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



						<b>U</b> ,	
Model(s):		CTC EcoPart 61	L6M + CTC Eco	_			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	157	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heater		No					
Parameters shall be declared for parameters shall be declared for	•		ion, except for	low-temperature heat pumps. For l	ow- tempera	ture heat pun	ıps,
	Symbol	Value	Unit	Itam	Symbol	Value	Unit
Item	•			Item Seasonal space heating energy	Зуппол		
Rated heat output (*)	Prated	16	kW	efficiency	η <sub>s</sub>	153	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperatu	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °c	•		•
T j = - 7 °C	Pdh	na	kW	T j = -7 °C	COPd	na	-
T j = + 2 °C	Pdh	14,3	kW	T j = +2 °C	COPd	2,57	-
T j = + 7 °C	Pdh	10,4	kW	T j = +7 °C	COPd	3,50	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	5,13	-
T j = bivalent temperature	Pdh	14,5	kW	T j = bivalent temperature	COPd	2,68	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	-
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>	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	7	Supplementary heater		_	7
Off mode	P <sub>OFF</sub>	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P TO	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	5300	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination he						1	
Declared load profile		NA	_	Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	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:		of the product's life	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 rrant, compressor oil and electrical/electronic en not permitted.	ering a service of	that type. t is of g	reat
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	16 372 88000 www.ctc.se			201124

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

CTC EcoPart 616M + CTC EcoLogic

Model(s):



Model(s):		CTC EcoPart 61	16IVI + CTC ECC	Logic			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	206	%	
Equipped with a supplementary	heater:	No		Package efficiency class:		-	
Heat pump combination heater:		No		,			
		erature applicati	ion, except for	low-temperature heat pumps. For l	ow- temperat	ure heat pum	ıps,
parameters shall be declared for	r low-temperatu	re application.					
tem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η <sub>s</sub>	202	%
Declared capacity for heating fooutdoor temperature T j	r part load at ind	door temperatui	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °C	-		-
j = − 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	] -
j = + 2 °C	Pdh	15,6	kW	T j = +2 °C	COPd	3,77	-
j = + 7 °C	Pdh	10,4	kW	T j = +7 °C	COPd	5,01	-
j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	6,00	-
j = bivalent temperature	Pdh	15,6	kW	T j = bivalent temperature	COPd	3,77	-
j = operation limit emperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
or air-to-water heat pumps: 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	-
valent temperature	T <sub>biv</sub>	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
ycling interval capacity for eating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
egradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
ower consumption in modes o	ther than active	mode	7	Supplementary heater			- -
ff mode	P <sub>OFF</sub>	0,020	kW	Rated heat output	Psup	0,0	kW
hermostat-off mode	P <sub>TO</sub>	0,020	kW				
tandby mode	P <sub>SB</sub>	0,020	kW	Type of energy input		Electric	
rankcase heater mode	P <sub>CK</sub>	0,000	kW				
ther items							
apacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
ound power level, indoors/ utdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
nnual energy consumption	Q <sub>HE</sub>	4080	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
or heat pump combination hea	iter:					ı	
eclared load profile		NA		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	NA	%
aily electricity consumption	Qelec	NA	kWh	Daily fuel consumption	Qfuel	na	kWh
nnual electricity onsumption	AEC	NA	kWh	Annual fuel consumption	AFC	na	GJ
pecific precautions and end flife information:		of the product's life	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 offor rant, compressor oil and electrical/electronic en ot permitted.	ering a service of	that type. t is of g	reat
ontact details	nertech AR Roy	309. SE-341 26	Liungby Tel +/	16 372 88000 www.ctc.se			201124

CTC EcoPart 616M + CTC EcoLogic

Model(s):



Model(s):		CTC ECOI dit 01	6M + CTC Eco	regic			
Air-to-water heat pump:		No		Energy efficiency class:	A+++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	158	%	
Equipped with a supplementary	heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heater	:	No					
		erature applicati	on, except for	r low-temperature heat pumps. For l	ow- temperat	ure heat pun	nps,
parameters shall be declared fo	r low-temperat	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	154	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatur	e 20 °C and	Declared coefficient of performation at indoor temperature 20 °C	-		-
T j = - 7 °C	Pdh	14,2	kW	T j = - 7 °C	COPd	2,79	-
T j = + 2 °C	Pdh D-l'-	8,8	kW	T j = +2 °C	COPd	4,13	- ∤
T j = + 7 °C	Pdh	5,5	kW	T j = +7 °C T j = +12 °C	COPd	4,89	1
T j = + 12 °C	Pdh	4,4	kW		COPd	5,14	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	2,70	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	_
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>	-8	°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	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	8176	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile		NA	1	Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	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:		of the product's life	cycle, it must be product's refrige	a recycling station or with the installation engir sent correctly to a waste station or reseller offe erant, compressor oil and electrical/electronic ε and permitted.	ering a service of	that type. t is of	great



Average climate and Low te	space heaters and heat pump combination heaters emperature		iicateis	Enertech AB 341 26 Ljungby			
Model(s):		CTC EcoPart 61	16M + CTC Eco	Logic			
Air-to-water heat pump:		No		Energy efficiency class:	A+++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	205	%	
Equipped with a supplementary	heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heater		No					
			ion, except for	low-temperature heat pumps. For	low- temperat	ure heat pun	nps,
parameters shall be declared fo	-					•	
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η <sub>s</sub>	201	%
Declared capacity for heating fooutdoor 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	14,0	kW	T j = - 7 °C	COPd	4,17	] -
T j = + 2 °C	Pdh	8,5	kW	T j = +2 °C	COPd	5,36	] -
Г j = + 7 °C	Pdh	5,6	kW	T j = +7 °C	COPd	5,87	] -
T j = + 12 °C	Pdh	4,6	kW	T j = +12 °C	COPd	6,03	] -
T j = bivalent temperature	Pdh	15,3	kW	T j = bivalent temperature	COPd	3,88	-
Γ j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
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 <sub>biv</sub>	-9	°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	ther than active	mode	-	Supplementary heater			_
Off mode	P OFF	0,020	kW	Rated heat output	Psup	0,4	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items	C.	-,	1	1	<u> </u>		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/
L Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	6321	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/
For heat pump combination hea	ater:						
Declared load profile		NA		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	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:

