Warm climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC EcoAir 406 +				
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	144	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				

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	5	kW	Seasonal space heating energy efficiency	η_s	140	%
Declared capacity for heating for and outdoor temperature T j	or part load at ir	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	na	kW	T j = -7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	2,43] -
T j = + 7 °C	Pdh	5,7	kW	T j = +7 °C	COPd	3,39	-
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,80	-
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,69	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,50	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: $T j = -15 \degree C \text{ (if TOL } < -20 \degree C \text{)}$	COPd	na	-
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes of	other than active	e mode		Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1947	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:			· ·		•	•
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the productimportance that t	ct's life cycle, it n the product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	rvice of that type	. t is of grea
Contact details (CTC AR Näsväge			-46 372 88000 www.ctc.se		F0001	2/1108



Warm climate and Low temperature			Ljungby	,	CIC
Model(s):	CTC EcoAir 406	+ CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	192	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				_

parameters shall be declared for	or low-temperat	ture application	١.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	188	%
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	1 -
T j = + 2 °C	Pdh	4,7	kW	T j = +2 °C	COPd	3,66	-
T j = + 7 °C	Pdh	6,3	kW	T j = +7 °C	COPd	4,96	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,45	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	3,79	-
T j = operation limit temperature	Pdh	4,7	kW	T j = operation limit temperature	COPd	3,87	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes	other than activ	e mode		Supplementary heater			•
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,019	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1451	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						•
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n the product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	rvice of that type	. t is of great
Contact details	CTC AB, Näsväge					F0001	241108

Information for heat pump space heaters and heat pump combination heaters CTC AB Ljungby **Average climate and Medium temperature** Model(s): CTC EcoAir 406 + CTC EcoLogic

wiodei(3).	CTC ECOAII 400 T CTC ECOLOGIC						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	119	%			
Equipped with a supplementary heater:	No	Package efficiency class:	A+	-			
Heat pump combination heater:	No						

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	115	%		
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20°C	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j					
T j = -7 °C	Pdh	3,5	kW	T j = - 7 °C	COPd	2,13] -		
T j = + 2 °C	Pdh	4,4	kW	T j = +2 °C	COPd	2,93] -		
T j = + 7 °C	Pdh	6,0	kW	T j = +7 °C	COPd	3,99	-		
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,21	-		
T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,44	-		
T j = operation limit temperature	Pdh	3,1	kW	T j = operation limit temperature	COPd	1,82	-		
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-		
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C		
Power consumption in modes of	other than activ	e mode	_	Supplementary heater			_		
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,9	kW		
Thermostat-off mode	P TO	0,006	kW						
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0,000	kW						
Other items							-		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h		
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water					
Annual energy consumption	Q_{HE}	3470	kWh	flow rate, outdoor heat exchanger	-	na	m3/h		
For heat pump combination he	ater:								
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%		
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh		
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ		
Specific precautions and end of life information:		end of the produ	ct's life cycle, it n	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	er offering a se	vice of that type	e. t is of grea		



		Ljurigby	<u> </u>	
CTC EcoAir 406 +	CTC EcoLogic			
Yes	Energy efficiency class:	A++	-	
No	Controller class:	VII	-	
No	Controller contribution:	3,5	%	
No	Package efficiency:	155	%	
No	Package efficiency class:	A++	-	
No				_
	Yes No No No No	Yes Energy efficiency class: No Controller class: No Controller contribution: No Package efficiency: No Package efficiency class:	CTC EcoAir 406 + CTC EcoLogic Yes Energy efficiency class: A++ No Controller class: VII No Controller contribution: 3,5 No Package efficiency: 155 No Package efficiency class: A++	CTC EcoAir 406 + CTC EcoLogic Yes Energy efficiency class: A++ - No Controller class: VII - No Controller contribution: 3,5 % No Package efficiency: 155 % No Package efficiency class: A++ -

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	151	%		
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20°C	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T					
T j = -7 °C	Pdh	3,9	kW	T j = -7 °C	COPd	3,16] -		
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	3,92	-		
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,25	-		
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,66	-		
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	3,35	-		
T j = operation limit temperature	Pdh	3,5	kW	T j = operation limit temperature	COPd	2,85	-		
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C		
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-		
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C		
Power consumption in modes of	other than activ	e mode	_	Supplementary heater			_,		
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,6	kW		
Thermostat-off mode	P TO	0,019	kW						
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric			
Crankcase heater mode	P _{CK}	0,000	kW						
Other items	-								
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h		
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water					
Annual energy consumption	Q _{HE}	2722	kWh	flow rate, outdoor heat exchanger	-	na	m3/h		
For heat pump combination he	ater:								
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%		
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh		
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ		
Specific precautions and end of life information:		end of the produ	ct's life cycle, it n the product's refi	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	vice of that type	. t is of grea		



Cold climate and Medium temperature			Ljungby	,	CIC
Model(s):	CTC EcoAir 406 +	+ CTC EcoLogic			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	107	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No				

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	5	kW	Seasonal space heating energy efficiency	η_{s}	103	%
Declared capacity for heating f and outdoor temperature T j	or part load at ii	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature	•		
T j = -7 °C	Pdh	3,6	kW	T j = - 7 °C	COPd	2,49] -
T j = + 2 °C	Pdh	4,5	kW	T j = +2 °C	COPd	3,22] -
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,34] -
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,44	-
T j = bivalent temperature	Pdh	3,4	kW	T j = bivalent temperature	COPd	2,37	-
T j = operation limit temperature	Pdh	1,7	kW	T j = operation limit temperature	COPd	1,67] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,6	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,76	-
Bivalent temperature	T _{biv}	-9	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	3,5	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4785	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:	•				•	•
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n the product's ref	at a recycling station or with the installation en nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electroni	ler offering a se	vice of that type	. t is of grea
	CTC 4.B. 41" "	Disnosing of the		hold waste is not permitted		F0001	

F0001



		Ljungby	/	CIC
CTC EcoAir 406 +	+ CTC EcoLogic			
Yes	Energy efficiency class:		-	
No	Controller class:	VII	-	
No	Controller contribution:	3,5	%	
No	Package efficiency:	135	%	
No	Package efficiency class:		-	
No				
	Yes No No No No	No Controller class: No Controller contribution: No Package efficiency: No Package efficiency class: No	CTC EcoAir 406 + CTC EcoLogic Yes Energy efficiency class: No Controller class: VII No Controller contribution: 3,5 No Package efficiency: 135 No Package efficiency class: No	Yes Energy efficiency class: - No Controller class: VII - No Controller contribution: 3,5 % No Package efficiency: 135 % No Package efficiency class: -

