CTC AB Ljungby



Model(s):	CTC EcoPar	CTC EcoPart 612M/i612M					
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:	161	%		
Equipped with a supplementary heater:	No/yes	612M/i612M	Package efficiency class:		-		
Heat pump combination heater:	No						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	n _s	157	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	2,75] -
T j = + 7 °C	Pdh	5,3	kW	T j = +7 °C	COPd	3,78	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,12	<u> </u>
T j = bivalent temperature	Pdh	8,3	kW	T j = bivalent temperature	COPd	2,75	-
T j = operation limit temperature	Pdh	8,3	kW	T j = operation limit temperature	COPd	2,75	-
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}	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	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	•	Supplementary heater			-
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2687	kWh	flow rate, outdoor heat exchanger	-	1	m3/h
For heat pump combination he	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:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller trant, compressor oil and electrical/electronic ec not permitted.	offering a service	e of that type. t	is of great
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CTC AB Ljungby



Model(s):	CTC EcoPar	CTC EcoPart 612M/i612M					
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:	204	%		
Equipped with a supplementary heater:	No/yes	612M/i612M	Package efficiency class:		-		
Heat pump combination heater:	No						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	n _s	200	%
Declared capacity for heating f	or part load at ir	idoor temperatu	ire 20 °C and	Declared coefficient of performa	nce or prima	ry energy rat	tio for
outdoor temperature T j				part load at indoor temperature	20 °C and out	tdoor tempe	rature T j
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	10,0	kW	T j = +2 °C	COPd	4,29] -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,29	_
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	5,71	
T j = bivalent temperature	Pdh	10,0	kW	T j = bivalent temperature	COPd	4,29	-
T j = operation limit	Pdh	10,0	kW	T j = operation limit	COPd	na	1 .
temperature	7 077	10,0	- ""	temperature	co. u	- IIu	4
For air-to-water heat pumps:	Pdh	na	kW	For air-to-water heat pumps:	COPd	na	_
T j = -15 °C (if TOL < -20 °C)	7 077	114		T j = -15 °C (if TOL < -20 °C)	co. u	110	
P. 1	-			For air-to-water heat pumps:	T0/		
Bivalent temperature	T _{biv}	2	°C	Operation limit temperature	TOL	na	°C
Cycling interval capacity for	D	200	kW	Cycling interval efficiency	COPeuc	20	1
heating	P cych	na	KVV	Cycling interval efficiency	COPcyc	na	_ ·
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items						_	
				For air-to-water heat pumps:] _ "
Capacity control		Variable		Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	1	41/na	dB	For water-/brine-to-water heat			
outdoors	L _{WA}	41/110	- ""	pumps: Rated brine or water			
Annual energy consumption	Q_{HE}	2566	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination he	ater:	•	•		'		1
Declared load profile		NA		Water heating energy	η _{wh/-}	NA	%
·		1	1	efficiency/Energy class	,		4
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				a recycling station or with the installation engine t be sent correctly to a waste station or reseller			
of life information:		importance that th	e product's refrige	rant, compressor oil and electrical/electronic ed	-		-
0	CTC AD ALE	of the product as h		<u>'</u>		F000C	224240
Contact details	CTC AB, Näsväge	en ö, St-341 34 L	jungby TeI +46	5 372 88000 www.ctc.se		F0089	231218

Average climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoPar	t 612M/i612M			
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:	159	%
Equipped with a supplementary heater:	No/yes	612M/i612M	Package efficiency class:	A+++	-
Heat pump combination heater:	No				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η _s	155	%
Declared capacity for heating for outdoor temperature T j	or part load at in	idoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	6,0	kW	T j = - 7 °C	COPd	3,25] -
T j = + 2 °C	Pdh	3,7	kW	T j = +2 °C	COPd	4,18] -
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,70	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,34	<u> </u>
T j = bivalent temperature	Pdh	6,7	kW	T j = bivalent temperature	COPd	3,00	-
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}	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	-	Supplementary heater			-
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3444	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	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:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller trant, compressor oil and electrical/electronic ed not permitted.	offering a service	e of that type. t	is of great
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CTC AB Ljungby



