

Information for heat pump s	pace heaters	and heat pum	p combinati	on heaters	Enertech <i>i</i>	AB P	
Warm climate and Medium temperature				341 26 Lju	ingby		
Model(s):		CTC EcoAir 6	14M 400V + 0	CTC EcoZenith i350/ i350F			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	180	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater	:	Yes					
			, ,	for low-temperature heat pumps.	For low- tempo	erature heat	pumps,
parameters shall be declared fo							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	γ η <sub>ς</sub>	176	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of perform			
T j = -7 °C	Pdh	na	kW	T j = -7 °C	COPd	na	] -
T j = + 2 °C	Pdh	9,4	kW	T j = +2 °C	COPd	1,81	] -
T j = + 7 °C	Pdh	6,2	kW	T j = +7 °C	COPd	3,83	] -
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,27	-
T j = bivalent temperature	Pdh	9,5	kW	T j = bivalent temperature	COPd	1,81	-
T j = operation limit temperature	Pdh	9,5	kW	T j = operation limit temperature	COPd	1,81	_
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 <sub>biv</sub>	2	°C	For air-to-water heat pumps:	TOL	2	°C

Bivalent temperature	l biv	2	C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW
Degradation co-efficient	Cdh	0,99	-
Power consumption in modes of	other than active	mode	
Off mode	P OFF	0,014	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW
Standby mode	$P_{SB}$	0,014	kW
Crankcase heater mode	P <sub>CK</sub>	0,000	kW
Other items		_	<u> </u>

 $L_{WA}$ 

 $Q_{HE}$ 

		•	
T j = bivalent temperature	COPd	1,81	-
T j = operation limit temperature	COPd	1,81	-
For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	COPd	na	-
For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval efficiency	СОРсус	na	-
Heating water operating limit temperature	WTOL	55	°C
Supplementary heater			_
Rated heat output (*)	Psup	0,0	kW
Type of energy input		Electric	
For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h

Faulant muman		h +
For heat pump	combination	neater:

Sound power level, indoors/

Annual energy consumption

Declared load profile	XL	Efficiency class	NA	Water heating energy efficiency	$\eta_{\sf wh}$	122	%
Daily electricity consumption	Qelec	6,232	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1371	kWh	Annual fuel consumption	AFC	NA	GJ

dB

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 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.

For water-/brine-to-water heat

pumps: Rated brine or water

flow rate, outdoor heat

exchanger

Capacity control

outdoors

Variable

na/52

2845

m3/h

### Information for heat pump space heaters and heat pump combination heaters

Enertech AB 341 26 Ljungby



Warm climate and Low tem	perature				341 26 Lju	ingby	
Model(s):		CTC EcoAir 63	L4M 400V + C	TC EcoZenith i350/ i350F			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	236	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Parameters shall be declared for	or medium-tem			for low-temperature heat pumps. F	or low- tempe	erature heat	pumps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_{s}$	232	%
Declared capacity for heating for	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of perform	•	, ,,	

Item	Symbol	value	Unit	Item	Symbol	value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_s$	232	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor temperat	ure 20 °C	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	9,3	kW	T j = +2 °C	COPd	2,50	] -
T j = + 7 °C	Pdh	6,2	kW	T j = +7 °C	COPd	5,39	-
T j = + 12 °C	Pdh	3,1	kW	T j = +12 °C	COPd	7,79	-
T j = bivalent temperature	Pdh	9,3	kW	T j = bivalent temperature	COPd	2,50	-
T j = operation limit temperature	Pdh	9,3	kW	T j = operation limit temperature	COPd	2,50	-
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 <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	ther than activ	e <u>mode</u>		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	$P_{TO}$	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water		na	m3/h
Annual energy consumption	Q <sub>HE</sub>	2164	kWh	flow rate, outdoor heat exchanger	_	IIa	1113/11
For heat pump combination hea	ater:						
Declared load profile	XL	Efficiency class	NA	Water heating energy efficiency	$\eta_{\sf wh}$	122	%
Daily electricity consumption	Qelec	6,232	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1371	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end				at a recycling station or with the installation en nust be sent correctly to a waste station or resel	-	-	

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.