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	η_{s}	131	%
Declared capacity for heating for and outdoor temperature T j	or part load at in	door tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature	-		
T j = -7 °C	Pdh	4,0	kW	T j = - 7 °C	COPd	3,34] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	4,07	-
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,40	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,62	-
T j = bivalent temperature	Pdh	3,2	kW	T j = bivalent temperature	COPd	2,92	-
T j = operation limit temperature	Pdh	1,9	kW	T j = operation limit temperature	COPd	1,83	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,9	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	2,58	-
Bivalent temperature	T _{biv}	-13	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	2,2	kW
Thermostat-off mode	P _{TO}	0,019	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3045	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:	•	•				
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it m the product's refr	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic bold waste is not permitted	er offering a ser	vice of that type	. t is of great
Contact details	CTC AB, Näsväge					F0001	241108

Information for heat pump space heaters and heat pump combination heaters

Yes

No

Warm climate and Medium temperature

Model(s):

Air-to-water heat pump:

Water-to-water heat pump:

CTC AB Ljungby

VII



water-to-water neat pump:		NO		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	144	%	
Equipped with a supplementary	/ heater:	Yes		Package efficiency class:		_	
Heat pump combination heater		Yes					
			tion, except fo	or low-temperature heat pumps. For	low- temper	ature heat pu	ımps,
parameters shall be declared fo					•	·	• •
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η _s	140	%
Declared capacity for heating fooutdoor temperature T j	or part load at in	door temperatu	ure 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	٦ -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	2,43	1 -
T j = + 7 °C	Pdh	5,7	kW	T j = +7 °C	COPd	3,39	1 -
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,80] -
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,69	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,50	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	•
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	55	°C
Power consumption in modes o	ther than active	mode		Supplementary heater		•	
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	0,9	kИ
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			
Other items	' CK	0,000	KVV				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1947	kWh	flow rate, outdoor heat exchanger		na	m3,
For heat pump combination hea	ater:						
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	112	%
Daily electricity consumption	Qelec	6,835	kWh	Daily fuel consumption	Qfuel	na	kW
Annual electricity consumption	AEC	1504	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the produc	ct's life cycle, it mu	t a recycling station or with the installation en ust be sent correctly to a waste station or rese gerant, compressor oil and electrical/electron	eller offering a ser	vice of that type	. t is of g

CTC EcoAir 406 + CTC EcoZenith i360/ EcoVent i360F

Energy efficiency class:

Controller class:

CTC AB



Warm climate and Low temperatur		cat pa	, , , , , , , , , , , , , , , , , , , ,		Ljungby		CIC
Model(s):	СТ	C EcoAir 40	06 + CTC EcoZ	enith i360/ EcoVent i360F			
Air-to-water heat pump:	Ye	es .		Energy efficiency class:		-	
Water-to-water heat pump:	No)		Controller class:	VII	-	
Brine-to-water heat pump:	No)		Controller contribution	: 3,5	%	
Low-temperature heat pump:	No)		Package efficiency:	192	%	
Equipped with a supplementary heater	Ye	es .		Package efficiency class	s:	-	
Heat pump combination heater:	Ye	es .					
Parameters shall be declared for mediu parameters shall be declared for low-te	•		, ,	for low-temperature heat	pumps. For low- temp	erature heat	pumps,
Item Sym	bol	Value	Unit	Item	Symbol	Value	Unit

parameters shall be declared for	or low-tempera	ure application	١.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	188	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,7	kW	T j = +2 °C	COPd	3,66	-
T j = + 7 °C	Pdh	6,3	kW	T j = +7 °C	COPd	4,96	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,45	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	3,79	-
T j = operation limit temperature	Pdh	4,7	kW	T j = operation limit temperature	COPd	3,87	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,019	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items	·	1					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1451	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\scriptscriptstyle \sf wh}$	111,6	%
Daily electricity consumption	Qelec	6,835	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1504	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n the product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a ser	vice of that type	. t is of great

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Information for heat pump s Average climate and Medius	•		o combinati	on heaters	CTC AB Ljungby			
Model(s):	'		6 + CTC Ecoz	Zenith i360/ EcoVent i360F				
Air-to-water heat pump:		Yes		Energy efficiency class:	A+	-		
Water-to-water heat pump:		No		Controller class:	VII	-		
Brine-to-water heat pump:		No		Controller contribution:	3,5 %			
Low-temperature heat pump:		No		Package efficiency:	119 %			
Equipped with a supplementary	/ heater:	Yes		Package efficiency class:	A+	-		
Heat pump combination heater		Yes		,				
Parameters shall be declared fo parameters shall be declared fo				t for low-temperature heat pumps. F	or low- tempe	erature heat	pumps,	
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	115	%	
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of perform part load at indoor temperature	•			
T j = − 7 °C	Pdh	3,5	kW	T i = -7 °C	COPd	2,13	1 -	
T j = + 2 °C	Pdh	4,4	kW	T j = +2 °C	COPd	2,93	1 -	
T j = + 7 °C	Pdh	6,0	kW	T j = +7 °C	COPd	3,99	-	
Γ j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,21	_	
Γ j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,44	-	
Γ j = operation limit temperature	Pdh	3,1	kW	T j = operation limit temperature	COPd	1,82	-	
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-	
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C	
Power consumption in modes o	ther than activ		ì	Supplementary heater			7	
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,9	kW	
Thermostat-off mode	P _{TO}	0,006	kW					
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0,000	kW					
Other items							7	
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/l	
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water				
Annual energy consumption	Q_{HE}	3470	kWh	flow rate, outdoor heat exchanger	-	na	m3/l	
or heat pump combination hea	ater:			-				
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	98	%	
Doily alastricity consumntion	0 '			Daily fuel consumption	~ .		1	

kWh Daily electricity consumption Qelec 7,752 kWh Daily fuel consumption Qfuel na Annual electricity AEC 1705 Annual fuel consumption AFC na consumption

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.