Average climate and Low temperature	•					CIC
Model(s):	CTC EcoPa	CTC EcoPart 612M/i612M				
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:	212	%	
Equipped with a supplementary heater:	No/yes	612M/i612M	Package efficiency class:	A+++	-	
Heat numn combination heater:	No		_		-	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	η _s	208	%
Declared capacity for heating for	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performan	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and out	tdoor tempe	rature T j
T j = -7 °C	Pdh	8,8	kW	T j = - 7 °C	COPd	4,59] -
T j = + 2 °C	Pdh	5,4	kW	T j = +2 °C	COPd	5,60	-
T j = + 7 °C	Pdh	3,5	kW	T j = +7 °C	COPd	6,05	
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	9,8	kW	T j = bivalent temperature	COPd	4,30	-
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}	-10	°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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	-	Supplementary heater	,		-
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3800	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination he	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:		end of the product'	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller trant, compressor oil and electrical/electronic ed not permitted.	offering a servic	e of that type. t	is of great
Contact details	CTC AB, Näsväge	n 8, SE-341 34 Lj	jungby Tel +46	372 88000 www.ctc.se		F0089	231218

Cold climate and Medium temperature

CTC AB Ljungby



CTC EcoPart 612M/i612M							
No		Energy efficiency class:		-			
No		Controller class:	VI	-			
Yes		Controller contribution:	4	%			
No		Package efficiency:	167	%			
No/yes	612M/i612M	Package efficiency class:		-			
No							
	No No Yes No No/yes	No No Yes No No/yes 612M/i612M	No Energy efficiency class: No Controller class: Yes Controller contribution: No Package efficiency: No/yes 612M/i612M Package efficiency class:	No Energy efficiency class: No Controller class: VI Yes Controller contribution: 4 No Package efficiency: 167 No/yes 612M/i612M Package efficiency class:	No Energy efficiency class: - No Controller class: VI - Yes Controller contribution: 4 % No Package efficiency: 167 % No/yes 612M/i612M Package efficiency class: -		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	163	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = -7 °C	Pdh	4,46	kW	T j = - 7 °C	COPd	4,01] -
T j = + 2 °C	Pdh	2,7	kW	T j = +2 °C	COPd	4,66	-
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	5,17	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,51	-
T j = bivalent temperature	Pdh	7,5	kW	T j = bivalent temperature	COPd	2,86	-
T j = operation limit temperature	Pdh	7,54	kW	T j = operation limit temperature	COPd	2,86] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-22	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	-	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P _{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4158	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	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:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation enging the sent correctly to a waste station or reseller erant, compressor oil and electrical/electronic en the permitted.	offering a service	e of that type. t	is of great
Contact details	CTC AB, Näsväge	•		•		F0089	231218

Cold climate and Low temperature

CTC AB Ljungby



Model(s):	CTC EcoPar	t 612M/i612M				
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 supplementary heater:	No/yes	612M/i612M	Package efficiency class:		-	
Heat pump combination heater:	No					

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	η_{s}	210	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	idoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	7,0	kW	T j = - 7 °C	COPd	5,33] -
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	5,90] -
T j = + 7 °C	Pdh	2,8	kW	T j = +7 °C	COPd	5,95	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,74	↓ -
T j = bivalent temperature	Pdh	11,5	kW	T j = bivalent temperature	COPd	3,93	-
T j = operation limit temperature	Pdh	11,45	kW	T j = operation limit temperature	COPd	3,93	-
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}	-22	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	-	Supplementary heater			-
Off mode	P _{OFF}	0,013	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,034	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items					i		_
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5145	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:			<u> </u>			
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	Gl
Specific precautions and end of life information:		end of the product	s life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec not permitted.	offering a service	e of that type. t	is of great
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Warm climate and Medium temperatu	re		Ljungby	/	CIC
Model(s):	CTC EcoPart 612N	/ + CTC EcoZenith i360/ EcoVent i360F		•	
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:	161	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat numn combination heater:	Ves				

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	η _s	157	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	na	kW	T j = − 7 °C	COPd	na] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	2,75] -
T j = + 7 °C	Pdh	5,3	kW	T j = +7 °C	COPd	3,78	
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,12	-
T j = bivalent temperature	Pdh	8,3	kW	T j = bivalent temperature	COPd	2,75	-
T j = operation limit temperature	Pdh	8,3	kW	T j = operation limit temperature	COPd	2,75	_
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}	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	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2687	kWh	flow rate, outdoor heat exchanger	-	1	m3/h
For heat pump combination hea	iter:		•				
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed	offering a servic	e of that type. t	is of great

