Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	- CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	152	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				

ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	148	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = – 7 °C	Pdh	na	kW	T j = − 7 °C	COPd	na] - [
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	2,10	-
T j = + 7 °C	Pdh	7,3	kW	T j = +7 °C	COPd	3,21	-
T j = + 12 °C	Pdh	9,4	kW	T j = +12 °C	COPd	4,88	-
T j = bivalent temperature	Pdh	6,0	kW	T j = bivalent temperature	COPd	1,59	-
T j = operation limit temperature	Pdh	5,6	kW	T j = operation limit temperature	COPd	2,45	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes c	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2271	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:						
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	t's life cycle, it mus he product's refrige	a recycling station or with the installation engi t be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic le units is not exercised.	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Bo			46 372 88000 www.ctc.se			181001

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature



	•				541 20 Ljun	e ;	
Model(s):		CTC EcoAir 408	+ CTC EcoLog	gic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	198	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
		erature applicatio	on, except for	r low-temperature heat pumps. For I	ow- temperatu	ure heat pum	ips,
parameters shall be declared f	or low-temperatu	re application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	n _s	194	%
Declared capacity for heating f outdoor temperature T j	or part load at ind	door temperature	e 20 °C and	Declared coefficient of performa load at indoor temperature 20 °	-		-
Г ј = — 7 °С	Pdh	na	kW	T j = – 7 °C	COPd	na] -
Г ј = + 2 °С	Pdh	6,0	kW	T j = +2 °C	COPd	3,76] -
Г ј = + 7 °С	Pdh	7,9	kW	T j = +7 °C	COPd	5,01] -
Г ј = + 12 °С	Pdh	9,7	kW	T j = +12 °C	COPd	6,41] -
Γ j = bivalent temperature	Pdh	6,2	kW	T j = bivalent temperature	COPd	3,91	-
Γ j = operation limit temperature	Pdh	6,0	kW	T j = operation limit temperature	COPd	3,70	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,7	kW
hermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0,000	kW				
Other items				1	1		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1816	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	eater:						
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	#VÄRDEFEL!	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		of the product's life importance that the	cycle, it must be product's refrige	a recycling station or with the installation engin sent correctly to a waste station or reseller offi erant, compressor oil and electrical/electronic e	ering a service of tl	nat type. t is of g	reat
Contact details	Enertech AB, Box		iunghy Tol +				181001

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	122	%	
Equipped with a supplementary heater:	No	Package efficiency class:	A+	-	
Heat pump combination heater:	No				

Rated heat output (*)Protect6kWResisting space heating energy efficiencyns118%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j00 <th>Item</th> <th>Symbol</th> <th>Value</th> <th>Unit</th> <th>Item</th> <th>Symbol</th> <th>Value</th> <th>Unit</th>	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
outdoor temperature T jT j = -7 °CPdh4,5T j = -7 °CPdh5,5WWT j = -7 °CCOPd2,23T j = +7 °CPdh7,6WWT j = +2 °CCOPd2,93T j = bivalent temperaturePdh4,9KWT j = +17 °CCOPd2,93T j = bivalent temperaturePdh4,0KWT j = bivalent temperatureCOPd2,51J = operation limitPdh4,0temperaturePdh4,0KWT j = operation limitCOPd2,51for air-to-water heat pumps:Pdhnar j = -15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	6	kW		η _s	118	%
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		for part load at ind	door temperat	ure 20 °C and				
TJ= + 7 °CPdh7.6kWTJ= + 12 °CCOPd4.09-TJ = + 12 °CPdh9.0kWT= + 12 °CCOPd5.31-TJ = bivalent temperaturePdh4.9kWT= bivalent temperatureCOPd2,51-TJ = operation limitPdh4.0kWT= operation limitCOPd2,51-For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdna-TJ = 15 °C (If TOL < -20 °C)	T j = – 7 °C	Pdh	4,5	kW	T j = − 7 °C	COPd	2,21	-
Tj = +12 °CPdh9,0kWTj = +12 °CCOPd5,31.Tj = bivalent temperaturePdh4,9kWTj = bivalent temperatureCOPd2,51.Tj = oparation limit temperaturePdh4,0kWTj = oparation limit temperatureCOPd1,91.For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 2 °C	Pdh	5,5	kW	-	COPd	2,98	-
T j = bivalent temperaturePdh4,9KWT j = bivalent temperatureCOPd2,51.T j = operation limit temperaturePdh4,0KWT j = operation limit temperatureCOPd1,91.For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)		Pdh	7,6	kW	,	COPd	4,09	-
T j = operation limit temperaturePdh4,0kWT j = operation limit temperature $COPd$ 1,91For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	9,0	kW	T j = +12 °C	COPd	5,31	-
temperaturePan4,0KWtemperatureCDPa1,91-For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = bivalent temperature	Pdh	4,9	kW	T j = bivalent temperature	COPd	2,51	-
T j = -15 °C (if TOL < - 20 °C)PainnakWT j = -15 °C (if TOL < - 20 °C)CDPanaBivalent temperatureT biv-4°CFor air-to-water heat pumps: Operation limit temperatureTOL-10°CCycling interval capacity for heatingP cychnakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,99-Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active mode0,007kWSupplementary heater Rated heat output (*)Psup2,4kWType of energy inputElectricElectricFor air-to-water heat pumps: Rated air flow rate, outdoors-4100m3/hCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors-4100m3/hSound power level, indoors/ outdoorsL WAna/58dBFor air-to-water heat pumps: Rated air flow rate, outdoors-nam3/hFor heat pump combination heater:Decared load profileMater heating energy efficiencyna%Daily electricity consumptionQelecnakWhDaily fuel consumptionQfuelnaSpecific precautions and end of life information:makWhAnnual fuel consumptionQfuelnaKWSpecific precautions and end of life information:The packaging must be deposited at a recycling station or with the instalation engineer for correct waster management. At the end of the p		Pdh	4,0	kW		COPd	1,91] -
Bivalent temperature T _{biv} -4 *C Operation limit temperature TOL -10 *C Cycling interval capacity for heating P cych na kW Operation limit temperature TOL -10 *C Degradation co-efficient Cdh 0,99 - Heating water operating limit WTOL 55 *C Power consumption in modes other than active mode 0,018 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Thermostat-off mode P or 0,007 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Crankcase heater mode P cx 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: - 4100 m3/h Sound power level, indoors/ L wA na/58 dB pmps: Rated brine or water flow rate, outdoors - na m3/h For heat pump combination heater: Declared load profile na KWh Annual fuel consumption Qfuel na % Specific precautions and end of the product's life cycle, it must be end outst's life cycle, it must be sent correctly to a waste station or seller offering a service of the moduct's life cycle, it must be sent correctly one wa		Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency COPcyc na - Degradation co-efficient Cdh 0,99 - Heating water operating limit temperature WTOL 55 °C Power consumption in modes other than active mode 0,018 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Thermostat-off mode P or 0,007 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Crankcase heater mode P ox 0,000 kW Type of energy input Electric Electric Capacity control Fixed Fixed For air-to-water heat pumps: Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ outdoors L _{WA} na/58 dB B For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger na m3/h For heat pump combination heater: Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption AFC	Bivalent temperature	T _{biv}	-4	°C		TOL	-10	°C
Degradation co-efficient Cdh 0,99 - temperature WIOL 55 *C Power consumption in modes other than active mode Supplementary heater Supplementary heater Rated heat output (*) Psup 2,4 kW Thermostat-off mode P ro 0,007 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Type of energy input Electric Electric Electric For air-to-water heat pumps: For water-/brine-to-water heat pumps: For water-/brine-to-water heat pumps: For water-/brine-to-water heat pumps: For heat pump combination heater: Power active activ		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orf 0,018 kW Thermostat-off mode P ro 0,007 kW Standby mode P sa 0,018 kW Crankcase heater mode P cc 0,000 kW Other items 0,000 kW Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L WA na/58 dB Por water-/brine-to-water heat pumps: Rated air flow rate, outdoors - na m3/h For heat pump combination heater: Declared load profile na KWh Paily fuel consumption Quelc na kWh Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refigerant, compressor oil and electricid/electroic equipment are properly disposed of. Discourse of the and/ut waste is in or pressided of.	Degradation co-efficient	Cdh	0,99	-	с , _с	WTOL	55	°C
Thermostat-off mode P ro 0,007 kW Standby mode P sB 0,018 kW Crankcase heater mode P cx 0,000 kW Other items 0,000 kW For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Capacity control Fixed For water-/brine-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L wA na/58 dB B For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: Declared load profile na WW Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffegrenat, compressor oil and electrical/electronic equipmen	Power consumption in modes	other than active	mode	-	Supplementary heater		-	-
Standby mode P so 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h m3/h Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product as baueshold waste is ont permitted. Disconsion of the nonduct as baueshold waste is ont permitted.	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,4	kW
Crankcase heater mode P cx 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water./brine-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Annual energy consumption Q HE 4343 kWh For water./brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h m3/h Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste is tation or reseller offering a service of that type. ti so figreat importance that the product's refrigreant, compressor oil and electrical/electronic equipment are properly disposed of.	Thermostat-off mode	Р _{то}	0,007	kW				
Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L MA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water - na m3/h Annual energy consumption Q HE 4343 kWh KWh Reter heating energy - na m3/h For heat pump combination heater: - Declared load profile na Water heating energy nwh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Discoging of the product's nefferent, compressor oil and electrical/electronic equipment are properly disposed of. Discoging of the produc	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L MA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water - na m3/h Annual energy consumption Q HE 4343 kWh KWh Reter heating energy - na m3/h For heat pump combination heater: - Declared load profile na Water heating energy nwh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Discoging of the product's nefferent, compressor oil and electrical/electronic equipment are properly disposed of. Discoging of the produc	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L WA na/58 dB For water./brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h Annual energy consumption Q HE 4343 kWh For water./brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h For heat pump combination heater: Declared load profile na Water heating energy efficiency number na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great inportance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Other items			•				_
outdoors L wA na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 4343 kWh pumps: Rated brine or water For heat pump combination heater: 4343 kWh water heating energy - na m3/h Declared load profile na na kWh Water heating energy nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 4343 kWh exchanger - na m3/h For heat pump combination heater: Declared load profile na Water heating energy efficiency η_{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.		L _{WA}	na/58	dB				
For heat pump combination heater: Declared load profile Na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na % Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product a bousehold waste is not permitted	Annual energy consumption	Q _{HE}	4343	kWh		-	na	m3/h
Declared load profile na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	For heat pump combination he	eater:						
Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Declared load profile		na		o o ,	η_{wh}	na	%
AEC na kWh Annual fuel consumption AFC na GJ consumption Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted. Disposing of the product as household waste is not permitted.	Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Specific precautions and end end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted. Disposing of the product as household waste is not permitted.	,	AEC			-			
			end of the production importance that t	ct's life cycle, it mus the product's refrige	t be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
	Contact details	Enertech AB, Box						181001

Information for heat pump space heaters and heat pump combination heaters Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoLogic		
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	No	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	158	%
Equipped with a supplementary heater:	No	Package efficiency class:	A++	-
Heat pump combination heater:	No			

