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

Enertech AB 341 26 Liungby



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Model(s):		CTC EcoPart 43	4 + CTC EcoLo	gic			
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:	141	%	
Equipped with a supplementa	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
Parameters shall be declared f	or medium-temp	erature applicat	ion, except for	low-temperature heat pumps. For	low- tempera	ture heat pui	nps,
parameters shall be declared f	or low-temperatu	ure application.			- · ·		
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	34	kW	Seasonal space heating energy efficiency	n _s	137	%
Declared capacity for heating to outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	ry energy rati tdoor temper	o for ature T j
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	-
T j = + 2 °C	Pdh	31,8	kW	T j = +2 °C	COPd	3,07	-
T j = + 7 °C	Pdh	32,0	kW	T j = +7 °C	COPd	3,42	-
T j = + 12 °C	Pdh	33	kW	T j = +12 °C	COPd	4,09	-
T j = bivalent temperature	Pdh	31,8	kW	T j = bivalent temperature	COPd	3,17	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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	other than active	mode	, 7	Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,6	kW
Thermostat-off mode	Р _{то}	0,008	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Рск	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}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	12630	kWh	flow rate, outdoor heat exchanger	-	3,1/3,1	m3/h
For heat pump combination he	eater:						
Declared load profile /		na		Water heating energy	η _{wh}	na	%
Energy efficiency class				efficiency	•••••		
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
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Specific precautions and end of life information:

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

Enertech AB 341 26 Liungby



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Model(s):		CTC EcoPart 43	4 + CTC EcoLog	gic			
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:	184	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
Parameters shall be declared f	or medium-tempe	erature applicat	ion, except for	low-temperature heat pumps. For	low- tempera	ature heat pui	nps,
parameters shall be declared for	or low-temperatu	re application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	36	kW	Seasonal space heating energy efficiency	η _s	180	%
Declared capacity for heating f outdoor temperature T j	or part load at inc	loor temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	nry energy rati Itdoor temper	o for ature T
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na	-
T j = + 2 °C	Pdh	33,8	kW	T j = +2 °C	COPd	4,55	-
T j = + 7 °C	Pdh	34,0	kW	T j = +7 °C	COPd	4,78	-
T j = + 12 °C	Pdh	34,6	kW	T j = +12 °C	COPd	5,06	-
T j = bivalent temperature	Pdh	33,8	kW	T j = bivalent temperature	COPd	4,63	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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	other than active	mode	,	Supplementary heater			i
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,8	kW
Thermostat-off mode	P _{TO}	0,027	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	10360	kWh	flow rate, outdoor heat exchanger	-	3,8/3,8	m3/h
For heat pump combination he	eater:						
Declared load profile / Energy efficiency class		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
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Enertech AB 341 26 Liungby



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Model(s):		CTC EcoPart 43	4 + CTC EcoLog	gic			
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:	141	%	
Equipped with a supplementa	ry heater:	No		Package efficiency class:	A++	-	
Heat pump combination heat	er:	No					
Parameters shall be declared	for medium-temp	erature applicat	ion, except for	low-temperature heat pumps. For	low- tempera	ature heat pui	nps,
parameters shall be declared	for low-temperatu	ire application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	36	kW	Seasonal space heating energy efficiency	η _s	137	%
Declared capacity for heating outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	nry energy rati Itdoor temper	o for ature T j
T j = – 7 °C	Pdh	32,0	kW	T j = – 7 °C	COPd	3,23	-
T j = + 2 °C	Pdh	32,2	kW	T j = +2 °C	COPd	3,60	-
T j = + 7 °C	Pdh	32,8	kW	T j = +7 °C	COPd	3,97	-
T j = + 12 °C	Pdh	33,4	kW	T j = +12 °C	COPd	4,36	-
T j = bivalent temperature	Pdh	32,0	kW	T j = bivalent temperature	COPd	3,23	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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}	-7	°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	other than active	mode	.	Supplementary heater			h
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	4,4	kW
Thermostat-off mode	Р _{то}	0,008	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	20572	kWh	flow rate, outdoor heat exchanger	-	3,1/3,1	m3/h
For heat pump combination h	eater:						
Declared load profile /		na		Water heating energy	n+	na	%
Energy efficiency class				efficiency	· Iwn		70
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
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Specific precautions and end of life information:

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





Average climate and Low to	emperature				J41 20 LJU	ingby	
Model(s):		CTC EcoPart 43	4 + CTC EcoLo	gic			
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:	185	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heate	er:	No					
Parameters shall be declared f	or medium-temp	erature applicat	ion, except fo	r low-temperature heat pumps. For	low- tempera	iture heat pui	nps,
parameters shall be declared f	or low-temperatu	re application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	38	kW	Seasonal space heating energy efficiency	n _s	181	%
Declared capacity for heating foutdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	ry energy rati tdoor temper	o for ature T j
T j = – 7 °C	Pdh	33,8	kW	T j = – 7 °C	COPd	4,64	-
T j = + 2 °C	Pdh	34,2	kW	T j = +2 °C	COPd	4,83	-
T j = + 7 °C	Pdh	34,4	kW	T j = +7 °C	COPd	5,01	-
T j = + 12 °C	Pdh	34,8	kW	T j = +12 °C	COPd	5,18	-
T j = bivalent temperature	Pdh	33,8	kW	T j = bivalent temperature	COPd	4,64	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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}	-7	°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	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	4,6	kW
Thermostat-off mode	Р _{то}	0,027	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	16724	kWh	flow rate, outdoor heat exchanger	-	3,8/3,8	m3/h
For heat pump combination he	eater:						
Declared load profile /		na		Water heating energy	η_{wh}	na	%
Energy efficiency class			r	efficiency			
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
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Specific precautions and end of life information:

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

Enertech AB



Model(s):		CTC EcoPart 43	4 + CTC EcoLog	gic			
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:	145	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
Parameters shall be declared f	or medium-temp	erature applicat	ion, except for	low-temperature heat pumps. For	low- tempera	ature heat pur	nps,
parameters shall be declared f	or low-temperatu	ire application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	34	kW	efficiency	η _s	140	%
Declared capacity for heating f outdoor temperature T j	for part load at ind	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	ry energy rati tdoor temper	o for ature T j
T j = – 7 °C	Pdh	32,2	kW	T j = – 7 °C	COPd	3,51	-
T j = + 2 °C	Pdh	32,8	kW	T j = +2 °C	COPd	3,89	-
T j = + 7 °C	Pdh	33,2	kW	T j = +7 °C	COPd	4,24	-
T j = + 12 °C	Pdh	33,6	kW	T j = +12 °C	COPd	4,50	-
T j = bivalent temperature	Pdh	31,8	kW	T j = bivalent temperature	COPd	3,19	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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}	-19	°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	other than active	mode		Supplementary heater			i
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,8	kW
Thermostat-off mode	Р _{то}	0,008	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	23108	kWh	flow rate, outdoor heat exchanger	-	3,1/3,1	m3/h
For heat pump combination he	eater:						
Declared load profile / Energy efficiency class		na		Water heating energy efficiency	η_{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
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Specific precautions and end of life information:

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

Enertech AB 341 26 Liungby



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Model(s):		CTC EcoPart 43	4 + CTC EcoLo	gic			
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:	188	%	
Equipped with a supplementary	/ heater:	No		Package efficiency class:		-	
Heat pump combination heater	:	No					
Parameters shall be declared for	or medium-temp	erature applicati	ion, except for	low-temperature heat pumps. For	low- tempera	ature heat pur	nps,
parameters shall be declared for	or low-temperate	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	36	kW	Seasonal space heating energy efficiency	η _s	184	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	ance or prima 20 °C and ou	ary energy rati Itdoor temper	o for ature T
T j = – 7 °C	Pdh	34,2	kW	⊤ j = − 7 °C	COPd	4,84	-
T j = + 2 °C	Pdh	34,4	kW	T j = +2 °C	COPd	5,01	-
T j = + 7 °C	Pdh	34,6	kW	T j = +7 °C	COPd	5,13	-
T j = + 12 °C	Pdh	34,6	kW	T j = +12 °C	COPd	5,15	-
T j = bivalent temperature	Pdh	33,8	kW	T j = bivalent temperature	COPd	4,61	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
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}	-20	°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 o	other than active	mode	-	Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,0	kW
Thermostat-off mode	P _{TO}	0,027	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	-	na	m3/h
L Sound power level, indoors/ outdoors	L _{WA}	56/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	18332	kWh	flow rate, outdoor heat exchanger	-	3,8/3,8	m3/h
For heat pump combination heat	ater:						
Declared load profile / Energy efficiency class		na		Water heating energy efficiency	η _{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
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