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Information for heat pump sp Average climate and Low ter		and neat pump	combinati	on neaters	CTC AB Ljungby			
Model(s):	iiperature	CTC EcoAir 40	6 + CTC EcoZ	Zenith i360/ EcoVent i360F	LJunguy			
Air-to-water heat pump:		Yes		Energy efficiency class:	A++	-		
Water-to-water heat pump:		No		Controller class:	VII	-		
Brine-to-water heat pump:		No		Controller contribution:	3,5	%		
Low-temperature heat pump:		No		Package efficiency:	155 %			
Equipped with a supplementary	heater:	Yes		Package efficiency class:	A++	-		
Heat pump combination heater		Yes		The second secon				
			ation, except	for low-temperature heat pumps. F	or low- temp	erature heat	pumps	
parameters shall be declared fo	r low-temperat	ture application						
ltem	Symbol	Value	Unit	Item	Symbol	Value	Uni	
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	151	%	
Declared capacity for heating fo and outdoor temperature T j	or part load at i	ndoor temperat	cure 20 °C	Declared coefficient of performation part load at indoor temperature				
Г j = – 7 °C	Pdh	3,9	kW	T j = -7 °C	COPd	3,16	1 -	
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	3,92	1 -	
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,25] -	
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,66	-	
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	3,35	-	
T j = operation limit temperature	Pdh	3,5	kW	T j = operation limit temperature	COPd	2,85	-	
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C	
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-	
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C	
Power consumption in modes o	ther than activ	e <u>mode</u>		Supplementary heater			_	
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,6	kW	
Thermostat-off mode	P _{TO}	0,019	kW			·		
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0,000	kW					
Other items								
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/	
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water				
Annual energy consumption	Q _{HE}	2722	kWh	flow rate, outdoor heat exchanger	-	na	m3/	
	112			ckendinger				
For heat pump combination hea				exertanger				

Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	98	%
Daily electricity consumption	Qelec	7,752	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1705	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.



Cold climate and Medium temperature			Ljungby	/	CIC
Model(s):	CTC EcoAir 406 +	CTC EcoZenith i360/ EcoVent i360F			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	107	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	emperature applicatio	n, except for low-temperature heat pump	s. For low- te	emperature	e heat pumps,

parameters shall be declared for	or low-tempera	ture application	١.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	103	%
Declared capacity for heating f and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
Tj=-7°C	Pdh	3,6	kW	T j = - 7 °C	COPd	2,49] -
T j = + 2 °C	Pdh	4,5	kW	T j = +2 °C	COPd	3,22	-
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,34	-
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,44	-
T j = bivalent temperature	Pdh	3,4	kW	T j = bivalent temperature	COPd	2,37	-
T j = operation limit temperature	Pdh	1,7	kW	T j = operation limit temperature	COPd	1,67	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,6	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,76	-
Bivalent temperature	T _{biv}	-9	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na] -
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	3,5	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4785	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:	•					•
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	89	%
Daily electricity consumption	Qelec	8,552	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1881	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n the product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	rvice of that type	. t is of great
Contact details	CTC AB, Näsväge					F0001	241108



Cold climate and Low temperature			Ljungby	/	CIC
Model(s):	CTC EcoAir 406 +	CTC EcoZenith i360/ EcoVent i360F			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	135	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	emperature application	n, except for low-temperature heat pump	s. For low- te	emperature	e heat pumps,

narameters shall be declared for low-temperature application

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	131	%
Declared capacity for heating fand outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature	•		
Tj=-7°C	Pdh	4,0	kW	T j = -7 °C	COPd	3,34] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	4,07	1 -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,40] -
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,62	_
T j = bivalent temperature	Pdh	3,2	kW	T j = bivalent temperature	COPd	2,92	-
T j = operation limit temperature	Pdh	1,9	kW	T j = operation limit temperature	COPd	1,83	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	2,9	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	2,58	-
Bivalent temperature	T _{biv}	-13	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e mode	•	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	2,2	kW
Thermostat-off mode	P _{TO}	0,019	kW			•	
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3045	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:		•	-		•	•
Declared load profile/		XL / A		Water heating energy	η_{wh}	89	%
Energy efficiency class		T	1	efficiency			
Daily electricity consumption	Qelec	8,552	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1881	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the produ	ct's life cycle, it n the product's ref	at a recycling station or with the installation en nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electroni	ler offering a se	vice of that type	. t is of grea
		Disposing of the		AC 272 00000		F0001	

Contact details

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Warm climate and Medium tempe	rature			Ljungby		
Model(s):	CTC EcoAir 4	106 + CTC Eco2	Zenith i255			
Air-to-water heat pump:	Yes		Energy efficiency class:		-	
Water-to-water heat pump:	No		Controller class:	VII	-	
Brine-to-water heat pump:	No		Controller contribution:	3,5	%	
Low-temperature heat pump:	No		Package efficiency:	135	%	
Equipped with a supplementary heater	: Yes		Package efficiency class:		-	
Heat pump combination heater: Parameters shall be declared for mediu parameters shall be declared for low-te			t for low-temperature heat pump	os. For low- tem	perature	heat pumps,
Item Syn		Unit	Item	Symbol	Val	ue Unit

Item	Symbol	Value	Unit	Item	Symbol	Value	Uni
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	131	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20°C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	2,24] -
T j = + 7 °C	Pdh	5,7	kW	T j = +7 °C	COPd	3,16] -
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,54	-
T j = bivalent temperature	Pdh	4,4	kW	T j = bivalent temperature	COPd	2,37	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,31	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: $T j = -15 ^{\circ}C \text{ (if TOL } < -20 ^{\circ}C \text{)}$	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°(
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°(
Power consumption in modes of	other than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,4	kV
Thermostat-off mode	P _{TO}	0,010	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3,
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1866	kWh	flow rate, outdoor heat exchanger	-	na	m3,
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	$\eta_{\scriptscriptstyle \sf wh}$	71	%
Daily electricity consumption	Qelec	6,566	kWh	Daily fuel consumption	Qfuel	na	kW
Annual electricity consumption	AEC	1445	kWh	Annual fuel consumption	AFC	na	G.
Specific precautions and end of life information:		end of the productimportance that t	ct's life cycle, it n the product's ref	at a recycling station or with the installation en nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	rvice of that type	t is of



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	low- tempera

parameters shall be declared for low-temperature application

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	174	%
Declared capacity for heating for and outdoor temperature T j	or part load at ir	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
Tj=-7°C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,7	kW	T j = +2 °C	COPd	3,32	1 -
T j = + 7 °C	Pdh	6,3	kW	T j = +7 °C	COPd	4,60	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,06	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	3,44	-
T j = operation limit temperature	Pdh	4,7	kW	T j = operation limit temperature	COPd	3,53	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes of	other than active	mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	P TO	0,027	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1568	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	$\eta_{\scriptscriptstyle wh}$	71	%
Daily electricity consumption	Qelec	6,566	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1445	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n he product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel igerant, compressor oil and electrical/electronic	ler offering a ser	vice of that type	. t is of grea

