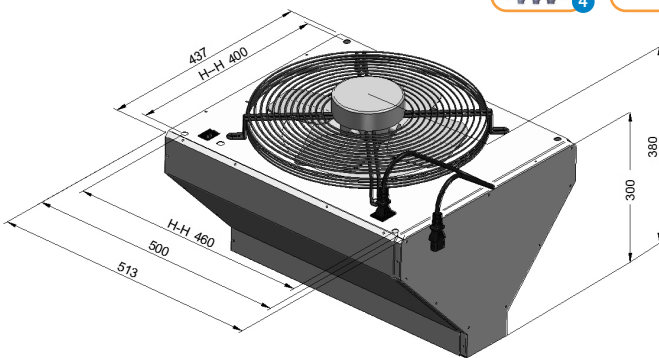
Winterwarm presents a modular air curtain. The modular construction enables you to assemble an air curtain for each door width. The ACM creates a comfortable room climate, prevents drafts and intrusion of polluted outside air. The ACM is available as standard model and as special model equipped with EC fan motor for low electricity consumption, a low sound level and a higher air volume.

Characteristics ACM:

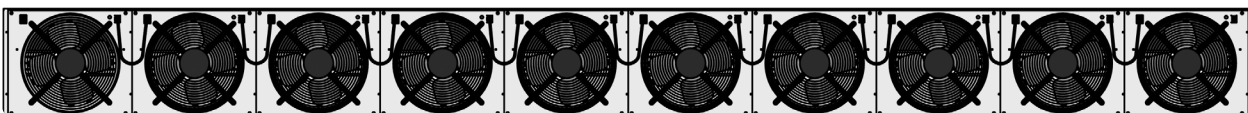
- applicable for all doors with a height of 5,5 m. or less
- modular construction
- vertical and horizontal positioning possible
- possibility to place underneath overhead-door
- high air output
- innovative application of Gurney flap which results in a relative high-air speed at floor level
- adjustable louvres to create optimum air flow
- low weight
- EC-model: stepless speed controller



Measurements



Example for a door of 5.00 m:



Top view



Front view

Width 5010 mm. (When more than 10 modules are necessary, extra support is required.)

Technical data ACM-series

Number of modules	Unit	1	4	5	6	7	8	9	10
Length incl. endplates*	mm	520	2020	2520	3020	3520	4020	4520	5020
Max. suspension height	m	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Air output	m ³ /h	1,900	7,600	9,500	11,400	13,300	15,200	17,100	19,000
Voltage (50 Hz)	V	230	230	230	230	230	230	230	230
Accumulated power consumption**	A	1.0	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Sound level (@ 5 meter)	dB(A)	64	70	71	72	73	73	73	74
Weight	kg	12	48	60	72	84	96	108	120

Technical data ACM EC-series

Number of modules	Unit	1	4	5	6	7	8	9	10
Length incl. endplates*	mm	520	2020	2520	3020	3520	4020	4520	5020
Max. suspension height	m	5,5	5,5	5,5	5,5	5,5	5,5	5,5	5,5
Air output	m ³ /h	2.250	9.000	11.250	13.500	15.750	18.000	20.250	22.500
Accumulated power consumption**	A	0,9	3,8	4,7	5,6	6,6	7,6	8,5	9,4
Sound level (@ 5 meter)	dB(A)	34-53	37-57	37-58	38-58	38-59	39-59	39-60	39-60
Weight	kg	10	40	50	60	70	80	90	100

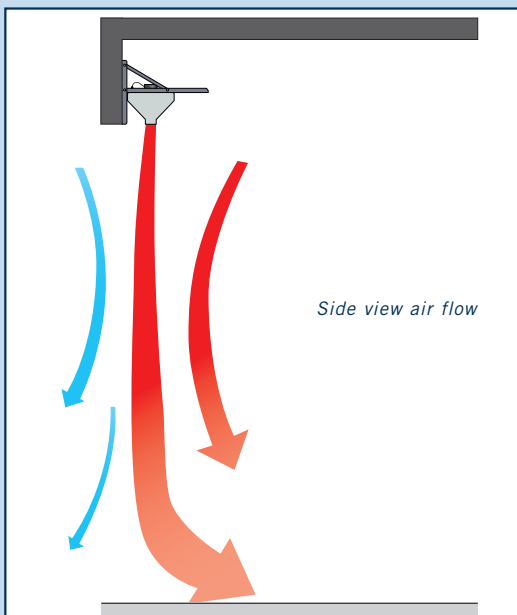
*) To realise a good separation, the air curtain should be wider than the door opening

**) Attention: supply current is max. 10A, so for more than 10 sections, more supply connections are necessary

Accessories ACM-series

	Description	article no.	price £
1	Heater module ACM*	GVACM	357
	Heater module ACM-EC* (1 module = 52 cm)	GVACMEC	544
2	Assembly set (incl. 2 end plates and 1 connector) Per air curtain one assembly set is required	GA8700	40
3	Horizontal mounting consoles (max. 10 modules per set)	GA8575	144
4	5-step switch 5 Amp.	IA8543	215
4	5-step switch 8 Amp.	IA8544	277
4	5-step switch 11 Amp.	IA8515	368
4	5-step switch 15 Amp.	IA8516	523
5	Stepless speedcontroller, 0-10V.	GA3955	69
6	Relay for door contact, 230 V., 20 Amp.	GA4100	86

*) The width of the door determines the number of modules to order.



The aircurtain is keeping the cold air out, and contributes to the realisation of the required room temperature because the warm air underneath the sealing is transported downwards.

Destratification fans

Nowadays buildings are well insulated; this limits the required heating capacity in a room. In this situation, however, it is very important to achieve a good recirculation of the warm air in the room by installing destratification fans. The installation of a destratification fan pays for itself quickly because of the significant energy savings. All WCU models are available with EC-motor which reduces the electricity consumption with 25%. Winterwarm has 2 types of destratification fans: recirculation unit WCU and a 3-blade ceiling fan Rendoment.

Characteristics destratification fans:

- extra circulation of warm air
- reduced heat losses
- increased comfort
- temperature gradient drops
- energy savings
- WCU IP30
- Rendoment IP20
- option: EC motor
- stepless control air volume (WCU-EC)

Recirculation unit WCU



WCU, for installation in rooms from 5 to 12 m. high



The WCU fans are all as standard provided with a room thermostat 230 V. and a socket connector.

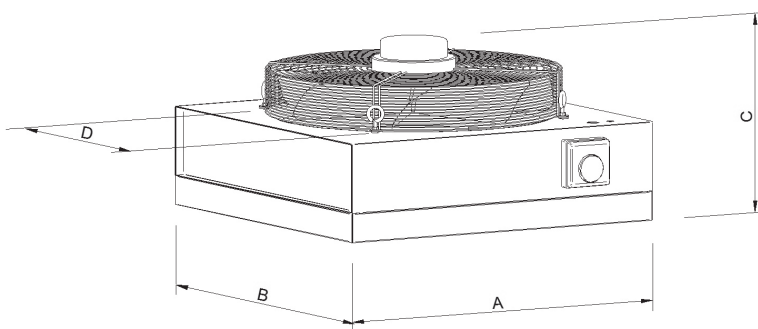
Ceiling fan Rendoment



Total height 69 cm.



Measurements

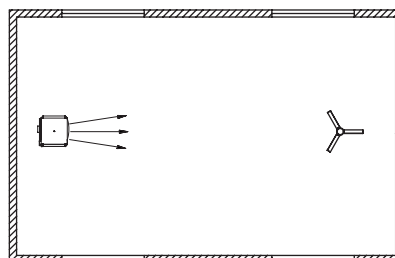
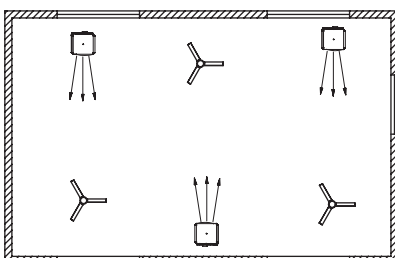


provided with 4 suspension screws $\varnothing 10$ mm

Measurements WCU (in mm)

Type	40	60	80	100
A	470	600	600	800
B	470	600	600	800
C	289	319	328	438
C (for EC)	255	269	269	396
D	300	375	400	740

Typical installations



Install destratification fans always at the end of the throw (to prevent air swirls) or above a location which is not reached by the air current of the heater.