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

No

No

CTC EcoPart 616M + CTC EcoLogic

Energy efficiency class:

Controller class:

Model(s):

Air-to-water heat pump:

Water-to-water heat pump:

Enertech AB 341 26 Ljungby

VI



Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	165	%	
Equipped with a supplementary	heater:	No		Package efficiency class:		-	
Heat pump combination heater		No					
	•		ion, except for	low-temperature heat pumps. For	low- temperat	ure heat pun	nps,
parameters shall be declared fo	•						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_s$	161	%
Declared capacity for heating for outdoor temperature T j	r part load at ind	door temperatu	re 20 °C and	Declared coefficient of perform load at indoor temperature 20	•		•
T j = -7 °C	Pdh	9,84	kW	T j = - 7 °C	COPd	3,79	-
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	4,78	] -
T j = + 7 °C	Pdh	4,5	kW	T j = +7 °C	COPd	5,31	-
T j = + 12 °C	Pdh	4,5	kW	T j = +12 °C	COPd	5,31	-
T j = bivalent temperature	Pdh	14,3	kW	T j = bivalent temperature	COPd	2,76	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	-
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>	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode		Supplementary heater		•	
Off mode	P OFF	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW			-	
Standby mode	P <sub>SB</sub>	0,020	kW	Type of energy input		Electric	
Crankcase heater mode	P <sub>CK</sub>	0,000	kW				
Other items		5,000	<u>I</u>		<u> </u>		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	9352	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile		NA		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	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:		of the product's lif	e cycle, it must be e product's refrige	a recycling station or with the installation engi sent correctly to a waste station or reseller of trant, compressor oil and electrical/electronic not permitted.	fering a service of	that type. t is of a	great

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

CTC EcoPart 616M + CTC EcoLogic

Model(s):



Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	214	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate		No					
			on, except for	low-temperature heat pumps. For lo	ow- temperat	ure heat pum	ps,
parameters shall be declared for			Unit	lk	Symbol	Value	Unit
Item	Symbol	Value	I	Item Seasonal space heating energy	Symbol	value	Oilit
Rated heat output (*)	Prated	16	kW	efficiency	$\eta_{s}$	210	%
Declared capacity for heating foutdoor temperature T j	or part load at ind	loor temperatur	e 20 °C and	Declared coefficient of performa load at indoor temperature 20 °C	•		•
			1				. ' ]
Tj=-7°C	Pdh	9,9	kW	T j = -7 °C	COPd	5,22	-
T j = + 2 °C T j = + 7 °C	Pdh Pdh	5,9 4,5	kW kW	T j = +2 °C T j = +7 °C	COPd COPd	5,93 6,07	-
Tj=+7 C	Pdh	4,4	kW	T j = +12 °C	COPd	5,76	
•	run	4,4	. KVV		coru		
T j = bivalent temperature	Pdh	15,5	kW	T j = bivalent temperature	COPd	3077,00	-
T j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
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 <sub>biv</sub>	-21	°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	1	Supplementary heater			1
Off mode	P <sub>OFF</sub>	0,020	kW	Rated heat output	Psup	0,4	kW
Thermostat-off mode	P TO	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	7239	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
For heat pump combination he	eater:						
Declared load profile		NA		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	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:		of the product's life	cycle, it must be product's refrige	a recycling station or with the installation engin sent correctly to a waste station or reseller offe rant, compressor oil and electrical/electronic e not permitted.	ering a service of	that type. t is of gr	eat

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



Model(s):		CTC EcoPart 61	L6M + CTC Eco	Zenith i360			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	157	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater	:	Yes					
			ion, except for	low-temperature heat pumps. For l	ow- tempera	ture heat pun	nps,
parameters shall be declared fo	r low-temperatu	ire application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_s$	153	%
Declared capacity for heating for 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	•		•
Tj = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	-
Tj = + 2 °C	Pdh	14,3	kW	T j = +2 °C	COPd	2,57	-
Tj = + 7 °C	Pdh	10,4	kW	T j = +7 °C	COPd	3,50	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	5,13	-
T j = bivalent temperature	Pdh	14,5	kW	T j = bivalent temperature	COPd	2,68	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	-
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>	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	-	Supplementary heater			-
Off mode	P <sub>OFF</sub>	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P TO	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	5300	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		of the product's life	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 offur erant, compressor oil and electrical/electronic en not permitted.	ering a service of	f that type. t is of a	great
Contact details	nertech AB, Bo	309, SE-341 26	Liunghy Tel +4	16 372 88000 www.ctc.se			201124

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



Model(s):		CTC EcoPart 61	.6M + CTC Eco	Zenith i360			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	206	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
			on, except for	low-temperature heat pumps. For I	ow- temperat	ture heat pum	ps,
parameters shall be declared for	•		11-4		Compleal	Malaa	11-14
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_s$	202	%
Declared capacity for heating foutdoor temperature T j	or part load at ind	door temperatur	e 20 °C and	Declared coefficient of performation load at indoor temperature 20 °	•		•
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	] -
T j = + 2 °C	Pdh	15,6	kW	T j = +2 °C	COPd	3,77	-
T j = + 7 °C	Pdh	10,4	kW	T j = +7 °C	COPd	5,01	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	6,00	-
T j = bivalent temperature	Pdh	15,6	kW	T j = bivalent temperature	COPd	3,77	-
T j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
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 <sub>biv</sub>	2	°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 <sub>OFF</sub>	0,020	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	4080	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:	Enertech AR Roy	of the product's life importance that the of the product as he	e cycle, it must be a product's refrige pusehold waste is	·	ering a service of	that type. t is of g	reat

