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



Warm climate and Medium	temperature				Ljungby	<u> </u>	
Model(s):		CTC EcoPart 42	25 + CTC EcoLo	gic, CTC EcoPart i425 PRO			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	141	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate		No					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared for			Unit		Symbol	Malua	11
Item	Symbol	Value		Item Seasonal space heating energy	Symbol	Value	Unit
Rated heat output (*)	Prated	24	kW	efficiency	η _s	137	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	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	27,2	kW	T j = +2 °C	COPd	3,08] -
T j = + 7 °C	Pdh	22,2	kW	T j = +7 °C	COPd	3,45	-
T j = + 12 °C	Pdh	23,0	kW	T j = +12 °C	COPd	4,14	-
T j = bivalent temperature	Pdh	22,0	kW	T j = bivalent temperature	COPd	3,18	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	-	Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	1,0	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							1
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8728	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/h
For heat pump combination he	eater:						
Declared load profile /		na		Water heating energy	η_{wh}	na	%
Energy efficiency class Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity			4	,			
consumption	AEC	na The packaging mus	kWh	Annual fuel consumption a recycling station or with the installation engi	AFC	na vaste managemer	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic	er offering a servio	ce of that type. t	is of great
Contact details	CTC AB, Näsväge	•		•			231218
	2. 2. 12, 143 Vage						

Information for heat pump space heaters and heat pump combination heaters



Rated heat output (*)Proted26KWDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 jSeasonal space heating energy efficiency n_s 180%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 jDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 10 °C and outdoor temperature 20 °C and outdoor temperature 10 °C and outdoor temperature 23,6T j = - 15 °C (fr TOL < - 20 °C)PdhnakWT j = - 15 °C (fr TOL < - 20 °C)PdhnakWFor air-to-water heat pumps: T j = - 15 °C (fr TOL < - 20 °C)PdhnardBivalent temperatureT biv3°CPor air-to-water heat pumps: T coll rol < - 20 °C)naPergradiation co-efficientCdh0,98-Por air-to-water heat pumps: T percent nimit temperatureTOLnaPower consumption in modes other than active mode0,018kWKWKWType of energy inputElectricOff modeP or or0,018kWFor air-to-water heat pumps: Rate air flow rate, outdoorsnamaFor heat pump combination heater:Co/naKWAnual ener	Warm climate and Low tem	perature				Ljungby		
Water-to-water heat pump: No Controller class: VII - Bine to water heat pump: Yes Controller contribution: 3,5 % Equipped with a supplementary heater: No Package efficiency: 184 % Equipped with a supplementary heater: No Package efficiency: 184 % Parameters shall be declared for modulm-temperature application, except for low-temperature heat pumps, parameters shall be declared for low-temperature application, except for low-temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 1) Item Symbol Value Unit Item Symbol Value Item Symbol <td>Model(s):</td> <td></td> <td>CTC EcoPart 42</td> <td>5 + CTC EcoLo</td> <td>ogic, CTC EcoPart i425 PRO</td> <td></td> <td></td> <td></td>	Model(s):		CTC EcoPart 42	5 + CTC EcoLo	ogic, CTC EcoPart i425 PRO			
Billine-to-water heat pump: Yes Controller contribution: 3,5 % Low-temperature heat pump: No Package efficiency 184 % Equipped with a supplementary heater: No Package efficiency class: Parameters shall be declared for low-temperature application, except for low-temperature heat pumps; Profection Symbol Value Unit Rated heat output (*) Proted 2.6 KW Seasonal space heating energy n ₃ 180 9 Package efficiency 1 Proted 2.6 KW Seasonal space heating energy n ₃ 180 9 Package efficiency 1 Proted 2.6 KW Seasonal space heating energy n ₃ 180 9 Package efficiency 1 Proted 2.6 KW 1 = 2 C Ord 4.60 1 1 1 1 130 1 <	Air-to-water heat pump:		No		Energy efficiency class:		-	
