MONOBLOC INVERTER

HEAT PUMP

PRODUCT FICHE LOW TEMPERATURE 35°

Product Fiche Conerning the C Regulations Requirements for Hea Heat Pump Combination Heat	at Pump S	pace He	eaters &	Eco	Volt	Y	
Model:				GSHVS	H-6AA1		
Air to Water Heat Pump					es		
Water to Water Heat Pump					0		
Brine to Water Heat Pump					0		
Low Temperature Heat Pump					0		
Equipped with Supplementary Heat	er				0		
Heat Pump Combination Heater					es		
Parameters Shall be declared for				Low Temperature		ns (35°C)
Parameters Shall be declared for				Average Clima			1
Item	Symbol	Value	Unit	Item	Symbol		Unit
item	Symbol	value	0	Seasonal space heating energy	Symbol	Value	Offic
Rated heat output	Prated	6.80	kW	efficiency	ης	211	%
Declared capacity at part load at o	utdoor tem	nperatu 6.019		Declared coefficient of performance for Tj = -7°C	part load	at outdo	
Tj = + 2°C	Pdh	3.725	1	Tj = + 2°C	COPd	5.62	
Tj = + 7°C	Pdh	2.578	1	$T_j = +7^{\circ}C$	COPd	6.06	
Tj = + 12°C	Pdh	3.128		Ti = + 12°C	COPd	8.23	
$T_i = biv$	Pdh	6.019		$T_i = biv$	COPd	3.35	
T <i>i</i> = TOL	Pdh	6.424	1	T <i>j</i> = TOL	COPd	3.01	
$T_j = -15^{\circ}C \text{ (if TOL < -20°C)}$	Pdh	0.424 N/A	1	$T_j = -15^{\circ}C$ (if TOL < -20°C)	COPd	3.01 N/A	
1) 13 C (11 10L \ -20 C)	Pull	IN/A	KVV	IJ = - I3 C (II TOE < -20 C)	СОРИ	IN/A	· <u> </u>
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Divalent temperature	1817	<u> </u>		Heating water operating limit	102	10	
Degradation co-efficient	Cdh	0.99	_	temperature	WTOL	75	°C
3				·			_
Power consumption in modes other	than acti	ve mode	е	Supplementary heater			
Off mode	P _{OFF}	0.13	kW	Rated Heat Output	P_{SUP}	N/A	kW
Thermostat-off mode	P _{TO}	0.13	kW				
Standby mode	P_{SB}	0.13	kW	Type of energy input		E	Electric
Crankcase heater mode	P_{CK}	0.43	kW				
Other items	·	_				_	
Capacity control		variable	9	Rated air flow, outdoors		2000	m3/h
Sound power level,	1	1		,	1		<u>'</u>
indoors/outdoors	L _{WA}	57	dB(A)				
Annual energy consumption	Q _{HE}		kWh	1			
For heat pump combination heater	:						
Declared Load Profile		L		Water heating energy efficiency	η_{wh}	135.9	%
				Water heating energy efficiency class			
Daily electricity consumption	Q _{elec}	3.822	kWh	Daily fuel consumption	Q_{fuel}	/	kWh
Annual electricity consumption	AEC	753.3	kWh/a	Annual fuel consumption	AFC	/	GJ
Volume of water accounted for in	000			Standby heat loss Pstby	Pstby	0.077	kW
test	200	L				0.071	
				Reference hot water temperature	0'wh	43.56	°C
Contact Details	Ecov	olt Lim	ited - Un	it 3C/D, Rosemount Park Dr, Rosemour			Dublin, D11 KD5E

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HEAT PUMP

PRODUCT FICHE LOW TEMPERATURE 55°

LowTemperature Heat Pump	Y	/olt	COV	EC	ters &	ace Hea	at Pump Sp	Product Fiche Conerning the C Regulations Requirements for Hea Heat Pump Combination Heat
Air to Water Heat Pump								
Water to Water Heat Pump		<u>4A1</u>		GSH				
Brine to Water Heat Pump								·
No No No No No No No No								•
Equipped with Supplementary Heater								•
Heat Pump Combination Heater								· · · · · · · · · · · · · · · · · · ·
Parameters Shall be declared for Average Climate Conditions (55°C) Parameters Shall be declared for Average Climate Conditions Rated heat output Prated 6.92 kW Essonal space heating energy efficiency ng 157 Declared capacity at part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J Declared coefficient of performance for part load at outdoor temperature T J L 25°C COPd 2.42°C COPd 3.94°C J = 2.70°C J =							er	1 11 3