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Model(s):	CTC EcoPart 616M + CTC EcoZenith i360							
Air-to-water heat pump:	No	Energy efficiency class:	A+++	-				
Water-to-water heat pump:	No	Controller class:	VI	-				
Brine-to-water heat pump:	Yes	Controller contribution:	4	%				
Low-temperature heat pump:	No	Package efficiency:	158	%				
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	16	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	154	%
Declared capacity for heating for	or part load at in	door temperatur	re 20 °C and	Declared coefficient of performar			•
outdoor temperature T j				load at indoor temperature 20 °C	and outdoor	temperatur	213
T j = -7 °C	Pdh	14,2	kW	T j = - 7 °C	COPd	2,79	] -
T j = + 2 °C	Pdh	8,8	kW	T j = +2 °C	COPd	4,13	-
T j = + 7 °C	Pdh	5,5	kW	T j = +7 °C	COPd	4,89	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	5,14	_
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	2,70	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	-
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>	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P TO	0,020	kW			-	
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	8176	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination hea	ater:						
Declared load profile	-	XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end				a recycling station or with the installation engine sent correctly to a waste station or reseller offer			

Specific precautions and end of life information:

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

Average climate and Low temperature

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Model(s):	CTC EcoPart 616M + CTC EcoZenith i360							
Air-to-water heat pump:	No	Energy efficiency class:	A+++	-				
Water-to-water heat pump:	No	Controller class:	VI	-				
Brine-to-water heat pump:	Yes	Controller contribution:	4	%				
Low-temperature heat pump:	No	Package efficiency:	205	%				
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	16	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	201	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperatu	re 20 °C and	Declared coefficient of performar load at indoor temperature 20 °C	•		•
T j = -7 °C	Pdh	14,0	kW	T j = - 7 °C	COPd	4,17	] -
T j = + 2 °C	Pdh	8,5	kW	T j = +2 °C	COPd	5,36	-
T j = + 7 °C	Pdh	5,6	kW	T j = +7 °C	COPd	5,87	
T j = + 12 °C	Pdh	4,6	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	15,3	kW	T j = bivalent temperature	COPd	3,88	-
T j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
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 <sub>biv</sub>	-9	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,020	kW	Rated heat output	Psup	0,4	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q HE	6321	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
For heat pump combination hea	ater:					·	
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

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

No

Model(s):

Air-to-water heat pump:

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Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	165	%	
Equipped with a supplementary	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heater	r:	Yes					
Parameters shall be declared for	or medium-temp	erature applicati	on, except for	low-temperature heat pumps. For	low- temperat	ure heat pun	ıps,
parameters shall be declared fo	or low-temperati	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_s$	161	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatui	e 20 °C and	Declared coefficient of perform load at indoor temperature 20 °			
T j = - 7 °C	Pdh	9,84	kW	T j = - 7 °C	COPd	3,79	] -
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	4,78	] -
T j = + 7 °C	Pdh	4,5	kW	T j = +7 °C	COPd	5,31	-
T j = + 12 °C	Pdh	4,5	kW	T j = +12 °C	COPd	5,31	-
T j = bivalent temperature	Pdh	14,3	kW	T j = bivalent temperature	COPd	2,76	-
T j = operation limit temperature	Pdh	14,34	kW	T j = operation limit temperature	COPd	2,57	-
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>	-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	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,020	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	9352	kWh	flow rate, outdoor heat exchanger	-	1,6	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		of the product's life	cycle, it must be product's refrige	a recycling station or with the installation engi sent correctly to a waste station or reseller of erant, compressor oil and electrical/electronic not permitted.	fering a service of	that type. t is of a	reat

CTC EcoPart 616M + CTC EcoZenith i360

Energy efficiency class:

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

Model(s):

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1110461(3):							
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	214	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heater		Yes					
Parameters shall be declared to parameters shall be declared for			on, except for	low-temperature heat pumps. For lo	ow- temperat	ure heat pum	ps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
item	34111001		1	Seasonal space heating energy	Зуппоот		
Rated heat output (*)	Prated	16	kW	efficiency	$\eta_s$	210	%
Declared capacity for heating for	or part load at inc	loor temperatur	e 20 °C and	Declared coefficient of performa	nce or prima	ry energy rati	o for part
outdoor temperature T j				load at indoor temperature 20 °C	and outdoo	r temperature	РŢ
Tj=-7°C	Pdh	9,9	kW	T j = - 7 °C	COPd	5,22	1 -
T j = + 2 °C	Pdh	5,9	kW	T j = +2 °C	COPd	5,93	-
T j = + 7 °C	Pdh	4,5	kW	T j = +7 °C	COPd	6,07	] -
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	5,76	-
T j = bivalent temperature	Pdh	15,5	kW	T j = bivalent temperature	COPd	3,77	-
T j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,77	-
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 <sub>biv</sub>	-21	°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	7	Supplementary heater			•
Off mode	P OFF	0,020	kW	Rated heat output	Psup	0,4	kW
Thermostat-off mode	P <sub>TO</sub>	0,020	kW				
Standby mode	P <sub>SB</sub>	0,020	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	7239	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
For heat pump combination he	ater:						
Declared load profile		XL	1	Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	95 / A	%
Daily electricity consumption	Qelec	8,010	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1762	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		of the product's life	cycle, it must be product's refrige	recycling station or with the installation engine sent correctly to a waste station or reseller offe rant, compressor oil and electrical/electronic ed not permitted.	ring a service of t	that type. t is of g	reat