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7)efficiency x_{i} $T_{j} = -7 °C$ Pdh $4,7$ kW $T_{j} = -7 °C$ Pdh $6,2$ kW $T_{j} = -7 °C$ Pdh $6,2$ kW $T_{j} = +7 °C$ Pdh $6,2$ kW $T_{j} = +7 °C$ Pdh $6,2$ kW $T_{j} = +7 °C$ $C COPd$ $4,03$ $ T_{j} = +12 °C$ Pdh $9,8$ kW $T_{j} = +2 °C$ $C OPd$ $5,28$ $ T_{j} = -partion limitPdh4,3kWT_{j} = operation limitPdh4,3kWtemperatureC OPd2,80-for air-to-water heat pumps:T_{j} = -15 °C (if TOL < -20 °C)PdhnaT_{j} = -15 °C (if TOL < -20 °C)PdhnakWT_{j} = -15 °C (if TOL < -20 °C)Pdhna T_{j} = -15 °C (if TOL < -20 °C)PdhnakWDegradation co-efficientCdh0,97-Power consumption in modes other than active modeRoc0,018kWThermostat-off modeP_{00}0,018kWType of energy inputElectricCapacity controlFixed1a1aPower$	Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
outdoor temperature T jpart load at indoor temperature 20 °C and outdoor temperatureT j = -7 °CPdh $4,7$ kWT j = -7 °CCOPd $3,07$ -T j = +7 °CPdh $6,2$ kWT j = +2 °CCOPd $4,03$ -T j = +12 °CPdh $9,8$ kWT j = +7 °CCOPd $4,03$ -T j = obraiton limitPdh $5,1$ kWT j = +12 °CCOPd $5,28$ -T j = obraiton limitPdh $4,3$ kWT j = operation limitCOPd $3,30$ -T j = obraiton limitPdh $4,3$ kWT j = operation limitCOPd $3,30$ -T j = -15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	6	kW		η _s	154	%
Tj = + 2 °C T j = + 7 °C T j = + 7 °C P dhP dh6,2 8,0 8,0KW KW T j = + 7 °C T j = + 7 °C C C DPdT j = + 2 °C 5,28 4,03C DPd6,28 5,28 4,03-T j = bivalent temperature T j = operation limit temperatureP dh5,1 4,3KW T j = bivalent temperatureC DPd3,30 5,28-T j = operation limit temperatureP dh4,3 4,3KW T j = operation limit temperatureC DPd3,30 2,80-T j = operation limit temperatureP dh4,3 4,3KWT j = operation limit temperatureC DPd3,30 2,80-For air-to-water heat pumps: p = 15 °C (if TOL < - 20 °C)		for part load at in	door temperat	ure 20 °C and				
Tj = + 7 °CPdh8,0kWTj = + 7 °CCOPd5,28-Tj = + 12 °CPdh9,8kWTj = + 12 °CCOPd6,58-Tj = bivalent temperaturePdh5,1kWTj = bivalent temperatureCOPd3,30-Tj = operation limitPdh4,3kWTj = operation limitCOPd2,80-For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdna-For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:TOL-10°CCycling interval capacity for heatingP_cychnakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,97-temperatureTOL-10°COff modeP_or0,018kWSupplementary heaterRated heat output (*)Psup1,9kWCapacity controlFixedna/58dBfor air-to-water heat pumps:-nam3,7Sound power level, indoors/ outdoorsL.wana/58dBBfor air-to-water heat pumps:-nam3,7Capacity controlFixedna/58dBBfor air-to-water heat pumps:-nam3,7Sound power level, indoors/L.wana/58dBBfor air-to-water heat pumps:-nam3,7Capacity controlFix	T j = – 7 °C	Pdh	4,7	kW	T j = – 7 °C	COPd	3,07	-
T j = +12 °CPdh9,8kWT j = +12 °CCOPd6,58-T j = bivalent temperaturePdh5,1kWT j = poration limitCOPd3,30-T j = operation limitPdh4,3kWT j = operation limitCOPd2,80-For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPd2,80-For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdna-T j = -15°C (if TOL < - 20°C)	T j = + 2 °C	Pdh	6,2	kW	T j = +2 °C	COPd	4,03	-
Tj = bivalent temperaturePdh5,1kWTj = bivalent temperatureCOPd3,30-Tj = operation limit temperaturePdh4,3kWTj = operation limit temperatureCOPd2,80-For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C)	T j = + 7 °C	Pdh	8,0	kW		COPd	5,28	-
T j = operation limit temperature Pdh 4,3kWT j = operation limit temperature $COPd$ 2,80-For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,58	-
temperaturePan4,3KWtemperature $CDPa$ 2,80-For air-to-water heat pumps: T] = -15 °C (if TOL < - 20 °C)	T j = bivalent temperature	Pdh	5,1	kW	T j = bivalent temperature	COPd	3,30	-
T j = -15 °C (if TOL < - 20 °C)PannakWT j = -15 °C (if TOL < -20 °C)COPanaBivalent temperatureT biv -5°CFor air-to-water heat pumps: Operation limit temperatureTOL-10°CCycling interval capacity for heating P_{cych} nakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh $0,97$ -Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active mode $0,018$ KW KWSupplementary heater Rated heat output (*) $Psup$ $1,9$ kW Type of energy inputElectricFor air-to-water heat pumps: $Crankcase heater mode$ $0,018$ KW Type of energy inputElectricCapacity controlFixedFor air-to-water heat pumps: $Capacity control$ A_{MA} $na/58$ A_{2277} dB Sound power level, indoors/ outdoors L_{WA} $na/58$ A_{2277} dB MWh For water /brine-to-water heat pumps: $Rated air flow rate, outdoorsA_{100}m3/2For heat pump combination heater:Declared load profilenaKWhAnual fuel consumptionQfuelnaKWDaily electricityconsumptionQelecnakWhAnual fuel consumptionQfuelnaKWAnnual electricityconsumptionAECnakWhAnual fuel consumptionQfuelnaKWAnnual electricityconsumptionA$		Pdh	4,3	kW		COPd	2,80	-
Bivalent temperature T_{biv} -5 c Operation limit temperature TOL -10 c Cycling interval capacity for heating P_{cych} na kW V $Cycling interval efficiency COPcyc na - Heating water operating limit WTOL 55 c c Cycling interval efficiency VTOL c F c rest re$		Pdh	na	kW		COPd	na	-
heating P_{cych} nakWCycling interval efficiency $COPcyc$ naDegradation co-efficient Cdh $0,97$ Heating water operating limit $WTOL$ 55 cc Power consumption in modes other than active mode $O,018$ kW Supplementary heater $Rated heat output (*)$ $Psup$ $1,9$ kW Thermostat-off mode P_{ror} $0,018$ kW $Rated heat output (*)$ $Psup$ $1,9$ kW Standby mode P_{sa} $0,018$ kW $Type of energy input$ $Electric$ $Electric$ Capacity control $Fixed$ $rad/58$ dB $rad or ate, outdoors$ $rad or ate, outdoor heat exchangerrad or ate, outdoor h$	Bivalent temperature	T _{biv}	-5	°C		TOL	-10	°C
Degradation co-efficient Can 0,97 - temperature W/OL SS Co Power consumption in modes other than active mode Off mode Power 0,018 kW Supplementary heater Rated heat output (*) Psup 1,9 kW Thermostat-off mode P ro 0,022 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric m3/ Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/ Sound power level, indoors/ outdoors L wA na/58 dB B For water-/brine-to-water heat pumps: Rated air flow rate, outdoors heat - na m3/ For heat pump combination heater: - na m3/ exchanger - na m3/ Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na G G <td< td=""><td></td><td>P _{cych}</td><td>na</td><td>kW</td><td>Cycling interval efficiency</td><td>СОРсус</td><td>na</td><td>-</td></td<>		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orf 0,018 kW Rated heat output (*) P sup 1,9 kW Thermostat-off mode P ro 0,022 kW Standby mode P sg 0,018 kW Crankcase heater mode P cx 0,000 kW Other items - - - Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/ Sound power level, indoors/ outdoors L WA na/58 dB - For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/ For heat pump combination heater: - - na m3/ Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation equipment are properly disposed of. Importance that heap onduct's infigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Degradation co-efficient	Cdh	0,97	-		WTOL	55	°C
Thermostat-off mode P TO 0,022 kW Standby mode P SB 0,018 kW Crankcase heater mode P CK 0,000 kW Other items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/ Sound power level, indoors/ outdoors L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/ For heat pump combination heater: Declared load profile na kWh Daily fuel consumption Qfuel na kW Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At 1 end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of gr importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Power consumption in modes	other than active	mode		Supplementary heater			-
Standby mode P sB 0,018 kW Type of energy input Electric Crankcase heater mode P ck 0,000 kW Type of energy input Electric Other items - P ck 0,000 kW For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/ Capacity control - Fixed For water-/brine-to-water heat pumps: Rated brine or water - na m3/ Sound power level, indoors/ outdoors L wA na/58 dB B pumps: Rated brine or water - na m3/ Annual energy consumption Q HE 3297 kWh Water heating energy efficiency - na m3/ Declared load profile na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na Gd Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the of the product's refrigerant, compressor oil and electrical/electroid/electroid/electroid/electroid/electroid/electroid/electroid/electroid/electroid/electroid	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,9	kW
Crankcase heater mode P cx 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/ Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/ For heat pump combination heater: 3297 kWh Water heating energy efficiency n_wh na % Declared load profile na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's efrigerant, compressor oil and electricici equipment are properly disposed of. Disposite of the product's efrigerant, compressor oil and electrici electroic equipment are properly disposed of.	Thermostat-off mode	P _{TO}	0,022	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L _{WA} na/58 dB Annual energy consumption Q _{HE} 3297 kWh For heat pump combination heater: For heat pump combination heater: na Declared load profile na kWh Water heating energy efficiency n _{wh} na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Other items Capacity control Fixed Sound power level, indoors/ outdoors L _{WA} na/58 dB Annual energy consumption Q _{HE} 3297 kWh For heat pump combination heater: For heat pump combination heater: na Declared load profile na kWh Water heating energy efficiency n _{wh} na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors 4100 m3/x Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat na m3/x Annual energy consumption Q HE 3297 kWh KWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat na m3/x For heat pump combination heater: Declared load profile na Water heating energy efficiency na m3/x Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer of recorrect waste management. At is end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of gr importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Discosing of the product's nefrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Discosing of the product's nefrigerant, compressor oil and electri	Other items							-
outdoors L wa na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 3297 kWh race, outdoor heat - na m3/ For heat pump combination heater: Declared load profile na Na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the information: Disposing of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 3297 kWh exchanger - na m3/ For heat pump combination heater:		L _{WA}	na/58	dB				
Declared load profile na Water heating energy efficiency nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Annual energy consumption	Q _{HE}	3297	kWh		-	na	m3/h
Declared load profile na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na gdg Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr more that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted	For heat pump combination he	eater:						
Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of gradient is not marked by the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Declared load profile		na		0 0/	η_{wh}	na	%
Consumption AEC na KWn Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At i end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of gr importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted	Daily electricity consumption	Qelec	na	kWh		Qfuel	na	kWh
Specific precautions and end end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gr of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted Disposing of the product as household waste is not permitted		AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
			end of the production importance that t	ct's life cycle, it mu he product's refrig	st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
	Contact details	Enertech AB, Box						190911

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	110	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				

Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	106	%
Declared capacity for heating fo outdoor temperature T j	er part load at ind	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	4,6	kW	T j = − 7 °C	COPd	2,49] -
T j = + 2 °C	Pdh	5,7	kW	T j = +2 °C	COPd	3,25	-
T j = + 7 °C	Pdh	7,7	kW	T j = +7 °C	COPd	4,40	-
T j = + 12 °C	Pdh	9,6	kW	T j = +12 °C	COPd	5,50	-
T j = bivalent temperature	Pdh	4,0	kW	T j = bivalent temperature	COPd	2,24	-
T j = operation limit temperature	Pdh	2,3	kW	T j = operation limit temperature	COPd	1,24	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	3,4	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	1,85	-
Bivalent temperature	T _{biv}	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	- [
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	ther than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	3,3	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5143	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:						
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation eng it be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic Id waste is not permitted	er offering a serv	vice of that type.	t is of great
Contact details E	nertech AB, Box						181001

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	137	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				

Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 jDeclared coefficient of performance or primary energy rate for part load at indoor temperature 20 °C and outdoor	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
outdoor temperature T jT j = -7 °CPdh4.8T j = + 2 °CPdh6.3T j = + 2 °CPdh6.3T j = + 12 °CPdh8.0T j = + 12 °CPdh9.8KWT j = + 7 °CCOPdJ = + 12 °CPdh9.8KWT j = + 7 °CCOPdJ = + 12 °CPdhJ = balant temperaturePdhP = balant temperaturePdhJ = operation limitPdhL = namePdhJ = operation limitPdhZ,7KWT j = operation limitCOPdL = nameCOPdFor air-to-water heat pumps:PdhT j = -15 °C (fr TOL < -20 °C)	Rated heat output (*)	Prated	5	kW		η _s	133	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		for part load at ind	door temperat	ure 20 °C and				
T j = + 7 * CPdh8,0kWT j = +7 * CCOPd5,42T j = + 12 * CPdh9,8KWT j = +12 * CCOPd6,55-T j = bivalent temperaturePdh3,8kWT j = bivalent temperatureCOPd2,54-T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90For air-to-water heat pumps: T j = -15 * C (if TOL < - 20 * C)	-	Pdh	4,8	kW	T j = – 7 °C	COPd	3,22	-
T j = +12 °CPdh9,8kWT j = +12 °CCOPd6,55T j = bivalent temperaturePdh3,8kWT j = bivalent temperatureCOPd2,54T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 2 °C	Pdh		kW		COPd		-
T j = bivalent temperaturePdh3,8kWT j = bivalent temperatureCOPd2,54T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = + 7 °C	Pdh		kW		COPd		-
T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,55	-
temperaturePdh2,7KWtemperature $COPd$ 1,90For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,54	-
T j = -15 °C (if TOL < -20 °C)Pah3,7kWT j = -15 °C (if TOL < -20 °C)COPd2,55Bivalent temperatureT biv-14°CFor air-to-water heat pumps: Operation limit temperatureTOL-22°Cycling interval capacity for heating P_{cych} nakWCycling interval efficiencyCOPcycnaDegradation co-efficientCdh0,97-Heating water operating limit temperatureWTOL55°Power consumption in modes other than active mode0,018kWSupplementary heater Rated heat output (*)Psup2,1kUType of energy inputElectricElectricFor air-to-water heat pumps: Rated air flow rate, outdoors4100m3Capacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors4100m3Sound power level, indoors/ outdoorsL wAna/58dBdBAnnual energy consumption Q HENa3494kWhFor water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors heat exchangernam3Daily electricity consumption ConsumptionQelecnakWhAnnual fuel consumptionQfuelnaDaily electricity consumptionQelecnakWhAnnual fuel consumptionAFCnaGDaily electricity consumptionAECnakWhAnnual fuel consumptionAFCnaGDaily fuel consumptionAECnakWhAnnual fuel consumption </td <td></td> <td>Pdh</td> <td>2,7</td> <td>kW</td> <td></td> <td>COPd</td> <td>1,90</td> <td>-</td>		Pdh	2,7	kW		COPd	1,90	-
Bivalent temperatureIJuv-14COperation limit temperatureIOL-22Cycling interval capacity for heatingP cychnakWOperation limit temperatureIOL-22naDegradation co-efficientCdh0,97-Cycling interval efficiencyCOPcycnanaPower consumption in modes other than active mode0,018kWHeating water operating limit temperatureWTOL55sOff modeP orr0,018kWSuplementary heaterRated heat output (*)Psup2,1ktThermostat-off modeP or0,022kWType of energy inputElectricElectricCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors4100m3Sound power level, indoors/ outdoorsL WAna/58dBFor water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heatnam3For heat pump combination heater:Declared load profilenakWhAnnual fuel consumptionQfuelnakWDaily electricity consumptionQelecnakWhAnnual fuel consumptionAFCnaGSpecific precautions and end of life information:The packaging must be deposited at a recycling station or with the instalation engineer for correct waste management. A end of the product's fire-great, compressor oil and electrical/electricic/colectrical/electrical equipment are properly disposed of di- import heat sent correct to a waste station or resiler offering a		Pdh	3,7	kW		COPd	2,55	-
heating P_{cych} nakWCycling interval efficiencyCOPcycnaDegradation co-efficientCdh0,97-Heating water operating limit temperatureWTOL55*Power consumption in modes other than active modeSupplementary heaterSupplementary heaterRated heat output (*)Psup2,1kUThermostat-off mode P_{orr} 0,018kWKWType of energy inputElectricElectricStandby mode P_{58} 0,018kWType of energy inputElectricm3Crankcase heater mode P_{cx} 0,000kWType of energy inputElectricCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors-4100m3Sound power level, indoors/ outdoors L_{WA} na/58dBdBpumps: Rated brine or water flow rate, outdoors heat exchanger-nam3For heat pump combination heater:-nakWhDaily fuel consumptionQfuelnakVDaily electricity consumptionQelecnakWhAnnual fuel consumptionQfuelnakVAnnual electricity eonsumptionAECnakWhAnnual fuel consumptionAFCnaGDaily electricity eonsumptionAECnakWhAnnual fuel consumptionAFCnaGConsumptionGelecnakWhAnnual fuel consumptionAFCnaGDaily fuel consumption<	Bivalent temperature	T _{biv}	-14	°C		TOL	-22	°C
Degradation co-efficient Can 0,97 - temperature W10L SS Power consumption in modes other than active mode Off mode P orF 0,018 kW Supplementary heater Rated heat output (*) P sup 2,1 kW Thermostat-off mode P orF 0,022 kW Standby mode P ss 0,018 kW Crankcase heater mode P cx 0,000 kW Other items For air-to-water heat pumps: - 4100 m3 Sound power level, indoors/ L WA na/58 dB - For water-/brine-to-water heat pumps: - na m3 Annual energy consumption Q HE 3494 kWh For water outdoors - na m3 For heat pump combination heater: Declared load profile na m3 Paily fuel consumption Qfuel na kW Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC		P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P oFF 0,018 kW Thermostat-off mode P ro 0,022 kW Standby mode P ss 0,018 kW Crankcase heater mode P cx 0,000 kW Other items 0,000 kW Capacity control Fixed Sound power level, indoors/ outdoors L wA na/58 dB Annual energy consumption Q HE 3494 kWh For heat pump combination heater: Declared load profile na Declared load profile na kWh Daily fuel consumption Q fuel Annual electricity consumption Qelec na kWh Daily fuel consumption QFuel na Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer of correct waste management. At end of the product's infergrant, compressor oil and electricit/electronic equipment are properly disposed of.	Degradation co-efficient	Cdh	0,97	-		WTOL	55	°C
Thermostat-off mode P TO 0,022 kW Standby mode P SB 0,018 kW Crankcase heater mode P CK 0,000 kW Other items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3 Sound power level, indoors/ outdoors L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3 For heat pump combination heater: Declared load profile na Water heating energy efficiency Nwh na 9 Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's iffergrant, compressor oil and electricicit equipment are properly disposed of.	Power consumption in modes	other than active	mode		Supplementary heater			-
Standby mode P 58 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3 Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3 Annual energy consumption Q HE 3494 kWh Water heating energy efficiency N_wh na 9 Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kV Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At empoduct's refrigerant, compressor oil and electricity delectronic equipment are properly disposed of. G	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,1	kW
Crankcase heater mode P cx 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3 Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water - na m3 Annual energy consumption Q HE 3494 kWh For air-to-water heat pumps: Rated brine or water - na m3 For heat pump combination heater: Declared load profile na Water heating energy efficiency n _{wh} na 9 Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kV Annual electricity consumption AEC na kWh Annual fuel consumption AFC na Go Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer of that type.t is of gi importance that the product's iffegreant, compresso oil and electrical/electronic equipment are properly disposed of.	Thermostat-off mode	P _{TO}	0,022	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L Manual energy consumption Q HE 3494 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger na For heat pump combination heater: Mater heating energy efficiency na Declared load profile na kWh Daily electricity consumption Qelec na Annual electricity consumption AEC na Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's life cycle, it must	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3 Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3 Annual energy consumption Q HE 3494 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3 For heat pump combination heater: - na m3 m3 m3 m3 Declared load profile na NWh Mater heating energy efficiency nwh na 9 Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kV Annual electricity consumption AEC na kWh Annual fuel consumption AFC na Mater heating on reseller offering a service of that type. t is of g importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's iffeigreant, compressor oil and electrical/electronic equipment are properly disposed of.	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors - 4100 m3 Sound power level, indoors/ outdoors L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3 Annual energy consumption Q HE 3494 kWh Reted air flow rate, outdoor heat - na m3 For heat pump combination heater: - na m3 m3 m3 m3 Declared load profile na NWh Mater heating energy efficiency na m3 Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Other items							_
outdoors L WA na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 3494 kWh pumps: Rated brine or water For heat pump combination heater: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 3494 kWh exchanger - na m3 For heat pump combination heater: - na Mater heating energy - na m3 Declared load profile na Water heating energy nwh na 9 Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kV Annual electricity AEC na kWh Annual fuel consumption AFC na G Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.		L _{WA}	na/58	dB	pumps: Rated brine or water			
Declared load profile na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption Qfuel na kW Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Annual energy consumption	Q _{HE}	3494	kWh		-	na	m3/h
Declared load profile na na 9 Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na kW Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	For heat pump combination he	eater:						
Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Declared load profile		na			η_{wh}	na	%
Consumption AEC na KWh Annual fuel consumption AFC na G Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of g importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Specific precautions and endend of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of gof life information:importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	•	AEC						GJ
UISOOSIDE OF THE OFOCULT AS DOLISEDOID WASTE IS OOT DEFINITED			end of the production importance that t	ct's life cycle, it mus he product's refrige	st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact detailsEnertech AB, Box 309, SE-341 26 Ljungby Tel +46 372 88000www.ctc.se1810	Contact details	Enertech AB, Box						181001

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoAir 408 + CTC EcoZenith i360/ EcoVent i360F						
Air-to-water heat pump:	Yes	Energy efficiency class:		-				
Water-to-water heat pump:	No	Controller class:	VII	-				
Brine-to-water heat pump:	No	Controller contribution:	3,5	%				
Low-temperature heat pump:	No	Package efficiency:	152	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:		-				

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	148	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	- 1
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	2,10	-
T j = + 7 °C	Pdh	7,3	kW	T j = +7 °C	COPd	3,21	-
T j = + 12 °C	Pdh	9,4	kW	T j = +12 °C	COPd	4,88	
T j = bivalent temperature	Pdh	6,0	kW	T j = bivalent temperature	COPd	1,59	-
T j = operation limit temperature	Pdh	5,6	kW	T j = operation limit temperature	COPd	2,45	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater		-	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2271	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	6,835	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1504	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mu he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic id unate in each engritted	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i360/ EcoVent i360F							
Air-to-water heat pump:	Yes	Energy efficiency class:		-				
Water-to-water heat pump:	No	Controller class:	VII	-				
Brine-to-water heat pump:	No	Controller contribution:	3,5	%				
Low-temperature heat pump:	No	Package efficiency:	197	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:		-				

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	194	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	-
T j = + 2 °C	Pdh	6,0	kW	T j = +2 °C	COPd	3,76	-
T j = + 7 °C	Pdh	7,9	kW	T j = +7 °C	COPd	5,01	
T j = + 12 °C	Pdh	9,7	kW	T j = +12 °C	COPd	6,41	-
T j = bivalent temperature	Pdh	6,2	kW	T j = bivalent temperature	COPd	3,91	-
T j = operation limit temperature	Pdh	6,0	kW	T j = operation limit temperature	COPd	3,70] -
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,7	kW
Thermostat-off mode	Р _{то}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1816	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	112	%
Daily electricity consumption	Qelec	6,84	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1504	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the produc importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation eng st be sent correctly to a waste station or resel erant, compressor oil and electrical/electronic	ler offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoZenith i360/ EcoVent i360F		
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	No	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	122	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+	-
Heat pump combination heater:	Yes			

Rated heat output (*) Declared capacity for heating for pa outdoor temperature T j T $j = -7$ °C T $j = +2$ °C	Pdh Pdh	6 loor temperat 4,5	kW ure 20 °C and	Seasonal space heating energy efficiency	η _s	118	%
outdoor temperature T j T j = $-7 \degree C$	Pdh Pdh		ure 20 °C and	Declared coefficient of reaf			
2	Pdh	4.5		Declared coefficient of performan part load at indoor temperature 2			
T j = + 2 °C		1-	kW	T j = − 7 °C	COPd	2,21	-
	D -III-	5,5	kW	T j = +2 °C	COPd	2,98	-
T j = + 7 °C	Pdh	7,6	kW	T j = +7 °C	COPd	4,09	-
T j = + 12 °C	Pdh	9,0	kW	T j = +12 °C	COPd	5,31	-
T j = bivalent temperature	Pdh	4,9	kW	T j = bivalent temperature	COPd	2,51	-
T j = operation limit temperature	Pdh	4,0	kW	T j = operation limit temperature	COPd	1,91	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes other	than active	mode		Supplementary heater	1		-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,4	kW
Thermostat-off mode	P _{TO}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4343	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination heater:				•			-
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	98	%
Daily electricity consumption	Qelec	7,816	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1720	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product importance that t	t's life cycle, it mu he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details Energy	tech AB, Box		5 Ljungby Tel +	46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i360/ EcoVent i360F						
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	157	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	154	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	4,7	kW	T j = – 7 °C	COPd	3,07	-
T j = + 2 °C	Pdh	6,2	kW	T j = +2 °C	COPd	4,03	-
T j = + 7 °C	Pdh	8,0	kW	T j = +7 °C	COPd	5,28	-
T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,58	-
T j = bivalent temperature	Pdh	5,1	kW	T j = bivalent temperature	COPd	3,30	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,80] -
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	- [
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,9	kW
Thermostat-off mode	Р _{то}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items	-						_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3297	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	98	%
Daily electricity consumption	Qelec	7,816	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1720	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the produc importance that t	ct's life cycle, it mus he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Medium temperature**

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i360/ EcoVent i360F							
Air-to-water heat pump:	Yes	Energy efficiency class:		-				
Water-to-water heat pump:	No	Controller class:	VII	-				
Brine-to-water heat pump:	No	Controller contribution:	3,5	%				
Low-temperature heat pump:	No	Package efficiency:	109	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:		-				

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	106	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	loor temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	4,6	kW	T j = – 7 °C	COPd	2,49	-
T j = + 2 °C	Pdh	5,7	kW	T j = +2 °C	COPd	3,25	-
T j = + 7 °C	Pdh	7,7	kW	T j = +7 °C	COPd	4,40	
T j = + 12 °C	Pdh	9,6	kW	T j = +12 °C	COPd	5,50	-
T j = bivalent temperature	Pdh	4,0	kW	T j = bivalent temperature	COPd	2,24	-
T j = operation limit temperature	Pdh	2,3	kW	T j = operation limit temperature	COPd	1,24	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	3,4	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	1,85	-
Bivalent temperature	T _{biv}	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater		r	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	3,3	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5143	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	84	%
Daily electricity consumption	Qelec	9,038	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1988	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mus he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Low temperature**

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i360/ EcoVent i360F							
Air-to-water heat pump:	Yes	Energy efficiency class:		-				
Water-to-water heat pump:	No	Controller class:	VII	-				
Brine-to-water heat pump:	No	Controller contribution:	3,5	%				
Low-temperature heat pump:	No	Package efficiency:	137	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:		-				