Technical data destratification fans

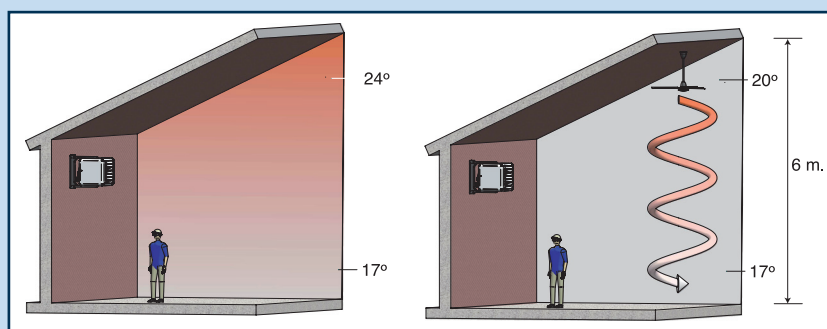
Type	Unit	WCU40	WCU60	WCU80	WCU100	WCU40EC	WCU60EC	WCU80EC	WCU100EC	Rendovent black/white
Price	£	530	626	807	983	746	1013	1249	1577	164
Air output	m ³ /h	3.200	5.600	7.000	10.000	3.300	5.700	7.000	10.000	13.000
Diameter fan	mm	350	450	500	650	350	450	450	650	1420
Distance fan to ceiling	cm	35	45	50	65	35	45	50	65	65
Throw vertical	m	5-8	7-10	8-12	12-15	5-9	7-11	8-12	12-15	3-7
Voltage (50Hz)	V	230	230	230	230	230	230	230	230	230
Electrical power	W	155	290	400	480	136	320	490	550	75
Electrical current	A	0,75	1,3	1,85	2,1	1,1	1,4	2,1	2,5	0,35
Revolutions per minute	rpm	1.380	1.360	1.315	1.000	1.530	1.300	1.500	1.050	300
Sound level (@ 6 mtr), range dB(A)		33-56	35-59	37-59	39-58	33-55	33-59	37-59	37-55	36
Sound level (@ 8 mtr), range dB(A)		31-54	33-57	35-57	37-56	31-53	31-57	35-57	35-53	-
Weight	kg	11	18	18	43	11	18	18	43	9,5

Accessories WCU-series

Type	article no.	price £
1 Suspension set WCU	GA8570	29
2 Room thermostat on/off 230V, 10 Amp., IP30	IW3960	36
2 Room thermostat on/off 230V, 10-200 mAmp., IP30 for WCU EC	IW3961	34
3 Stepless switch 3 Amp. (for 1-7 Rendovents)	IA8509	115
4 Stepless switch with temperature sensor (controls RPM of Rendovent; for 2-12 Rendovent)	IA8510	506
5 5-step switch 2.2 Amp.	IA8540	200
5 5-step switch 3.5 Amp.	IA8542	209
5 5-step switch 5.0 Amp.	IA8543	215
5 5-step switch 8.0 Amp.	IA8544	277
5 5-step switch 11 Amp.	IA8515	368
5 5-step switch 15 Amp.	IA8516	523
6 Stepless speed controller 0-10 V., for WCU-EC	GA3955	69

Advantages application destratification fans:

- Temperature gradient drops
- Heat transmission loss reduces
- Energy savings (20 to 30%!)
- Higher comfort
- Extra air circulation in the summer
- Easy to install



Without application of destratification fans the temperature gradient increases with 1,3°C per 1 m. height*

For rooms with more than 5 m. height, Winterwarm advises to always install destratification fans; rule of thumb is 1 per 300 m²*.

Room volume m ³	<1.000	2.000	3.000	5.000	7.000	9.000	12.000
Minimal desired recirculation multiple*	6	5	4	3	2.5	2	2

(in order to determine the number of necessary destratification fans, add the air output of the heater to that of the destratification fan(s))

*) Source: ISSO publication 57

WWH-series

Winterwarm presents the WWH-series: LPHW heaters which, combined with any type of hot water system, can comfortably heat up any room.

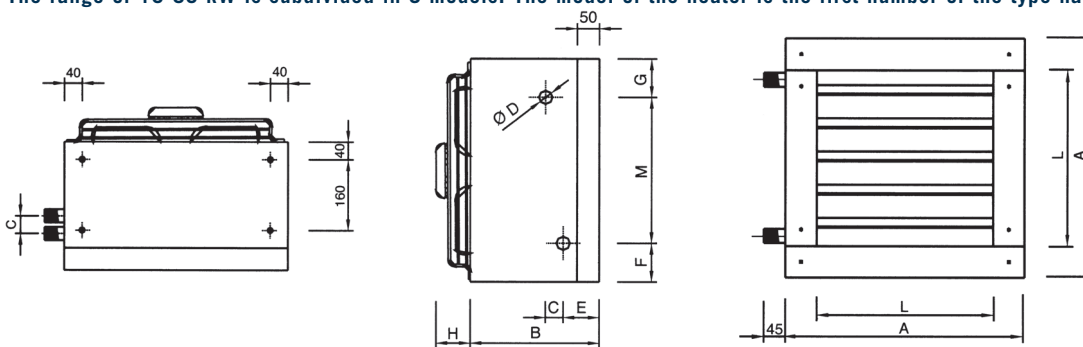
Characteristics WWH:

- good air circulation • comfortable temperature distribution • various air discharge possibilities • can be installed anywhere
- 9 capacities available • simple to control • long duration of life • 8 suspension points • IP54



Measurements

The range of 10-80 kW is subdivided in 3 models. The model of the heater is the first number of the type name (1, 2 or 3).



Type	110	115	120	230	235	245	350	365	380
Model	1	1	1	2	2	2	3	3	3
A	505	505	505	679	679	679	834	834	834
B	290	290	290	290	290	290	340	354	354
C	40	40	43	40	40	43	40	40	43
D	3/4"	3/4"	3/4"	3/4"	3/4"	1"	1"	1"	1"
E	81	81	79.5	81	81	79.5	81	81	79.5
F	87.5	87.5	75	87	87	74.5	89.5	89.5	77
G	87.5	87.5	87.5	87	87	87	89.5	89.5	89.5
H	90	90	90	135	135	135	190	78	78
L	375	375	375	535	535	535	690	690	690
M	330	330	343	505	505	518	655	655	668

Discharge possibilities

Type	1	2	3
A	505	679	834
N	200	200	200
P	240	240	290
R	181	181	-
S	714	957	-

standard grill



4-way downflow plenum



6-way downflow plenum



Technical data WWH-series

Type	Unit	110	115	120	230	235	245	350	365	380
Article no.		GI122LWW	GI122HWW	GI123HWW	GI162LWW	GI162HWW	GI163HWW	GI202LWW	GI202LWW	GI203LWW
Price	£	523	587	671	814	879	1026	1117	1214	1299
Maximum heat output*	kW	11.7	14.7	19.5	22.8	27.7	38.7	48.2	54.4	76.8
Air output (warm)	m ³ /h	1,400	2,200	1,900	2,600	3,850	3,450	6,600	8,450	7,600
Throw horizontal	m	10	14	12	19	22	19	20	25	21
Throw vertical	m	3.5	5	4	6	7	6	7	8	7
Voltage (50Hz)	V	230	230	230	230	230	230	230	230	230
Electrical power*	W	79	164	153	175	310	326	450	561	56
Electrical current*	A	0.3	0.7	0.7	0.8	1.4	1.4	2.0	2.4	2.5
Sound level (@ 5 meter)	dB(A)	50	59	58	51	61	60	62	58	56
Weight (incl. water)	kg	20	20	21	31	31	32	44	61	65
Water connection	G"	3/4	3/4	3/4	3/4	3/4	1	1	1	1
Watersided pressure loss	kPa	2	3	3	3	3	5	4	5	9
Minimum suspension height	m	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5

*) at water temperature 90/70° and room temperature 15°C

Accessories WWH-series

Description	110	115	120	230	235	245	350	365	380
Article no.	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595
1 Wall brackets	63	63	63	63	63	63	63	63	63
Article no.	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600
2 Ceiling suspension set	56	56	56	56	56	56	56	56	56
Article no.	GA120WW	GA120WW	GA120WW	GA245WW	GA245WW	GA245WW	GA380WW	GA380WW	GA380WW
3 4-way down flow plenum	110	110	110	135	135	135	167	167	167
Article no.	GA120WW6	GA120WW6	GA120WW6	GA245WW6	GA245WW6	GA245WW6	-	-	-
4 6-way down flow plenum	210	210	210	270	270	270	-	-	-
Article no.	GA120VS	GA120VS	GA120VS	GA245VS	GA245VS	GA245VS	GA380VS	GA380VS	GA380VS
Set vertical louvres	24	24	24	40	40	40	56	56	56
Controls (more information on page 24)							article no.	price £	
5 Room thermostat 230 V-10 Amp.- on/off							IW3960		36
6 Clock thermostat 230V, 5 Amp.							IW3959		221
7 Connection thermostat							IH8500		32
8 5-step switch 2.2 Amp.							IA8540		200
8 5-step switch 3.5 Amp.							IA8542		209
8 5-step switch 5.0 Amp.							IA8543		215
8 5-step switch 8 Amp.							IA8544		277
8 5-step switch 11 Amp.							IA8515		368
8 5-step switch 15 Amp.							IA8516		523
Zone valve, 230V, 1" (2-way)							GA3980		361

Capacities @ various water temperatures

In situations with other water temperatures, one has to multiply the standard capacity of the unit with the value in the table below.

The WWH-range is not suitable for application with steam.

Water temperature	Air temperature inlet					
	0°C	5°C	10°C	15°C	18°C	20°C
90/70°C	1.30	1.19	1.10	1.00	0.94	0.91
80/60°C	1.11	1.01	0.91	0.82	0.76	0.73
70/50°C	0.92	0.82	0.73	0.64	0.56	0.55
60/40°C	0.73	0.64	0.54	0.45	0.40	0.37
50/30°C	0.54	0.45	0.37	0.27	0.22	0.18

WWH EC-series



The Winterwarm WWH-EC air heaters are as standard provided with an EC-motor. Because of that electricity consumption drops as much as 25% as well as the sound level in comparison to the standard WWH heater. This heater is suitable for everybody with a normal heating boiler but who still wants an economical heating appliance with as less noise as possible.