#### 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 614I	M 400V + CTC EcoZenith i350/ i350F		
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	VI	-
Brine-to-water heat pump:	No	Controller contribution:	4	%
Low-temperature heat pump:	No	Package efficiency:	152	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-
Heat pump combination heater:	Yes			

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	148	%
Declared capacity for heating for and outdoor temperature T j	or part load at in	ndoor temperat	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	6,8	kW	T j = -7 °C	COPd	2,01	] -
T j = + 2 °C	Pdh	4,1	kW	T j = +2 °C	COPd	3,94	] -
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	5,14	-
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	6,53	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	1,51	-
T j = operation limit temperature	Pdh	7,7	kW	T j = operation limit temperature	COPd	1,51	-
For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	Pdh	na	kW	For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	COPd	na	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	e <u>mode</u>	•	Supplementary heater			=
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	4153	kWh	flow rate, outdoor heat exchanger			1113/11
For heat pump combination he	ater:			T Texterioring or		I.	
Declared load profile	XL	Efficiency class	Α	Water heating energy efficiency	$\eta_{\scriptscriptstyle \sf wh}$	97	%
Daily electricity consumption	Qelec	7,880	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1734	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	ct's life cycle, it n that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ller offering a se	vice of that type	. It is of

# 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 614M 400V + CTC EcoZenith i350/ i350F						
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-			
Water-to-water heat pump:	No	Controller class:	VI	-			
Brine-to-water heat pump:	No	Controller contribution:	4	%			
Low-temperature heat pump:	No	Package efficiency:	197	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_s$	193	%
Declared capacity for heating for and outdoor temperature T j	or part load at ii	ndoor temperat	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	6,8	kW	T j = -7 °C	COPd	2,88	] -
T j = + 2 °C	Pdh	4,1	kW	T j = +2 °C	COPd	5,21	] -
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	6,24	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	7,17	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	2,25	-
T j = operation limit temperature	Pdh	7,7	kW	T j = operation limit temperature	COPd	2,25	-
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 <sub>biv</sub>	-10	°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 activ	e mode	•	Supplementary heater			-
Off mode	P <sub>OFF</sub>	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items						_	
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/
Annual energy consumption	Q <sub>HE</sub>	3163	kWh	flow rate, outdoor heat exchanger		IId	11137
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	Α	Water heating energy efficiency	$\eta_{\sf wh}$	97	%
Daily electricity consumption	Qelec	7,880	kWh	Daily fuel consumption	Qfuel	NA	kW
Annual electricity consumption	AEC	1734	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc	ct's life cycle, it n that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ler offering a se	rvice of that type	. It is of

### 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 614M	400V + CTC EcoZenith i350/ i350F		
Air-to-water heat pump:	Yes	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VI	-
Brine-to-water heat pump:	No	Controller contribution:	4	%
Low-temperature heat pump:	No	Package efficiency:	124	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_{s}$	120	%
Declared capacity for heating f and outdoor temperature T j	or part load at ii	ndoor temperat	cure 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	6,7	kW	T j = -7 °C	COPd	2,40	] -
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	4,44	-
T j = + 7 °C	Pdh	2,5	kW	T j = +7 °C	COPd	5,29	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,92	-
T j = bivalent temperature	Pdh	7,9	kW	T j = bivalent temperature	COPd	1,74	-
T j = operation limit temperature	Pdh	2,7	kW	T j = operation limit temperature	COPd	1,32	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	7,1	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	1,51	-
Bivalent temperature	T <sub>biv</sub>	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na/60	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than activ	e <u>mode</u>		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	8,3	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P SB	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items		•					
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	8797	kWh	flow rate, outdoor heat exchanger		IId	1113/11
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	Α	Water heating energy efficiency	$\eta_{\sf wh}$	82	%
Daily electricity consumption	Qelec	9,257	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2037	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	ct's life cycle, it n that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ler offering a se	ervice of that type	. It is of