Parameters Shall be declared for Symbol Value Unit Item Seasonal space heating energy efficiency n_b 157 Declared capacity at part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor temperature T_f Declared coefficient of performance for part load at outdoor for T_f Declared coefficient of performance for part load at outdoor for T_f Declared coefficient of performance for part load at outdoor for T_f Declared coefficient of performance for part load at outdoor for T_f Declared f								•
Symbol Value Unit Item Symbol Value Unit Item Seasonal space heating energy $\eta_{\rm E}$ 157								
Rated heat output $ Prated 6.92 $ kW $ Seasonal space heating energy $ efficiency $ I_{tb} $ 157 Declared capacity at part load at outdoor temperature T_1 Declared coefficient of performance for part load at outdoor temperature $T_1 = -7^{\circ}C$ COPd 2.42 $T_1 = -7^{\circ}C$ Pdh 3.804 kW $T_2 = -7^{\circ}C$ COPd 3.94 $T_3 = -7^{\circ}C$ Pdh 2.854 kW $T_3 = -7^{\circ}C$ COPd 5.39 $T_3 = +12^{\circ}C$ Pdh 2.854 kW $T_3 = -12^{\circ}C$ COPd 5.39 $T_3 = +12^{\circ}C$ Pdh 2.854 kW $T_3 = -12^{\circ}C$ COPd 5.39 $T_3 = -12^{\circ}C$ Pdh 6.125 kW $T_3 = -12^{\circ}C$ COPd 5.39 $T_3 = -12^{\circ}C$ Pdh 5.925 kW $T_3 = -12^{\circ}C$ COPd 2.42 $T_3 = -15^{\circ}C$ (if $TOL < -20^{\circ}C$) Pdh N/A kW $T_3 = -15^{\circ}C$ (if $TOL < -20^{\circ}C$) COPd N/A Bivalent temperature Tbiv -7 $^{\circ}C$ Operation limit temperature TOL -10 Degradation co-efficient Cdh 0.99 - temperature WTOL 75 Power consumption in modes other than active mode Pose 0.013 kW Degradation to deficient Degradation to deficient Degradation to deficient Degradation to deficient Degrad	5	Conditions	Climate Co	Average Cli				Parameters Shall be declared for
Rated heat output	Value Unit	ymbol Value	Syr		Unit	Value	Symbol	ltem
Tj = -7°C	157 %	, 157	ης		kW	6.92	Prated	Rated heat output
Tj = -7°C	door temperature T _i	oad at outdoor ter	for part loa	Declared coefficient of performance for	T_i	perature	ıtdoor temp	Declared capacity at part load at ou
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				·				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				3			Pdh	3
Tig = biv	5.39 -	OPd 5.39	СО	Tj = + 7°C	kW	2.573	Pdh	<u>-</u> Γ <i>i</i> = + 7°C
Tig = biv	5.98 -	OPd 5.98	СО	Ti = + 12°C	kW	2.854	Pdh	Ti = + 12°C
Tij = TOL Pdh 5.925 kW Tij = TOL COPd 2.15 Tij = - 15°C (if TOL < -20°C) Pdh N/A kW Tij = - 15°C (if TOL < -20°C) COPd N/A Bivalent temperature Tbiv -7 °C Operation limit temperature TOL -10 Heating water operating limit temperature WTOL 75 Power consumption in modes other than active mode Supplementary heater Off mode Poff O.013 kW Rated Heat Output Psup N/A Thermostat-off mode Ps O.013 kW Type of energy input Electracksee heater mode PcK O.043 kW Other items Capacity control variable Rated air flow, outdoors 2000 Sound power level, indoors/outdoors LwA 57 dB(A) Annual energy consumption QHE 3583 kWh Declared Load Profile L Water heating energy efficiency Inwh 135.9 Daily electricity consumption Qelec 3.822 kWh Daily fuel consumption AFC / Copacity Control Qelec Total Rate Consumption AFC / Copacity Control Qelec Total Rate Copacity Consumption AFC / Copacity Control Qelec Total Rate Copacity Consumption AFC / Copacity Copacity Consumption AFC / Copacity Copa	2.42 -	OPd 2.42	СО	Ti = biv			Pdh	Ti = biv