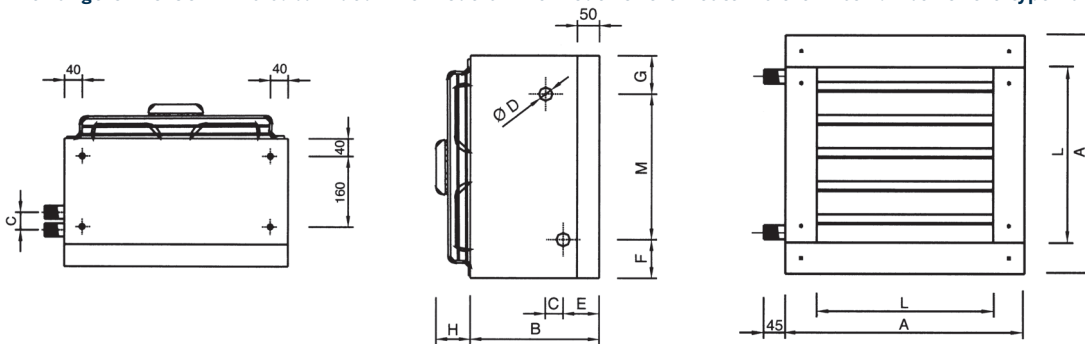
Characteristics

- good air circulation • EC motor as standard • stepless control • comfortable temperature distribution • various discharge possibilities
- suitable for different water temperatures • 7 capacities • 8 suspension points M10 • IP 54



Measurements

The range of 10-80 kW is subdivided in 3 models. The model of the heater is the first number of the type name (1, 2 or 3).



Type	115	120	235	245	350	365	380
Model	1	1	2	2	3	3	3
A	505	505	679	679	834	834	834
B	290	290	290	290	340	354	354
C	40	43	40	43	40	40	43
D	3/4"	3/4"	3/4"	1"	1"	1"	1"
E	81	79.5	81	79.5	81	81	79.5
F	87.5	75	87	74.5	89.5	89.5	77
G	87.5	87.5	87	87	89.5	89.5	89.5
H	85	85	140	140	53	46	46
L	375	375	535	535	690	690	690
M	330	343	505	518	655	655	668

Discharge possibilities

Type	1	2	3
A	505	679	834
N	200	200	200
P	240	240	290
R	181	181	-
S	714	957	-

standard grill



4-way downflow plenum



6-way downflow plenum



Technical data WWH EC-series

Type	Unit	115EC	120EC	235EC	245EC	350EC	365EC	380EC
Article no.		GI122HWWEC	GI123HWWEC	GI162HWWEC	GI163HWWEC	GI202LWWEC	GI202LWWEC	GI203LWWEC
Price	£	753	879	1059	1487	1615	2048	2188
Maximum heat output*	kW	14,7	19,7	27,8	38,7	46,4	54,4	76,8
Air output (warm)	m ³ /h	2200	1950	3900	3500	6150	8500	7600
Throw horizontal	m	16	14	22	19	21	25	21
Throw vertical	m	5	5	7	6	7	8	7
Voltage (50Hz)	V	230	230	230	230	230	230	230
Electrical power	W	111	123	200	250	320	400	308
Electrical current	A	1,0	1,1	0,9	1,1	1,5	1,8	1,4
Sound level (@ 5 meter)	dB(A)	35-54	35-54	35-59	35-57	35-60	35-56	35-54
Weight (incl. water)	kg	20	21	31	32	44	61	65
Water volume	ltr	0,6	0,9	1,4	1,7	2,2	2,2	2,6
Waterconnection (male thread)	G"	3/4	3/4	3/4	1	1	1	1
Watersided pressure loss	kPa	3	3	4	6	4	7	9
Minimum suspension height	m	2,5	2,5	2,5	2,5	2,5	2,5	2,5

*) at water temperature 90/70° and room temperature 15°C

Accessories WWH EC-series

Description	115EC	120EC	235EC	245EC	350EC	365EC	380EC
1 Article no.	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595	GA8595
Wall brackets	53	53	53	53	53	53	53
2 Article no.	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600	GA8600
Ceiling suspension set	50	50	50	50	50	50	50
3 Article no.	GA120WW	GA120WW	GA245WW	GA245WW	GA380WW	GA380WW	GA380WW
4-way down flow plenum	94	94	119	119	148	148	148
4 Article no.	GA120WW6	GA120WW6	GA245WW6	GA245WW6	-	-	-
6-way down flow plenum	187	187	240	240	-	-	-
Article no.	GA120VS	GA120VS	GA245VS	GA245VS	GA380VS	GA380VS	GA380VS
Set vertical louvres	22	22	36	36	51	51	51
Controls (more information on page 24)						article no.	price £
5 Room thermostat for EC-control, 230 V.						IW3961	34
6 Clock thermostat 230V, 5 Amp.						IW3959	221
7 Connection thermostat						IH8500	32
8 Stepless speed controller 0-10V						GA3955	69
Zone valve, 230V, 1" (2-way)						GA3980	361

Capacities @ various water temperatures

In situations with other water temperatures, one has to multiply the standard capacity of the unit with the value in the table below.

The WWH-range is not suitable for application with steam.

Water temperature	Air temperature inlet					
	0°C	5°C	10°C	15°C	18°C	20°C
90/70°C	1,30	1,19	1,10	1,00	0,94	0,91
80/60°C	1,11	1,01	0,91	0,82	0,76	0,73
70/50°C	0,92	0,82	0,73	0,64	0,56	0,55
60/40°C	0,73	0,64	0,54	0,45	0,40	0,37
50/30°C	0,54	0,45	0,37	0,27	0,22	0,18

WWH LT-series



The WWH-LT water heaters are especially designed for heating with low water temperatures like in combination with a heat pump or district heating network. The special heatexchanger and improved air flow realize optimal heat outputs with low water temperatures. The WWH-LT can also be used for cooling provided that the heat pump is suitable for that application.

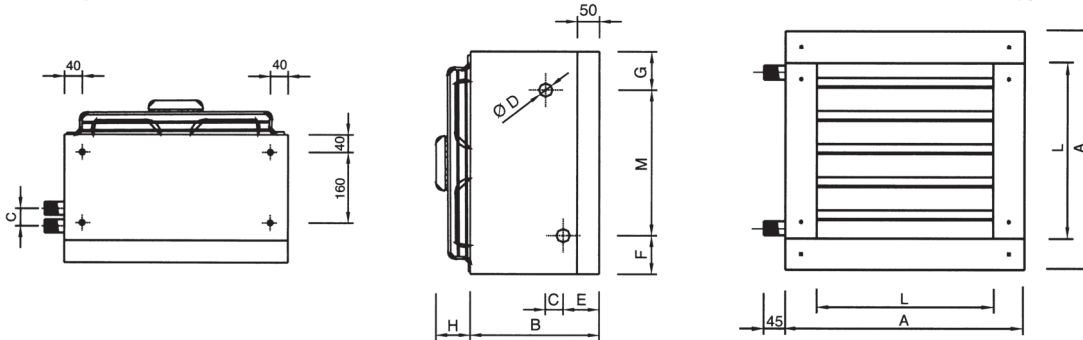
Characteristics

- low temperature heating • good air circulation • EC motor as standard • low electricity consumption • stepless control • 4 capacities
- comfortable temperature distribution • various discharge possibilities (when also applied for cooling: only horizontal) • can be used for cooling • integrated condensate collection box • 8 suspension points M10 • IP 54



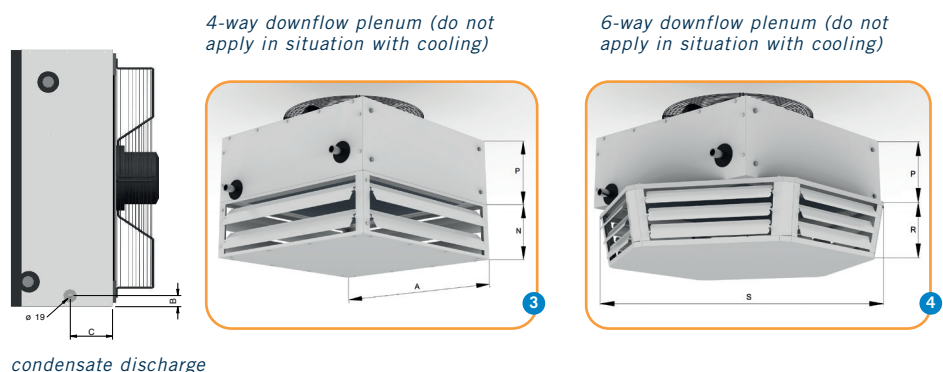
Measurements

The range of 10-80 kW is subdivided in 3 models. The model of the heater is the first number of the type name (1,2 or 3).