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

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Model(s):	CTC EcoAir 614M	400V + CTC EcoZenith i350/ i350F		
Air-to-water heat pump:	Yes	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VI	-
Brine-to-water heat pump:	No	Controller contribution:	4	%
Low-temperature heat pump:	No	Package efficiency:	155	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_{s}$	151	%
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor temperat	cure 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	6,6	kW	T j = -7 °C	COPd	3,16	-
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	5,57	-
T j = + 7 °C	Pdh	2,7	kW	T j = +7 °C	COPd	6,79	-
T j = + 12 °C	Pdh	3,1	kW	T j = +12 °C	COPd	7,04	-
T j = bivalent temperature	Pdh	8,1	kW	T j = bivalent temperature	COPd	2,20	-
T j = operation limit temperature	Pdh	5,0	kW	T j = operation limit temperature	COPd	1,81	-
For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	Pdh	7,4	kW	For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	COPd	1,82	-
Bivalent temperature	T <sub>biv</sub>	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	6,0	kW
Thermostat-off mode	$P_{TO}$	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water		na	m3/h
Annual energy consumption	Q <sub>HE</sub>	7038	kWh	flow rate, outdoor heat exchanger		iid	1113/11
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	Α	Water heating energy efficiency	$\eta_{wh}$	82	%
Daily electricity consumption	$Q_{elec}$	9,257	kWh	Daily fuel consumption	$Q_{fuel}$	NA	kWh
Annual electricity consumption	AEC	2037	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc	ct's life cycle, it n that the produc	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ler offering a se	rvice of that type	. It is of

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

Model(s):

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Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	180	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate		No					
				for low-temperature heat pumps. For	or low- temp	erature heat ¡	oumps,
parameters shall be declared for	1						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_s$	176	%
Declared capacity for heating f and outdoor temperature T j	or part load at ir	ndoor temperat	ure 20 °C	Declared coefficient of performation part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	-
T j = + 2 °C	Pdh - "	9,4	kW	T j = +2 °C	COPd	1,81	-
T j = + 7 °C	Pdh	6,2	kW	T j = +7 °C	COPd	3,83	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,27	
T j = bivalent temperature	Pdh	9,5	kW	T j = bivalent temperature	COPd	1,81	-
T j = operation limit temperature	Pdh	9,5	kW	T j = operation limit temperature	COPd	1,81	- 1
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 <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	e <u>mode</u>		Supplementary heater			-
Off mode	P <sub>OFF</sub>	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dВ	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	2845	kWh	flow rate, outdoor heat exchanger			,
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{wh}$	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 produc great importance	t's life cycle, it n that the produc	at a recycling station or with the installation er nust be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele shold waste is not permitted.	eller offering a se	rvice of that type	. It is of

CTC EcoAir 614M 400V+ CTC EcoLogic

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

Model(s):

Enertech AB 341 26 Ljungby



Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	236	%	
Equipped with a supplementary	heater:	No		Package efficiency class:		-	
Heat pump combination heater		No					
				t for low-temperature heat pumps. Fo	or low- temp	erature heat	oumps,
parameters shall be declared fo	•	• • • • • • • • • • • • • • • • • • • •	Unit	Han-	Symbol	Value	Unit
Item	Symbol	Value	Unit	Item Seasonal space heating energy	Symbol	Value 	Unit
Rated heat output (*)	Prated	10	kW	efficiency	$\eta_s$	232	%
Declared capacity for heating for	r part load at i	ndoor temperat	ure 20 °C	Declared coefficient of performa			
and outdoor temperature T j				part load at indoor temperature	20 Cand ou	itaoor tempe	rature i j
T j = -7 °C	Pdh	na	kW	T j = -7 °C	COPd	na	-
T j = + 2 °C	Pdh	9,3	kW	T j = +2 °C	COPd	2,50	-
T j = + 7 °C	Pdh Pdh	6,2	kW	T j = +7 °C	COPd	5,39	-
T j = + 12 °C	Pdh	3,1	kW	T j = +12 °C	COPd	7,79	_
T j = bivalent temperature	Pdh	9,3	kW	T j = bivalent temperature	COPd	2,50	-
T j = operation limit temperature	Pdh	9,3	kW	T j = operation limit temperature	COPd	2,50	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	For air-to-water heat pumps: $T j = -15 ^{\circ}\text{C} \text{ (if TOL } < -20 ^{\circ}\text{C)}$	COPd	na	-
Bivalent temperature	T <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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 o	ther than activ	e mode		Supplementary heater			•
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	$P_{SB}$	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	2164	kWh	flow rate, outdoor heat exchanger			
For heat pump combination hea	ater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	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 produc	t's life cycle, it r that the produc	I at a recycling station or with the installation en must be sent correctly to a waste station or rese t's refrigerant, compressor oil and electrical/ele ehold waste is not permitted.	ller offering a se	rvice of that type	. It is of