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η _s	133	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	4,8	kW	T j = – 7 °C	COPd	3,22	-
T j = + 2 °C	Pdh	6,3	kW	T j = +2 °C	COPd	4,19	-
T j = + 7 °C	Pdh	8,0	kW	T j = +7 °C	COPd	5,42	-
T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,55	-
T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,54	-
T j = operation limit temperature	Pdh	2,7	kW	T j = operation limit temperature	COPd	1,90	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	3,7	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	2,55	-
Bivalent temperature	T _{biv}	-14	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater		-	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,1	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3494	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination heat	ater:						
Declared load profile/ Energy efficiency class		XL/A		Water heating energy efficiency	η_{wh}	84	%
Daily electricity consumption	Qelec	9,038	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1988	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the productimportance that t	ct's life cycle, it mu he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i255					
Air-to-water heat pump:	Yes	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	VII	-		
Brine-to-water heat pump:	No	Controller contribution:	3,5	%		
Low-temperature heat pump:	No	Package efficiency:	141	%		
Equipped with a supplementary heater:	Yes	Package efficiency class:		-		

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	137	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	1 -
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	2,42	-
T j = + 7 °C	Pdh	7,3	kW	T j = +7 °C	COPd	3,26	-
T j = + 12 °C	Pdh	9,4	kW	T j = +12 °C	COPd	4,68	-
T j = bivalent temperature	Pdh	6,0	kW	T j = bivalent temperature	COPd	2,63	-
T j = operation limit temperature	Pdh	5,6	kW	T j = operation limit temperature	COPd	2,36	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,2	kW
Thermostat-off mode	Р _{то}	0,018	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2688	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:	•				-	•
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	η_{wh}	73	%
Daily electricity consumption	Qelec	6,352	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1397	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation engi st be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic id unote in a the correlated	er offering a serv	vice of that type.	t is of grea
Contact details	Enertech AB, Bo			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoZenith i255			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	174	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				

Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	170	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performan part load at indoor temperature 2			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	1 - 1
T j = + 2 °C	Pdh	6,0	kW	T j = +2 °C	COPd	3,37] -
T j = + 7 °C	Pdh	7,9	kW	T j = +7 °C	COPd	4,62	
T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	5,98	-
T j = bivalent temperature	Pdh	6,4	kW	T j = bivalent temperature	COPd	3,66	-
T j = operation limit temperature	Pdh	6,0	kW	T j = operation limit temperature	COPd	3,31	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than active	e mode		Supplementary heater		-	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,4	kW
Thermostat-off mode	P _{TO}	0,055	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2302	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:		<u> </u>				•
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	η_{wh}	73	%
Daily electricity consumption	Qelec	6,352	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1397	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation eng st be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Bo			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoAir 408 + CTC EcoZenith i255						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-				
Water-to-water heat pump:	No	Controller class:	VII	-				
Brine-to-water heat pump:	No	Controller contribution:	3,5	%				
Low-temperature heat pump:	No	Package efficiency:	121	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+	-				

Heat pump combination heater:

Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	117	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperat	ure 20 °C and	Declared coefficient of performat part load at indoor temperature :			
T j = – 7 °C	Pdh	4,4	kW	T j = – 7 °C	COPd	2,10] -
T j = + 2 °C	Pdh	6,3	kW	T j = +2 °C	COPd	3,21	-
T j = + 7 °C	Pdh	7,6	kW	T j = +7 °C	COPd	3,80	-
T j = + 12 °C	Pdh	8,9	kW	T j = +12 °C	COPd	4,66	-
T j = bivalent temperature	Pdh	5,1	kW	T j = bivalent temperature	COPd	2,51	-
T j = operation limit temperature	Pdh	3,9	kW	T j = operation limit temperature	COPd	1,82	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater		-	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,5	kW
Thermostat-off mode	Р _{то}	0,018	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4380	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	η_{wh}	61	%
Daily electricity consumption	Qelec	7,630	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1679	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc importance that t	t's life cycle, it mu he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic ud waste is not permitted	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box						200701

Information for heat pump space heaters and heat pump combination heaters Average climate and Low temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i255						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	138	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+	-			

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	134	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	4,7	kW	T j = – 7 °C	COPd	2,67	-
T j = + 2 °C	Pdh	6,2	kW	T j = +2 °C	COPd	3,60	-
T j = + 7 °C	Pdh	8,0	kW	T j = +7 °C	COPd	4,84	
T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,12	-
T j = bivalent temperature	Pdh	5,2	kW	T j = bivalent temperature	COPd	2,99	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,41	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,5	kW
Thermostat-off mode	P _{TO}	0,055	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4088	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	η_{wh}	61	%
Daily electricity consumption	Qelec	7,630	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1679	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mu he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic old waste is not permitted	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box						200701

Information for heat pump space heaters and heat pump combination heaters **Cold climate and Medium temperature**

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i255						
Air-to-water heat pump:	Yes	Energy efficiency class:		-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	99	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			

Heat pump combination heater:

Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	95	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = – 7 °C	Pdh	4,6	kW	T j = − 7 °C	COPd	2,27] - [
T j = + 2 °C	Pdh	5,7	kW	T j = +2 °C	COPd	2,99	-
T j = + 7 °C	Pdh	7,7	kW	T j = +7 °C	COPd	4,10	-
T j = + 12 °C	Pdh	9,6	kW	T j = +12 °C	COPd	5,18	-
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,22	-
T j = operation limit temperature	Pdh	2,3	kW	T j = operation limit temperature	COPd	1,01	- [
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	3,4	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	1,60	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	4,8	kW
Thermostat-off mode	Р _{то}	0,018	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	71330	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	η_{wh}	54	%
Daily electricity consumption	Qelec	8,617	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1896	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation engi st be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Box			46 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature

Yes

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC EcoZenith i255						
Air-to-water heat pump:	Yes	Energy efficiency class:		-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	117	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	113	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door temperat	ure 20 °C and	Declared coefficient of performat part load at indoor temperature			
T j = – 7 °C	Pdh	4,8	kW	T j = − 7 °C	COPd	2,81	-
T j = + 2 °C	Pdh	6,3	kW	T j = +2 °C	COPd	3,76	-
T j = + 7 °C	Pdh	8,1	kW	T j = +7 °C	COPd	4,98	-
T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,10	-
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,61	-
T j = operation limit temperature	Pdh	2,7	kW	T j = operation limit temperature	COPd	1,51] -
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	3,7	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	2,12	-
Bivalent temperature	T _{biv}	-9	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	ther than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	4,2	kW
Thermostat-off mode	Р _{то}	0,055	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5832	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	η_{wh}	54	%
Daily electricity consumption	Qelec	8,617	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1896	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that t	t's life cycle, it mus he product's refrig	a recycling station or with the installation eng st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
Contact details E		309, SE-341 20		Id waste is not nermitted			

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature



Warm climate and Medium	temperature				341 26 Ljur	ignà	
Model(s):		CTC EcoAir 408	8 + CTC EcoZer	ith i555			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	142	%	
Equipped with a supplementary	/ heater:	Yes		Package efficiency class:		-	
	or medium-temp		ion, except for	low-temperature heat pumps. For l	ow- temperat	ure heat pun	nps,
parameters shall be declared fo Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	n _s	138	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °C			
Г ј = — 7 °С	Pdh	na	kW	T j = – 7 °C	COPd	na	1 -
г ј = + 2 °С	Pdh	5,9	kW	T j = +2 °C	COPd	2,42] -
Г ј = + 7 °С	Pdh	7,3	kW	T j = +7 °C	COPd	3,24] -
Г ј = + 12 °С	Pdh	9,4	kW	T j = +12 °C	COPd	4,66	- [
Γ j = bivalent temperature	Pdh	6,1	kW	T j = bivalent temperature	COPd	2,53	-
T j = operation limit temperature	Pdh	5,6	kW	T j = operation limit temperature	COPd	2,36	-
For air-to-water heat pumps: F j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes o	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,7	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		·	•		•		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ putdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2477	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	88	%
Daily electricity consumption	Qelec	8,698	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1914	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		of the product's life	e cycle, it must be	a recycling station or with the installation engin sent correctly to a waste station or reseller offer rant, compressor oil and electrical/electronic e	ering a service of	that type. t is of a	great
	Enertech AB, Bo	of the product as h	ousebold waste is	not permitted			

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature



Warm climate and Low terr	nperature				341 26 Ljun	igby	
Model(s):		CTC EcoAir 408	8 + CTC EcoZer				
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	181	%	
Equipped with a supplementar	ry heater:	Yes		Package efficiency class:		-	
Heat pump combination heate Parameters shall be declared for parameters shall be declared for	or medium-temp		ion, except for	r low-temperature heat pumps. For I	ow- temperat	ure heat pun	ıps,
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	n _s	177	%
Declared capacity for heating f outdoor temperature T j	or part load at in	idoor temperatu	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °			
T j = – 7 °C	Pdh	na	kW	T j = − 7 °C	COPd	na	- 1
T j = + 2 °C	Pdh	6,0	kW	T j = +2 °C	COPd	3,37] -
T j = + 7 °C	Pdh	7,9	kW	T j = +7 °C	COPd	4,60	- [
T j = + 12 °C	Pdh	9,7	kW	T j = +12 °C	COPd	5,97	-
T j = bivalent temperature	Pdh	6,4	kW	T j = bivalent temperature	COPd	3,51	-
T j = operation limit temperature	Pdh	6,0	kW	T j = operation limit temperature	COPd	3,31	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than active	e mode		Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,9	kW
Thermostat-off mode	Р _{то}	0,034	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•	•	1	•		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2053	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	eater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	88	%
Daily electricity consumption	Qelec	8,698	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1914	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		of the product's life	e cycle, it must be	a recycling station or with the installation engin sent correctly to a waste station or reseller offi erant, compressor oil and electrical/electronic e	ering a service of t	that type. t is of a	great
Contact details	Enertech AB Bo	of the product as h x 309, SE-341 26	Liunghy Tel +4	46 372 88000 www.ctc.se			200701
	, b0	303, 32 371 20	-10-10-11				200701

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature



Average climate and Mediu	in temperatur				341 26 Ljun	igny	
Model(s):		CTC EcoAir 408	3 + CTC EcoZer	hith i555			
Air-to-water heat pump:		Yes		Energy efficiency class:	A+	-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	125	%	
Equipped with a supplementary	y heater:	Yes		Package efficiency class:	A++	-	
Heat pump combination heater Parameters shall be declared for parameters shall be declared for	or medium-temp	• •	ion, except for	low-temperature heat pumps. For I	ow- temperat	ure heat pun	ıps,
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	n _s	121	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performation load at indoor temperature 20 °	-		
T j = − 7 °C	Pdh	4,3	kW	T j = − 7 °C	COPd	2,14] -
Г ј = + 2 °С	Pdh	6,2	kW	T j = +2 °C	COPd	3,26	- 1
T j = + 7 °C	Pdh	7,6	kW	T j = +7 °C	COPd	4,04	-
т ј = + 12 °С	Pdh	8,9	kW	T j = +12 °C	COPd	4,90	1 -
T j = bivalent temperature	Pdh	5,0	kW	T j = bivalent temperature	COPd	2,58	-
T j = operation limit temperature	Pdh	3,7	kW	T j = operation limit temperature	COPd	1,77	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,7	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•			4		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
L Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4242	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	В	Water heating energy efficiency	η_{wh}	75	%
Daily electricity consumption	Qelec	10,117	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2226	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		of the product's life	e cycle, it must be	a recycling station or with the installation engin sent correctly to a waste station or reseller offi- rrant, compressor oil and electrical/electronic e	ering a service of t	:hat type. t is of ຄູ	reat

Information for heat pump space heaters and heat pump combination heaters Average climate and Low temperature



Average climate and Low te	mperature				341 26 Ljun	igby	
Model(s):		CTC EcoAir 408	8 + CTC EcoZer	ith i555			
Air-to-water heat pump:		Yes		Energy efficiency class:	A+	-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	141	%	
Equipped with a supplementary	y heater:	Yes		Package efficiency class:	A+	-	
	or medium-temp		ion, except for	low-temperature heat pumps. For I	ow- temperat	ure heat pun	nps,
parameters shall be declared fo Item	or low-temperat Symbol	ure application. Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	137	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °			•
T j = – 7 °C	Pdh	4,7	kW	T j = – 7 °C	COPd	2,67] -
T j = + 2 °C	Pdh	6,2	kW	T j = +2 °C	COPd	3,59	- [
T j = + 7 °C	Pdh	8,0	kW	T j = +7 °C	COPd	4,83	-
Г ј = + 12 °С	Pdh	9,8	kW	T j = +12 °C	COPd	6,12	-
T j = bivalent temperature	Pdh	5,1	kW	T j = bivalent temperature	COPd	2,88	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,41	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes c	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,9	kW
Thermostat-off mode	P _{TO}	0,034	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Lound power level, indoors/	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3708	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	В	Water heating energy efficiency	η_{wh}	75	%
Daily electricity consumption	Qelec	10,117	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2226	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		of the product's life	e cycle, it must be	a recycling station or with the installation engin sent correctly to a waste station or reseller offi rant, compressor oil and electrical/electronic e	ering a service of t	hat type. t is of a	great
Contact details	Enertech AB, Bo	of the product as h	ousebold waste is	not permitted			