CTC EcoPart 616M + CTC EcoZenith i360

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



Rated heat output (*)  Prated  16  kW  Seasonal space heating energy efficiency  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j  Declared coefficient of performance or primary energy load at indoor temperature 20 °C and outdoor temperature 20 °C and ou	alue Un
Water-to-water heat pump:       No       Controller class:       VI       −         Brine-to-water heat pump:       Yes       Controller contribution:       4       %         Low-temperature heat pump:       No       Package efficiency:       139       %         Equipped with a supplementary heater:       Yes       Package efficiency class:       -         Heat pump combination heater:       Yes       Package efficiency class:       -         Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature he parameters shall be declared for low-temperature application.       Item       Symbol       Value         Item       Symbol       Value       Unit       Item       Symbol       Value         Rated heat output (*)       Prated       16       kW       Seasonal space heating energy efficiency       1         Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature	alue Un  35 %  rgy ratio for poerature T j  na
Brine-to-water heat pump:  Low-temperature heat pump:  No  Package efficiency:  139  %  Equipped with a supplementary heater:  Yes  Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps application, except for low-temperature heat pumps. For low-temperature heat pumps are parameters shall be declared for low-temperature application.  Item  Symbol  Value  Unit  Item  Symbol  Seasonal space heating energy efficiency  Prated  16  kW  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j  T j = -7 °C  Pdh  T j = -7 °C  Pdh  14,3  RW  T j = -7 °C  COPd  T j = +2 °C  T j = +2 °C  Pdh  10,4  KW  T j = +7 °C  COPd  3,4  T j = +12 °C  COPd  4,4  T j = +12 °C  COPd  4,4	alue Un  35 %  rgy ratio for poerature T j  na
Low-temperature heat pump:  No Package efficiency: 139 %  Equipped with a supplementary heater:  Yes  Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low-temperat	alue Un  35 %  rgy ratio for poerature T j  na
Equipped with a supplementary heater:  Heat pump combination heater:  Yes  Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps. For low-temperature heat pumps. For low-t	alue Un  35 %  rgy ratio for poerature T j  na
Heat pump combination heater: Yes  Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature he parameters shall be declared for low-temperature application.  Item Symbol Value Unit Item Symbol Value Unit Item Symbol Value Efficiency $\eta_S$ 1  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j  T j = -7 °C Pdh na kW T j = -7 °C COPd T j = +2 °C Pdh 10,4 kW T j = +7 °C COPd T j = +12	alue Un  35 %  rgy ratio for poerature T j  na
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature he parameters shall be declared for low-temperature application.  Item Symbol Value Unit Item Symbol Value Hated heat output (*)  Prated 16 kW  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j $Tj = -7 ^{\circ}C$ $Tj = +2 ^{\circ}C$ $Tj = +2 ^{\circ}C$ $Pdh$ $Tj = +7 ^{\circ}C$ $Tj = +2 ^{\circ}C$ $Tj =$	alue Un  35 %  rgy ratio for poerature T j  na
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps. For low- temperature heat parameters shall be declared for low-temperature application.  Item Symbol Value Unit Item Symbol Value Seasonal space heating energy efficiency $\Pi_S$ 1.  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j  T j = -7 °C Pdh Na Rymbol Value Seasonal space heating energy efficiency $\Pi_S$ 1.  Declared coefficient of performance or primary energular indoor temperature 20 °C and outdoor temperature	alue Un  35 %  rgy ratio for poerature T j  na
ItemSymbolValueUnitItemSymbolValueRated heat output (*) $Prated$ 16kWSeasonal space heating energy efficiency $\eta_S$ 1Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T jDeclared coefficient of performance or primary energload at indoor temperature 20 °C and outdoor tempera	orgy ratio for potenture T j
Rated heat output (*)  Prated  16  kW  Seasonal space heating energy efficiency  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j  Declared coefficient of performance or primary energload at indoor temperature 20 °C and outdoor temperature 20 °C and outd	orgy ratio for potenture T j
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j $Tj = -7 °C \qquad Pdh \qquad na \qquad kW \qquad Tj = -7 °C \qquad COPd \qquad Tj = +2 °C \qquad Pdh \qquad 10,4 \qquad kW \qquad Tj = +7 °C \qquad COPd \qquad Tj = +7 °C \qquad Pdh \qquad 10,4 \qquad kW \qquad Tj = +7 °C \qquad COPd \qquad 3, Tj = +12 °C \qquad COPd \qquad 3, Tj = +12 °C \qquad COPd \qquad 4, Tj = +12 °C \qquad$	rgy ratio for poerature T j
outdoor temperature T j    T j = $-7$ °C   Pdh   T j = $+2$ °C   Pdh   T j = $+7$ °C   Pdh   T j = $+7$ °C   Pdh   T j = $+7$ °C   Pdh   Pdh   T j = $+7$ °C   Pdh   T j = $+7$ °C   Pdh   T j = $+7$ °C   T	na - 2,32 - 3,14 -
T j = +2 °C       Pdh       14,3       kW       T j = +2 °C       COPd       2,         T j = +7 °C       Pdh       10,4       kW       T j = +7 °C       COPd       3,         T j = +12 °C       Pdh       4,4       kW       T j = +12 °C       COPd       4,	3,32 - 3,14 -
$Tj = +7 ^{\circ}C$ $Pdh$ $10,4$ $kW$ $Tj = +7 ^{\circ}C$ $COPd$ $3,$ $Tj = +12 ^{\circ}C$ $Tj = +12 ^{\circ}C$ $COPd$ $4,$	- 3,14
T j = + 12 °C Pdh $\frac{4,4}{}$ kW T j = +12 °C COPd $\frac{4}{}$	
	,51
T j = bivalent temperature Pdh 14,3 kW T j = bivalent temperature COPd 2,	I
	-,32
T j = operation limit temperature  T j = operation limit temperature  T j = operation limit temperature  COPd temperature	-,32
For air-to-water heat pumps: $Pdh$ na kW For air-to-water heat pumps: $COPd$ T j = $-15$ °C (if TOL < $-20$ °C)	na -
Bivalent temperature $T_{biv}$ 3 °C For air-to-water heat pumps: TOL Operation limit temperature	na °(
Cycling interval capacity for na kW Cycling interval efficiency COPcyc reating	na -
Degradation co-efficient Cdh 0,99 - Heating water operating limit temperature	<b>65</b> °C
Power consumption in modes other than active mode Supplementary heater	
Off mode $P_{OFF}$ <b>0,030</b> kW Rated heat output $Psup$ 1	<b>1,7</b> kV
Thermostat-off mode $P_{TO}$ 0,030 kW	
Standby mode $P_{SB}$ 0,030 kW Type of energy input	tric
Crankcase heater mode $P_{CK}$ 0,000 $kW$	
Other items	
Capacity control  Variable  For air-to-water heat pumps: Rated air flow rate, outdoors	na m3,
Sound power level, indoors/ Dutdoors  L WA  40 / na  dB  For water-/brine-to-water heat pumps: Rated brine or water	
Annual energy consumption Q HE 5300 kWh flow rate, outdoor heat exchanger - 1	<b>1,6</b> <i>m3,</i>
For heat pump combination heater:	
Declared load profile  XL  Water heating energy efficiency/Energy class	85 %
Daily electricity consumption Qelec 9,721 kWh Daily fuel consumption Q <sub>fuel</sub> r	na kW
consumption	na G
The packaging must be deposited at a recycling station or with the installation engineer for correct waste man of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disord the product as household waste is not permitted.	e. t is of great
Contact details Enertech AB, Box 309, SE-341 26 Ljungby Tel +46 372 88000 www.ctc.se	