CTC EcoAir 614M 400V+ CTC EcoLogic

#### 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 614M 400V+ CTC EcoLogic							
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-				
Water-to-water heat pump:	No	Controller class:	VI	-				
Brine-to-water heat pump:	No	Controller contribution:	4	%				
Low-temperature heat pump:	No	Package efficiency:	152	%				
Equipped with a supplementary heater:	No	Package efficiency class:	A+++	-				
Heat pump combination heater:	No							

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{s}$	148	%
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor temperat	cure 20 °C	Declared coefficient of performal part load at indoor temperature			
T j = -7 °C	Pdh	6,8	kW	T j = - 7 °C	COPd	2,01	] -
T j = + 2 °C	Pdh	4,1	kW	T j = +2 °C	COPd	3,94	-
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	5,14	_
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	6,53	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	1,51	-
T j = operation limit temperature	Pdh	7,7	kW	T j = operation limit temperature	COPd	1,51	-
For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	Pdh	na	kW	For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	COPd	na	-
Bivalent temperature	T <sub>biv</sub>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	$P_{SB}$	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	4153	kWh	flow rate, outdoor heat exchanger		110	msym
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{wh}$	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 produc	t's life cycle, it m that the product	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel c's refrigerant, compressor oil and electrical/elec hold waste is not permitted.	ler offering a se	rvice of that type	. It is of

#### 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 614M 400V+ CTC EcoLogic							
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-				
Water-to-water heat pump:	No	Controller class:	VI	-				
Brine-to-water heat pump:	No	Controller contribution:	4	%				
Low-temperature heat pump:	No	Package efficiency:	197	%				
Equipped with a supplementary heater:	No	Package efficiency class:	A+++	-				
Heat pump combination heater:	No			_				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{s}$	193	%
Declared capacity for heating f and outdoor temperature T j	for part load at ir	idoor temperat	ture 20°C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	6,8	kW	T j = - 7 °C	COPd	2,88	] -
T j = + 2 °C	Pdh	4,1	kW	T j = +2 °C	COPd	5,21	-
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	6,24	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	7,17	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	2,25	-
T j = operation limit temperature	Pdh	7,7	kW	T j = operation limit temperature	COPd	2,25	-
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 <sub>biv</sub>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	other than active	mode		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items			•				
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	3163	kWh	flow rate, outdoor heat exchanger		iia	1113/11
For heat pump combination he	eater:			• •			
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	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 produc great importance	ct's life cycle, it r that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ller offering a se	rvice of that type	. It is of

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

Enertech AB 341 26 Ljungby



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Model(s):		CTC EcoAir 61	4M 400V+ C	CTC EcoLogic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	124	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate		No		,			
		perature applica	ation, except	t for low-temperature heat pumps. F	or low- tempe	erature heat	pumps,
parameters shall be declared f	or low-temperat	ure application	•				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_{s}$	120	%
Declared capacity for heating f and outdoor temperature T j	for part load at i	ndoor temperat	ure 20 °C	Declared coefficient of performation part load at indoor temperature			
T j = -7 °C	Pdh	6,7	kW	T j = - 7 °C	COPd	2,40	-
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	4,44	] -
T j = + 7 °C	Pdh	2,5	kW	T j = +7 °C	COPd	5,29	
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,92	-
T j = bivalent temperature	Pdh	7,9	kW	T j = bivalent temperature	COPd	1,74	_
T j = operation limit temperature	Pdh	2,7	kW	T j = operation limit temperature	COPd	1,32	-
For air-to-water heat pumps: $T j = -15 ^{\circ}\text{C}$ (if $TOL < -20 ^{\circ}\text{C}$ )	Pdh	7,1	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,51	-
Bivalent temperature	T <sub>biv</sub>	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na/60	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than activ	e mode		Supplementary heater		•	•
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	8,3	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water		na	m3/h
Annual energy consumption	Q <sub>HE</sub>	8797	kWh	flow rate, outdoor heat exchanger	-	na	1115/11
For heat pump combination he	eater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	NA	Gl
Specific precautions and end of life information:		end of the produc	t's life cycle, it i that the produc	I at a recycling station or with the installation er must be sent correctly to a waste station or rese tt's refrigerant, compressor oil and electrical/ele ehold waste is not permitted.	eller offering a se	rvice of that type	e. It is of