Contact details

Information for heat pump space heaters and heat pump combination heaters CTC AB **Average climate and Medium temperature** Ljungby CTC EcoAir 406 + CTC EcoZenith i255 Model(s): Air-to-water heat pump: Yes Energy efficiency class: **A**+ No Controller class: VII Water-to-water heat pump: No Controller contribution: 3,5 % Brine-to-water heat pump: Package efficiency: No 125 % Low-temperature heat pump: Equipped with a supplementary heater: Yes Package efficiency class: A++ Heat pump combination heater: 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. Unit Symbol Value Unit Symbol Value Seasonal space heating energy Rated heat output (*) Prated 5 kW 121 % η_s efficiency Declared capacity for heating for part load at indoor temperature 20 °C Declared coefficient of performance or primary energy ratio for and outdoor temperature T j part load at indoor temperature 20 °C and outdoor temperature T j

and outdoor temperature T j				part load at indoor temperature	20 °C and or	itdoor tempe	rature T j
T j = -7 °C	Pdh	3,8	kW	T j = - 7 °C	COPd	2,23] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	3,20	-
T j = + 7 °C	Pdh	6,3	kW	T j = +7 °C	COPd	4,05	-
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,95	-
T j = bivalent temperature	Pdh	4,2	kW	T j = bivalent temperature	COPd	2,64	-
T j = operation limit temperature	Pdh	3,3	kW	T j = operation limit temperature	COPd	1,90	-
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}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than activ	ve mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,018	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3288	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination h	eater:						
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	$\eta_{\scriptscriptstyle wh}$	59	%
Daily electricity consumption	Ooloc	7 902	k\A/b	Daily fuel consumption	06	NA	k\A/h

For neat pump combination ne	eater:						
Declared load profile	L	Efficiency class	В	Water heating energy efficiency	$\eta_{\scriptscriptstyle \sf wh}$	59	%
Daily electricity consumption	Qelec	7,902	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1738	kWh	Annual fuel consumption	AFC	NA	GJ

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.

Information for heat pump sp Average climate and Low ter	on heaters	CTC AB Ljungby		CTC			
Model(s):		CTC EcoAir 40	06 + CTC Eco2	Zenith i255			
Air-to-water heat pump:		Yes		Energy efficiency class:	A+	-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		No		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	140	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:	A+	-	
Heat pump combination heater:	:	Yes					
				t for low-temperature heat pumps. F	or low- tempe	erature heat	pumps,
parameters shall be declared fo	r low-temperat	ure application	١.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	136	%
Declared capacity for heating fo and outdoor temperature T j	r part load at ii	ndoor tempera	ture 20 °C	Declared coefficient of perform part load at indoor temperature	•		
T j = - 7 °C	Pdh	3,9	kW	T j = - 7 °C	COPd	2,81	1 -
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	3,54] -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	4,87] -
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,25	-
T j = bivalent temperature	Pdh	4,2	kW	T j = bivalent temperature	COPd	3,07] -
T j = operation limit temperature	Pdh	3,5	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}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,96		Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes o	ther than activ	e mode		Supplementary heater			
				1 1			1
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,0	kW

Power consumption in modes	other than active	mode	
Off mode	P OFF	0,018	kW
Thermostat-off mode	P _{TO}	0,027	kW
Standby mode	P _{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items			

 L_{WA}

Q_{HE}

Fixed

na/56

3244

	Ī		1
For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
For water-/brine-to-water heat pumps: Rated brine or water			
flow rate, outdoor heat	-	na	m3/h

Electric

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Capacity control

outdoors

Declared load profile	L	Efficiency class	В	Water heating energy efficiency	η_{wh}	59	%
Daily electricity consumption	Qelec	7,902	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1738	kWh	Annual fuel consumption	AFC	NA	GJ

dΒ

kWh

Specific precautions and end of life information:

The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.

Type of energy input

Disnosing of the product as household waste is not per



Cold climate and Medium temperature			Ljungb	У	CIC
Model(s):	CTC EcoAir 406 +	- CTC EcoZenith i255			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	99	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	mperature application	on, except for low-temperature heat pump	s. For low- t	emperature	e heat pumps,

parameters shall be declared for low-temperature application

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	95	%
Declared capacity for heating for and outdoor temperature T j	or part load at ir	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	3,6	kW	T j = - 7 °C	COPd	2,29	-
T j = + 2 °C	Pdh	4,5	kW	T j = +2 °C	COPd	2,97] -
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,07	-
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,15	-
T j = bivalent temperature	Pdh	3,5	kW	T j = bivalent temperature	COPd	2,23	-
T j = operation limit temperature	Pdh	1,7	kW	T j = operation limit temperature	COPd	0,96	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,6	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,55	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	3,9	kW
Thermostat-off mode	P _{TO}	0,010	kW				-
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•					-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5625	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	$\eta_{\scriptscriptstyle wh}$	52	%
Daily electricity consumption	Qelec	8,931	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1965	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the productimportance that t	ct's life cycle, it n the product's ref	at a recycling station or with the installation enquest be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic hold waste is not permitted.	ler offering a se	vice of that type	. t is of grea

Contact details



		Ljungby	/	CIC
CTC EcoAir 406 +	+ CTC EcoZenith i255			
Yes	Energy efficiency class:		-	
No	Controller class:	VII	-	
No	Controller contribution:	3,5	%	
No	Package efficiency:	120	%	
Yes	Package efficiency class:		-	
Yes		•		
	Yes No No No Yes	No Controller class: No Controller contribution: No Package efficiency: Yes Package efficiency class:	CTC EcoAir 406 + CTC EcoZenith i255 Yes Energy efficiency class: No Controller class: VII No Controller contribution: 3,5 No Package efficiency: 120 Yes Package efficiency class:	Yes Energy efficiency class: - No Controller class: VII - No Controller contribution: 3,5 % No Package efficiency: 120 % Yes Package efficiency class: -

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	116	%
Declared capacity for heating for and outdoor temperature T j	or part load at ir	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
Tj=-7°C	Pdh	4,0	kW	T j = - 7 °C	COPd	3,32] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	4,05] -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,38	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,61	-
T j = bivalent temperature	Pdh	3,6	kW	T j = bivalent temperature	COPd	2,64	-
T j = operation limit temperature	Pdh	1,9	kW	T j = operation limit temperature	COPd	1,83	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,9	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	2,53	-
Bivalent temperature	T _{biv}	-10	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than active	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	3,3	kW
Thermostat-off mode	P _{TO}	0,027	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q_{HE}	4331	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	L	Efficiency class	na	Water heating energy efficiency	$\eta_{\scriptscriptstyle \sf wh}$	52	%
Daily electricity consumption	Qelec	8,931	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1965	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the productimportance that t	ct's life cycle, it n the product's ref	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel igerant, compressor oil and electrical/electronic	ler offering a se	vice of that type	. t is of grea