Type	110	220	330	340
Model	1	2	3	3
A	505	679	834	834
B	290	290	354	354
C	65	65	65	65
D	3/4"	1"	1"	1"
E	72,5	72,5	72,5	72,5
F	75	79,5	82	82
G	100	104,5	107	107
H	85	140	53	46
L	375	535	690	690
M	330	495	645	645

Type	110	220	330	340
A	505	679	834	834
B	34,5	34,5	36	36
C	93	93	137	137
N	200	200	200	200
P	240	240	290	290
R	181	181	-	-
S	714	957	-	-



condensate discharge

Technical data WWH LT-series

Type	Unit	110LT	220LT	330LT	340LT
Article no.		GI125BWWEC	GI250BWWEC	GI390BWWEC	GI395BWWEC
Price	£	1106	1474	2120	2581
Heat output* at 45°/35°	kW	8,3	19,4	28,6	37,9
Cooling capacity** at 7°/12°	kW	6,6	16,5	19,2	32,1
Cooling capacity** at 15°/18°	kW	3,8	8,8	12,8	17,8
Cooling capacity** at 16°/19°	kW	3,4	7,9	11,7	16,1
Air output	m ³ /h	1850	4150	5450	8850
Throw horizontal (warm)	m	14	21	20	25
Throw vertical (warm)	m	5	7	7	8
Voltage (50Hz)	V	230	230	230	230
Electrical power	W	118	515	320	718
Electrical current	A	1,1	2,3	1,5	3,2
Sound level (@ 5 meter)	dB(A)	35-54	35-64	35-60	35-62
Weight (incl. water)	kg	22	34	66	68
Water volume	ltr	2,0	3,9	6,6	6,6
Water connection (male thread)	G"	3/4	1	1	1
Watersided pressure loss	kPa	4	11	30	30
Minimum suspension height	m	2,5	2,5	2,5	2,5

*) at room temperature 15°C

**) at room temperature 28°C

Accessories WWH LT-series

Description	110LT	220LT	330LT	340LT
1 Article no.	GA8595	GA8595	GA8595	GA8595
Wall brackets	53	53	53	53
2 Article no.	GA8600	GA8600	GA8600	GA8600
Ceiling suspension set	50	50	50	50
3 Article no.	GA120WW	GA245WW	GA380WW	GA380WW
4-way down flow plenum	94	119	148	148
4 Article no.	GA120WW6	GA245WW6		
6-way down flow plenum	187	240	-	-
Article no.	GA120VS	GA245VS	GA380VS	GA380VS
Set vertical louvres	22	36	51	51
Controls (more information on page 24)			article no.	price £
5 Room thermostat for EC-control, 230 V.			IW3961	34
6 Clock thermostat 230V, 5 Amp.			IW3959	221
7 Connection thermostat			IH8500	32
8 Stepless speed controller 0-10V			GA3955	69
Zone valve, 230V, 1" (2-way)			GA3980	361
Condensate pump set incl. sifon adapter, hose connector, hose to waste soil pipe, and 6 m. hose for condensate discharge*			GX8002	213
Hose for condensate discharge 30m., ø10mm			IK5785	39

*) siphon not included

Capacities @ various water temperatures

In situations with other water temperatures, one has to multiply the standard capacity of the unit with the value in the table below.

The WWH-range is not suitable for application with steam.

Water temperature	Air temperature inlet					
	0°C	5°C	10°C	15°C	18°C	20°C
45/35°C	1,76	1,51	1,25	1,00	0,81	0,74
50/30°C	1,56	1,30	1,07	0,78	0,64	0,52
60/40°C	2,11	1,85	1,56	1,30	1,16	1,07
70/50°C	2,66	2,37	2,11	1,85	1,62	1,59

Winterwarm EH-series

Winterwarm presents the EH-series: an electric air heater for those situations where no gas is available or for other reason an electrical heating appliance is preferred.

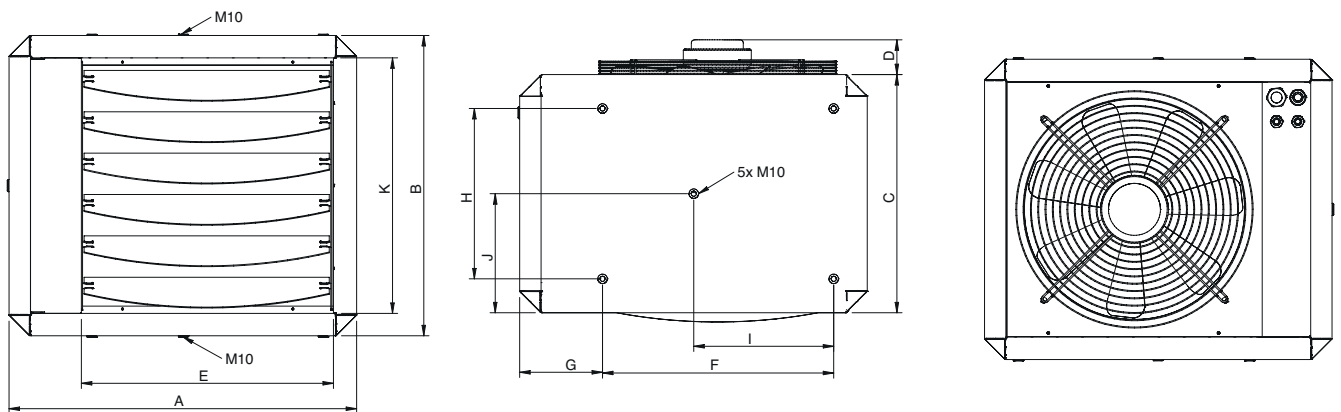
Characteristics

- Compact and low weight
- tubular heat exchanger
- sustainable heating solution in combination with solar panels
- variable heating capacity
- 7 capacities
- delta T-control
- control of 1-8 heaters with 1 thermostat
- optional: control by 0-10 V or by modbus
- heater can be tilted (to 45°)
- protection degree IP00B
- simple installation

	A	B	C	D
EH 5-30	795	380	280	745
EH 40	845	490	380	795

more information on controls on page 36

Measurements



Type	A	B	C	D	E	F	G	H	I	J	K
EH 5-30	570	490	390	125	420	380	140	280	230	195	420
EH 40	650	490	530	125	490	na	na	na	325	245	420

Technical data EH-series

Type	Unit	EH 5	EH 10	EH 15	E20	EH 25	EH 30	EH 40
Article no.		GE05A0WW	GE10A0WW	GE15A0WW	GE20A0WW	E25A0WW	GE30A0WW	GE40A0WW
Price	£	795	986	1166	1300	1475	1641	1862
Heating capacity high	kW	5,0	9,9	15,0	19,8	24,9	29,7	39,6
Heating capacity low	kW	2,5	3,3	7,5	9,9	9,9	9,9	19,8
Electrical connection	kW	5,2	10,1	15,2	20,0	25,1	29,9	39,8
Maximum electrical current per phase high	A	11,9	15,5	22,9	31,0	37,2	44,2	59,0
Maximum electrical current one phase*	A	22,6	44	n/a	n/a	n/a	n/a	n/a
Maximum air output (warm)	m ³ /h	3100	3100	3100	3100	3000	3000	4400
Throw	m	23	23	23	23	22	22	28
Voltage (50 Hz)*	V	400V+N	400V+N	400V+N	400V+N	400V+N	400V+N	400V+N
Weight	kg	25	25	26	26	28	30	34
Sound level (@ 5m), range	dB(A)	55-58	55-58	55-58	55-58	55-58	55-58	57-60
Min. suspension height horizontal throw	m	1,8	1,8	1,8	1,8	1,8	1,8	1,8

*EH 5 and EH 10 are also suitable for 1-phase connection

Accessories EH-series

	Controls (more information on page 24)	applicable on	article no.	price £
1	MultiTherm S thermostat for 1-8 unit air heaters with external enable/disable option	EH5-40	IX3911	124
2	MultiTherm C clock thermostat for 1-8 unit air heaters	EH5-40	IX3912	242
3	Remote sensor, optional with MTC	EH5-40	GA3929	91
8	Interface board for connection to a BMS (max. 8 heaters)	EH5-40	IB5902	242
	Modbus Interface Set (incl. cable set)	EH5-40	GA5904	279
	MTS with extra input relay	EH5-40	GX3955	163
	MTC with extra input relay	EH5-40	GX3956	336
4	Room thermostat on/off 230V, 10 Amp., IP30	EH5-40	IW3960	36
	Modbus control set	EH5-40	GA5906	55
	0-10 V. input control set	EH5-40	GA5903	55
	Power isolation switch, 230 V - 400 V, 25 Amp.	EH5-40	IK5282	48
	Suspension			
6	Consoles (U-sections)	EH5-40	GA8610	129
5	Clamps for H-section	EH5-40	GA8680	91
7	Design console	EH5-40	GA8630	198
	Set vertical louvres (4 pcs)	EH5-40	GX2002	82

Controls for air heaters

Winterwarm provides an extensive program of controls which guarantee optimal operation of their heaters.



MultiTherm S



MultiTherm C



remote sensor

MultiTherm thermostat

IX3911 **£ 124**
IX3912 **£ 242**

Functions	MultiTherm S	MultiTherm C
Clock function	no	yes
10 programmable time blocks	no	yes
Overtime program	no	yes
Summer/winter time	no	yes
Lets heater modulate on room temperature	yes	yes
Summer ventilation	yes	yes
Compensation for wall influence	yes	yes
Intelligent (self optimizing) thermostat	no	yes
Keyboard locking (incl. pincode)	no	yes
Frost protection	yes	yes
Failure diagnosis and reset per heater	yes	yes
Low voltage current (24V.)	yes	yes
Controls up to 8 heaters	yes	yes
Temperature range 0 - 30°C	yes	yes
Remote sensor possible (GA3929)	no	yes
Enable/disable function via external switch (e.g. PIR, door switch)	yes	no
IP20	yes	yes

Interface board

for connection to a building management system

IB5902 **£ 242**



- Controls up to 8 heaters
- Entrance for low-stage
- Reset function
- Failure diagnosis
- 0-10 analogue input (reacts between 2 -10V)
- Connection for high-stage
- Summer ventilation



Power isolation switch

IK5282 **£ 48**

- Necessary with each heater to be able to switch off the current during maintenance activities
- IP65
- 230V - 400V
- 25 Amp
- 4 poles



On/off thermostat

IP794209 **£ 121**

- Water resistant to IP65
- Temperature range -20°C-40°C
- on/off thermostat
- 230 V.
- 6 Amp.