### Information for heat pump space heaters and heat pump combination heaters

Enertech AB 341 26 Ljungby



Cold climate and Low temp	erature				341 26 Lju	ingby 📘	
Model(s):		CTC EcoAir 6	14M 400V+ C	TC EcoLogic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No C		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	155	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared f parameters shall be declared f	or medium-temp			for low-temperature heat pumps. F	or low- temp	erature heat	pumps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	η <sub>s</sub>	151	%
Declared capacity for heating f	for part load at in	door tempera	iture 20 °C	Declared coefficient of perform	ance or prima	ry energy ra	tio for

Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	151	%
Declared capacity for heating f and outdoor temperature T j	or part load at ir	door temperat	ure 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	6,6	kW	T j = -7 °C	COPd	3,16	] -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	5,57	-
T j = + 7 °C	Pdh	2,7	kW	T j = +7 °C	COPd	6,79	-
T j = + 12 °C	Pdh	3,1	kW	T j = +12 °C	COPd	7,04	-
T j = bivalent temperature	Pdh	8,1	kW	T j = bivalent temperature	COPd	2,20	-
T j = operation limit temperature	Pdh	5,0	kW	T j = operation limit temperature	COPd	1,81	-
For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	Pdh	7,4	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,82	-
Bivalent temperature	T <sub>biv</sub>	-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	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	6,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items	-	,					
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	7038	kWh	flow rate, outdoor heat exchanger			
For heat pump combination he	eater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{wh}$	na	%
Daily electricity consumption	$Q_{elec}$	na	kWh	Daily fuel consumption	$Q_{fuel}$	NA	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	t's life cycle, it n that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec ehold waste is not permitted.	ler offering a ser	rvice of that type	. It is of

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

Enertech AB 341 26 Ljungby



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Model(s):		CTC EcoAir 61	.4M 400V + I	EcoZenith i250			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	138	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
		perature applica	ation, except	t for low-temperature heat pumps. F	or low- temp	erature heat	pumps,
parameters shall be declared for	or low-tempera	ture application					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_{s}$	134	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor temperat	Declared coefficient of performa				
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	] -
T j = + 2 °C	Pdh	8,4	kW	T j = +2 °C	COPd	1,31	] -
T j = + 7 °C	Pdh	5,8	kW	T j = +7 °C	COPd	2,92	
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	5,05	-
T j = bivalent temperature	Pdh	8,5	kW	T j = bivalent temperature	COPd	1,31	-
T j = operation limit temperature	Pdh	8,5	kW	T j = operation limit temperature	COPd	1,31	-
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 <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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 activ	e mode		Supplementary heater			_
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	1,0	kW
Thermostat-off mode	$P_{TO}$	0,014	kW				
Standby mode	$P_{SB}$	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items				1			
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water			2 /h
Annual energy consumption	Q <sub>HE</sub>	3701	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	$\eta_{\sf wh}$	67	%
Daily electricity consumption	Qelec	6,958	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1531	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	ct's life cycle, it i that the produc	I at a recycling station or with the installation er must be sent correctly to a waste station or rese ct's refrigerant, compressor oil and electrical/ele ehold waste is not permitted.	eller offering a se	rvice of that type	. It is of

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

Enertech AB 341 26 Ljungby



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Model(s):		CTC EcoAir 61	4M 400V +	EcoZenith i250			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	190	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
				t for low-temperature heat pumps. Fo	or low- tempe	erature heat	pumps,
parameters shall be declared for	Symbol	Value	Unit	lko-sa	Symbol	Value	Unit
Item	Зуппьот		Onit	Item Seasonal space heating energy	Зуппоп		I
Rated heat output (*)	Prated	10	kW	efficiency	$\eta_s$	186	%
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor temperat	Declared coefficient of performation part load at indoor temperature				
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	] -
T j = + 2 °C	Pdh	9,1	kW	T j = +2 °C	COPd	1,98	] -
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,31	
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,26	-
T j = bivalent temperature	Pdh	9,1	kW	T j = bivalent temperature	COPd	1,98	-
T j = operation limit	Pdh	9,1	kW	T j = operation limit	COPd	1,98	Ī _
temperature				temperature			1
For air-to-water heat pumps:	Pdh	na	kW	For air-to-water heat pumps:	COPd	na	
T j = -15 °C (if TOL < -20 °C)	Pull	na	KVV	T j = - 15 °C (if TOL < - 20 °C)	СОРи	na	_
Bivalent temperature	T <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°C
Cycling interval capacity for	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
heating	Cdh	0,98		Heating water operating limit	WTOL	55	°C
Degradation co-efficient	Cun	0,36		temperature	VVIOL	33	C
Power consumption in modes		· · · · · · · · · · · · · · · · · · ·		Supplementary heater			7
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	$P_{SB}$	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items						<u> </u>	1
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water			2 //h
Annual energy consumption	Q <sub>HE</sub>	2682	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:			The state of the s			
Declared load profile	L	Efficiency class	NA	Water heating energy efficiency	$\eta_{\sf wh}$	67	%
Daily electricity consumption	Qelec	6,958	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1531	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	t's life cycle, it i that the produc	l at a recycling station or with the installation er must be sent correctly to a waste station or rese tt's refrigerant, compressor oil and electrical/ele ehold waste is not permitted.	eller offering a se	rvice of that type	e. It is of