•							
Model(s):	CTC EcoAir 406 + CTC EcoZenith i555						
Air-to-water heat pump:	Yes	Energy efficiency class:		-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	137	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			
Heat pump combination heater:	Yes						

Item	Symbol	Value	Unit	Item	Symbol	Value	
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	133	
Declared capacity for heating for outdoor temperature T j	or part load at i	ndoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature	-		
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na	1
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	2,24	
T j = + 7 °C	Pdh	5,7	kW	T j = +7 °C	COPd	3,19	
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,56	
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,50	
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,31	
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	
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	55	
Power consumption in modes of	ther than activ	re mode	_	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,9	
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•				-	
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	n
Sound power level, indoors/ outdoors	L _{WA}	na/56	dВ	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2051	kWh	flow rate, outdoor heat exchanger		na	n
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	85	
Daily electricity consumption	Qelec	8,943	kWh	Daily fuel consumption	Qfuel	NA	k
Annual electricity consumption	AEC	1967	kWh	Annual fuel consumption	AFC	NA	
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 t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic e	offering a servi	ce of that type. t	is of
Contact details (TC AR Näsväg	en 8 SF-341 34 Li	ousebold waste is iunghy Tel +46			F0001	24



Model(s):	CTC EcoAir 406 + CTC EcoZenith i555						
Air-to-water heat pump:	Yes	Energy efficiency class:		-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	179	%			
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	5	kW	Seasonal space heating energy efficiency	η_{s}	175	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,7	kW	T j = +2 °C	COPd	3,32] -
T j = + 7 °C	Pdh	6,3	kW	T j = +7 °C	COPd	4,60	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,06	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	3,44	-
T j = operation limit temperature	Pdh	4,7	kW	T j = operation limit temperature	COPd	3,53	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes of	other than active	mode	•	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,023	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•	•				-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q_{HE}	1555	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	85	%
Daily electricity consumption	Qelec	8,943	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1967	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	s life cycle, it mus	a 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 service	e of that type. t	is of great
Contact details	CTC AB, Näsväge	of the product as h	ousehold waste is	372 88000 www.ctc.se		F0001	241108



Model(s):	CTC EcoAir 406 + CTC EcoZenith i555						
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	116	%			
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	5	kW	Seasonal space heating energy efficiency	η_{s}	112	%
Declared capacity for heating outdoor temperature T j	for part load at in	ndoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature	-		
T j = -7 °C	Pdh	3,5	kW	T j = - 7 °C	COPd	2,01] -
T j = + 2 °C	Pdh	4,7	kW	T j = +2 °C	COPd	3,01	-
T j = + 7 °C	Pdh	5,9	kW	T j = +7 °C	COPd	3,75	-
T j = + 12 °C	Pdh	7,2	kW	T j = +12 °C	COPd	4,69	-
T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,35	-
T j = operation limit temperature	Pdh	2,9	kW	T j = operation limit temperature	COPd	1,66	-
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}	-4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than activ	e mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	2,0	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3550	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination h	eater:						
Declared load profile	XL	Efficiency class	В	Water heating energy efficiency	η_{wh}	73	%
Daily electricity consumption	Qelec	10,407	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2289	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that the	's life cycle, it mus	a recycling station or with the installation engin t be sent correctly to a waste station or reseller erant, compressor oil and electrical/electronic en and permitted	offering a service	ce of that type. t	is of great
Contact details	CTC AB, Näsväge	en 8, SE-341 34 Lj				F0001	241108



Average climate and Low temperature			Ljungby	,	CIC
Model(s):	CTC EcoAir 406 +	CTC EcoZenith i555			
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-	
Water-to-water heat pump:	No	Controller class:	VII	-	
Brine-to-water heat pump:	No	Controller contribution:	3,5	%	
Low-temperature heat pump:	No	Package efficiency:	141	%	
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	5	kW	Seasonal space heating energy efficiency	η_{s}	137	%
Declared capacity for heating for outdoor temperature T j	or part load at in	ndoor temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2	=		
T j = -7 °C	Pdh	3,9	kW	T j = - 7 °C	COPd	2,81	-
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	3,53	-
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	4,86	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,25	-
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	2,99	-
T j = operation limit temperature	Pdh	3,5	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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e <u>mode</u>	-	Supplementary heater			=
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,023	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2998	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	В	Water heating energy efficiency	η_{wh}	73	%
Daily electricity consumption	Qelec	10,407	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2289	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that th	'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 rrant, compressor oil and electrical/electronic ed	offering a service	e of that type. t	is of great
	CTC AB, Näsväge		ousahold wasta is				



old climate and Medium temperature							
Model(s):	СТ	C EcoAir 406	+ CTC EcoZe	nith i555		•	•
Air-to-water heat pump:	Υe	es		Energy efficiency class:		-	
Water-to-water heat pump:	No	0		Controller class:	VII	-	
Brine-to-water heat pump:	No	0		Controller contribution:	3,5	%	
Low-temperature heat pump:	No	0		Package efficiency:	99	%	
Equipped with a supplementary heater:	Ye	es		Package efficiency class	:	-	
Heat pump combination heater:	Ye	es					
Parameters shall be declared for mediu parameters shall be declared for low-te	•		ion, except fo	or low-temperature heat pur	mps. For low- temper	rature heat pi	umps,
Item Sym	nbol	Value	Unit	Item	Symbol	Value	Unit
				7 L			

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η_s	95	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature	•		
T j = - 7 °C	Pdh	3,6	kW	T j = - 7 °C	COPd	2,29] -
T j = + 2 °C	Pdh	4,5	kW	T j = +2 °C	COPd	2,97] -
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,07	-
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,15	-
T j = bivalent temperature	Pdh	3,5	kW	T j = bivalent temperature	COPd	2,23	-
T j = operation limit temperature	Pdh	1,7	kW	T j = operation limit temperature	COPd	0,96	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,589	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	1,554	-
Bivalent temperature	T _{biv}	-8	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes o	ther than active	e <u>mode</u>	=	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	3,9	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5609	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hea	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	66	%
Daily electricity consumption	Qelec	11,646	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2562	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 engir t be sent correctly to a waste station or reselle erant, compressor oil and electrical/electronic e and permitted	r offering a servi	ce of that type. t	is of great