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature



Model(s):		CTC EcoAir 408	8 + CTC EcoZer	nith i555			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	99	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate Parameters shall be declared fo parameters shall be declared fo	or medium-temp		ion, except for	r low-temperature heat pumps. For l	ow- temperat	ure heat pun	ıps,
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	95	%
Declared capacity for heating for heating for the structure T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °			
Г ј = — 7 °С	Pdh	4,6	kW	T j = – 7 °C	COPd	2,27	- 1
Г ј = + 2 °С	Pdh	5,7	kW	T j = +2 °C	COPd	2,99] -
Г ј = + 7 °С	Pdh	7,7	kW	T j = +7 °C	COPd	4,10	- [
Г ј = + 12 °С	Pdh	9,6	kW	T j = +12 °C	COPd	5,18	-
Γ j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,22	-
Γ j = operation limit temperature	Pdh	2,3	kW	T j = operation limit temperature	COPd	1,01] -
For air-to-water heat pumps: [j = – 15 °C (if TOL < – 20 °C)	Pdh	3,4	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	1,60	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode	-	Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	4,8	kW
Thermostat-off mode	Р _{то}	0,012	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7107	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	68	%
Daily electricity consumption	Qelec	11,152	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2453	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		of the product's life importance that the	e cycle, it must be e product's refrige	a recycling station or with the installation engin sent correctly to a waste station or reseller offi rant, compressor oil and electrical/electronic e	ering a service of t	that type. t is of a	great
Contact details	Enertech AB. Bo	of the product as h x 309, SE-341 26	Ljungby Tel +4				200701
			2. 0-1.00				

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature



Cold climate and Low tempe	erature	070 5. 11 100			341 26 Ljun	igby	
Model(s):		CTC EcoAir 408	3 + CTC EcoZer				
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	119	%	
Equipped with a supplementary		Yes		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared fo		Yes erature applicati	ion, except for	low-temperature heat pumps. For l	ow- temperat	ure heat pun	ıps,
parameters shall be declared fc Item	or low-temperat Symbol	ure application. Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy	η _s	115	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	efficiency Declared coefficient of performa load at indoor temperature 20 °C	ince or primar		•
Г ј = – 7 °С	Pdh	4,8	kW	T j = – 7 °C	COPd	2,79	- 1
Г ј = + 2 °С	Pdh	6,3	kW	T j = +2 °C	COPd	3,74	- [
Г ј = + 7 °С	Pdh	8,1	kW	T j = +7 °C	COPd	4,96	-
Г ј = + 12 °С	Pdh	9,8	kW	T j = +12 °C	COPd	6,09	-
Γ j = bivalent temperature	Pdh	4,2	kW	T j = bivalent temperature	COPd	2,40	-
Γ j = operation limit temperature	Pdh	2,7	kW	T j = operation limit temperature	COPd	1,51] -
For air-to-water heat pumps: [j = – 15 °C (if TOL < – 20 °C)	Pdh	3,7	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	2,12	-
Bivalent temperature	T _{biv}	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes c	other than active	e mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	3,3	kW
Thermostat-off mode	Р _{то}	0,034	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4977	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	68	%
Daily electricity consumption	Qelec	11,152	kWh	Daily fuel consumption	Qfuel	XL	kWh
Annual electricity consumption	AEC	2453	kWh	Annual fuel consumption	AFC	XL	GJ
Specific precautions and end of life information:		of the product's life	e cycle, it must be	a recycling station or with the installation engin sent correctly to a waste station or reseller offer rant, compressor oil and electrical/electronic e	ering a service of t	hat type. t is of g	reat
Contact details	Enortach AP Pa	of the product as h x 309, SE-341 26	ousebold waste is	lo 372 88000 www.ctc.se			200701

Information for heat pump space heaters and heat pump combination heaters Warm climate and Medium temperature

No

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 +	CTC EcoAir 408 + CTC Basicstyrning						
Air-to-water heat pump:	Yes	Energy efficiency class:		-				
Water-to-water heat pump:	No	Controller class:	I	-				
Brine-to-water heat pump:	No	Controller contribution:	1	%				
Low-temperature heat pump:	No	Package efficiency:	149	%				
Equipped with a supplementary heater:	No	Package efficiency class:		-				

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η _s	148	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = – 7 °C	Pdh	na	kW	T j = − 7 °C	COPd	na	-
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	2,10	-
T j = + 7 °C	Pdh	7,3	kW	T j = +7 °C	COPd	3,21	-
T j = + 12 °C	Pdh	9,4	kW	T j = +12 °C	COPd	4,88	-
T j = bivalent temperature	Pdh	6,0	kW	T j = bivalent temperature	COPd	1,59	-
T j = operation limit temperature	Pdh	5,6	kW	T j = operation limit temperature	COPd	2,45	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes o	other than active	mode		Supplementary heater			-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2271	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:					-	
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation engi t be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic letter station of the station of the station of the station of the s	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Bo			46 372 88000 www.ctc.se			181001

Information for heat pump space heaters and heat pump combination heaters Warm climate and Low temperature