#### 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 614M 400V + EcoZenith i250						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-			
Water-to-water heat pump:	No	Controller class:	VI	-			
Brine-to-water heat pump:	No	Controller contribution:	4	%			
Low-temperature heat pump:	No	Package efficiency:	114	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+	-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{s}$	110	%		
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor temperat	ure 20 °C	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T					
T j = -7 °C	Pdh	5,7	kW	T j = - 7 °C	COPd	1,64	-		
T j = + 2 °C	Pdh	3,6	kW	T j = +2 °C	COPd	3,46	-		
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,75	-		
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	6,38	-		
T j = bivalent temperature	Pdh	6,2	kW	T j = bivalent temperature	COPd	1,21	-		
T j = operation limit temperature	Pdh	6,2	kW	T j = operation limit temperature	COPd	1,21	-		
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 <sub>biv</sub>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	P <sub>cych</sub>	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	other than activ	e mode		Supplementary heater			_		
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	1,4	kW		
Thermostat-off mode	P <sub>TO</sub>	0,014	kW						
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric			
Crankcase heater mode	P <sub>CK</sub>	0,000	kW						
Other items		<u>.</u>							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h		
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h		
Annual energy consumption	Q <sub>HE</sub>	5555	kWh	flow rate, outdoor heat exchanger		110	1113/11		
For heat pump combination he	ater:								
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	$\eta_{\sf wh}$	53	%		
Daily electricity consumption	Qelec	8,570	kWh	Daily fuel consumption	Qfuel	NA	kWh		
Annual electricity consumption	AEC	1885	kWh	Annual fuel consumption	AFC	NA	GJ		
Specific precautions and end of life information:		end of the produc	t's life cycle, it n that the produc	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ler offering a se	rvice of that type	. It is of		

#### 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 614M 400V + EcoZenith i250						
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-			
Water-to-water heat pump:	No	Controller class:	VI	-			
Brine-to-water heat pump:	No	Controller contribution:	4	%			
Low-temperature heat pump:	No	Package efficiency:	168	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Uni
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{s}$	164	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor temperat	cure 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	6,5	kW	T j = -7 °C	COPd	2,40	] -
T j = + 2 °C	Pdh	4,0	kW	T j = +2 °C	COPd	4,44	] -
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	5,35	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,18	-
T j = bivalent temperature	Pdh	7,3	kW	T j = bivalent temperature	COPd	1,86	-
T j = operation limit temperature	Pdh	7,3	kW	T j = operation limit temperature	COPd	1,86	-
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 <sub>biv</sub>	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°(
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°(
Power consumption in modes of	other than activ	e mode	,	Supplementary heater			-
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	0,0	kV
Thermostat-off mode	P <sub>TO</sub>	0,014	kW				
Standby mode	$P_{SB}$	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items						1	
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3,
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3,
Annual energy consumption	Q <sub>HE</sub>	3710	kWh	flow rate, outdoor heat exchanger		l l l	1113)
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	$\eta_{\sf wh}$	53	%
Daily electricity consumption	Qelec	8,570	kWh	Daily fuel consumption	Qfuel	NA	kW
Annual electricity consumption	AEC	1885	kWh	Annual fuel consumption	AFC	NA	G.
Specific precautions and end of life information:		end of the produc	ct's life cycle, it ne that the produc	at a recycling station or with the installation en nust be sent correctly to a waste station or resel t's refrigerant, compressor oil and electrical/elec shold waste is not permitted.	ler offering a se	ervice of that type	. It is of