Model(s):	CTC EcoAir 406 + C	CTC EcoAir 406 + CTC EcoZenith i555					
Air-to-water heat pump:	Yes	Energy efficiency class:		-			
Water-to-water heat pump:	No	Controller class:	VII	-			
Brine-to-water heat pump:	No	Controller contribution:	3,5	%			
Low-temperature heat pump:	No	Package efficiency:	120	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:		-			
Heat pump combination heater:	Yes						
Parameters shall be declared for medium-te	mperature application,	except for low-temperature heat pumps.	For low- tem	perature heat pumps,			

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	5	kW	Seasonal space heating energy efficiency	η_{s}	116	%
Declared capacity for heating for outdoor temperature T j	or part load at i	ndoor temperatu	ire 20 °C and	Declared coefficient of performar part load at indoor temperature 2	-		
T j = -7 °C	Pdh	4,0	kW	T j = - 7 °C	COPd	2,97] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	3,67] -
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,00	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,22	-
T j = bivalent temperature	Pdh	3,4	kW	T j = bivalent temperature	COPd	1,49	-
T j = operation limit temperature	Pdh	1,9	kW	T j = operation limit temperature	COPd	2,69	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,197	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	2,197	-
Bivalent temperature	T _{biv}	-11	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,96	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e <u>mode</u>	-	Supplementary heater			=
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	2,9	kW
Thermostat-off mode	P _{TO}	0,023	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3993	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	η_{wh}	66	%
Daily electricity consumption	Qelec	11,646	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2562	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus	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	offering a servi	ce of that type. t	is of great
Contact details	CTC AB, Näsväg	en 8, SE-341 34 L	jungby Tel +46	372 88000 www.ctc.se		F0001	241108



Model(s):	CTC EcoAir 406 +	- CTC Basicstyrning		
Air-to-water heat pump:	Yes	Energy efficiency class:		-
Water-to-water heat pump:	No	Controller class:	1	-
Brine-to-water heat pump:	No	Controller contribution:	1	%
Low-temperature heat pump:	No	Package efficiency:	141	%
Equipped with a supplementary heater:	No	Package efficiency class:		-
Heat pump combination heater:	No			
Parameters shall be declared for medium-te	mnerature annlication	on except for low-temperature heat number	s For low- te	emnerature heat numns

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	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	140	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature	•		
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	2,43	-
T j = + 7 °C	Pdh	5,7	kW	T j = +7 °C	COPd	3,39	-
T j = + 12 °C	Pdh	7,5	kW	T j = +12 °C	COPd	4,80	-
T j = bivalent temperature	Pdh	4,5	kW	T j = bivalent temperature	COPd	2,69	-
T j = operation limit temperature	Pdh	4,3	kW	T j = operation limit temperature	COPd	2,50	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	4	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	55	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1947	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:					•	•
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n he product's ref	at a recycling station or with the installation en nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electroni	ler offering a se	vice of that type	. t is of grea
		i lichocing of the r		hold waste is not permitted		F0001	



Warm climate and Low temperature			Ljungby	/	CIC
Model(s):	CTC EcoAir 406	+ CTC Basicstyrning			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	I	-	
Brine-to-water heat pump:	No	Controller contribution:	1	%	
Low-temperature heat pump:	No	Package efficiency:	189	%	
Equipped with a supplementary heater:	No	Package efficiency class:		-	
Heat pump combination heater:	No			•	