Low-temperature heat pump: No Package efficiency: 184 % Equipped with a supplementary heater: No Package efficiency class: - - Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps; parameters shall be declared for low-temperature application, except for low-temperature heat pumps; parameters shall be declared for medium-temperature application, Item Symbol Value Unit Rated heat output (*) Praced 2.6 KW Item Symbol Value Unit Becard coefficient of performance or primary energy ratio for part load at indoor temperature 20 *C and outdoor temperature 20 *C and outdoor temperature Declared coefficient of performance or primary energy ratio for part load at indoor temperature Ti = -7 *C C OPd Ti = +2 *C C OPd Ti = +2 *C C OPd 4,60 - T = -7 *C Pdh Ta KW Ti = -7 *C C OPd 4,68 - T = + 1 *C Pdh Ta KW Ti = -7 *C C OPd 4,68 - T = + 1 *C Pdh Ta KW Ti = -7 *C C OPd fa - T = - 1 *C *C (if TOL < - 20 *C)	Water-to-water heat pump:		No		Controller class:	VII	-	
Equipped with a supplementary heater: No Package efficiency class: - Heat pump combination heater: No Package efficiency class: - Parameters shall be declared for medium-temperature application, except for low-temperature heat pumps, for low temperature for low-temperature for low-temperature for low-temperature for low temperature for lo	Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Heat pump combination heater: No Parameters shall be declared for medium-temperature application. Symbol Value Unit tem Symbol Value Unit Rate heat output (*) Proted 2.6 kW Easonal space heating energy n.5 1.80 9 Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 0°C and outdoor temperature 1 j Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature 0°C and the design 0°C and 0°C an	Low-temperature heat pump:		No		Package efficiency:	184	%	
Parameters shall be declared for modelum-temperature application. time Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit Symbol Value Unit Rated heat output (*) Protect Quad C Add outdoor temperature 20 °C and outdoor temperature 23.6 KW T j = -7 °C COPd na - T j = -7 °C Pdh na KW T j = -7 °C COPd na -	Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
parameters shall be declared for low-temperature application. tem Symbol Value Unit tem Symbol Value Unit Rated heat output (*) Protect 2.6 kW Beclared capacity for heating for part load at indoor temperature 20°C and outdoor temperature T j T] = -7°C Pdh 23,6 kW T] = +2°C Pdh 23,6 kW T] = +2°C COPd 4,68 - T] = +2°C Pdh 23,6 kW T] = +2°C COPd 4,68 - T] = +12°C Pdh 23,6 kW T] = +12°C COPd 4,68 - T] = bivalent temperature Pdh 23,6 kW T] = bivalent temperature Pdh a a kW For alin-to-water heat pumps: Pdh na kW For alin-to-water heat pumps: COPd na - T] = -15°C (ff TOL < -20°C) na - Sivalent temperature T biv Sivalent temperatu	Heat pump combination heate	r:	No					
temSymbolValueUnittemSymbolValueUnitRated heat output (*) $Prated$ 2.6kWSeasonal space heating energy $n_{\rm S}$ 18.0%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T jDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 20 °C and $T = -7 ^{\circ}$ CPdhnakWT = -7 ^{\circ} CPdhnakWT = -7 ^{\circ} CCOPdna-T = -7 ^{\circ} CPdh23.6kWT = -7 ^{\circ} CCOPd4.68-T = bivalent temperaturePdh23.6kWT = +12 ^{\circ} CCOPd4.68-T = operation limitPdhnakWT = +12 ^{\circ} CCOPdna-T = operation limitPdhnakWT = operation limitCOPdna-T = -15 ^{\circ} (f TOL < -20 °C)				ion, except fo	r low-temperature heat pumps. For	low-tempera	ature heat pu	mps,
Rated heat output (*) $Prated$ 2.6kWDeclared capacity for heating for part load at indoor temperature 20*C and outdoor temperature 1Seasonal space heating energy n_s 180%Declared capacity for heating for part load at indoor temperature 20*C and transmitted at indoor temperature 20*C and transmitted at indoor temperature 20*C and transmitted at indoor temperature 20*C and outdoor temperature 20*C and 4.83T j = -7*CPdhnakWT j = + 12*CPdh23.6kWT j = + 12*CPdhnakWT j = paration limitPdhnakWT j = oparation limitPdhnakWT j = oparation limitPdhnakWT j = -15*C (if TOL < -20*C)	parameters shall be declared for	-						
Name and output (*)Protect2.5KWDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 700Declared capacity for heating for part load at indoor temperature 20 °C and part load at indoor temperature 20 °C and part load at indoor temperature 20 °C and outdoor temperature 20 °C and part load at indoor temperature 20 °C and outdoor temperature 20 °C and part load at indoor temperature 20 °C and outdoor temperature 20 °C and part load at indoor temperature 20 °C and outdoor temperature 20 °C and part load at indoor temperature 20 °C and outdoor temperature 20 °C and part load at indoor temperature 20 °C and part load at 20 °C a	Item	Symbol	Value	Unit	1	Symbol	Value	Unit