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Warm climate and Low temperature			Ljungby	<i>'</i>	CIC
Model(s):	CTC EcoPart 612N	/I + CTC EcoZenith i360/ EcoVent i360F			
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:	204	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	η_s	200	%
Declared capacity for heating foutdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2	•		
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	10,0	kW	T j = +2 °C	COPd	4,29	1 -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,29] -
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	5,71] -
T j = bivalent temperature	Pdh	10,0	kW	T j = bivalent temperature	COPd	4,29	-
T j = operation limit temperature	Pdh	10,0	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}	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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	•	Supplementary heater		•	•
Off mode	P _{OFF}	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2566	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

Average climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoPart 612M + CTC EcoZenith i360/ EcoVent i360F						
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:	159	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	155	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = -7 °C	Pdh	6,0	kW	T j = - 7 °C	COPd	3,25	-
T j = + 2 °C	Pdh	3,7	kW	T j = +2 °C	COPd	4,18	-
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,70	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,34	-
T j = bivalent temperature	Pdh	6,7	kW	T j = bivalent temperature	COPd	3,00	-
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}	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	•	Supplementary heater		•	
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,000	kW	[]			-
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3444	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product'	s life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec not permitted.	offering a servi	e of that type. t i	s of great

CTC AB Ljungby



Average climate and Low temperature			Ljungby		CIC
Model(s):	CTC EcoPart 612N				
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:	212	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-	_
Heat numn combination heater:	Ves		<u> </u>		

Heat pump combination heater: Yes

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	η _s	208	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	8,8	kW	T j = − 7 °C	COPd	4,59] -
T j = + 2 °C	Pdh	5,4	kW	T j = +2 °C	COPd	5,60] -
T j = + 7 °C	Pdh	3,5	kW	T j = +7 °C	COPd	6,05	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	9,8	kW	T j = bivalent temperature	COPd	4,30	-
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}	-10	°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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P _{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3800	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination hea	iter:		•				
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed	offering a servic	e of that type. t	is of great

Cold climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoPart 612N	/ + CTC EcoZenith i360/ EcoVent i360F			
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:	167	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	163	%
Declared capacity for heating foutdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2	•		
T j = -7 °C	Pdh	4,46	kW	T j = − 7 °C	COPd	4,01] -
T j = + 2 °C	Pdh	2,7	kW	T j = +2 °C	COPd	4,66	1 -
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	5,17	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,51	_
T j = bivalent temperature	Pdh	7,5	kW	T j = bivalent temperature	COPd	2,86	-
T j = operation limit temperature	Pdh	7,54	kW	T j = operation limit temperature	COPd	2,86	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-22	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW	[]		•	•
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4158	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:	_	end of the product	's life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

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

CTC AB Ljungby



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Model(s):	CTC EcoPart 612N	CTC EcoPart 612M + CTC EcoZenith i360/ EcoVent i360F						
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 supplementary heater:	Yes	Package efficiency class:		-				
Heat pump combination heater:	Yes				_			

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	η_s	210	%
Declared capacity for heating fo outdoor temperature T j	r part load at ir	idoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	7,0	kW	T j = - 7 °C	COPd	5,33] -
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	5,90] -
T j = + 7 °C	Pdh	2,8	kW	T j = +7 °C	COPd	5,95] -
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,74	-
T j = bivalent temperature	Pdh	11,5	kW	T j = bivalent temperature	COPd	3,93	-
T j = operation limit temperature	Pdh	11,45	kW	T j = operation limit temperature	COPd	3,93	_
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}	-22	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,013	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P_{TO}	0,034	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5145	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination hea	iter:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	recycling station or with the installation engine be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec	offering a servic	e of that type. t i	is of great

Warm climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoPart 612N	CTC EcoPart 612M + CTC EcoZenith i555					
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:	143	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	η_s	139	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	na	kW	T j = − 7 °C	COPd	na] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	2,51] -
T j = + 7 °C	Pdh	5,3	kW	T j = +7 °C	COPd	3,44	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	4,57	- 1
T j = bivalent temperature	Pdh	8,3	kW	T j = bivalent temperature	COPd	2,51	-
T j = operation limit temperature	Pdh	8,3	kW	T j = operation limit temperature	COPd	2,51	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	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	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,030	kW				
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3022	kWh	flow rate, outdoor heat exchanger	-	1	m3/h
For heat pump combination he	ater:					_	
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