Rated heat output (*) Proted 5 kW Seasonal space heating energy efficiency Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j T j = -7 °C T j = +2 °C Pdh T j = +2 °C T j = bivalent temperature Pdh A,8 KW T j = operation limit temperature Pdh A,7 kW T j = operation limit temperature For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) Bivalent temperature T biv 3 °C For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) Bivalent temperature T biv 3 °C Cycling interval capacity for heating Peycrh Power consumption in modes other than active mode Off mode Porr Oynous Standby mode Pro Oynous Crankcase heater mode Pro Oynous LwA Na/56 AB T j = operation limit temperature For air-to-water heat pumps: Operation limit temperature Supplementary lefficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors Fixed Sound power level, indoors/ outdoors Annual energy consumption QHE Annual energy consumption Qelec na KWh Annual fuel consumption Annual electricity AEC na KWh Annual fuel consumption	Symbol	Value	Uni
part load at indoor temperature $2 \times 10^{-1} = -7 $	η_s	188	%
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	nce or prim	nary energy ra	tio for
Tj = +2 °C j = +7 °C j = +7 °C j = +7 °C j = +12 °	20 °C and o	utdoor tempe	erature [·]
Tj = +7 °C Pdh Pdh T,9 RW Tj = +12 °C Pdh T,9 RW Tj = +12 °C Tj = bivalent temperature Pdh	COPd	na] -
T j = +12 °C Pdh 7,9 KW T j = bivalent temperature Pdh 4,8 KW T j = bivalent temperature T j = operation limit Pdh 4,7 KW T j = bivalent temperature T j = operation limit T j = operation limi	COPd	3,66	
T j = bivalent temperature Pdh 4,8 KW T j = bivalent temperature T j = operation limit temperature For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) Pdh na RW For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) Power consumption in modes other than active mode Degradation co-efficient Cower consumption in modes other than active mode Defremode Porr Operation limit temperature Cycling interval capacity for leating Power consumption in modes other than active mode Defremode Porr Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoor heat exchanger For otheat pump combination heater: Declared load profile Nanual electricity AEC Nanual fuel consumption Annual fuel consumption	COPd	4,96	
Tj = operation limit emperature For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Tj = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature Cycling interval capacity for leating P cych Ina RW Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoor heat exchanger For heat pump combination heater: Opeclared load profile Ina Water heating energy efficiency Daily electricity consumption Annual electricity AEC Ina RWh Annual fuel consumption	COPd	6,45	
temperature or air-to-water heat pumps: i j = -15 °C (if TOL < -20 °C) Pdh na kW For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature Cycling interval capacity for leating P cych na kW Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Operation limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Attraction of the pump consumption Attraction of the pump combination heater: Declared load profile Namual electricity AEC na kW Annual fuel consumption Annual fuel consumption Annual fuel consumption	COPd	3,79	-
temperature for air-to-water heat pumps: $j = -15 ^{\circ} \text{C} (\text{if TOL} < -20 ^{\circ} \text{C})$ Ana kW For air-to-water heat pumps: $j = -15 ^{\circ} \text{C} (\text{if TOL} < -20 ^{\circ} \text{C})$ Ana kW For air-to-water heat pumps: $j = -15 ^{\circ} \text{C} (\text{if TOL} < -20 ^{\circ} \text{C})$ For air-to-water heat pumps: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Operation limit temperature Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors And By Ana heat pump combination heater: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors Rated air flow rate, outdoors heat pumps: Rated brine or water flow rate, outdoor heat exchanger For heat pump combination heater: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors heat exchanger Water heating energy efficiency Daily fuel consumption Annual fuel consumption	COPd	2.07	
T j = -15 °C (if TOL < -20 °C) Path Na RW T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature Cycling interval capacity for eating P cych Na RW Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-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 Operation limit temperature Cycling interval efficiency Supplementary heater Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Supplementary heater Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Supplementary heater Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Rated heat output (*) T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Rated heat output (*) Type of energy input For air-to-water heat pumps: Rated heat output (*) For air-to-water heat pumps: Rated heat output (*) For air-to-water heat pumps: Rated heat output (*) For air-to-water heat pumps: Rated	СОРа	3,87	
Sivalent temperature T biv 3 °C For air-to-water heat pumps: Operation limit temperature Cycling interval capacity for leating begradation co-efficient Cycling interval efficiency Degradation co-efficient Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input	605.4		
Operation limit temperature Operation limit lemperature Operation limit lemperature Operation limit lemperature Operation limit	COPd	na	-
Operation limit temperature Operation limit lemperature Operation limit lemperature Operation limit lemperature Operation limit			1
Cycling interval capacity for neating Power addition co-efficient Cdh O,97 - Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input Type of	TOL	2	°C
Degradation co-efficient Cdh O,97 - Heating water operating limit temperature Supplementary heater Rated heat output (*) Type of energy input 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 For heat pump combination heater: Declared load profile Nanual electricity AEC Pospt Annual fuel consumption Annual fuel consumption Cycling interval efficiency Heating water operating limit temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input 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 Water heating energy efficiency Daily fuel consumption Annual fuel consumption			-
temperature Tower consumption in modes other than active mode Tower consumption in modes other than active mode To find mode	COPcyc	na	-
temperature Supplementary heater Supplementary heater Rated heat output (*) Type of energy input Type of	WTOL	55	۰۵
Off mode Poff One pro			
Thermostat-off mode Pro O,019 kW Standby mode Pro O,018 kW Type of energy input	0	0.5	T kw
Type of energy input 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 For heat pump combination heater: Declared load profile Type of energy input Type of energy input 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 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 For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoor	Psup	0,5	KVI
Crankcase heater mode P ck O,000 KW Other items Capacity control Fixed 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 For heat pump combination heater: Oeclared load profile Nanual electricity AEC Nanual flow Annual fuel consumption Annual fuel consumption Annual fuel consumption		Flactuia	
Dither items Capacity control Fixed Fixed 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 exchanger For heat pump combination heater: Declared load profile Daily electricity consumption Annual electricity AEC Na Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Water heating energy efficiency Daily fuel consumption Annual electricity AEC Na Rated air flow rate, outdoors For water-/brine-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 Daily fuel consumption Annual fuel consumption		Electric	
Fixed 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 exchanger For air-to-water heat pumps: For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger For air-to-water heat pumps: Water heating energy efficiency Daily electricity consumption Annual electricity AEC Page 1451 ABB Annual fuel consumption Annual fuel consumption			
apacity control ound power level, indoors/ utdoors unual energy consumption Ound power level, indoors/ utdoors I wa na/56 I dB I dB I dB I 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, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors Water heating energy efficiency Daily fuel consumption AEC Daily fuel consumption		·	_
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 exchanger For heat pump combination heater: Declared load profile	_	4100	m3/
putdoors Annual energy consumption QHE 1451 Wh pumps: Rated brine or water flow rate, outdoor heat exchanger flow rate, outdoor heat exchanger Water heating energy efficiency Daily electricity consumption Annual electricity AEC na kWh Annual fuel consumption		4100	11137
Annual energy consumption Q HE 1451 kWh pumps: Rated brine or water flow rate, outdoor heat exchanger exchanger			
Annual energy consumption Q HE 1451 kWh exchanger For heat pump combination heater: Declared load profile na Water heating energy efficiency Daily electricity consumption Qelec na kWh Daily fuel consumption Annual electricity AEC na kWh Annual fuel consumption			
Cor heat pump combination heater: Declared load profile Deally electricity consumption Annual electricity AEC na Water heating energy efficiency Daily fuel consumption Annual electricity AEC na kWh Annual fuel consumption	-	na	m3/
Daily electricity AEC na kWh Annual electricity AEC na kWh Annual fuel consumption Annual fuel consumption			•
Annual electricity AEC na kWh Annual fuel consumption	η_{wh}	na	%
AEC I na I kWh IAnnual fuel consumption	Qfuel	na	kW
consumption	AFC	na	GJ
The packaging must be deposited at a recycling station or with the installation engired end of the product's life cycle, it must be sent correctly to a waste station or reselle importance that the product's refrigerant, compressor oil and electrical/electronic electronic ele	ler offering a se	ervice of that type	e. t is of g



Average climate and Medium temperature				/	CIC
Model(s):	CTC EcoAir 406	CTC Basicstyrning			
Air-to-water heat pump:	Yes	Energy efficiency class:	A+	-	
Water-to-water heat pump:	No	Controller class:	I	-	
Brine-to-water heat pump:	No	Controller contribution:	1	%	
Low-temperature heat pump:	No	Package efficiency:	116	%	
Equipped with a supplementary heater:	No	Package efficiency class:	A+	-	
Heat pump combination heater:	No			•	

parameters shall be declared for Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	n _s	115	%
Declared capacity for heating for and outdoor temperature T j	or part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	3,5	kW	T j = - 7 °C	COPd	2,13] -
T j = + 2 °C	Pdh	4,4	kW	T j = +2 °C	COPd	2,93	-
T j = + 7 °C	Pdh	6,0	kW	T j = +7 °C	COPd	3,99	-
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,21	-
T j = bivalent temperature	Pdh	3,8	kW	T j = bivalent temperature	COPd	2,44	-
T j = operation limit temperature	Pdh	3,1	kW	T j = operation limit temperature	COPd	1,82	-
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,9	kW
Thermostat-off mode	P _{TO}	0,006	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3470	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:	•				•	
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it n the product's ref	at a recycling station or with the installation en nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	rvice of that type	. t is of great
Contact details	CTC AB, Näsväge					F0001	241108