MTS with extra input relay

GX3955 **£ 163**

- 24 V. switch contact
- to interrupt heat demand with an external signal



MTC with extra input relay

GX3956 **£ 336**

- 24 V. switch contact
- connection to external clock possible
- to interrupt heat demand with an external signal
- extra control between day and night

Thermostats and switches

For destratification fans and water heaters



Room thermostat

IW3960/IW3961 £ 36

Simple room thermostat to control WWH. Can also be used to control the Rendovent on the room temperature.

- Temperature range 15°C - 30°C
- IP30
- 230V.
- IW3960 for heaters with AC-motor, switching range 200mA-10A
- IW3961 for heaters with EC-motor, switching range 10mA-200mA



Clock thermostat

IW3959 £ 221

- Temperature range 4°C - 30°C
- 230 V.
- Switches max. 5 Amp.
- Week program
- IP20
- Excl. 2x 1,5V AA battery



Connection thermostat

IH8500 £ 32

Thermostat which has to be placed on the water supply pipe to the WWH; Prevents the heater blowing cold air.

- Temperature range 20°C - 90°C
- IP30
- 230 V.
- Max. 2.5 Amp.



Stepless speed controller 0-10V

GA3955 £ 69

Applicable on all heaters provided with an EC fan motor (WWH-EC/LT, ACM-EC, WCU-EC). With this controller the air volume can be stepless adjusted.

- IP44
- 230 V
- Controls up to 8 heaters



5-step switch
IA8540-42-43-44

5-step switches

Applicable on both WWH air heaters and WCU destratification fans to reduce the revolutions per minute. Water resistant (IP44). Switches can control more than one device (add power consumptions to determine necessary Amps.)

	article no.	price £
• 5-step switch - 2,2 Amp.	IA8540	200
• 5-step switch - 3,5 Amp.	IA8542	209
• 5-step switch - 5,0 Amp.	IA8543	215
• 5-step switch - 8,0 Amp.	IA8544	277
• 5-step switch - 11 Amp.	IA8515	368
• 5-step switch - 15 Amp.	IA8516	523



5-step switch
IA8515-16



Stepless switch

IA8509 £ 115

Suitable for application for 1-7 Rendovent fans

- IP 54
- 0,5 - 3 Amp.



Stepless switch

IA8510 £ 506

Suitable for application with 2-12 Rendovent fans; switches the Rendovent based on the measured room temperature of the sensor.

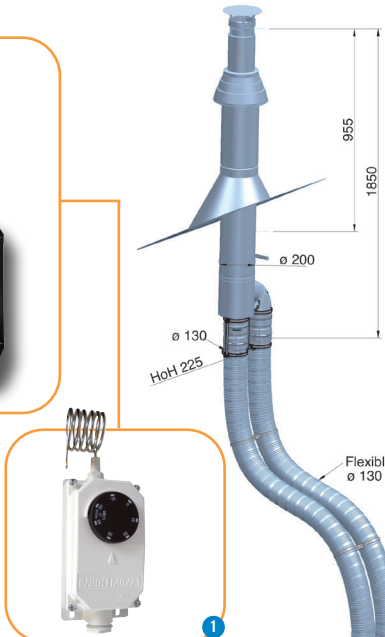
- IP 54
- 230V
- 0,1 - 6 Amp.

Winterwarm DXC series

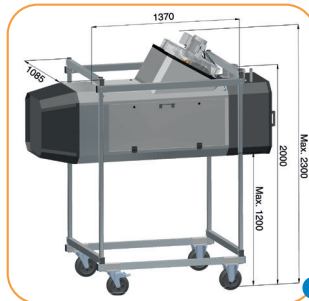
The DXC is an indirect fired gas heater with a closed combustion circuit especially developed for application in poultry houses. The consequence is that all CO₂ remains outside the house. Therefore, considerably less heating capacity is necessary to maintain the necessary room temperature, thus energy costs can be reduced considerably.

Characteristics

- SS-steel casing
- robust tubular heat exchanger
- closed combustion system
- flexible flue material
- no CO₂ in the house = less ventilation needed = lower energy consumption = lower costs
- energy savings up to 25% possible
- reliable technology
- CE-approved
- easy to service
- standard on/off
- optional: 0-10V input
- optional: reduced heatput
- optional: high/low burnercontrol
- easy to clean (IPX4D) ⚠

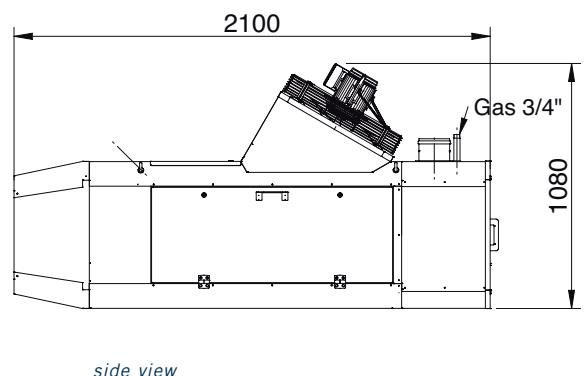
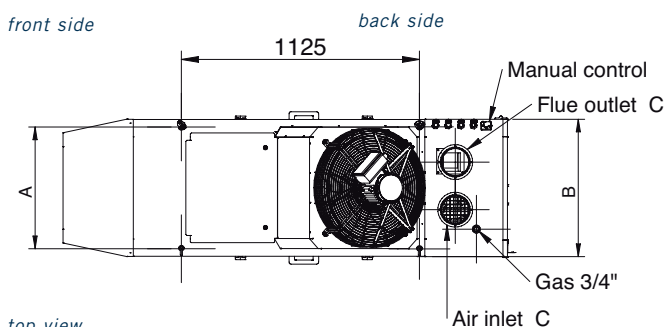
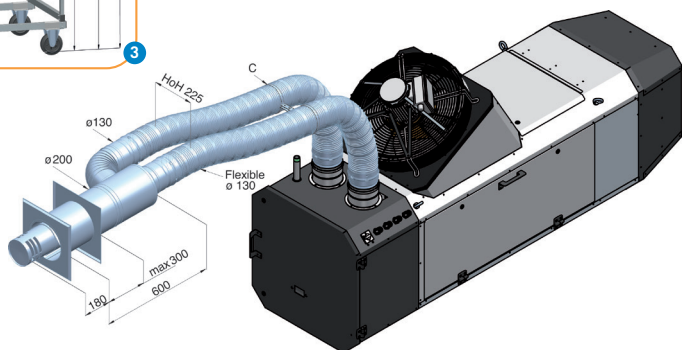
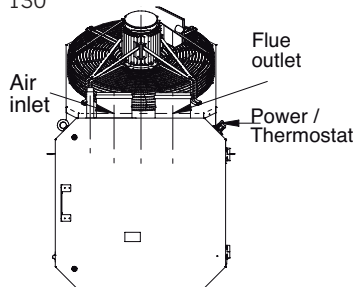
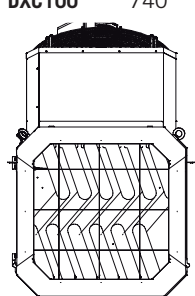


- Interface board for modulating burner control
- 0 - 10 V. analogue input (reacts between 2-10 V)
 - Entrance burner on/off
 - Entrance ventilation on/off
 - Reset function
 - Output failure signal
 - Output "in operation" signal



Measurements

Type	A	B	C
DXC60/80	575	650	130
DXC100	740	815	130



Technical data DXC-series

Type	Unit	DXC 60	DXC 80	DXC 100
Price	£	3742	4300	5168
Nominal heat input max.	W	65.5	83.0	108.0
Maximum heat output	kW	60	76	99
Efficiency max. power	%	91.5	91.5	91.5
Air output (warm)	m ³ /h	6,000	8,000	10,000
Throw	m	40	45	45
Voltage (50Hz)	V	230	230	230
Electrical power	W	800	900	1400
Electrical current	A	3.5	3.9	6.1
Gas consumption natural gas (G25)	m ³ /h	7.8	9.9	12.8
Gas consumption natural gas (G20)	m ³ /h	6.9	8.8	11.4
Gas consumption propane (G31)	kg/h	5.2	6.6	8.6
Sound level	dB(A)	68	68	68
Weight	kg	140	150	175
Flue connection	mm	130	130	130
Gas connection	G"	3/4	3/4	3/4