outdoor temperature T jT j = -7 °CPdhnaT j = -7 °CPdh23,6T j = + 12 °CPdh23,8T j = + 12 °CPdh23,6T j = + 12 °CC OPd4,63T j = - 15 °C (if TOL < - 20 °C)	Rated heat output (*)	Prated	26	kW		η _s	180	%
T T J = + 2 °CPdh23,6kWT J = + 12 °CCOPd4,60T J = + 12 °CPdh23,8kWT J = + 12 °CCOPd4,60T J = bivalent temperaturePdh23,6kWT J = + 12 °CCOPd4,68T J = operation limit temperaturePdhnakWT T = operation limit temperatureCOPd4,68For air-to-water heat pumps: T J = -15 °C (if TOL < - 20 °C)		or part load at in	door temperatu	re 20 °C and	-			
T j = + 7 °CPdh23,8kWT j = +7 °CCOPd4,83T j = +12 °CPdh24,0kWT j = +12 °CCOPd5,11-T j = bivalent temperaturePdh23,6kWT j = bivalent temperatureCOPd4,68-T j = operation limitPdhnakWT j = operation limitCOPdna-For air-to-water heat pumps:PdhnakWT j = operation limitCOPdna-For air-to-water heat pumps:T j = -15 °C (if TOL < -20 °C)	T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
T j = + 12 °CPdh24,0kWT j = +12 °CCOPd5,11T j = bivalent temperaturePdh23,6kWT j = bivalent temperatureCOPd4,68T j = operation limit temperaturePdhnakWT j = operation limit temperatureCOPdnaFor air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = + 2 °C	Pdh	23,6	kW	T j = +2 °C	COPd	4,60	- [
Tj = bivalent temperature Pdh 23,6kWTj = bivalent temperature $COPd$ 4,68Tj = operation limit temperature Pdh nakWTj = operation limit temperature $COPd$ naFor air-to-water heat pumps: T Pdh nakWFor air-to-water heat pumps: T $COPd$ na-Bivalent temperature T_{biv} 3*CFor air-to-water heat pumps: Operation limit temperature TOL na-Bivalent temperature T_{biv} 3*CFor air-to-water heat pumps: Operation limit temperature TOL na-Bivalent temperature T_{biv} 3*CFor air-to-water heat pumps: Operation limit temperature TOL na-Bivalent temperature T_{biv} 3*CNoNoNo-Degradation co-efficient Cdh 0.98 -Heating water operating limit temperature $WTOL$ 65*CPower consumption in modes other than active mode $0,018$ kW Type of energy input $Electric$ NoOther items $Crankcase heater modeP_{cx}0,000kWType of energy inputElectricNoCapacity controlFixedFixedT_{236}kWhFor air-to-water heat pumps:net, outdoorsnam3Capacity controlFixedRaT_{236}kWhDaily fuel consumptionQ_{tuel}naDeclared load profile /Ener$	T j = + 7 °C	Pdh	23,8	kW	T j = +7 °C	COPd	4,83	-
T = operation limit temperaturePdhnakWT = operation limit temperature $COPd$ naFor air-to-water heat pumps: T] = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	24,0	kW	T j = +12 °C	COPd	5,11	-
temperaturePahnaKWtemperatureCDFana-For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = bivalent temperature	Pdh	23,6	kW	T j = bivalent temperature	COPd	4,68	-
T j = -15 °C (if TOL < -20 °C)PannaKWT j = -15 °C (if TOL < -20 °C)COPanaBivalent temperatureTTj = -15 °C (if TOL < -20 °C)	• •	Pdh	na	kW		COPd	na	-
Bivalent temperature I_{biv} 3 C Operation limit temperature IOL Ina C Cycling interval capacity for heating P_{cych} Ina kW Operation limit temperature IOL Ina C Cycling interval capacity for heating P_{cych} Ina kW Cycling interval efficiency $COPcyc$ Ina $-$ Heating water operating limit $WTOL$ $G5$ C C $COPcyc$ Ina $-$ Heating water operating limit $WTOL$ $G5$ C $COPcyc$ Ina $-$ Heating water operating limit $WTOL$ $G5$ C $COPcyc$ Ina $ C$ $COPcyc$ Ina V T $COPcyc$ Ina $Ince$ V T $COPcyc$ Ina $Ince$ V T $COPcyc$ Ina $Ince$ V T $COPcyc$ $Ince$ V T $COPcyc$ $Ince$ V T $COPcyc$ Ina $Ince$ V T $COPcyc$ $Ince$ $Ince$ V T $COPcyc$ $Ince$ Inc		Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency COPcyc na - Degradation co-efficient Cdh 0,98 - Heating water operating limit WTOL 65 co Power consumption in modes other than active mode Off mode P orr 0,018 kW Supplementary heater Rated heat output P sup 1,8 kV Thermostat-off mode P ro 0,022 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric ma m3 Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3 Sound power level, indoors/ outdoors L WA 50/na dB dB for water-/brine-to-water heat pumps: Rated brine or water na m3 For heat pump combination heater: Declared load profile / na - 3,8/2,0 m3 Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Daily fuel consumption AEC <t< td=""><td>Bivalent temperature</td><td>T _{biv}</td><td>3</td><td>°C</td><td></td><td>TOL</td><td>na</td><td>°C</td></t<>	Bivalent temperature	T _{biv}	3	°C		TOL	na	°C