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

Enertech AB 341 26 Ljungby



					371 20 Lju			
Model(s):		CTC EcoAir 61	.4M 400V + E	coZenith i250				
Air-to-water heat pump:		Yes		Energy efficiency class:		-		
Water-to-water heat pump:		No			VI	-		
Brine-to-water heat pump:		No		Controller contribution:	4	%		
Low-temperature heat pump:		No		Package efficiency:	97	%		
Equipped with a supplementary	, heater:	Yes		Package efficiency class:		_		
Heat pump combination heater		Yes		r dekage emelency class.				
			ation, except	for low-temperature heat pumps. For	or low- tempe	erature heat	pumps,	
parameters shall be declared for				The state of the s			1 1/	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_s$	93	%	
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor temperat	cure 20 °C	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature				
T j = - 7 °C	Pdh	5,5	kW	T j = -7 °C	COPd	1,96	1 -	
T j = + 2 °C	Pdh	3,7	kW	T j = +2 °C	COPd	3,90	1 -	
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,89	1 -	
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,77	1 -	
T j = bivalent temperature	Pdh	6,4	kW	T j = bivalent temperature	COPd	1,38	-	
T j = operation limit temperature	Pdh	2,1	kW	T j = operation limit temperature	COPd	1,01		
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	5,6	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,18	-	
Bivalent temperature	T <sub>biv</sub>	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C	
Cycling interval capacity for heating	P <sub>cych</sub>	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 o	ther than activ	e mode		Supplementary heater				
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	8,9	kW	
Thermostat-off mode	P <sub>TO</sub>	0,014	kW					
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric		
Crankcase heater mode	P <sub>CK</sub>	0,000	kW					
Other items	<del></del>	, , , , ,	<u> </u>		<u> </u>			
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/	
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/52	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/	
Annual energy consumption	Q <sub>HE</sub>	11331	kWh	flow rate, outdoor heat exchanger		iid	1113/	
For heat pump combination he	ater:							
Declared load profile	L	Efficiency class	NA	Water heating energy efficiency	$\eta_{\sf wh}$	47	%	
Daily electricity consumption	Qelec	9,856	kWh	Daily fuel consumption	Qfuel	NA	kWl	
Annual electricity consumption	AEC	2168	kWh	Annual fuel consumption	AFC	NA	GJ	

of life information:

Specific precautions and end

Disposing of the product as household waste is not permitted.

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.

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

Enertech AB 341 26 Ljungby



					341 20 Lju		
Model(s):		CTC EcoAir 61	4M 400V +	EcoZenith i250			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	132	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
				t for low-temperature heat pumps. Fo	or low- tempe	erature heat	pumps,
parameters shall be declared for							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_{s}$	128	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j				Declared coefficient of performa			
Tj=-7°C	Pdh	6,3	kW	T j = - 7 °C	COPd	2,64	] -
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	4,74	] -
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	5,82	-
T j = + 12 °C	Pdh	3,0	kW	T j = +12 °C	COPd	6,07	
T j = bivalent temperature	Pdh	7,6	kW	T j = bivalent temperature	COPd	1,82	-
T j = operation limit temperature	Pdh	4,6	kW	T j = operation limit temperature	COPd	1,43	-
temperature							1
For air-to-water heat pumps: T j = -15  °C (if TOL  < -20  °C)	Pdh	6,9	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,48	-
Bivalent temperature	T <sub>biv</sub>	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P <sub>cych</sub>	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	other than activ	e mode		Supplementary heater		•	
Off mode	P OFF	0,014	kW	Rated heat output (*)	Psup	6,4	kW
Thermostat-off mode	P <sub>TO</sub>	0,014	kW			•	•
Standby mode	P <sub>SB</sub>	0,014	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items					•		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	6200	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	na/51	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q <sub>HE</sub>	8306	kWh	flow rate, outdoor heat exchanger		IId	1113/11
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	NA	Water heating energy efficiency	$\eta_{\sf wh}$	47	%
Daily electricity consumption	$\mathbf{Q}_{elec}$	9,856	kWh	Daily fuel consumption	$\mathbf{Q}_{fuel}$	NA	kWh
Annual electricity consumption	AEC	2168	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc great importance	t's life cycle, it i that the produc	I at a recycling station or with the installation er must be sent correctly to a waste station or rese ct's refrigerant, compressor oil and electrical/ele ehold waste is not permitted.	eller offering a se	rvice of that type	e. It is of