Accessories DXC-series

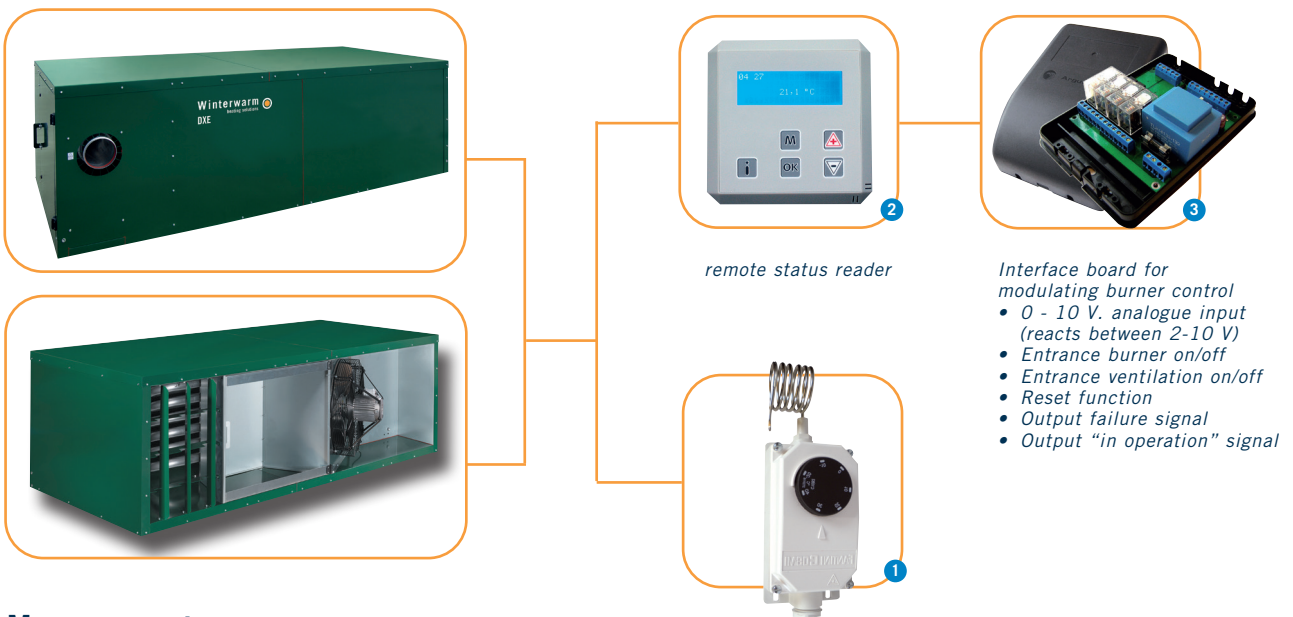
	Description	article no.	price £
1	On/off thermostat, -20°C - +40°C, splashproof	IP794209	121
	Remote status reader	GD3202	264
	Masterflash	SQ801BA	69
2	Interface board for modulating burner control	IB5902	242
3	Mobile heater stand	GD5000	691
	Suspension kit (incl. 4 m. chain + 8 carabiner)	GA8574	45
	Service parts box for DXC 60-80-100 (excl. fans) - version 4	GA4004-1	998
	Service set with system fan and flue fan for DXC 60-80	GA4004-2	598
	Service set with system fan and flue fan for DXC100	GA4004-3	698
	Modbus control set	GA5906	55
	0-10 V. input control set	GA5903	55
	Set for external alarm signal	GA4009	55
	Set for external alarm signal and reset	GA4012	96
	Reduced heat output set	GD3910	100
	Flue material (for extra flue material see page 35)	article no.	price £
	Roof terminal DDV 130/200	IA8305	349
	Wall terminal CT 130/200	IA8312	232
	Flue mounting kit (incl. 2 male & 2 female adapters, 2 safety clamps, silicone kit) (Obligatory with each pipe set)	GA8350	199
	Flexible pipe set 1 m. ø 130	GA8310	97
	Flexible pipe set 2 m. ø 130 (incl. 1 spacer bracket)	GA8315	161
	Flexible pipe set 3 m. ø 130 (incl. 2 spacer brackets)	GA8320	235
	Flexible pipe set 4 m. ø 130 (incl. 3 spacer brackets)	GA8325	284
	Flexible pipe set 5 m. ø 130 (incl. 4 spacer brackets)	GA8330	357
	90° Elbow set, ø 130	GA8355	58

Winterwarm DXE heater

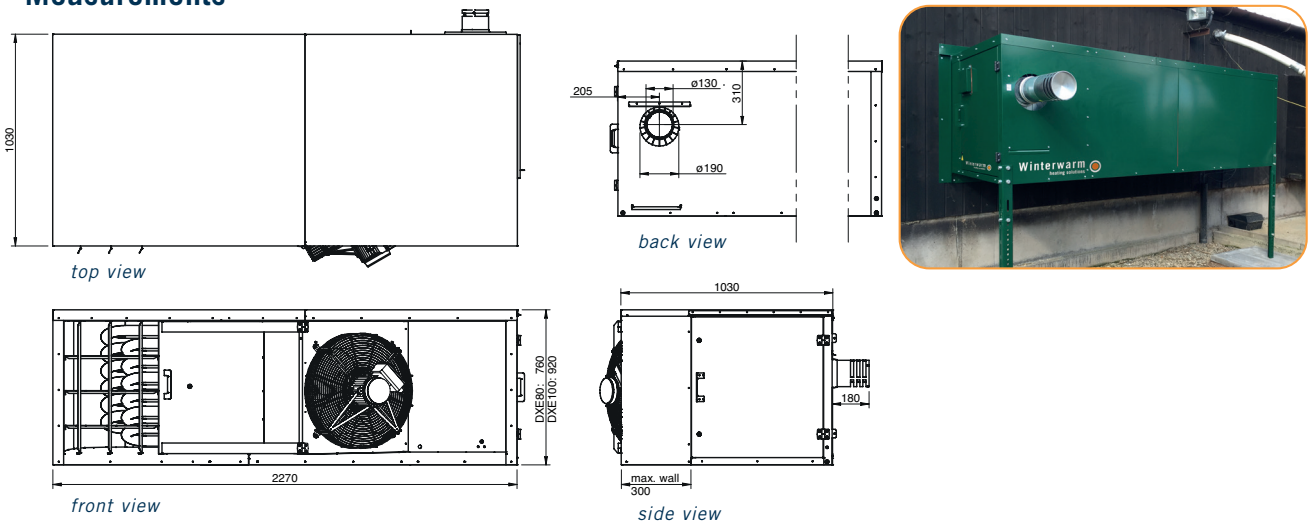
Winterwarm presents the DXE series. This unique heating concept for poultry houses is situated in the external wall. The air to be heated is circulated through the heater via an air inlet on one side and blown out of the heater into the house again on the other side of the heater. Due to the positioning of the heater the combustion gases are exhausted to the outside and never enter the house. Advantages: considerable energy savings can be made as less ventilation is required, a lower humidity level, easy access is ensured and bio-security is enhanced as the control and combustion components are outside the house.

Characteristics

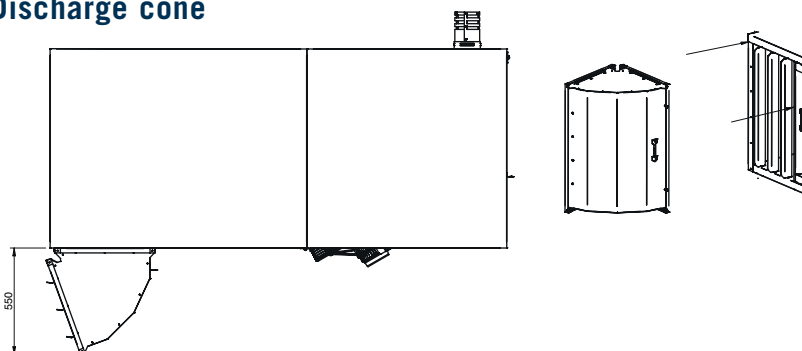
- installation outside the poultry house
- insulated splashproof casing in neutral green colour
- high air output
- 100% recirculation of return air
- robust heatexchanger
- no combustion flue necessary
- no CO₂ in the house
- energy savings up to 20% possible
- 0-10V control possible
- CE approved
- easy to service
- standard on/off
- optional: 0-10V input
- optional: reduced heatput
- optional: high/low burnercontrol
- wall flanges and 2 adjustable legs are delivered with the heater
- easy to clean (IPX4B) 



Measurements



Discharge cone



Technical data DXE

Type	Unit	DXE 80	DXE100
Price*	£	5235	6149
Nominal heat input	kW	83	108
Nominal heat output	kW	76	99.1
Efficiency maximum power	%	91.5	91.8
Air output	m ³ /h	8,000	10,000
Throw	m	45	50
Electrical power	W	900	1,400
Electrical current	A	3.9	6.1
Electrical connection	V	230	230
Maximum gas consumption G20	m ³ /h	8.8	11.4
Maximum gas consumption G31	kg/h	6.6	8.6
Gas connection	G"	3/4	3/4
Weight	kg	150	175
Protection degree		IPX4B	IPX4B

*) including wall flanges and 2 adjustable legs


Accessories DXE-series

	Description	article no.	price £
1	On/off thermostat, -20°C - +40°C, splashproof	IP794209	121
2	Remote status reader	GD3202	264
3	Interface board for modulating burner control	IB5902	242
	Modbus control set	GA5906	55
	0-10V. input control set	G5903	55
	Set for external alarm signal	GA4009	55
	Set for external alarm signal and reset	GA4012	96
	Discharge cone DXE 80	GD4308	350
	Discharge cone DXE 100	GD4310	414
	Service parts box for DXE 60-80-100 (excl. fans) - version 4	GA4004-1	998
	Service set with system fan and flue fan for DXE 60-80	GA4004-2	598
	Service set with system fan and flue fan for DXE100	GA4004-3	698

Winterwarm DXA/B-heaters

The DXA/B heaters are direct fired heaters for gas and oil, especially designed by Winterwarm for the agricultural and horticultural market. The heaters are of a robust design, completely manufactured from stainless steel for a durable and efficient operation, based on a well-known concept.