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

Model(s):

Enertech AB 341 26 Ljungby



Model(s):		CTC ECOPART 61	OIVI + CTC ECC	Zenitii 1555			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	206	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:			
	or medium-temp		on, except fo	r low-temperature heat pumps. For lo	ow- temperat	ure heat pun	nps,
parameters shall be declared for Item	Symbol	vre application.  Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	$\eta_s$	202	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatui	re 20 °C and	Declared coefficient of performa load at indoor temperature 20 °C			-
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	] -
T j = + 2 °C	Pdh	15,6	kW	T j = +2 °C	COPd	3,32	-
T j = + 7 °C	Pdh	10,4	kW	T j = +7 °C	COPd	4,38	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	5,20	-
T j = bivalent temperature	Pdh	15,6	kW	T j = bivalent temperature	COPd	3,32	-
T j = operation limit temperature	Pdh	15,6	kW	T j = operation limit temperature	COPd	3,32	-
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	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	<b>.</b>	Supplementary heater			-
Off mode	P <sub>OFF</sub>	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P TO	0,030	kW				
Standby mode	P <sub>SB</sub>	0,030	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	-	na	m3/h
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	4080	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
For heat pump combination he	ater:					ī	ı
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	85	%
Daily electricity consumption	Qelec	9,721	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	2139	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		of the product's life	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 offe erant, compressor oil and electrical/electronic e- not permitted.	ering a service of t	that type. t is of	great
Contact details	Enertech AB, Bo	x 309, SE-341 26	Liunghy Tel +	46 372 88000 www.ctc.se			201105

CTC EcoPart 616M + CTC EcoZenith i555

Information for heat pump space heaters and heat pump co Average climate and Medium temperature		combination	mbination heaters		Enertech AB 341 26 Ljungby		
Model(s):		CTC EcoPart 6:	16M + CTC Eco	Zenith i555			
Air-to-water heat pump:		No		Energy efficiency class:	A++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	140	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:	A++	-	
Heat pump combination heater: Parameters shall be declared for parameters shall be declared for	medium-temp		ion, except for	low-temperature heat pumps. For	low- temperat	ure heat pur	nps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	•	136	%
Declared capacity for heating for outdoor temperature T j	r part load at in	door temperatu	re 20 °C and	Declared coefficient of perform load at indoor temperature 20	•	, 0,	
T j = - 7 °C	Pdh	14,2	kW	T j = - 7 °C	COPd	2,51	-
T j = + 2 °C	Pdh	8,8	kW	T j = +2 °C	COPd	3,70	-
T j = + 7 °C	Pdh	5,5	kW	T j = +7 °C	COPd	4,32	-
T j = + 12 °C	Pdh	4,4	kW	T j = +12 °C	COPd	4,52	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	2,43	-
T j = operation limit temperature	Pdh	14,3	kW	T j = operation limit temperature	COPd	2,32	-
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>	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°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	65	°C
Power consumption in modes ot	her than active	mode		Supplementary heater			
Off mode	P OFF	0,030	kW	Rated heat output	Psup	1,7	kW
Thermostat-off mode	P TO	0,030	kW				
Standby mode	$P_{SB}$	0,030	kW	Type of energy input		Electric	

Power consumption in modes other than active mode					
Off mode	P OFF	0,030	kW		
Thermostat-off mode	P <sub>TO</sub>	0,030	kW		
Standby mode	P <sub>SB</sub>	0,030	kW		
Crankcase heater mode	P <sub>CK</sub>	0,000	kW		
Other items					

Variable Capacity control Sound power level, indoors/ 40 / na dΒ  $L_{WA}$ outdoors Annual energy consumption 9194 kWh $Q_{HE}$ 

For air-to-water heat pumps: m3/h na Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 1,6 m3/h

For heat pump combination heater:

Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	85	%
Daily electricity consumption	Qelec	9,721	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	2139	kWh	Annual fuel consumption	AFC	na	GJ

exchanger

Specific precautions and end of life information:



Information for heat pump space heaters and heat pump combination heaters  Average climate and Low temperature					Enertech AB 341 26 Ljungby		
Model(s):		CTC EcoPart 61	6M + CTC Eco	oZenith i555			
Air-to-water heat pump:		No		Energy efficiency class:	A++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4 %		
Low-temperature heat pump	):	No		Package efficiency:	178	%	
Equipped with a supplement	ary heater:	Yes		Package efficiency class:	A+++	-	
Parameters shall be declared parameters shall be declared	for medium-temp		on, except fo	r low-temperature heat pumps. For	low- temperat	ure heat pun	nps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η <sub>s</sub>	174	%
Declared capacity for heating outdoor temperature T j	g for part load at ir	ndoor temperatur	re 20 °C and	Declared coefficient of perform load at indoor temperature 20 °	•		•
T j = -7 °C	Pdh	14,0	kW	T j = - 7 °C	COPd	3,67	] -