Vir. Io-water heat pump: Yes Energy efficiency class: - Vir. Io-water heat pump: No Controller class: I - Mace To water heat pump: No Controller contribution: 1 - work-emperature heat pump: No Package efficiency: 195 % samplementary heater: No Package efficiency: 195 % samplementary heater: No Package efficiency: 105 % samplementary heater: No Package efficiency: 105 % samplementary heater: No Package efficiency: 105 % sameters shall be decared for invet temperature application. Samplementary heater that pumps. No Package efficiency: 10 No sate date at output (*) Protect 7 KW Y Package efficiency: No No Package efficiency: No Package efficiency: No No Package efficiency:	warm climate and Low terr	iperature				341 26 LJUN	yagi	
Nate to water heat pump: No Controller class: I - Sine to water heat pump: No Controller contribution: 1 % Sine to water heat pump: No Package efficiency: 195 % Saupped with a supplementary heater: No Package efficiency: 195 % Sametors shall be declared for low-temperature application, except for low-temperature heat pumps. - - - Sametors shall be declared for low-temperature application, except for low-temperature heat pumps. Sametors shall be declared for low-temperature application, except for low-temperature by Cando outcoor temperature by Cando outcoor temperature 1 IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	Model(s):		CTC EcoAir 408	+ CTC Basics	tyrning			
No Controller contribution: 1 % cow-temperature heat pump: No Package efficiency: 95 % cow-temperature heat pump: No Package efficiency: 95 % composition heater: No Package efficiency: 95 % composition heater: No Package efficiency: 95 % arameters shall be declared for notion-temperature application. tem Symbol Value Unit tased heat output (1) Proted 7 KW Seasonal space heating energy ns 194 % basedend coacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 7 j 194 % rig i = 7 °C Pdh 6.0 KW Ti = 2 °C COPd 3.6 - rig i = 7 °C Pdh 6.0 KW Ti = 2 °C COPd 3.6 - rig i = 7 °C Pdh 6.0 KW Ti = 2 °C COPd 3.6 - rig i = -15 °C (ff TOL < - 20 °C)	Air-to-water heat pump:		Yes		Energy efficiency class:		-	
No Package efficiency: 195 % Staupped with a supplementary heater: No Package efficiency class: - Staupped with a supplementary heater: No Package efficiency class: - Package efficiency: 195 % Parameters: No Package efficiency: 195 % Parameters: No Package efficiency: 195 % Parameters: Package efficiency: 195 % - Parameters: Package efficiency: 195 % - Package efficiency: Package efficiency: 195 % - Package efficiency: Package efficiency: 195 % - Package efficiency: Package efficiency: <t< td=""><td>Water-to-water heat pump:</td><td></td><td>No</td><td></td><td>Controller class:</td><td>1</td><td>-</td><td></td></t<>	Water-to-water heat pump:		No		Controller class:	1	-	
Equipped with a supplementary heater: No Package efficiency class: . feat purp combination heater: No Package efficiency class: . reade purp combination heater: No Package efficiency class: . sarameters shall be declared for molitum-temperature application. tem Symbol Value Unit sarameters shall be declared for molitum-temperature application. tem Symbol Value Unit sarameters shall be declared for molitum-temperature application. tem Symbol Value Unit sarameters shall be declared for molitum temperature 20 °C and outdoor temperature 1 Image: sarameters shall be declared of molitum temperature 20 °C and outdoor temperature 7 Image: sarameters shall be declared of molitum temperature 20 °C and outdoor temperature 7 Image: sarameters shall be declared of molitum temperature 20 °C and outdoor temperature 7 Image: sarameters shall be declared of molitum temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 7 I j = -7 °C Pdn G, 2 k/W Image: sarameter shall be declared of molitum temperature 8 Sorameters shall be declared of molitum temperature 30 °C and outdoor temperature 7 Image: sarameter sarameter shall be declared coefficient of performance or primary energy rates of sarameters shall be declared and outdoor temperature 3, 1 = 1 = 7 °C °C cloped 3, 70 °C real to chare the at	Brine-to-water heat pump:		No		Controller contribution:	1	%	
Idea turn proministion heater: No Signates: Shall be declared for notwint-temperature application. Item Symbol Value Unit tard meters shall be declared for notwint-temperature application. Item Symbol Value Unit tarde heat output (*) Proted 7 kW Seasonal space heating energy n_a 194 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 i If i = -7 °C Pdn n_a KW If i = + 7 °C Pdn 6,0 kW Ti = + 7 °C COPd 3,76 - If i = + 2 °C Pdn 6,2 kW Ti = + 2 °C COPd 3,76 - I = parature Pdn 6,0 kW Ti = + 12 °C COPd 3,70 - I = parature Pdn 6,0 kW Ti = + 12 °C COPd 3,70 - I = parature Pdn 6,0 kW Ti = + 12 °C COPd 3,70 - I = parature Pdn 6,0 kW Ti = - 7 °C COPd n_a - I = pare	Low-temperature heat pump:		No		Package efficiency:	195	%	
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps, for low-temperature beat pumps, for low-temperature for part load at indoor temperature 20 °C and build temperature T i tem Symbol Value Unit If $j = 7$ °C Pdh na kW KW Seasonal space heating energy η_s 194 % Declared capacity for heating for part load at indoor temperature 20 °C and utdoor temperature T j $T = -7$ °C COPd na - $T = -7$ °C Pdh 6,0 kW KW $T = -2$ °C COPd $\overline{0}_{3,76}$ - $T = +2$ °C Pdh 6,2 kW T = -12 °C COPd $\overline{0}_{6,41}$ - $T = -15$ °C (fTOL < -20 °C)	Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
arameters shall be declared for low-temperature application. tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit tated heat output (*) Practed 7 kW Seasonal space heating energy ns 194 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 10 °C and outdoor temperature 20 °C and strain temperature 7 br/s 3 °C °C °C °C °C Single interval capacity for pression inmit temperature 7 br/s 3 °C °C <td< td=""><td>Heat pump combination heate</td><td>r:</td><td>No</td><td></td><td></td><td></td><td></td><td></td></td<>	Heat pump combination heate	r:	No					
temSymbolValueUnitItemSymbolValueUnitlated heat output (*)Praced7k/WSeasonal space heating energy n_5 194%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 j $j = -7 ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ}$				on, except for	r low-temperature heat pumps. For le	ow-temperati	ure heat pum	ips,
Stated heat output (*)Proted7kWDeclared capacity for heating for part load at indoor temperature 20 °C and utdoor temperature 1Declared capacity for heating for part load at indoor temperature 20 °C and utdoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and utdoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 20 °C and i = + 2 °CDeclared capficient of performance or primary energy ratio for part load at indoor temperature 1 i i = + 12 °CCOPdDeclared capficient of performance or primary energy ratio for part load at indoor temperature 1 i i = + 12 °C1 = - 17 °CPdh6,0kWTi = + 12 °CCOPdDeclared capficient of performance or primary energy ratio for part load at indoor temperature 1 is - 12 °CCOPdDeclared capficient of performance or primary energy ratio for part i = + 12 °C1 = - 15 °C (if TOL < - 20 °C)	·	-				6 subst		
value near output (1) <i>Praced</i> </td <td>Item</td> <td>Symbol</td> <td>value</td> <td>Unit</td> <td></td> <td>Symbol</td> <td>value</td> <td>Unit</td>	Item	Symbol	value	Unit		Symbol	value	Unit
load at indoor temperature 20 °C and outdoor temperature 7 j $j = -7^{\circ}$ CPdhna $j = -7^{\circ}$ CPdhna $j = +7^{\circ}$ CPdh6,0 $j = +7^{\circ}$ CPdh7,9 kW $T = -7^{\circ}$ CCOPdna $j = +7^{\circ}$ CPdh6,0 kW $T = +7^{\circ}$ CCOPd5,01 $j = +12^{\circ}$ CPdh6,2kW $T = +12^{\circ}$ CCOPd5,01 $j = operation limitPdh6,0kWT = +12^{\circ}CCOPdj = operation limitPdhemperaturePdh6,0kWT = operation limitCOPdj = -15^{\circ}C (f TOL < -20^{\circ}C)$	Rated heat output (*)	Prated	7	kW		n _s	194	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Declared capacity for heating f outdoor temperature T j	or part load at ind	door temperatur	e 20 °C and		-		-
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	- 1
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Г ј = + 2 °С	Pdh	6,0	kW	T j = +2 °C	COPd	3,76	- 1
Tj = bivalent temperaturePdh6,2kWTj = bivalent temperatureCOPd3,91Tj = operation limitPdh6,0kWTj = operation limitCOPd3,70T= operation limitPdh6,0kWTj = operation limitCOPd3,70orr air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdnaalvalent temperatureTJiv3°CFor air-to-water heat pumps:COPdnaalvalent temperatureTJiv3°COperation limit temperatureTOL2°CCycling interval capacity for reatingPnakWOperation limit temperatureTOL2°CSupplementary beaterRating water operating limitWTOL55°C°CSound power level, indoors/LNAna/58dBOther itemsFixedFixedFor air-to-water heat pumps: Rated air flow rater, outdoors4100m3/hCapacity controlFixedNaNa%NaNa%Daily electricity consumptionQelecnaKWhNaNa%NaNaDaily electricity 	T j = + 7 °C	Pdh	7,9	kW	T j = +7 °C	COPd	5,01	-
r j = operation limit emperature Pdh 6,0 kW T j = operation limit emperature COPd 3,70 - or air-to-water heat pumps: r j = -15 °C (if TOL < -20 °C)	Г ј = + 12 °С	Pdh	9,7	kW	T j = +12 °C	COPd	6,41	-
emperaturePah6,0KWtemperatureCOPa3,70-ior air-to-water heat pumps: i j = -15 °C (if TOL < -20 °C)	T j = bivalent temperature	Pdh	6,2	kW	T j = bivalent temperature	COPd	3,91	-
r j = -15 °C (if TOL < -20 °C)PannakWT j = -15 °C (if TOL < -20 °C)COPana-Bivalent temperatureT biv3°CFor air-to-water heat pumps: Operation limit temperatureTOL2°CCycling interval capacity for neating P_{cych} nakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0.97-Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active modeKWSupplementary heater Rated heat output (*)Psup0,7kWThe rokes heater modeP or 0,00220,018kWType of energy inputElectricCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors4100m3/hSound power level, indoors/ DutdoorsL WA MAna/58dBMWFor water-/brine-to-water heat pumps: Rated air flow rate, outdoorsnamaAnnual energy consumption or heat pump combination heater:Declared load profilena%MAmaDeclared load profilenakWhDaily fuel consumptionQfuelnakWhAnnual electricity consumptionQelecnakWhLew hand use beset carcer was tation or with the installation or seler of foring service of that type, to or generationAfficiencyNunaDeclared load profilenakWhAnnual fuel consumptionAFCnaKWhAnnual electricity cons	T j = operation limit temperature	Pdh	6,0	kW		COPd	3,70] -
avalent temperatureTJJCOperation limit temperature IOL ZCCycling interval capacity for neating P_{cych} nakWCycling interval efficiency $COPcyc$ na-Degradation co-efficient Cdh $0,97$ Heating water operating limit wTOL TOL 55 *CPower consumption in modes other than active mode $0,97$ Heating water operating limit wTOL TOL 55 *CPower consumption in modes other than active mode $0,018$ kW Supplementary heaterRated heat output (*) $Psup$ $0,7$ kW Crankcase heater mode P_{cx} $0,000$ kW Type of energy input $Electric$ $Electric$ Capacity controlFixedFixedFor air-to-water heat pumps: 	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW		COPd	na	-
neating P_{cych} nakWCycling interval efficiency $COPyc$ na-Degradation co-efficient Cdh $0,97$ -Heating water operating limit $WTOL$ 55*CPower consumption in modes other than active mode $Dorr$ $0,018$ kW Supplementary heaterSupplementary heaterDefmode P_{orr} $0,022$ kW Rated heat output (*) $Psup$ $0,7$ kW Chernostat-off mode P_{ro} $0,022$ kW Type of energy input $Electric$ Standby mode P_{so} $0,018$ kW Type of energy input $Electric$ Crankcase heater mode P_{cx} $0,000$ kW Type of energy input $Electric$ Capacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors- 4100 $m3/h$ Capacity control I_{WA} $na/58$ dB B B B ma /h ma /h Sound power level, indoors/ L_{WA} $na/58$ dB B B ma /h ma /h Cor heat pump combination heater: D B W A ma /h ma /h M Declared load profile na kWh Annual fuel consumption Q fuel na kWh Annual electricityAEC R KWh Annual fuel consumption AFC na G Daily electricityAEC R KWh Annual fuel consumption AFC na G Speci	Bivalent temperature	T _{biv}	3	°C		TOL	2	°C
Jagradation co-efficient Can 0,97 - temperature WIOL SS C Power consumption in modes other than active mode Off mode Porr 0,018 KW Supplementary heater Rated heat output (*) Psup 0,7 kW Off mode Porr 0,022 KW Type of energy input Electric Electric Standby mode Pss 0,018 KW Type of energy input Electric M3/h Crankcase heater mode P cx 0,000 KW For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Capacity control Fixed For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors - na m3/h Condotors L WA na/58 dB Mater heating energy efficiency na m3/h Cor heat pump combination heater: Declared load profile na Mater heating energy efficiency Nwh na % Daily electricity consumption Qelec na KWh Annual fuel consumption AFC na GJ Specific precautions and end of	Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orf 0,018 kW Rated heat output (*) P sup 0,7 kW Chermostat-off mode P ro 0,022 kW Type of energy input Electric Standby mode P sa 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ butdoors L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h Cor heat pump combination heater: - na m3/h - ma m3/h Declared load profile na kWh Water heating energy efficiency N_wh na % Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the emotive is product's iff expeci, it m	Degradation co-efficient	Cdh	0,97	-		WTOL	55	°C
Thermostat-off mode P TO 0,022 kW Standby mode P SB 0,018 kW Crankcase heater mode P CK 0,000 kW Crankcase heater mode P CK 0,000 kW Dother items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Capacity control Image: state diagram of the product's life cycle, it must be sent correctly to a waste station or reseller of for state diagram of the sta	Power consumption in modes	other than active	mode		Supplementary heater		-	_
Standby mode P 58 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - - - 4100 m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ L wA na/58 dB - na m3/h Annual energy consumption Q HE 1816 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h - na m3/h Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC #VÄRDEFELI kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,7	kW
Crankcase heater mode P cx 0,000 kW Crankcase heater mode P cx 0,000 kW Dther items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Capacity control Image: second s	Thermostat-off mode	Р _{то}	0,022	kW				
Dther items Capacity control Sound power level, indoors/ L _{WA} na/58 Annual energy consumption Q _{HE} 1816 kWh For water -/brine-to-water heat pumps: Annual energy consumption Q _{HE} 1816 kWh For heat pump combination heater: Declared load profile na Nanual electricity consumption Qelec Annual electricity AEC #VÄRDEFELI kWh Daily electricity consumption Qelec The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. ti sof great importance that the product's refrigerant, compressor oil and electricia/electronic equipment are properly disposed of. Disposing of the acoduct are bunchold water be are promitted	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Dther items Capacity control Sound power level, indoors/ L _{WA} na/58 Annual energy consumption Q _{HE} 1816 kWh For water -/brine-to-water heat pumps: Annual energy consumption Q _{HE} 1816 kWh For heat pump combination heater: Declared load profile na Nanual electricity consumption Qelec Annual electricity AEC #VÄRDEFELI kWh Daily electricity consumption Qelec The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. ti sof great importance that the product's refrigerant, compressor oil and electricia/electronic equipment are properly disposed of. Disposing of the acoduct are bunchold water be are promitted	Crankcase heater mode		0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat na m3/h Annual energy consumption Q HE 1816 kWh Reted air flow rate, outdoor heat na m3/h For heat pump combination heater: Declared load profile na Mater heating energy nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC #VÄRDEFELI kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electricial/electronic equipment are properly disposed of. Disposing of the product as hoursehold waste is not corrective or a management. At the end of the product as hoursehold waste is not corrective or a management are properly disposed of .Disposing of the product as hoursehold waste is not corrective or a waste station or sel	Other items				1			
L WA na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 1816 kWh pumps: Rated brine or water For heat pump combination heater: Declared load profile na ma/s/h Declared load profile na kWh Water heating energy efficiency number of the product set on t	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 1816 kWn exchanger - na m3/n For heat pump combination heater: - na m3/n exchanger - na m3/n Declared load profile na Mater heating energy efficiency η_{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC #VÄRDEFEL! kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the encoder importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing	Sound power level, indoors/ outdoors	L _{WA}	na/58	dB				
For heat pump combination heater: Declared load profile na Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na % Annual electricity AEC #VÄRDEFEL! kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the encoder to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as boursehold worsts is not corrective.	Annual energy consumption	Q _{HE}	1816	kWh		-	na	m3/h
Declared load profile na Water heating energy efficiency n _{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC #VÄRDEFEL! kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as bourshold waste is not correctived.	For heat pump combination he	eater:	•	-			-	-
Annual electricity consumption AEC #VÄRDEFEL! kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: Comparison of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as bounded waste is not correctived.	Declared load profile		na		o o ,	η_{wh}	na	%
AEC #VARDEFEL! kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as bousehold waste is not permitted.	Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as bousehold waste is not permitted of the product as bousehold waste is not permitted	Annual electricity consumption	AEC						
Contact details Enertech AB, Box 309, SE-341, 26 Liungby Tel +46, 372, 88000 www.etc.se 191001	Specific precautions and end of life information:		of the product's life	cycle, it must be	sent correctly to a waste station or reseller offe	ering a service of t	hat type. t is of g	reat
	Contact details	Enertech AB Boy	of the product as ho	iunghy Tol ±	16 372 88000			181001

Information for heat pump space heaters and heat pump combination heaters Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC Basicstyrning						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-			
Water-to-water heat pump:	No	Controller class:	I	-			
Brine-to-water heat pump:	No	Controller contribution:	1	%			
Low-temperature heat pump:	No	Package efficiency:	119	%			
Equipped with a supplementary heater:	No	Package efficiency class:	A+	-			
Heat pump combination heater:	No						