Characteristics:

- body from stainless steel
- DXA= gasfired
- DXB= oilfired
- available for gas and oil
- reliable
- 1 automatic restart
- hourly self-check
- possibility for ventilation position
- high air output
- 100% efficiency
- CE-approved (DXA)
- possibility to connect 8 heaters to 1 thermostat
- easy to clean (IPX4B) 



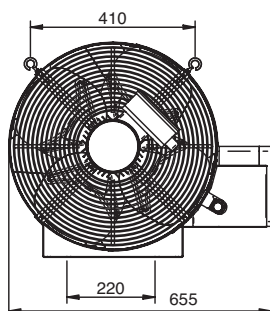
- Interface board for 1-8 heaters
- 0 - 10 V. analogue input (reacts between 2-10 V)
 - Entrance burner on/off
 - Entrance ventilation on/off
 - Reset function
 - Output failure signal
 - Output "in operation" signal



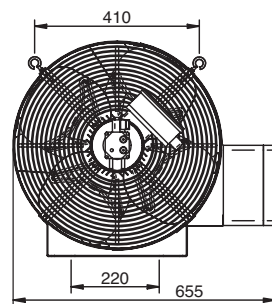
remote status reader



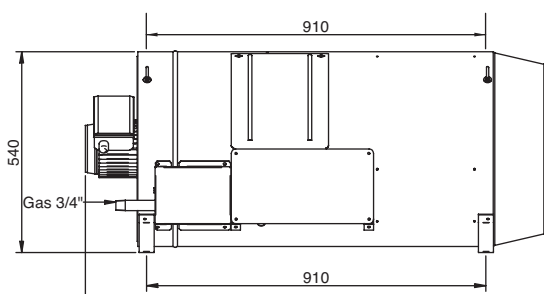
Measurements



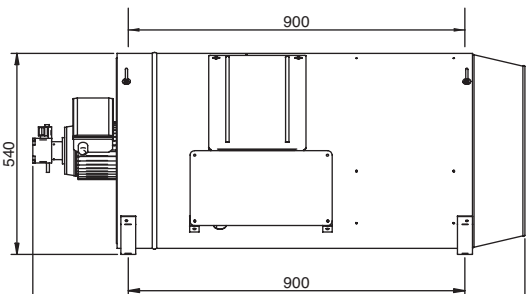
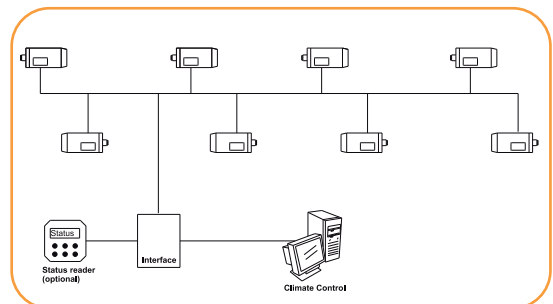
DXA



DXB



DXA



DXB

Technical data DXA/B-series

Type	Unit	DXA 75	DXA 100	DXA 120	DXB 100	DXB 120
Price	£	1888	2069	2308	2009	2113
Nominal heat input/output	kW	75	100	120	100	120
Air output (warm)	m ³ /h	6,000	6,000	7,000	6,000	7,000
Throw	m ³ /h	40	40	45	45	45
Electrical power	W	550	550	800	900	1000
Electrical current	A	2.8	2.8	3.8	4.6	4.8
Voltage (50Hz)*	V	230	230	230	230	230
Sound level	dB(A)	79	79	81	79	79
Weight	kg	40	40	45	45	45
Gas consumption natural gas (G20)	m ³ /h	7.9	10.5	12.6	-	-
Gas consumption propane (G31)	kg/h	5.9	7.9	9.5	-	-
Oil consumption parafin	l/h - kg/h	-	-	-	10.1-8.3	12.1-9.7
Oil consumption diesel	l/h - kg/h	-	-	-	9.8-8.3	11.7-10.0
Gas connection	G"	3/4	3/4	3/4	-	-
Oil connection	mm	-	-	-	6	6

*) 60Hz also available

Accessories DXA/B-series

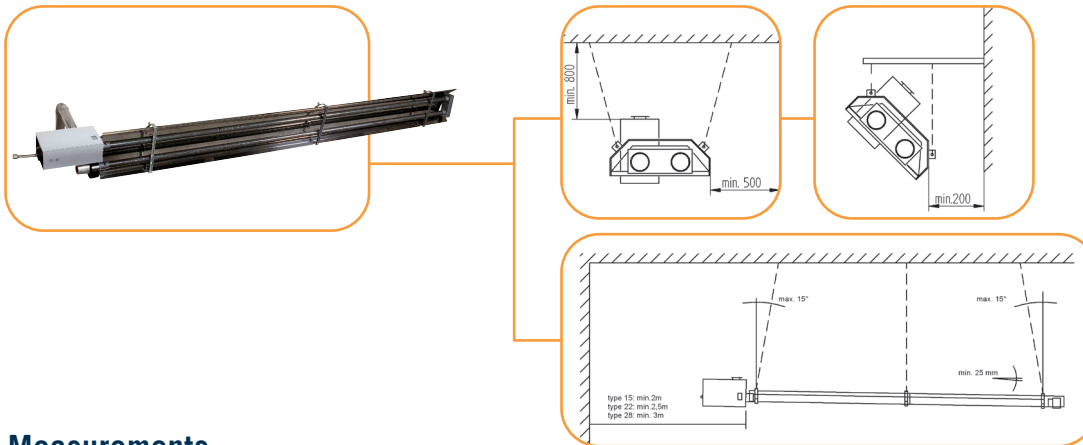
Description	article no.	price £
1 Interface board for max. 8 heaters	IB5902	242
2 Remote status reader	GD3202	264
3 Room thermostat -20°- 40°C, splashproof	IP794209	121
DXB		
4 Automatic de-aeration set, incl. filter, steel-wired hose and mounting mat.	IP794276	194
Air Eliminator	IP794273	164
Flexible fuel hose (per m.)	IP494004	2
Service parts box for DXB	GA4008	1123
DXA		
Flexible gas hose 2m. x ½" for DXA 75, max. 150 bar	IP694133	70
Flexible gas hose 2m x ¾" for DXA 100/120	IP694132	70
Pressure regulator propane for DX100/120	IP614151	125
Pressure regulator propane for DXA 75	IP614151B	125
Service parts box for DXA	GA4006-1	1085

Winterwarm Radiant Tube

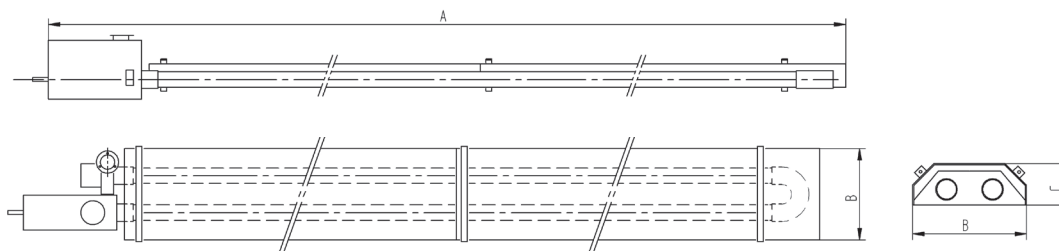
Winterwarm presents the WRU-series: gas-fired radiant tubes which provide a comfortable warmth. Radiant heat is experienced as a very pleasant warmth equal to sun radiation; the thermostat can even be set a few degrees lower than usual! Especially suitable for bad insulated halls, circumstances where only part of a room needs to be at a certain temperature (like warehouses with packing area) or environments where no air circulation or draughts are allowed. The WRU is a U-tube available in 8 capacities. Information on linear types/herringbone systems/ double linears available upon request.

Characteristics WRU:

- rapid heating up times
- no heat loss through the roof
- energy saving
- no air movement
- no floor space required
- plug in control box
- maximum efficiency because of patented reflector system



Measurements



Technical data WRU

Model	Unit	WRU 15	WRU 22	WRU 28	WRU 33	WRU 42	WRU 50
Price	£	1135	1349	1623	1752	1817	1959
Nominal heat input (h.i.)	kW	15.0	23.0	29.2	34.5	42.2	47.0
Voltage (50Hz)	V	230	230	230	230	230	230
Weight	kg	31	47	66	66	81	81
Supply pressure G20 min.	mbar	17	17	17	17	17	17
Gas category		II2H3+, II2H3PII2H3+, II2H3PII2H3+, II2H3P, II2H3+, II2H3PII2H3+, II2H3PII2H3+, II2H3PII2H3+, II2H3PII2H3+, II2H3PII2H3+, II2H3P					
Flue connection	mm	100	100	100	100	100	100
Gas connection	G"	½"	½"	½"	½"	½"	½"

Measurements

length - A	mm	3100	5385	5510	5510	6970	6970
width - B	mm	470	711	711	711	711	711
height - C	mm	175	210	210	210	210	210

Flue material for balanced flue system

	article no.	Price £
Roof terminal DDV 100/150	IA8101	209
Roof sheet flat roof RP 100/160	IA8321	27
Adjustable roof sheet CL 100/160 (25°-45°)	IA8143	46

Various flue materials

All Winterwarm heaters are CE-approved with their own flue system which should be ordered together with the heater (roof or wall terminal). Additionally, Winterwarm offers extra flue material to extend the flue system and different kinds of roof sheets.