Degradation co-efficient Can 0,98 - temperature W10L b5 Can Power consumption in modes other than active mode Supplementary heater Supplementary heater Rated heat output Psup 1,8 kW Off mode P orF 0,018 kW Rated heat output Psup 1,8 kV Thermostat-off mode P orF 0,018 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Capacity control Fixed For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors - na m3, Annual energy consumption Q HE 7236 kWh Water heating energy efficiency - 3,8/2,0 m3, Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G The packaging must be deposi		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orF 0,018 kW Rated heat output Psup 1,8 kW Thermostat-off mode P ro 0,022 kW Type of energy input Filectric Filectric Standby mode P sa 0,018 kW Type of energy input Electric Filectric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Filectric Other items - - na m3, Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Sound power level, indoors/ outdoors L wA 50/na dB dB pumps: Rated brine or water flow rate, outdoors heat - 3,8/2,0 m3, For heat pump combination heater: - - 3,8/2,0 m3, Declared load profile / Energy efficiency class na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na KW	Degradation co-efficient	Cdh	0,98	-		WTOL	65	°C
Thermostat-off mode P TO 0,022 kW Standby mode P SB 0,018 kW Standby mode P CK 0,000 kW Crankcase heater mode P CK 0,000 kW Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Sound power level, indoors/ outdoors L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water - 3,8/2,0 m3, For heat pump combination heater: Declared load profile / na Water heating energy - 3,8/2,0 m3, Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na Ga The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th <td>Power consumption in modes</td> <td>other than active</td> <td>mode</td> <td>-</td> <td>Supplementary heater</td> <td></td> <td></td> <td>-</td>	Power consumption in modes	other than active	mode	-	Supplementary heater			-
Standby mode P s8 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Sound power level, indoors/ outdoors L wA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water - 3,8/2,0 m3, For heat pump combination heater: 7236 kWh Water heating energy - 3,8/2,0 m3, Declared load profile / Energy efficiency class na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G The packaging must be deposited at a recycling station or with the installation engineer for correct waster management. At th To packaging must be deposited at a recycling station or with the installation engineer for correct waster management. At th	Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	1,8	kW
Crankcase heater mode P cx 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Sound power level, indoors/ outdoors L wA 50/na dB For water./brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3, Annual energy consumption Q HE 7236 kWh Water heating energy efficiency - 3,8/2,0 m3, For heat pump combination heater: Declared load profile / Energy efficiency class na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Annual fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G	Thermostat-off mode	Р _{то}	0,022	kW				
Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3, Sound power level, indoors/ outdoors L S0/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat na m3, Annual energy consumption Q T236 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3, For heat pump combination heater: Declared load profile / Energy efficiency class na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3, Sound power level, indoors/ outdoors L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3, Annual energy consumption Q HE 7236 kWh Water heating energy efficiency - 3,8/2,0 m3, For heat pump combination heater: - - 3,8/2,0 m3, Declared load profile / Energy efficiency class na kWh Mater heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors na m3, Sound power level, indoors/ outdoors L _{WA} 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger For water-/brine-to-water heat pumps: Rated brine or water 3,8/2,0 m3, For heat pump combination heater: 7236 kWh Water heating energy efficiency - 3,8/2,0 m3, Declared load profile / Energy efficiency class na kWh Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G. The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	Other items						_	_