Ty = -15°C (if TOL < -20°C) Pdh N/A kW Ty = -15°C (if TOL < -20°C) COPd N/A Bivalent temperature Tbiv -7 °C Operation limit temperature TOL -10 Heating water operating limit Degradation co-efficient Cdh 0.99 - temperature WTOL 75 Power consumption in modes other than active mode Off mode Poff 0.013 kW Rated Heat Output Psup N/A Standby mode Ps 0.013 kW Type of energy input Electronic temperature Crankcase heater mode Pck 0.043 kW Other items Capacity control variable Rated air flow, outdoors 2000 Sound power level, indoors/outdoors LwA 57 dB(A) Annual energy consumption QHE 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency class Daily electricity consumption Qelec 3.822 kWh Daily fuel consumption Qruel / AFC / Standby heat loss Pstby Pstby Volume of water accounted for in test	2.15 -			,				
Degradation co-efficient Cdh O.99 Heating water operating limit temperature WTOL 75 WTOL 75 Power consumption in modes other than active mode Off mode Poff O.013 W Rated Heat Output Psup N/A Thermostat-off mode Poff O.013 W Type of energy input Electricity consumption Variable Rated air flow, outdoors Annual electricity consumption Volume of water accounted for in tems Capacity Control Lama Sound Annual electricity consumption All Annual fleet consumption All Annual fleet consumption All Annual fleet consumption All Annual fleet consumption Annual fleet consumption All Annual fleet consumption Annual	N/A -	OPd N/A	CO	3	kW		Pdh	-
Degradation co-efficient Cdh O.99 Heating water operating limit temperature WTOL 75 WTOL 75 Power consumption in modes other than active mode Off mode Poff O.013 W Rated Heat Output Psup N/A Thermostat-off mode Poff O.013 W Type of energy input Electricity consumption Variable Rated air flow, outdoors Annual electricity consumption Volume of water accounted for in tems Capacity Control Lama Sound Annual electricity consumption All Annual fleet consumption All Annual fleet consumption All Annual fleet consumption All Annual fleet consumption Annual fleet consumption All Annual fleet consumption Annual	-10 °C	01 10	ITO	Operation limit to property ye	00	7	This.	Divisiont to personal use
Degradation co-efficient Cdh 0.99 - temperature WTOL 75 Power consumption in modes other than active mode Off mode Poff 0.013 kW Rated Heat Output Psup N/A Thermostat-off mode Ps 0.013 kW Type of energy input Ele Crankcase heater mode Pc 0.043 kW Other items Capacity control variable Rated air flow, outdoors 2000 Sound power level, indoors/outdoors LwA 57 dB(A) Annual energy consumption QhE 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency Nwh 135.9 Water heating energy efficiency class Daily electricity consumption Qelec 3.822 kWh Daily fuel consumption Qruel / Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Volume of water accounted for in test	-10 -C	JL -10	10		-C	-/	VIGIT	Bivalent temperature
Power consumption in modes other than active mode Off mode Off mode Poff Off Off mode Poff Off Off Off Off Off Off Off Off Off	75 °C	JTOI 75	\A/T	, ,		0.00	Cdb	Dogradation of officient
Off mode	/5 C	710L 75	VVI	temperature	-	0.99	Cun	Degradation co-efficient
Thermostat-off mode				Supplementary heater		e mode	than active	Power consumption in modes other
Thermostat-off mode	N/A kW	SUP N/A	P_{SU}	Rated Heat Output	kW	0.013	P_{OFF}	Off mode
Standby mode	<u> </u>			· ·	kW	0.013		Thermostat-off mode
Crankcase heater mode	Electric	Ele		Type of energy input	kW	0.013		Standby mode