Type (aluminium 0,7mm)

	diameter	article no.	price £
Elbow 90°	Ø 80	IA8123	13
Elbow 45°	Ø 80	IA8200	13
Pipe 1000 mm	Ø 80	IA8128	23
Pipe 500 mm	Ø 80	IA8250	15
Elbow 90°	Ø 130	IA8367	30
Elbow 45°	Ø 130	IA8363	27
Pipe 1000 mm	Ø 130	IA8356	37
Pipe 500 mm	Ø 130	IA8350	28

Type (aluminium 1,5mm)

	diameter	article no.	price £
Elbow 90°	Ø 80	IA8220	19
Elbow 45°	Ø 80	IA8221	19
Pipe 1000 mm	Ø 80	IA8129	28
Pipe 500 mm	Ø 80	IA8222	16
Elbow 90°	Ø 130	IA8368	66
Elbow 30°	Ø 130	IA8360	34
Pipe 1000 mm	Ø 130	IA8358	47
Pipe 500 mm	Ø 130	IA8352	34

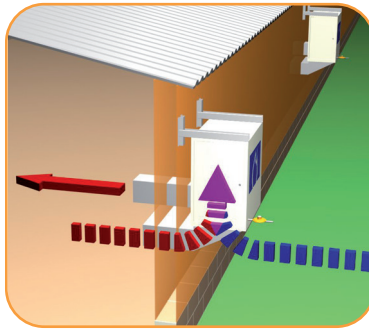
	article no.	price £
Roof sheet RP 80/125	IA8121	15
Adjustable roof sheet CL 80/130 (25°-45°)	IA8124	43
Roof sheet RP 130/210	IA8322	32
Conical Roof sheet CL 130/210 (lead/zinc) (22°-45°) incl. storm collar	GA8342	173
Conical Roof sheet CP 130/210 (up to 45°), incl. storm collar	GA8332	173
Roofsheets set 130/210 for trapezoidal roof	GA8334	202

Winterwarm Boxer

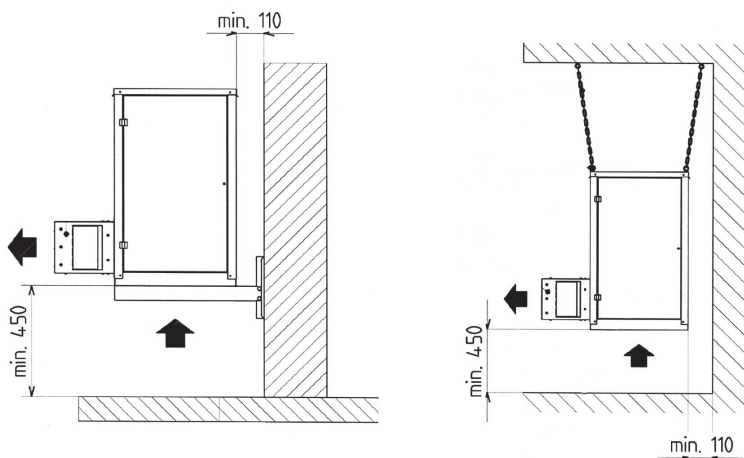
The Winterwarm Boxer is a direct gas fired heater, especially developed for intensive farming. The heater can be installed outside or inside: either way, the Boxer is designed to ensure a reliable and efficient heating of the room to create the perfect environment for your animals.

Characteristics Boxer:

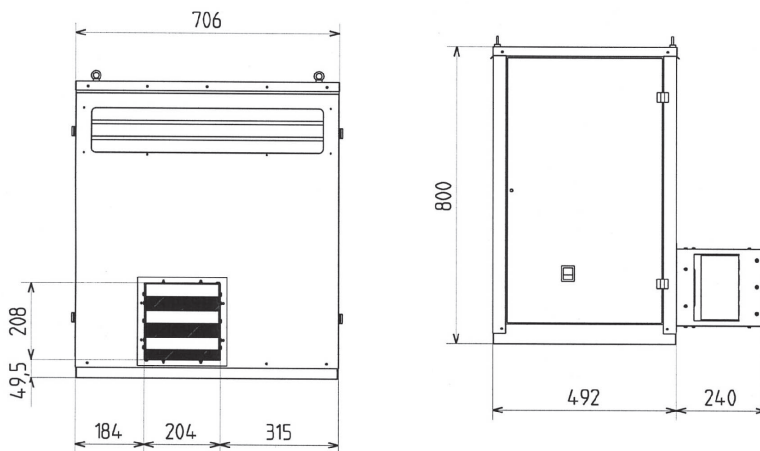
- multigas burner • high power centrifugal fan • safety flow switch • installation as well outside as inside • multi point electronic ignition • mixture of inside and outside air possible • energy efficient



Suspension



Measurements



Technical data Boxer

Description	Unit	
Price	£	1108
Nominal heat output	kW	80.0
Air output (warm)	m ³ /h	2000
Throw	m	30
Power of centrifugal fan motor	kW	0.30
Gas consumption natural gas (G20)	m ³ /h	7.02
Gas consumption propane (G31)	l/h	10.7

Accessories Boxer

Description	article no.	price £
Air recirculation unit	4AYC060	139
Air diffusion extension	4AYT060	57
Mounting brackets	4AZM001	67

DX fan

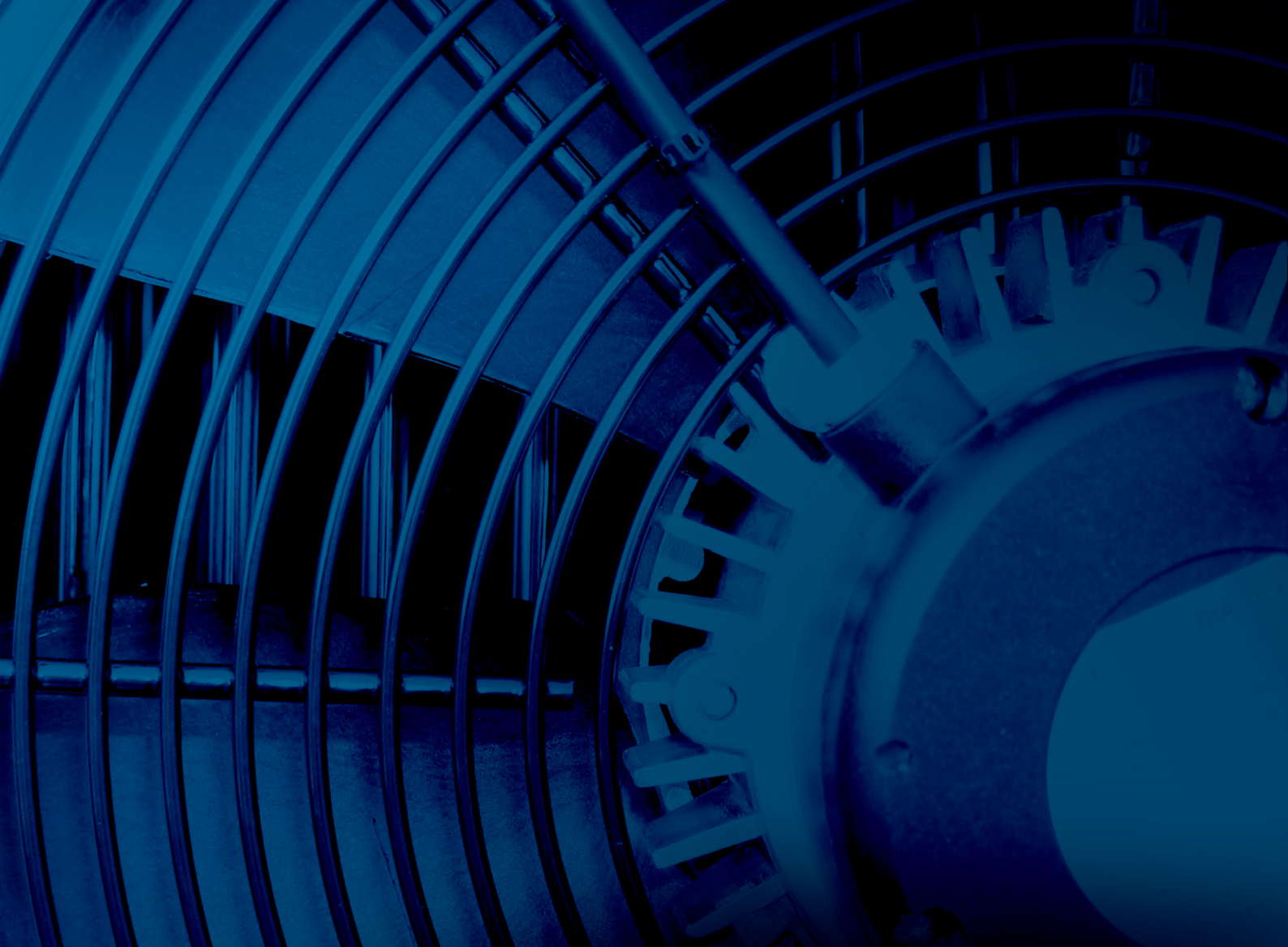
The DX fan aims to realize an optimum distribution of the warm air in the poultry house or the glass house. Plant and animal grow better in environments with a constant temperature. Second feature is that the efficiency of the consumed energy increases, and as a consequence the total energy consumption decreases, so applying fans is cost saving.

Characteristics DXF

- high air output (5000m³)
- energy-saving
- robust SS-body
- light and easy to install
- smaller measurements (air inlet opening ø460)
- IP55
- grills included



	Unit	DX fan
Article no.		PDF5000
Price	£	344
Diameter outlet side	mm	460
intake side	mm	460
Body length	mm	300
Air output	m ³ /h	5000
Throw (max.)	m	30
Mains voltage	V	230
	Hz	50/60
Electrical power	W	365
Electrical current	A	1.9
Sound level (@ 4 meter)	dB(A)	57
Protection degree		IP55



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 water heaters, electric heaters, destratification fans and gas and oil fired heaters for the agricultural and horticultural industry.

Winterwarm

heating solutions 

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European Association of
Air Heater Manufacturers