Rated heat output (*) Protect 6 k.W Seasonal space heating energy n_5 118 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j $j = -7 ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ}$	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
outdoor temperature T jpart load at indoor temperature 20 °C and outdoor temperature T jT] = -7 °CPdh $4,5$ KWT] = -7 °CCOPd $2,21$ -T] = + 7 °CPdh $7,6$ KWT] = -2 °CCOPd $4,09$ -T] = brain temperaturePdh $4,9$ KWT] = +7 °CCOPd $2,51$ -T] = objection limitPdh $4,0$ KWT] = operation limitCOPd $2,51$ -T] = objection limitPdh $4,0$ KWT] = operation limitCOPd $2,51$ -T] = -15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	6	kW		η _s	118	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		for part load at ind	door temperat	ure 20 °C and				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = – 7 °C	Pdh	4,5	kW	T j = – 7 °C	COPd	2,21	- [
TTT <th< td=""><td>T j = + 2 °C</td><td>Pdh</td><td>5,5</td><td>kW</td><td></td><td>COPd</td><td>2,98</td><td>-</td></th<>	T j = + 2 °C	Pdh	5,5	kW		COPd	2,98	-
T j = bivalent temperaturePdh4,9KWT j = bivalent temperatureCOPd2,51-T j = operation limit temperaturePdh4,0kWT j = operation limit temperatureCOPd1,91-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 7 °C	Pdh	7,6	kW	,	COPd	4,09	-
T j = operation limit temperaturePdh4,0kWT j = operation limit temperature $COPd$ 1,91For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	9,0	kW	T j = +12 °C	COPd	5,31	-
temperaturePdn4,0KWtemperatureCOPd1,91-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = bivalent temperature	Pdh	4,9	kW	T j = bivalent temperature	COPd	2,51	-
T j = -15 °C (if TOL < - 20 °C)PdnnakWT j = -15 °C (if TOL < - 20 °C)CDPana-Bivalent temperatureT $_{biv}$ -4°CFor air-to-water heat pumps: Operation limit temperatureTOL-10°CCycling interval capacity for heatingP $_{cych}$ nakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,99-Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active modeSupplementary heaterSupplementary heaterRated heat output (*)Psup2,4kWThermostat-off modeP $_{cx}$ 0,007kWType of energy inputElectricFor air-to-water heat pumps: Rated heat output (*)4100m3/hCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors4100m3/hSound power level, indoors/ outdoorsL $_{WA}$ na/58dBFor water-/brine-to-water heat pumps: Rated air flow rate, outdoorsnam3/hFor heat pump combination heater:Declared load profilenaKWhDaily fuel consumptionQfuelnakWhAnnual electricity consumptionAECnakWhAnnual fuel consumptionAFCnakWhAnnual electricity consumptionAECnakWhAnnual fuel consumptionAFCnakWhSpecific precautions and end of life information:The packaging must be deposited at a recycling stati		Pdh	4,0	kW		COPd	1,91	-
Bivalent temperature I biv -4 *C Operation limit temperature IOL -10 *C Cycling interval capacity for heating P na kW Operation limit temperature IOL -10 *C Degradation co-efficient Cdh 0,99 - Heating water operating limit WTOL 55 *C Power consumption in modes other than active mode 0,018 kW KW Supplementary heater Rated heat output (*) Psup 2,4 kW Thermostat-off mode P orr 0,018 kW Type of energy input Electric Capacity control Fixed Fixed For air-to-water heat pumps: - 4100 m3/h Sound power level, indoors/ L wA na/58 dB Degrade air flow rate, outdoors - na m3/h Annual energy consumption Q HE 4343 kWh Daily fuel consumption Q fuel na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of the product's life cycle, thust		Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency COPcyc na - Degradation co-efficient Cdh 0,99 - Heating water operating limit WTOL 55 *C Power consumption in modes other than active mode Off mode P ore 0,018 kW Supplementary heater Rated heat output (*) P sup 2,4 kW Thermostat-off mode P ro 0,007 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: Declared load profile na - na m3/h Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption	Bivalent temperature	T _{biv}	-4	°C		TOL	-10	°C
Degradation co-efficient Can 0,99 - temperature W10L 55 C Power consumption in modes other than active mode O,018 kW Supplementary heater Supplementary heater Rated heat output (*) Psup 2,4 kW Thermostat-off mode P ro 0,007 kW Supplementary heater Rated heat output (*) Psup 2,4 kW Crankcase heater mode P cx 0,000 kW Type of energy input Electric Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB dB flow rate, outdoors - na m3/h For heat pump combination heater: Declared load profile na Water heating energy efficiency I/wh na % Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na KW Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Da	, , ,	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orr 0,018 kW Rated heat output (*) P sup 2,4 kW Thermostat-off mode P ro 0,007 kW Type of energy input Electric Standby mode P sa 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - - 4100 m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - - na m3/h Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's fi	Degradation co-efficient	Cdh	0,99	-		WTOL	55	°C
Thermostat-off mode P ro 0,007 kW Standby mode P ss 0,018 kW Crankcase heater mode P cx 0,000 kW Other items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water - na m3/h Annual energy consumption Q HE 4343 kWh Point retext pumps: Rated brine or water - na m3/h Por heat pump combination heater: Declared load profile na Water heating energy efficiency N_wh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineref ro correct waste management. At the end of	Power consumption in modes	other than active	mode		Supplementary heater			-
Standby mode P ss 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,4	kW
Crankcase heater mode P cx 0,000 kW Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors 4100 m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h ma % Declared load profile na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption: AEC na kWh Annual fuel consumption AFC na GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's infercycle.tricity/electronic equipment are properly disposed of. Disposition of the moduct's infercycle, it	Thermostat-off mode	Р _{то}	0,007	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L _{WA} na/58 dB Annual energy consumption Q _{HE} 4343 kWh For heat pump combination heater: ma Water heating energy efficiency numh na Declared load profile na kWh Water heating energy efficiency numh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's iffe cycle, it must be sent correctly lectronic equipment are properly disposed of. Discoing of the moduct's incomputer a buschold waste is not committed.	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h Annual energy consumption Q HE 4343 kWh KWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h For heat pump combination heater: - na m3/h m3/h m3/h Declared load profile na kWh Mater heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's busehold waste is not nermitted	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger na m3/h Annual energy consumption Q HE 4343 kWh KWh Rated air flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat na m3/h For heat pump combination heater: Declared load profile na M3/h Mater heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great on bisociang of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Other items							_
outdoors L WA na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 4343 kWh pumps: Rated brine or water For heat pump combination heater: Poclared load profile na m3/h Declared load profile na kWh Water heating energy efficiency nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation equipment are properly disposed of. Disposing of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 4343 kWh exchanger - na m3/h For heat pump combination heater: Pechanger - na m3/h Declared load profile na Water heating energy efficiency η_{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the importance that the product's iffergerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not nermitted Disposing of the product as household waste is not nermitted		L _{WA}	na/58	dB				
Declared load profile na Water heating energy efficiency nm na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Annual energy consumption	Q _{HE}	4343	kWh		-	na	m3/h
Declared load profile na na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted	For heat pump combination he	eater:						
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AEC na kWh Annual fuel consumption AFC na GJ consumption Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted	Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Specific precautions and end end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted Disposing of the product as household waste is not permitted	•	AEC			-			
			end of the product importance that t	ct's life cycle, it mus he product's refrige	st be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
	Contact details	Enertech AB, Box						181001

Information for heat pump space heaters and heat pump combination heaters Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC Basicstyrning							
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-				
Water-to-water heat pump:	No	Controller class:	I.	-				
Brine-to-water heat pump:	No	Controller contribution:	1	%				
Low-temperature heat pump:	No	Package efficiency:	155	%				
Equipped with a supplementary heater:	No	Package efficiency class:	A++	-				
Heat pump combination heater:	No							

Rated heat output (*) Protect 6 k.W Seasonal space heating energy n_5 1.54 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j indoor temperature 20 °C and outdoor temperature 7 j indoor temperature 7 j indoor temperature 7 j indoor temperature 20 °C and outdoor temperature 7 j T j = -7 °C Pdh 4.7 KW T j = -7 °C C OPd 3.07 - T j = + 2 °C Pdh 8.0 KW T j = + 2 °C C OPd 5.28 - T j = byzelent temperature Pdh 5.1 KW T j = poration limit C OPd 3.20 - T j = operation limit Pdh 4.3 KW T j = operation limit C OPd 3.20 - T j = operation limit Pdh A.3 KW T j = operation limit C OPd 3.20 - T j = operation limit Pdh A.3 KW T j = operation limit C OPd 3.20 - T j = -15 °C (IT TOL < -20 °C) Pdh na KW T j = operation limit C OPd 3.20 - T = -15 °C (IT TOL < -20 °C	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
outdoor temperature T jT j = - 7 °CPdh $4,7$ kWT j = - 2 °CC OPd $4,03$ -T j = + 7 °CPdh $6,2$ kWT j = -2 °CC OPd $4,03$ T j = + 7 °CPdh $8,0$ kWT j = -2 °CC OPd $4,03$ T j = + 12 °CPdh $9,8$ kWT j = + 2 °CC OPd $6,58$ T j = obvalent temperaturePdh $5,1$ kWT j = operation limitC OPd $3,30$ -T j = obvalent temperaturePdh $4,3$ kWT j = operation limitC OPd $3,30$ -T j = -15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	6	kW		η _s	154	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		or part load at inc	loor temperat	ure 20 °C and				
T j = + 7 °CPdh8,0KWT j = +7 °CCOPd5,28-T j = + 1 2 °CPdh9,8KWT j = +1 2 °CCOPd6,58-T j = bivalent temperaturePdh5,1KWT j = bivalent temperatureCOPd3,30-T j = operation limitPdh4,3KWT j = operation limitCOPd2,80-For air-to-water heat pumps:PdhnaKWT j = operation limitCOPd2,80-For air-to-water heat pumps:PdhnaKWFor air-to-water heat pumps:COPdna-Bivalent temperatureT biv-5°CFor air-to-water heat pumps:COPd-10°CCycling interval capacity for heatingP cychnakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,97-Heating water operating limit temperatureTOL55°CSupplementary heater Canacase heater modeP cor 0,0020,018 kWKWType of energy inputElectricStandby modeP cor 0,0000,000kWFor air-to-water heat pumps: Nated brine or water flow rate, outdoors4100m3/hCapacity controlFixedS297 kWhFor air-to-water heat pumps: Rated air flow rate, outdoors110m3/hCapacity controlFixedDaily fuel consumptionQfuelnam3/hMDaily electricity consumptionQelecna	-	Pdh	4,7	kW	T j = − 7 °C	COPd	3,07	-
$ T j = + 12 °C \qquad Pdh \qquad 9,8 \qquad kW \qquad T j = +12 °C \qquad COPd \qquad 6,58 \qquad - \\ T j = bivalent temperature \qquad Pdh \qquad 5,1 \qquad kW \qquad T j = - 15 °C (a COPd \qquad 3,30 \qquad - \\ T j = bivalent temperature \qquad COPd \qquad 3,30 \qquad - \\ T j = operation limit \\ temperature \qquad Pdh \qquad 4,3 \qquad kW \qquad T j = operation limit \\ temperature \qquad COPd \qquad 2,80 \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad Pdh \qquad na \qquad kW \qquad For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad Pdh \qquad na \qquad kW \qquad For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ For air-to-water heat pumps: \\ T j = - 15 °C (a TOL < - 20 °C) \qquad na \qquad - \\ Heating water operating limit \\ temperature \qquad TOL \qquad -10 \qquad °C \qquad -2 \\ For air-to-water heat pumps: \\ Supplementary heater \\ For air-to-water heat pumps: \\ Rated heat output (*) \qquad Psup \qquad 1,9 \qquad kW \qquad -2 \\ For air-to-water heat pumps: \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ Rated air flow rate, outdoors \qquad - \\ For air-to-water heat pumps: \\ For air-to-water heat pump$		Pdh		kW		COPd		-
Tj = bivalent temperaturePdh5,1kWTj = bivalent temperatureCOPd3,30-Tj = operation limit temperaturePdh4,3kWTj = operation limit temperatureCOPd2,80-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)		Pdh	8,0	kW	T j = +7 °C	COPd	-	-
T j = operation limit temperaturePdh4,3kWT j = operation limit temperature $COPd$ 2,80.For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,58	-
temperaturePdn4,3KWtemperatureCOPd2,80-For air-to-water heat pumps: T j = -15 °C (If TOL < - 20 °C)	T j = bivalent temperature	Pdh	5,1	kW	T j = bivalent temperature	COPd	3,30	-
T j = -15 °C (if TOL < -20 °C)PdnnakWT j = -15 °C (if TOL < -20 °C)CDPdnaBivalent temperatureT biv-5°CFor air-to-water heat pumps: Operation limit temperatureTOL-10°CCycling interval capacity for heating P_{cych} nakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,97-Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active mode0,018kWSupplementary heater Rated heat output (*)Psup1,9kWThermostat-off mode P_{cor} 0,018kWType of energy inputElectricCrankcase heater mode P_{cx} 0,000kWType of energy inputElectricCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors-4100m3/hSound power level, indoors/ outdoors L_{WA} na/58dBAnnual energy consumption Q_{HE} 3297kWhDelared load profilenakWhDaily fuel consumptionQfuelna%Daily electricity consumptionQelecnakWhAnnual fuel consumptionQfuelnaSpecific precautions and end of life information:The packaging must be deposited at a recycling station or with the installation engineer for correct wate management. At the end of the product's if ergenar, morrestor of the ond exter in a produced of.Decirect information:The packaging mus		Pdh	4,3	kW		COPd	2,80	-
Bivalent temperature I biv -5 *C Operation limit temperature IOL -10 *C Cycling interval capacity for heating P cych na kW Cycling interval efficiency COPcyc na - Degradation co-efficient Cdh 0,977 - Heating water operating limit WTOL 55 *C Power consumption in modes other than active mode 0,018 kW Supplementary heater Rated heat output (*) Psup 1,9 kW Thermostat-off mode P orr 0,018 kW Type of energy input Electric Electric Capacity control Fixed Sound power level, indoors/ L wA na/58 dB For air-to-water heat pumps: Rated brine or water flow rate, outdoors - na m3/h Annual energy consumption Q HE 3297 kWh Daily fuel consumption Qfuel na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na % Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation en		Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency CDPcyc na - Degradation co-efficient Cdh 0,97 - Heating water operating limit temperature WTOL 55 °C Power consumption in modes other than active mode 0,018 kW Supplementary heater Rated heat output (*) Psup 1,9 kW Thermostat-off mode P or 0,022 kW Type of energy input Electric Electric Crankcase heater mode P ox 0,000 kW Type of energy input Electric m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB B pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: Declared load profile na - na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC n	Bivalent temperature	T _{biv}	-5	°C		TOL	-10	°C
Degradation co-efficient Can 0,97 - temperature W10L 55 *C Power consumption in modes other than active mode Off mode Porf 0,018 kW Supplementary heater Rated heat output (*) Psup 1,9 kW Thermostat-off mode P ro 0,022 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB m3/h m3/h For heat pump combination heater: Declared load profile na Water heating energy nmh na m3/h Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na G Daily electricity consumption AEC na kWh Annual fuel consumption AFC na G G Daily electricity AEC na kWh Annual fuel consumptio		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orF 0,018 kW Rated heat output (*) P sup 1,9 kW Thermostat-off mode P ro 0,022 kW Type of energy input Electric Standby mode P sa 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water - na m3/h For heat pump combination heater: Declared load profile na water heating energy N_wh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer of correct waste management. At the end of the prod	Degradation co-efficient	Cdh	0,97	-		WTOL	55	°C
Thermostat-off mode P TO 0,022 kW Standby mode P SB 0,018 kW Crankcase heater mode P CK 0,000 kW Other items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L WA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: Declared load profile na KWh Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's ifficigency. Is of great importance that the product's ieffigerent, compressor oil and electrical/electronic equipment are properly disposed	Power consumption in modes	other than active	mode		Supplementary heater		-	-
Standby mode P ss 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - 4100 m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB - na m3/h Annual energy consumption Q _{HE} 3297 kWh For water /brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h - na m3/h Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correcty to a waste station or reseller offering	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,9	kW
Crankcase heater mode P cx 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h m3/h Declared load profile na Water heating energy efficiency I/wh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption Qfuel na kWh Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffe cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor of and electrical/electronic equipment are properly disposed of. Disonage of the product's the output are boundehold waste is not normited.	Thermostat-off mode	Р _{то}	0,022	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L _{WA} na/58 dB Annual energy consumption Q _{HE} 3297 kWh For heat pump combination heater: Peclared load profile na m3/h Daily electricity consumption Qelec na kWh Maily fuel consumption Qfuel na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na % Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's refrigerant, compressor oil and electricity/ to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h Annual energy consumption Q HE 3297 kWh KWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h For heat pump combination heater: Declared load profile na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption or with the installation engineer for correct waster management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle,	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h Annual energy consumption Q HE 3297 kWh KWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h For heat pump combination heater: Declared load profile na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as bousehold waste is not nermitted	Other items							-
outdoors L WA na/58 dB pumps: Rated brine or water Annual energy consumption Q HE 3297 kWh pumps: Rated brine or water For heat pump combination heater: na m3/h Declared load profile na Water heating energy nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the impoduct's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Capacity control		Fixed			-	4100	m3/h
Annual energy consumption Q HE 3297 kWh exchanger na m3/h For heat pump combination heater: Peclared load profile na Water heating energy efficiency η_{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.		L _{WA}	na/58	dB	pumps: Rated brine or water			
Declared load profile na Water heating energy efficiency nm nm % Daily electricity consumption Qelec nm kWh Daily fuel consumption Qfuel nm kWh Annual electricity consumption AEC nm kWh Annual fuel consumption AFC nm GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	Annual energy consumption	Q _{HE}	3297	kWh		-	na	m3/h
Declared load profile rid efficiency lwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.	For heat pump combination he	eater:						
Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted	Declared load profile		na			η_{wh}	na	%
AEC na kWh Annual fuel consumption AFC na GJ consumption Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted Disposing of the product as household waste is not permitted.	Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Specific precautions and end end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted Disposing of the product as household waste is not permitted	· ·	AEC			•			
			end of the production importance that t	ct's life cycle, it mus he product's refrige	t be sent correctly to a waste station or resell erant, compressor oil and electrical/electronic	er offering a serv	vice of that type.	t is of great
	Contact details	Enertech AB, Box						190911