CTC AB Ljungby



Warm climate and Low temperature			Ljungby	/	CIC
Model(s):	CTC EcoPart 612N	M + CTC EcoZenith i555			
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:	178	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				

					Symbol		
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	174	%
Declared capacity for heating fo	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j	•	·		part load at indoor temperature 2			
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	10,0	kW	T j = +2 °C	COPd	3,83	-
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	4,70	
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	5,02	-
T j = bivalent temperature	Pdh	10,0	kW	T j = bivalent temperature	COPd	3,83	-
T j = operation limit temperature	Pdh	10,0	kW	T j = operation limit temperature	COPd	3,83	-
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}	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	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode		Supplementary heater			
Off mode	P OFF	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,030	kW				
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2945	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination hea	ater:						
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product'	s life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec	offering a servic	e of that type. t	is of great

Average climate and Medium temperature

CTC AB Ljungby



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Model(s):	CTC EcoPart 612N	/I + CTC EcoZenith 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:	142	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-	
Heat pump combination heater:	Yes				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	138	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = -7 °C	Pdh	6,0	kW	T j = − 7 °C	COPd	2,96] -
T j = + 2 °C	Pdh	3,7	kW	T j = +2 °C	COPd	3,78] -
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,21	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	4,74	-
T j = bivalent temperature	Pdh	6,7	kW	T j = bivalent temperature	COPd	2,73	-
T j = operation limit temperature	Pdh	6,66	kW	T j = operation limit temperature	COPd	2,73	-
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}	-10	°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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	•	Supplementary heater			•
Off mode	P OFF	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,030	kW	[]			
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3839	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:						
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product'	s life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec not permitted.	offering a servi	ce of that type. t i	is of great

CTC AB Liungby



Average climate and Low temperature			Ljungby		CIC
Model(s):	CTC EcoPart 612N				
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:	187	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-	
Heat numn combination heater:	Voc				

Heat pump combination heater: Yes

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	10	kW	Seasonal space heating energy efficiency	η _s	183	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	8,8	kW	T j = − 7 °C	COPd	4,09] -
T j = + 2 °C	Pdh	5,4	kW	T j = +2 °C	COPd	4,96] -
T j = + 7 °C	Pdh	3,5	kW	T j = +7 °C	COPd	5,33	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,29	-
T j = bivalent temperature	Pdh	9,8	kW	T j = bivalent temperature	COPd	3,82	-
T j = operation limit temperature	Pdh	9,8	kW	T j = operation limit temperature	COPd	3,82] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-10	°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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,030	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,030	kW			•	
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4310	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination hea	ater:		•				
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servic	e of that type. t	is of great

Cold climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoPart 612M + CTC EcoZenith i555						
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:	149	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	145	%
Declared capacity for heating foutdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2	•		
T j = -7 °C	Pdh	4,5	kW	T j = − 7 °C	COPd	3,64] -
T j = + 2 °C	Pdh	2,7	kW	T j = +2 °C	COPd	4,18	1 -
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,59] -
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	4,88	_
T j = bivalent temperature	Pdh	7,5	kW	T j = bivalent temperature	COPd	2,61	-
T j = operation limit temperature	Pdh	7,54	kW	T j = operation limit temperature	COPd	2,61	-
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}	-22	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na] -
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	_	Supplementary heater		•	_
Off mode	P OFF	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,030	kW			•	•
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4634	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	eater:						
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

Cold climate and Low temperature



CTC AB

Cold climate and Low temperature			Ljungby	/	CIC
Model(s):	CTC EcoPart 612N	/I + CTC EcoZenith i555			
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:	189	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	η_{s}	185	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	7,0	kW	T j = - 7 °C	COPd	4,72] -
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	5,19	-
T j = + 7 °C	Pdh	2,8	kW	T j = +7 °C	COPd	5,22	
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,03	-
T j = bivalent temperature	Pdh	11,5	kW	T j = bivalent temperature	COPd	3,51	-
T j = operation limit temperature	Pdh	11,5	kW	T j = operation limit temperature	COPd	3,51] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-22	°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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	e <u>mode</u>	_	Supplementary heater		_	_
Off mode	P _{OFF}	0,030	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,030	kW				
Standby mode	P_{SB}	0,030	kW	Type of energy input		Electric	
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/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5836	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:						
Declared load profile		L		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	73/ B	%
Daily electricity consumption	Qelec	7,160	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1575	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec not permitted.	offering a servic	e of that type. t	is of great
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