outdoors L wa 50/na dB pumps: Rated brine or water flow rate, outdoor heat Annual energy consumption Q HE 7236 kWh pumps: Rated brine or water flow rate, outdoor heat For heat pump combination heater:	Capacity control		Fixed			-	na	m3/h
Annual energy consumption Q HE 7236 kWh exchanger - 3,8/2,0 m3, For heat pump combination heater: Declared load profile / na Water heating energy η_{wh} na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity AEC na kWh Annual fuel consumption AFC na G. The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	•	L _{WA}	50/na	dB				
For heat pump combination heater: Declared load profile / Declared load profile / na Water heating energy efficiency na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kW Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	Annual energy consumption	Q _{HE}	7236	kWh		-	3,8/2,0	m3/h
Energy efficiency class na Ima Ima<		eater:			· · ·			
Energy efficiency class efficiency Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G. The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the	-		na			n _{wb}	na	%
Annual electricity consumption AEC na kWh Annual fuel consumption AFC na G. The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At th	Energy efficiency class		110	1	efficiency	' Iwn	iid	/0
AEC na KWh Annual fuel consumption AFC na G consumption The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the		Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
		AEC			-			GJ
of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposed of the product as household waste is not permitted.	Specific precautions and end of life information:		end of the product' importance that the	s life cycle, it mus e product's refrige	t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic	er offering a servio	ce of that type. t	is of great
Contact details CTC AB, Näsvägen 8, SE-341 34 Ljungby Tel +46 372 88000 www.ctc.se 2312	Contact details	CTC AB Näsväge	n 8, SE-341 34 Li	unghy Tel +//	372 88000 www.ctc.se			231218

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



Average climate and Mediu	ım temperatur	9			Ljungby	<u> </u>	
Model(s):		CTC EcoPart 42	25 + CTC EcoLo	gic, CTC EcoPart i425 PRO			
Air-to-water heat pump:		No		Energy efficiency class:	A++	-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	14 2	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:	A++	-	
Heat pump combination heate		No					
			ion, except fo	r low-temperature heat pumps. For	low-tempera	ture heat pu	mps,
parameters shall be declared for			11		Gunahal	Malua	11
Item	Symbol	Value	Unit I	Item Seasonal space heating energy	Symbol	Value	Unit
Rated heat output (*)	Prated	24	kW	efficiency	η _s	138	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performation part load at indoor temperature			
T j = – 7 °C	Pdh	22,0	kW	T j = − 7 °C	COPd	3,25] -
T j = + 2 °C	Pdh	22,4	kW	T j = +2 °C	COPd	3,64	- 1
T j = + 7 °C	Pdh	22,8	kW	T j = +7 °C	COPd	4,02	- 1
T j = + 12 °C	Pdh	23,2	kW	T j = +12 °C	COPd	4,40	-
T j = bivalent temperature	Pdh	22,0	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	3	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	14168	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/h
For heat pump combination he	eater:						
Declared load profile /		na	_	Water heating energy	η_{wh}	na	%
Energy efficiency class Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
		110			Qiuei		
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engi t be sent correctly to a waste station or reselle rrant, compressor oil and electrical/electronic not permitted.	er offering a servio	ce of that type. t i	is of great
Contact details	CTC AB, Näsväge						231218
	erend, Masvage	0, 32 341 34 Lj	140 Jan 80 Jan 8				201210

Information for heat pump space heaters and heat pump combination heaters



Average climate and Low te	emperature				Ljungby		
Model(s):		CTC EcoPart 42	25 + CTC EcoLo	gic, CTC EcoPart i425 PRO			
Air-to-water heat pump:		No		Energy efficiency class:	A+++	-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	186	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heate		No					
			ion, except fo	r low-temperature heat pumps. For	low-tempera	ature heat pu	mps,