CTC AB



Average climate and Low tempera	ture				Ljung	by		
Model(s):		CTC EcoAir 4	06 + CTC Basi	cstyrning				
Air-to-water heat pump:		Yes		Energy efficiency cl	ass: A++	-		
Water-to-water heat pump:		No		Controller class:	1	-		
Brine-to-water heat pump:		No		Controller contribu	tion: 1	%		
Low-temperature heat pump:		No		Package efficiency:	152	%		
Equipped with a supplementary heate	r:	No		Package efficiency	class: A++	-		
Heat pump combination heater:		No						
Parameters shall be declared for medi	um-tempe	erature applic	ation, except	for low-temperature h	eat pumps. For low-	· temperat	ure heat	pumps,
parameters shall be declared for low-t	emperatu	ire applicatioi	1.					
Item Syr	nbol	Value	Unit	Item	Syn	nbol	Value	Unit
				1 1				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	n _s	151	%
Declared capacity for heating for and outdoor temperature T j	or part load at ii	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	3,9	kW	T j = - 7 °C	COPd	3,16] -
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	3,92	-
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,25	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,66	-
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	3,35	-
T j = operation limit temperature	Pdh	3,5	kW	T j = operation limit temperature	COPd	2,85	-
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}	-5	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-10	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes of	ther than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,019	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/ outdoors	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2722	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination hear	ater:						
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production	ct's life cycle, it m the product's refr	at a recycling station or with the installation engust be sent correctly to a waste station or resel igerant, compressor oil and electrical/electronic bold waste is not permitted.	ler offering a ser	vice of that type	. t is of gre



Cold climate and Medium te	Information for neat pump space neaters and neat pump combination neaters Cold climate and Medium temperature						
Model(s):		CTC EcoAir 40	06 + CTC Basi	cstyrning			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	I	-	
Brine-to-water heat pump:		No		Controller contribution:	1	%	
Low-temperature heat pump:		No		Package efficiency:	104	%	
Equipped with a supplementary	heater:	No		Package efficiency class:		-	
Heat pump combination heater:		No					
Parameters shall be declared for	r medium-tem _l	perature applic	ation, except	for low-temperature heat pumps. For	or low- tempe	erature heat	pumps,
parameters shall be declared for	•						
Item	Symbol	Value	Unit	Item	Symbol	Value	Uni
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	103	%
Declared capacity for heating fo	r part load at i	ndoor tempera	ture 20 °C	Declared coefficient of performa	ince or prima	ry energy ra	tio for
and outdoor temperature T j				part load at indoor temperature			
T i = - 7 °C	Pdh	3,6	kW	T j = - 7 °C	COPd	2,49	1 _
Γj=+2°C	Pdh	4,5	kW	T i = +2 °C	COPd	3,22	1 .
T j = + 7 °C	Pdh	6,1	kW	T j = +7 °C	COPd	4,34	1 -
T j = + 12 °C	Pdh	7,6	kW	T j = +12 °C	COPd	5,44	1 -
T j = bivalent temperature	Pdh	3,4	kW	T j = bivalent temperature	COPd	2,37	-
T j = operation limit	- "			T j = operation limit			1
temperature	Pdh	1,7	kW	temperature	COPd	1,67	-
For air-to-water heat pumps:				For air-to-water heat pumps:			
T j = - 15 °C (if TOL < - 20 °C)	Pdh	2,6	kW	T j = -15 °C (if TOL < -20 °C)	COPd	1,76	-
			-				1
Bivalent temperature	T _{biv}	-9	°C	For air-to-water heat pumps:	TOL	-22	°C
orraneme temperature	· DIV			Operation limit temperature	.02		
Cycling interval capacity for	D .	na	kW	Cycling interval efficiency	СОРсус	na	1 .
heating	P _{cych}	IIa	KVV		corcyc	IIa	<u> </u>
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit	WTOL	55	°C
Power consumption in modes of	ther than active	node		temperature Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	3,5	kW
Thermostat-off mode	P _{TO}	0,006	kW	indica near output ()	rsup	3,3	
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW	Type or energy input		2.000.70	
Other items	F CK	0,000	KVV				
other items				4			7
Capacity control		Fixed		For air-to-water heat pumps:	_	4100	m3/
,				Rated air flow rate, outdoors			,
Sound power level, indoors/	L _{WA}	na/56	dB	For water-/brine-to-water heat			
outdoors	- WA	.10/30		pumps: Rated brine or water			
Annual energy consumption	Q_{HE}	4785	kWh	flow rate, outdoor heat exchanger	-	na	m3/
For heat pump combination hea	iter:			· · · · · · · · · · · · · · · · · · ·			
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kW
Annual electricity			1				1
consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ

of life information:

importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of.

F0001



Cold climate and Low temperature			Ljungby	/	CIC
Model(s):	CTC EcoAir 406 +	CTC Basicstyrning			
Air-to-water heat pump:	Yes	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	T	-	
Brine-to-water heat pump:	No	Controller contribution:	1	%	
Low-temperature heat pump:	No	Package efficiency:	132	%	
Equipped with a supplementary heater:	No	Package efficiency class:	•	-	
Heat pump combination heater:	No				
Parameters shall be declared for medium-te	emperature application	on, except for low-temperature heat pump	s. For low- te	emperatur	e heat pumps,

parameters shall be declared for	or low-temperat	ure application	١.				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	η_{s}	131	%
Declared capacity for heating f and outdoor temperature T j	or part load at in	ndoor tempera	ture 20 °C	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	4,0	kW	T j = - 7 °C	COPd	3,34] -
T j = + 2 °C	Pdh	4,9	kW	T j = +2 °C	COPd	4,07	-
T j = + 7 °C	Pdh	6,4	kW	T j = +7 °C	COPd	5,40	-
T j = + 12 °C	Pdh	7,9	kW	T j = +12 °C	COPd	6,62	-
T j = bivalent temperature	Pdh	3,2	kW	T j = bivalent temperature	COPd	2,92	-
T j = operation limit temperature	Pdh	1,9	kW	T j = operation limit temperature	COPd	1,83	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	2,9	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	2,58	-
Bivalent temperature	T _{biv}	-13	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-22	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	55	°C
Power consumption in modes	other than activ	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output (*)	Psup	2,2	kW
Thermostat-off mode	P _{TO}	0,019	kW			•	•
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	4100	m3/h
Sound power level, indoors/	L _{WA}	na/56	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3045	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	eater:					•	•
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the production importance that t	ct's life cycle, it n he product's refi	at a recycling station or with the installation eng nust be sent correctly to a waste station or resel rigerant, compressor oil and electrical/electronic	ler offering a se	vice of that type	. t is of great
Contact details	CTC AB, Näsväge					F0001	241108