T j = + 2 °C	Pdh	8,5	kW					
T j = + 7 °C	Pdh	5,6	kW					
T j = + 12 °C	Pdh	4,6	kW					
T j = bivalent temperature	Pdh	15,3	kW					
T j = operation limit temperature	Pdh	15,6	kW					
For air-to-water heat pumps: $T j = -15 ^{\circ}\text{C}$ (if $TOL < -20 ^{\circ}\text{C}$ )	Pdh	na	kW					
Bivalent temperature	T <sub>biv</sub>	-9	°C					
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW					
Degradation co-efficient	Cdh	0,98	-					
Power consumption in modes o	Power consumption in modes other than active mode							
Off mode	P OFF	0,030	kW					
Thermostat-off mode	P TO	0,030	kW					

Standby mode	P <sub>SB</sub>	0,030	kW		
Crankcase heater mode	P <sub>CK</sub>	0,000	kW		
Other items					
Capacity control	Variable				
Sound power level, indoors/ outdoors	L <sub>WA</sub>	36 / na	dB		
Annual energy consumption	Q <sub>HE</sub>	7278	kWh		

T j = +2 °C	COPd	4,68	-
T j = +7 °C	COPd	5,10	-
T j = +12 °C	COPd	5,23	-
T j = bivalent temperature	COPd	3,42	-
T j = operation limit temperature	COPd	3,32	-
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	na	°C
Cycling interval efficiency	СОРсус	na	-
Heating water operating limit temperature	WTOL	65	°C
Supplementary heater			·

Supplementary heater			_
Rated heat output	Psup	0,4	kW
Type of energy input		Electric	

For air-to-water heat pumps: Rated air flow rate, outdoors	na	m3/h
For water-/brine-to-water heat pumps: Rated brine or water		
flow rate, outdoor heat - exchanger	2,3	m3/h

For heat pump combination heater:

Declared load profile	XL			Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	85	%
Daily electricity consumption	Qelec	9,721	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	2139	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

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

No

No

Model(s):

Air-to-water heat pump:

Water-to-water heat pump:

Enertech AB 341 26 Ljungby

VI



Low-temperature heat pumps:  Tyes Package efficiency: 146 %  Package efficiency class:	water-to-water neat pump.		NO		Controller class.	VI		
Equipped with a supplementary heater: Yes Package efficiency class:    Yes   Package efficiency class:	Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Heat pump combination heater:  Yes Pramareters shall be declared for medium-temperature application.  Item  Symbol Value Unit  Rated heat output (*)  Prated 16 kW  Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 load outdoor temperature 8 load outdoor temperature 8 load outdoor temperature 8 load outdoor temperature 8 load outdoor temperature 9 load outdoor temperature 9 load outdoor temperature 7 load outdoor temperature 8 load outdoor temperature 7 load outdoor temperature 7 load outdoor temperature 8 load outdoor temperature 8 load outdoor temperature 7 load outdoor temperature 7 load outdoor temperature 8 load outdoor temperature 9 load outdoor 1 load out	Low-temperature heat pump:		No		Package efficiency:	146	%	
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps, parameters shall be declared for low-temperature application.  Item Symbol Value Unit Item Seasonal space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit It	Equipped with a supplementary	y heater:	Yes		Package efficiency class:		-	
Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps, parameters shall be declared for low-temperature application.  Item Symbol Value Unit Item Seasonal space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit Item Seasonal Space heating energy In Item Symbol Value Unit It	Heat pump combination heater	r:	Yes					
tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit Seasonal space heating energy ns 142 % Seasonal space nergy ns 142 % Seasonal space			erature applicati	on, except for	r low-temperature heat pumps. For lo	w- temperat	ure heat pun	ıps,
Seasonal space heating energy   Tight   Seasonal space   Tight	parameters shall be declared for	or low-temperatu	ire application.					
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j load to indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load at indoor temperature 20 °C and outdoor temperature 8 j load in indoor temperature 8 j load in indoor temperature 9 j load at indoor temperature 20 °C and outdoor temperature 8 j line 20 j load at indoor temperature 20 °C and outdoor temperature 8 j line 20 j load at indoor temperature 20 °C and outdoor temperature 8 j line 20 j load at indoor temperature 20 °C and outdoor temperature 8 j line 20 j load at indoor temperature 20 °C and outdoor temperature 8 j line 20 j load at indoor temperature 20 °C and outdoor 4 j line 20 j load 4,66 load 1 j line 20 load 4,66 load 1 j line 20 load 4,66 load 1 j line 20 °C load 4,66 load 1 line 20 °C load 4 line 20 °C load 4,66 load 1 line 20 °C load 4,66 load 1 line 20 °C load 4 line 20 °C load 2 line	Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
outdoor temperature T $J = -7 \cdot C$ Pdh $J_{3,8}$ kW $J_{1} = -7 \cdot C$ COPd $J_{3,4}$ $J_{3,4}$ $J_{4,5}$ $J_{5,9}$ kW $J_{1} = -7 \cdot C$ COPd $J_{4,6,6}$ $J_{5,9}$ $J_{5,9}$ $J_{5,9}$ kW $J_{1} = -7 \cdot C$ COPd $J_{5,6}$ $J_{5,9}$ $J_{5$	Rated heat output (*)	Prated	16	kW		$\eta_{s}$	142	%
load at indoor temperature T $j$   $j=-7$ °C   $j=-7$	Doclared capacity for heating for	or part load at in	door tomporative	o 20 °C and	Declared coefficient of performa	nco or prima	ry oporay rati	o for part
T j = + 2°C	outdoor temperature T j	or part load at illi	door temperatur	e 20 Canu	- I	•		-
T j = 7 °C Pdh 4,5 kW T j = 17 °C COPd 4,66 - T j = 12 °C Pdh 4,5 kW T j = 12 °C COPd 4,66 - T j = 12 °C Pdh 4,5 kW T j = 12 °C COPd 4,66 - T j = 12 °C COPd 5,60 °C COPd 5,60 °C COPd 5,60 °C COPD 5,60 °C COPD 6,60 °C COPD 6,60 °C COPD 7,60 °C C	Tj=-7°C	Pdh	9,8	kW	T j = - 7 °C	COPd	3,4	-
T j = bivalent temperature  Pdh  14,3 kW  T j = poperation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  Pdh  14,3 kW  T j = operation limit temperature  COPd  2,32 -  Torair-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)  Pdh  na  kW  For air-to-water heat pumps: Operation limit temperature  T biv  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if TOL < -20 °C)  T j = -15 °C (if T	T j = + 2 °C	Pdh		kW	T j = +2 °C	COPd		-
T j = bivalent temperature	T j = + 7 °C	Pdh	4,6	kW	T j = +7 °C	COPd	4,66	-
Tj = operation limit temperature  Pdh  14,3 kW  Tj = operation limit temperature  Por air-to-water heat pumps: Tj = -15 °C (if TOL < - 20 °C)  Pdh  na kW  For air-to-water heat pumps: Tj = -15 °C (if TOL < - 20 °C)  Power consumption in modes other than active mode Off mode Porr Ondo Nav  Crankcase heater mode Other items  Variable  V	T j = + 12 °C	Pdh	4,5	kW	T j = +12 °C	COPd		-
temperature    Pan   14,3   kW   temperature   For air-to-water heat pumps:   For air-to-water heat pumps:   For air-to-water heat pumps:   T   = -15 °C (if TOL < -20 °C)   Pdh   na   kW   For air-to-water heat pumps:   TOL   na   °C     Bivalent temperature   T   biv   -18   °C   For air-to-water heat pumps:   TOL   na   °C     Cycling interval capacity for heating   P   Cych   na   kW   Cycling interval efficiency   COPcyc   na   -	T j = bivalent temperature	Pdh	14,3	kW	T j = bivalent temperature	COPd	2,49	-
T j = -15 °C (if TOL < -20 °C)  Bivalent temperature  T biv  -18  °C  For air-to-water heat pumps: Operation limit temperature  T cycling interval capacity for heating Degradation co-efficient  Cdh  0,98  - Heating water operating limit temperature  Cycling interval efficiency Copacity Copacity Cycling interval efficiency Copacity Copacity Copacity Cycling interval efficiency Cycling interval efficiency Copacity Copacity Copacity Cycling interval efficiency Copacity Copacity Copacity Cycling interval efficiency Copacity Copacity Copacity Cycling interval efficiency Cycling interval efficiency Copacity Copacity Copacity Cycling interval efficiency Copacity Copacity Cycling interval efficiency Copacity C	T j = operation limit temperature	Pdh	14,3	kW		COPd	2,32	-
Sevalent temperature  Thiv  18 C  Operation limit temperature  Cycling interval capacity for heating  Degradation co-efficient  Cdh  0,98  - Heating water operating limit temperature  Cycling interval efficiency  COPcyc  na  - Heating water operating limit temperature  Supplementary heater  Rated heat output  Psup  1,7 kW  Type of energy input  Electric  For air-to-water heat pumps: Rated air flow rate, outdoors  Annual energy consumption  Annual energy consumption  Annual electricity consumption  Qelec  9,721 kWh  Annual fuel consumption  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 seen 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 seen 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 seen 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 seen 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 seen 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 seen 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 seen 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 seen 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 seen 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 seen co	For air-to-water heat pumps: T j = $-15$ °C (if TOL < $-20$ °C)	Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency COPCC na Degradation co-efficient Cdh 0,98 Degradation co-efficient Cdh 0,98 Power consumption in modes other than active mode Off mode P or 0,030 kW Thermostat-off mode P ro 0,030 kW Standby mode P ss 0,030 kW Crankcase heater mode P cx 0,000 kW Other items  Capacity control Variable For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Sound power level, indoors/ outdoors Annual energy consumption QHE 10538 kWh For heat pump combination heater:  Declared load profile XL WA Daily electricity consumption Qelec 9,721 kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC 2139 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 as household waste is not permitted.	Bivalent temperature	T <sub>biv</sub>	-18	°C		TOL	na	°C
Power consumption in modes other than active mode Off mode	Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode  Poff O,030 kW  Thermostat-off mode Poff O,030 kW  Standby mode Poff O,030 kW  Type of energy input  For air-to-water heat pumps: Rated air flow rate, outdoors Rated air flow rate, outdoors Poff water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors pumps: Rated brine or w	Degradation co-efficient	Cdh	0,98	-	1 1	WTOL	65	°C
Thermostat-off mode Standby mode Standby mode P SS O,030 kW Crankcase heater mode P CK O,000 kW  Type of energy input  Electric  The ackaging 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 oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product's incompressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product is not permitted.	Power consumption in modes of	other than active	mode		Supplementary heater			
Standby mode  P ss	Off mode	P OFF	0,030	kW	Rated heat output	Psup	1,7	kW
Crankcase heater mode  Other items  Capacity control  Variable  Variable  For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger  I,6 m3/h  Water heating energy efficiency/Energy class  Polity electricity consumption  Qelec  Annual electricity Consumption  AEC  Z139  AEC  Z139  KWh  Annual fuel consumption  AFC  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.	Thermostat-off mode	P TO	0,030	kW			-	
Crankcase heater mode  Other items  Capacity control  Variable  Variable  For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger  I,6 m3/h  Water heating energy efficiency/Energy class  Polity electricity consumption  Qelec  Annual electricity Consumption  AEC  Z139  AEC  Z139  KWh  Annual fuel consumption  AFC  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.	Standby mode	P sp	0.030	kW	Type of energy input		Electric	
Other items  Capacity control  Variable  For air-to-water heat pumps: Rated air flow rate, outdoors  For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoor heat pumps: Rated brine or water flow rate, outdoors perficiency/Energy class  Nwh/-  85  %  Water heating energy perficiency/Energy class  Nwh/- Annual electricity 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. 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.	•			ł				
Capacity control  Variable  Variable  For air-to-water heat pumps: Rated air flow rate, outdoors  For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger  The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of life information:  For air-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger  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 as household waste is not permitted.		, , ,	0,000	KVV				
outdoors  Annual energy consumption  QHE  10538  AWh  Declared load profile  XL  Water heating energy efficiency/Energy class  Declared load profile  Annual electricity consumption  Qelec  Annual electricity  consumption  AEC  2139  AEC  2139  AEC  2139  AEC  Annual fuel consumption  AFC  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.	Capacity control	Variable			-	na	m3/h	
Annual energy consumption Q HE 10538 kWh exchanger - 1,6 m3/h  For heat pump combination heater:  Declared load profile XL Water heating energy efficiency/Energy class \( \text{Nuh/-} \) 85 \( \text{85} \) \( \text{Wh} \)  Daily electricity consumption \( \text{Qelec} \) \( \text{Qelec} \) \( \text{Qelec} \) \( Policy 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.	Sound power level, indoors/ outdoors	L <sub>WA</sub>	40 / na	dB	1 1			
Declared load profile  XL  Water heating energy efficiency/Energy class  Daily electricity consumption  Qelec  9,721 kWh  Daily fuel consumption  AFC  139 kWh  Annual fuel consumption  AFC  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.	Annual energy consumption	Q <sub>HE</sub>	10538	kWh		-	1,6	m3/h
Declared load profile  AL  efficiency/Energy class  Daily electricity consumption  Qelec  9,721 kWh  Daily 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 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	ater:						
Daily electricity consumption  Qelec  9,721 kWh Daily fuel consumption  Qfuel  na kWh Annual electricity consumption  AEC  2139 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 refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Declared load profile		XL			$\eta_{\text{wh/-}}$	85	%
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.	Daily electricity consumption	Qelec	9,721	kWh		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 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.	Annual electricity consumption	AEC	2139	kWh	Annual fuel consumption	AFC	na	GJ
Contact details	Specific precautions and end of life information:		of the product's life importance that the	cycle, it must be product's refrige	sent correctly to a waste station or reseller offeerant, compressor oil and electrical/electronic ed	ring a service of	that type. t is of g	reat
	Contact dotails	Enertech AR Pox	·		· · · · · · · · · · · · · · · · · · ·			201105