parameters shall be declared f							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	26	kW	Seasonal space heating energy efficiency	η _s	182	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of perform part load at indoor temperature			
T j = − 7 °C	Pdh	23,6	kW	T j = − 7 °C	COPd	4,69] -
T j = + 2 °C	Pdh	23,8	kW	T j = +2 °C	COPd	4,88	1 -
T j = + 7 °C	Pdh	24,0	kW	T j = +7 °C	COPd	5,06] -
T j = + 12 °C	Pdh	24,2	kW	T j = +12 °C	COPd	5,23	-
T j = bivalent temperature	Pdh	23,6	kW	T j = bivalent temperature	COPd	4,69	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	3,2	kW
Thermostat-off mode	Р _{то}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items					•		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	11628	kWh	flow rate, outdoor heat exchanger	-	3,8/2,0	m3/h
For heat pump combination he	eater:						
Declared load profile /		na		Water heating energy	η_{wh}	na	%
Energy efficiency class			1	efficiency	- 14/1		
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engi t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic not permitted.	er offering a servio	ce of that type. t	is of great
Contact details	CTC AB, Näsväge			•			231218
	CICAD, Masvage	11 0, 31-341 34 L	unguy rei +40	372 88000 www.ctc.se			201210

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



Cold climate and Medium to	emperature				Ljungby		
Model(s):		CTC EcoPart 42	25 + CTC EcoLo	gic, CTC EcoPart i425 PRO			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	145	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heater		No					
			tion, except for	r low-temperature heat pumps. For	low- tempera	iture heat pu	mps,
parameters shall be declared fo Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
	Symbol			Seasonal space heating energy	Symbol		
Rated heat output (*)	Prated	24	kW	efficiency	η _s	141	%
Declared capacity for heating for outdoor temperature T j	or part load at in	idoor temperatu	ire 20 °C and	Declared coefficient of performation part load at indoor temperature			
T j = − 7 °C	Pdh	22,4	kW	T j = − 7 °C	COPd	3,56] -
T j = + 2 °C	Pdh	22,8	kW	T j = +2 °C	COPd	3,94	- 1
т ј = + 7 °С	Pdh	23,2	kW	T j = +7 °C	COPd	4,29] -
Г ј = + 12 °С	Pdh	23,4	kW	T j = +12 °C	COPd	4,54] -
T j = bivalent temperature	Pdh	22,0	kW	T j = bivalent temperature	COPd	3,25] -
T j = operation limit	Pdh	na	kW	T j = operation limit	COPd	na	1 -
temperature			-	temperature			
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	- 1
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	e mode		Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	2,8	kW
Thermostat-off mode	P _{TO}	0,005	kW			•	
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items			-				-
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	16390	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/h
For heat pump combination he	ater:		•	· · · · · · · · · · · · · · · · · · ·		•	
Declared load profile /		na		Water heating energy	η_{wh}	na	%
Energy efficiency class			1	efficiency	' Iwh		/0
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation enging t be sent correctly to a waste station or reselled rant, compressor oil and electrical/electronic not permitted.	er offering a servio	ce of that type. t	is of great
Contact details	CTC AB, Näsväge						231218
	,						-

Information for heat pump space heaters and heat pump combination heaters



Air to water heat pump: No Energy efficiency class:	Cold climate and Low temp	erature				Ljungby		
Water to-water heat pump: No Controller class: VII - Sinte-to-water heat pump: No Package efficiency: 1.89 % Equipped with a supplementary heater: No Package efficiency class: - Equipped with a supplementary heater: No Package efficiency class: - Parameters shall be declared for invo-temperature application. No Package efficiency class: - Parameters shall be declared for invo-temperature application. No Package efficiency class: - Rated heat output (*) Prored 2.4 kW Seasonal space heating energy in the structure heat pumps. - Parameters shall be declared for invo-temperature application. Immediate indoor temperature 0.0° C and utdoor temperature 0.0° C and u	Model(s):		CTC EcoPart 42	5 + CTC EcoLo	gic, CTC EcoPart i425 PRO			