Information for heat pump space heaters and heat pump combination heaters Cold climate and Medium temperature

No

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC Basicstyrning					
Air-to-water heat pump:	Yes	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	I	-		
Brine-to-water heat pump:	No	Controller contribution:	1	%		
Low-temperature heat pump:	No	Package efficiency:	107	%		
Equipped with a supplementary heater:	No	Package efficiency class:		-		

Heat pump combination heater:

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	n _s	106	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperat	ure 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = – 7 °C	Pdh	4,6	kW	T j = − 7 °C	COPd	2,49	- 1
T j = + 2 °C	Pdh	5,7	kW	T j = +2 °C	COPd	3,25	-
T j = + 7 °C	Pdh	7,7	kW	T j = +7 °C	COPd	4,40	-
T j = + 12 °C	Pdh	9,6	kW	T j = +12 °C	COPd	5,50	- 1
T j = bivalent temperature	Pdh	4,0	kW	T j = bivalent temperature	COPd	2,24	-
T j = operation limit temperature	Pdh	2,3	kW	T j = operation limit temperature	COPd	1,24	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	3,4	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	1,85	-
Bivalent temperature	T _{biv}	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes c	other than active	mode	_	Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	3,3	kW
Thermostat-off mode	Р _{то}	0,007	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control	Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h	
Sound power level, indoors/	L _{WA}	na/58	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5143	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it mus he product's refrige	a recycling station or with the installation engi t be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic the statistic statistics of the statistical statistics of the	er offering a serv	vice of that type.	t is of great
Contact details	Enertech AB, Bo			46 372 88000 www.ctc.se			181001

Information for heat pump space heaters and heat pump combination heaters Cold climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoAir 408 + CTC Basicstyrning					
Air-to-water heat pump:	Yes	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	I.	-		
Brine-to-water heat pump:	No	Controller contribution:	1	%		
Low-temperature heat pump:	No	Package efficiency:	134	%		
Equipped with a supplementary heater:	No	Package efficiency class:		-		
Heat pump combination heater:	No					

Rated heat output (*)Proted5KWseasonal space heating energy efficiency n_s 1.33%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 jDeclared capacity for heating for part load at indoor temperature 20 °C and part load at indoor temperature 7 jDeclared capacity for heating for part load at indoor temperature 20 °C and part load at indoor temperature 7 j $T j = -7 °C$ Pdh4.8KWT $j = -7 °C$ COPd3.22 $T j = +7 °C$ Pdh8.0KWT $j = -7 °C$ COPd3.22 $T j = +7 °C$ Pdh8.0KWT $j = -7 °C$ COPd3.22T j = briz (T T CPdh9.8KWT $j = +2 °C$ COPd5.42T j = operation limitPdh2.7KWT $j = +12 °C$ COPd2.54T j = operation limitPdh3.7KWFor air-to-water heat pumps: temperatureCOPd2.55For air-to-water heat pumps:Pdh3.7KWFor air-to-water heat pumps: toperation limit temperatureTOL-22°CBivalent temperatureT $_{BW}$ -14°CFor air-to-water heat pumps: operation limit temperatureTOL-22°CCycling interval efficientCdh0.97-For air-to-water heat pumps: temperatureTOL-22°CPower consumption in modes other than active modeP $_{$	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
autdoor temperature T jT]= - 7 °CPdh4.8T]= - 7 °CPdh6.3T]= + 7 °CPdh6.3T]= + 7 °CPdh6.3T]= + 7 °CPdh6.3T]= + 12 °CPdh9.8KWT]= + 12 °CCOPd5.42T]= + 12 °CPdh3.8KWT]= + 12 °CCOPd6.55T]= bivalent temperaturePdh3.8For alr-to-water heat pumps:Pdh2.7KWT]= operation limitCOPd2.54For alr-to-water heat pumps:Pdh3.7KWT]= operation limitCOPd2.55For alr-to-water heat pumps:Pdh3.7KWT]= - 15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	5	kW		η _s	133	%	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $									
T j = + 7 °CPdh8.0kWT j = + 7 °CCOPd5.42.T j = + 12 °CPdh9.8KWT j = + 7 °CCOPd6.55T j = bivalent temperaturePdh3.8KWT j = bivalent temperatureCOPd2.54.T j = operation limitPdh2.7kWT j = operation limitCOPd2.55.For air-to-water heat pumps:Pdh3.7kWFor air-to-water heat pumps:COPd2.55.T j = -15 °C (If TOL < -20 °C)	2	Pdh	4,8	kW	T j = − 7 °C	COPd	3,22	-	
T j = + 12 °CPdh9,8kWT j = + 12 °CCOPd6,55-T j = bivalent temperaturePdh3,8kWT j = - 13 °CCOPd2,54-T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90-For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)		Pdh		kW		COPd		-	
T j = bivalent temperaturePdh3,8KWT j = bivalent temperatureCOPd2,54-T j = operation limit temperaturePdh2,7kWT j = operation limit temperatureCOPd1,90-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)		Pdh					-	-	
T j = operation limit temperature pdh 2,7kWT j = operation limit temperature $COPd$ 1,90.For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	9,8	kW	T j = +12 °C	COPd	6,55	-	
temperaturePan2,7kWtemperature $COPa$ 1,90-For air-to-water heat pumps: T] = -15 °C (if TOL < - 20 °C)	T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,54	-	
T j = -15 °C (if TOL < - 20 °C)Pan3,7KWT j = -15 °C (if TOL < - 20 °C)CDPa2,55-Bivalent temperatureT biv-14°C°CFor air-to-water heat pumps: Operation limit temperatureTOL-222°CCycling interval capacity for heatingP cychnakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,97-Heating water operating limit temperatureWTOL55°CPower consumption in modes other than active mode0,018kWKWSupplementary heater Rated heat output (*)Psup2,1kWType of energy inputElectricFixedSupplementary heater Rated air flow rate, outdoors-4100m3/hCapacity controlFixedSupplementary heat Outdoors-nam3/hm3/hFor heat pump combination heater:Decared load profile-nam3/hDelared load profilenakWhAnnual fuel consumptionQfuelna%Daily electricity consumptionQelecnakWhAnnual fuel consumptionQfuelnaKWhAnnual fuel consumptionAECnakWhAnnual fuel consumptionQfuelna%Daily electricityAECnakWhAnnual fuel consumptionQfuelnaKWhAnnual fuel consumptionQelecnakWhAnnual fuel consumptionQfuelnaSpecific precautions and end of		Pdh	2,7	kW		COPd	1,90	-	
Bivalent temperature I biv -14 *C Operation limit temperature IOL -22 *C Cycling interval capacity for heating P cych na kW Operation limit temperature IOL -22 *C Degradation co-efficient Cdh 0,97 - Heating water operating limit WTOL 55 *C Power consumption in modes other than active mode 0,018 kW Rated heat output (*) Psup 2,1 kW Thermostat-off mode P cor 0,018 kW Type of energy input Electric Supplementary heater Capacity control Fixed Fixed For air-to-water heat pumps: 4100 m3/h Sound power level, indoors/ L wA na/58 dB GB For air-to-water heat pumps: 4100 m3/h For heat pump combination heater: Declared load profile na Mater heating energy num na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na % Specific precautions and end of the poduct's fife-ycle, it must be sent correctly to a		Pdh	3,7	kW		COPd	2,55	-	
heating P_{cych} nakWCycling interval efficiencyCOPcycnaDegradation co-efficient Cdh $0,97$ -Heating water operating limit temperature $WTOL$ 55*CPower consumption in modes other than active mode $0,97$ -Supplementary heater Rated heat output (*) $Psup$ $2,1$ kW Thermostat-off mode P_{orer} $0,018$ kW Supplementary heater Rated heat output (*) $Psup$ $2,1$ kW Thermostat-off mode P_{orer} $0,022$ kW Type of energy input $Electric$ Canakcase heater mode P_{cx} $0,000$ kW Type of energy input $Electric$ Capacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors- 4100 $m3/h$ Sound power level, indoors/ outdoors L_{WA} $na/58$ dB dB For water /brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger- na $m3/h$ For heat pump combination heater: $Declared load profile$ na kWh Daily fuel consumption $Qfuel$ na kWh Annual electricity consumptionAEC na kWh Annual fuel consumptionAFC na GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a wate station or result of the attribute is constrained.The packaging must be deposited at a recycling station or with the installation equipment are properly disposed of. Declared dot freding a service of that type	Bivalent temperature	T _{biv}	-14	°C		TOL	-22	°C	
Degradation co-efficient Can 0,97 - temperature WIOL SS *C Power consumption in modes other than active mode Off mode Power 0,018 kW Supplementary heater Rated heat output (*) Psup 2,1 kW Thermostat-off mode P ro 0,022 kW Type of energy input Electric Electric Cankcase heater mode P cx 0,000 kW Type of energy input Electric m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB B For water-/brine-to-water heat pumps: Rated air flow rate, outdoors heat na m3/h For heat pump combination heater: Declared load profile na Water heating energy na m3/h Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Daily electricity consumption Qelec<		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-	
Off mode P OFF 0,018 kW Rated heat output (*) Psup 2,1 kW Thermostat-off mode P TO 0,022 kW Type of energy input Electric For air-to-water heat pumps: Standby mode P CK 0,000 kW Type of energy input Electric Canakcase heater mode P CK 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: - 4100 m3/h Sound power level, indoors/ L WA na/58 dB For water-/brine-to-water heat pumps: - na m3/h Annual energy consumption Q HE 3494 kWh For water-/brine-to-water heat pumps: - na m3/h For heat pump combination heater: Declared load profile na Mater heating energy nu na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ <	Degradation co-efficient	Cdh	0,97	-		WTOL	55	°C	
Thermostat-off mode P ro 0,022 kW Standby mode P ss 0,018 kW Crankcase heater mode P cx 0,000 kW Other items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h m3/h Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation equiprent are properly disposed of. Dicorder of the product's friggerant, compressor oil and electrical/electronic equipment are properly disposed of.	Power consumption in modes other than active mode				Supplementary heater				
Standby mode P sg 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - - - - - - - - m3/h Capacity control Fixed - For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wa na/58 dB - For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h - - na m3/h Declared load profile na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption Qfuel na KWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the ins	Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,1	kW	
Crankcase heater mode P or 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - 4100 m3/h Sound power level, indoors/ outdoors L wA na/58 dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - na m3/h Annual energy consumption Q HE 3494 kWh Water heating energy efficiency - na m3/h Poclared load profile na Water heating energy efficiency I/wh na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's life cycle, it must be sent correctly to a waste is tation or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor of an electrical/electro	Thermostat-off mode	Р _{то}	0,022	kW					
Other items Capacity control Fixed Sound power level, indoors/ outdoors L _{WA} na/58 dB Annual energy consumption Q _{HE} 3494 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - na m3/h For heat pump combination heater: - na m3/h m3/h Declared load profile na KWh Water heating energy efficiency nwh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, threat, compressor oil and electrical/electronic equipment are properly disposed of. Discoging of the product's a burgehold waste is out committed	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric		
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	Contact details	Enertech AB, Box						181001	