Capacity control variable Rated air flow, outdoors 2000 Sound power level, indoors/outdoors L _{WA} 57 dB(A) Annual energy consumption Q _{HE} 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency η_{Wh} 135.9 Water heating energy efficiency class Daily electricity consumption Q _{elec} 3.822 kWh Daily fuel consumption Q _{fuel} / Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Standby heat loss Pstby Pstby test								-
Capacity control variable Rated air flow, outdoors 2000 Sound power level, indoors/outdoors L _{WA} 57 dB(A) Annual energy consumption Q _{HE} 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency water heating energy efficiency class Daily electricity consumption Q _{elec} 3.822 kWh Daily fuel consumption Q _{fuel} / Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Volume of water accounted for in test								Other items
Sound power level, indoors/outdoors	2000 m3/h	2000		Rated air flow, outdoors		/ariable	V	
Annual energy consumption QHE 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency Water heating energy efficiency class Daily electricity consumption Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption Qelec Standby heat loss Pstby O.071			l .	, , 2 2				
Annual energy consumption QHE 3583 kWh For heat pump combination heater: Declared Load Profile L Water heating energy efficiency Water heating energy efficiency class Water heating energy efficiency class Water heating energy efficiency class Daily electricity consumption Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC Volume of water accounted for in test 200 L Standby heat loss Pstby 0.071					dB(A)	57	Lwa	'
For heat pump combination heater: Declared Load Profile L Water heating energy efficiency Water heating energy efficiency class Water heating energy efficiency class Water heating energy efficiency class Daily electricity consumption Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC Volume of water accounted for in test 200 L Standby heat loss Pstby 0.071				1				
Declared Load Profile L Water heating energy efficiency Water heating energy efficiency class Water heating energy efficiency class Daily electricity consumption Qelec Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption Volume of water accounted for in test AFC Volume of water accounted for in test Vater heating energy efficiency AWH Daily fuel consumption AFC / Standby heat loss Pstby O.071				†		2000		
Water heating energy efficiency class Daily electricity consumption Q _{elec} 3.822 kWh Daily fuel consumption Q _{fuel} / Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Volume of water accounted for in test 200 L Standby heat loss Pstby 0.071	135.9 %	135 9	n	Water heating energy efficiency		L		· · ·
Daily electricity consumption Q _{elec} 3.822 kWh Daily fuel consumption Q _{fuel} / Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Volume of water accounted for in test 200 L Standby heat loss Pstby 0.071	·==·= ·*	vii 155.5					1	
Annual electricity consumption AEC 753.3 kWh/a Annual fuel consumption AFC / Volume of water accounted for in test L Standby heat loss Pstby 0.071	/ kWh) _{fuol} /			kWh	3.822	Oalaa	Daily electricity consumption
Volume of water accounted for in 200 L Standby heat loss Pstby Pstby 0.071	/ GJ							
	k\\/	sthy		'				Volume of water accounted for in
Reference not water temperature 0wn 43.56	43.56 °C	'wh 43.56	0'W	Reference hot water temperature				test
Contact Details Ecovolt Limited - Unit 3C/D, Rosemount Park Dr, Rosemount Business Park, Dub	٠٠			1	<u> </u>			