Warm climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	128	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	124	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 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	7,6	kW	T j = +2 °C	COPd	2,91] -
T j = + 7 °C	Pdh	7,8	kW	T j = +7 °C	COPd	3,22] -
T j = + 12 °C	Pdh	8,0	kW	T j = +12 °C	COPd	3,80	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	3,00	-
T j = operation limit temperature	Pdh	7,6	kW	T j = operation limit temperature	COPd	2,91	-
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}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes of	other than active	mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,6	kW
Thermostat-off mode	P _{TO}	0,018	kW	[]		•	-
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items	<u></u>						
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L WA	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3356	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination he	ater:						
Declared load profile /		L/A		Water heating energy	$\eta_{\sf wh}$	88	%
Energy efficiency class			1	efficiency			-
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

Warm climate and Low temperature

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Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	172	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	η_{s}	154	%
Declared capacity for heating for	or part load at in	door temperatu	ire 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor tempe	rature T
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	8,2	kW	T j = +2 °C	COPd	4,19	1 -
T j = + 7 °C	Pdh	8,3	kW	T j = +7 °C	COPd	4,38] -
T j = + 12 °C	Pdh	8,4	kW	T j = +12 °C	COPd	4,63	-
T j = bivalent temperature	Pdh	8,2	kW	T j = bivalent temperature	COPd	4,25	-
T j = operation limit	Pdh	0.2	kW	T j = operation limit	COPd	4.10	1
temperature	Pull	8,2	KVV	temperature	СОРИ	4,19	ļ ⁻
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	na	°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	65	°C
Power consumption in modes of	ther than active	mode	-	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,7	kW
Thermostat-off mode	P _{TO}	0,055	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items			_				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2910	kWh	flow rate, outdoor heat exchanger	-	2,0	m3/h
For heat pump combination hea	ater:						
Declared load profile / Energy efficiency class		L/A		Water heating energy efficiency	η_{wh}	88	%
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Q fuel	na	kWh
Annual electricity			_				1
consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

Average climate and Medium temperature

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Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	129	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-
Heat pump combination heater:	Yes			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	125	%
Declared capacity for heating for	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor tempe	rature T j
T j = - 7 °C	Pdh	7,7	kW	T j = - 7 °C	COPd	3,05] -
T j = + 2 °C	Pdh	7,9	kW	T j = +2 °C	COPd	3,39] -
T j = + 7 °C	Pdh	8,0	kW	T j = +7 °C	COPd	3,71	_
T j = + 12 °C	Pdh	8,1	kW	T j = +12 °C	COPd	4,03	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	3,11	-
T j = operation limit	Pdh	7.6	kW	T j = operation limit	COPd	2.01	1
temperature	Pull	7,6	KVV	temperature	СОРИ	2,91	ļ ⁻
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}	-6	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	7	Supplementary heater			7
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,5	kW
Thermostat-off mode	P _{TO}	0,018	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/outdoors	L _{WA}	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5670	kWh	flow rate, outdoor heat exchanger	_	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile / Energy efficiency class		L/A		Water heating energy efficiency	$\eta_{\sf wh}$	88	%
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Qfuel	na	kWh
, , ,	QCICC	3,232		Sany raci consumption	Qiuei		- "
Annual electricity consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

Average climate and Low temperature



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Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	163	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-
Heat numn combination heater:	Ves			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	η_{s}	159	%
Declared capacity for heating for	or part load at in	door temperatu	ıre 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor tempe	rature T j
T j = - 7 °C	Pdh	8,2	kW	T j = - 7 °C	COPd	4,27] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	4,44] -
T j = + 7 °C	Pdh	8,3	kW	T j = +7 °C	COPd	4,59] -
T j = + 12 °C	Pdh	8,4	kW	T j = +12 °C	COPd	4,73	-
T j = bivalent temperature	Pdh	8,2	kW	T j = bivalent temperature	COPd	4,31	-
T j = operation limit	Pdh	0.2	kW	T j = operation limit	COPd	4.10	1
temperature	Pull	8,2	- KVV	temperature	СОРИ	4,19	ļ ⁻
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}	-6	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes of	ther than active	mode	_	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,5	kW
Thermostat-off mode	P _{TO}	0,055	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4816	kWh	flow rate, outdoor heat exchanger		2,0	m3/h
For heat pump combination hear	ater:						
Declared load profile / Energy efficiency class		L/A		Water heating energy efficiency	$\eta_{\sf wh}$	88	%
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Qfuel	na	kWh
, , ,	QCICC	3,232		Daily raci consumption	Qiuei	.10	
Annual electricity consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

Cold climate and Medium temperature

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Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	131	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	127	%
Declared capacity for heating for	or part load at in	door temperatu	ire 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor tempe	rature T j
T j = - 7 °C	Pdh	7,8	kW	T j = - 7 °C	COPd	3,31] -
T j = + 2 °C	Pdh	8,0	kW	T j = +2 °C	COPd	3,63] -
T j = + 7 °C	Pdh	8,1	kW	T j = +7 °C	COPd	3,92	_
T j = + 12 °C	Pdh	8,2	kW	T j = +12 °C	COPd	4,14	-
T j = bivalent temperature	Pdh	7,7	kW	T j = bivalent temperature	COPd	3,05	-
T j = operation limit	Pdh	7.6	kW	T j = operation limit	COPd	2.01	1
temperature	Pull	7,6	KVV	temperature	СОРИ	2,91	ļ ⁻
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}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,0	kW
Thermostat-off mode	P _{TO}	0,018	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/outdoors	L _{WA}	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	6273	kWh	flow rate, outdoor heat exchanger	_	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile / Energy efficiency class		L/A		Water heating energy efficiency	$\eta_{\sf wh}$	88	%
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Qfuel	na	kWh
, , ,	QCICC	3,232		Daily raci consumption	Qiuei		- """
Annual electricity consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

Enertech AB 341 26 Ljungby **Cold climate and Low temperature**



Model(s):	CTC EcoHeat 408			
Air-to-water heat pump:	No	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	VII	-
Brine-to-water heat pump:	Yes	Controller contribution:	3,5	%
Low-temperature heat pump:	No	Package efficiency:	165	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
Heat pump combination heater:	Yes			

Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps, parameters shall be declared for low-temperature application.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	9	kW	Seasonal space heating energy efficiency	η_{s}	161	%
Declared capacity for heating fo	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performar			
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor tempe	rature T
T j = - 7 °C	Pdh	8,3	kW	T j = - 7 °C	COPd	4,46] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	4,59	1 -
T j = + 7 °C	Pdh	8,4	kW	T j = +7 °C	COPd	4,69	1 -
T j = + 12 °C	Pdh	8,4	kW	T j = +12 °C	COPd	4,71] -
T j = bivalent temperature	Pdh	8,2	kW	T j = bivalent temperature	COPd	4,30	-
T j = operation limit temperature	Pdh	8,2	kW	T j = operation limit temperature	COPd	4,19	-
For air-to-water heat pumps: $T j = -15 ^{\circ}\text{C}$ (if $TOL < -20 ^{\circ}\text{C}$)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,0	kW
Thermostat-off mode	P _{TO}	0,055	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/outdoors	L _{WA}	46/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5383	kWh	flow rate, outdoor heat exchanger	-	2,0	m3/h
For heat pump combination hea	ater:						
Declared load profile / Energy efficiency class		L/A		Water heating energy efficiency	η_{wh}	88	%
Daily electricity consumption	Qelec	5,292	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity			1				1
consumption	AEC	1164	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

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.