CTC EcoPart 616M + CTC EcoZenith i555

Energy efficiency class:

Controller class:

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

Model(s):

Enertech AB 341 26 Ljungby



	CIC Ecopart 61	BIVI + CTC ECO.	Zenith 1555			
	No		Energy efficiency class:		-	
	No		Controller class:	VI	-	
	Yes		Controller contribution:	4	%	
	No		Package efficiency:	185	%	
y heater:	Yes		Package efficiency class:		-	
r:	Yes					
or medium-temp	erature application	on, except for	low-temperature heat pumps. For lo	ow- temperat	ture heat pum	ps,
or low-temperatu	re application.					
Symbol	Value	Unit	Item	Symbol	Value	Unit
Prated	16	kW	Seasonal space heating energy efficiency	$\eta_{s}$	181	%
or part load at in	door temperatur	e 20 °C and		-		-
Pdh	9,9	kW	T j = - 7 °C	COPd	4,56	-
Pdh	5,9	kW	T j = +2 °C	COPd	5,15	-
Pdh	4,5	kW		COPd		
Pdh	4,4	kW	T j = +12 °C	COPd	5,00	-
Pdh	15,5	kW	T j = bivalent temperature	COPd	3,32	-
Pdh	15,6	kW	T j = operation limit temperature	COPd	3,32	-
Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
T <sub>biv</sub>	-21	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
other than active	mode	_	Supplementary heater			_
P OFF	0,030	kW	Rated heat output	Psup	0,4	kW
P TO	0,030	kW				
P <sub>SB</sub>	0,030	kW	Type of energy input		Electric	
P <sub>CK</sub>	0,000	kW				
				I.		
	Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
L <sub>WA</sub>	36 / na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Q <sub>HE</sub>	8339	kWh	flow rate, outdoor heat exchanger	-	2,3	m3/h
ater:					1	
	XL	_	Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	85	%
Qelec	9,721	kWh	Daily fuel consumption	Qfuel	na	kWh
AEC	2139	kWh	Annual fuel consumption	AFC	na	GJ
	of the product's life importance that the	cycle, it must be s product's refrige	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 g	reat
	Prated  or part load at in  Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pd	No No Yes No y heater: Yes r: Yes or medium-temperature application. Symbol Value  Prated 16 or part load at indoor temperatur  Pdh 9,9 Pdh 5,9 Pdh 4,5 Pdh 4,5 Pdh 15,6  Pdh 15,6  Pdh 15,6  Pdh 15,6  Pdh 0,98  Other than active mode Poff 0,030 Pro 0,030 Pr	No No Yes No Yes No Yheater: Yes Tryes Try	No Controller class:  Yes Controller contribution:  No Package efficiency:  y heater: Yes Package efficiency class:  Tryes  or medium-temperature application, except for low-temperature heat pumps. For low-temperature application.  Symbol Value Unit  Proted 16 kW  or part load at indoor temperature 20 °C and  Path 9,9 kW Path 5,9 kW Path 4,5 kW Path 4,4 kW Path 15,5 kW Path 15,6	No Energy efficiency class:  No Controller class:  Yes Controller contribution: 4  No Package efficiency: 185  Package efficiency class: 7  Yes Package efficiency class: 8  Yes Package efficiency class: 9  Yes Package efficiency class cl	No Energy efficiency class:

CTC EcoPart 616M + CTC EcoZenith i555