Brink-to-water heat pump: Yes Controller contribution: 3,5 % Convertengerature heat pump: No Package efficiency: 139 % Evanue temporature heat pump: No Package efficiency: 139 % Heat pump combination heater: No Package efficiency: 139 % Package efficiency: No Package efficiency: 139 % Package efficiency: No Package efficiency: 139 % Package efficiency: No Package efficiency: 139 % Package heat output (*) Proted 24 kW KW Symbol Value Unit Rade heat output (*) Proted 24 kW Seasonal space heating energy ns 185 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 185 % 185 % T = 1 = 7 °C Pdn 23,6 kW T = 2 °C COPd 5,20 - T = 1 = 7 °C Pdn 23,6 kW T = 2 °C COPd 5,20 -	Air-to-water heat pump:		No		Energy efficiency class:		-	
Low-temperature heat pump: No Package efficiency: 189 % Equipped with a supplementary heater: No Package efficiency: 189 % Parameters shall be declared for investmere ature application, escept for low-temperature heat pumps. For low-temperature heat pumps, anameters shall be declared for investmere temperature application. * * Rated heat output (*) Proted 24 KW Search apparent temperature application. Team Team Shall be declared for low-temperature application. Item Search apparent temperature application. Search apparent temperature approximation heater: Ti = -7 C Pdn 23,8 KW Search apparent temperature 20.°C and outdoor temperature 20.°C and outdoor temperature 20.°C and outdoor temperature 7 i Ti = -7 C COPd 4,66 - Ti = -7 C Pdn 23,6 KW KW Ti = -7 C COPd 5,06 - Ti = -7 C Pdn 23,6 KW KW Ti = -7 C COPd 5,20 - Ti = -7 C Pdn 23,6 KW Ti = -7 C COPd 4,66 - Ti = -9 crotion limit ma 23,6 KW Ti = -7 C COPd	Water-to-water heat pump:		No		Controller class:	VII	-	
Equipped with a supplementary heater: No Package efficiency class:	Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
No No Pranters shall be declared on relumin-temperature application. Except for low-temperature heat pumps. For low-temperature heat pumps. No Symbol Value Unit Rate deator dor low-temperature application. Unit Item Symbol Value Unit Rate deatoutput (*) Proted 2.4 kW Seasonal space heating energy ng 1855 % Declared capacity for heating for part load at indoor temperature 20° candoudcor temperature 1 j Image: Signal space heating energy ng 1855 % T = -2°C Pdn 23.8 kW KW T = -2°C COPd 5.96 - T = +2°C Pdn 23.6 kW T = +2°C COPd 5.98 - T = +2°C Pdn 23.6 kW T = +2°C COPd 5.20 - T = -15°C (1°T OL < -20°C)	Low-temperature heat pump:		No		Package efficiency:	189	%	
Parameters shall be declared for medium-temperature application. except for low-temperature heat pumps. For low-temperature for line water for al-to-water heat pumps. For low-temperature for low for low-tem	Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
parameters shall be declared for low-temperature application. Item Symbol Value Unit Item Symbol Value Item Symbol Value Unit Item Symbol Value Value VALUE VII Item Symbol Value VII Item Symbol Value VII Item Value VII Item Symbol Value VII Item Value								
teamSymbolValueUnitteamSymbolValueUnitRated heat output (*)Protect24kWDeclared capacity for heating for part load at indoor temperature 20 °C andDeclared capacity for heating for part load at indoor temperature 20 °C andDeclared capacity for heating for part load at indoor temperature 20 °C andDispan="2">Declared capacity for heating for part load at indoor temperature 20 °C andColspan="2">Colspan="2"Colspan="2">Colspan="2">Colspan="2">Colspan="2"Colspan="2"Colspan="2"Colspan="2"Colspan="2" <th< td=""><td></td><td></td><td></td><td>ion, except for</td><td>r low-temperature heat pumps. For</td><td>low- tempera</td><td>ture heat pu</td><td>nps,</td></th<>				ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	nps,
Rated heat output (*)Proted24kWSeasonal space heating energy $\eta_{\rm S}$ 185%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 jIISeasonal space heating energy $\eta_{\rm S}$ 185%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 7 jIIINI = -7 °CPdh23.8kWVIII-COPd4.59-I = +7 °CPdh24.2kWVII-COPd5.18I = +7 °CPdh24.2kWVII+7 °COPd5.20I = bivalent temperaturePdhnakWTi= +7 °COPd5.20I = obsci (if I OL < - 20 °C)	·			11		C	Malua	11
Name have output (Y)Prace24KWefficiency Π_5 1.65 π_5 Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature 7 j $T_1 = -7^{+}C$ Path23,8KW $T_1 = -7^{+}C$ COPd4,89- $T_1 = +7^{+}C$ Path24,2KW $T_1 = -7^{+}C$ COPd5,18- $T_1 = +2^{+}C$ Path23,6KW $T_1 = +2^{+}C$ COPd5,18- $T_1 = +2^{+}C$ Path23,6KW $T_1 = +2^{+}C$ COPd5,18- $T_1 = +2^{+}C^{-}C$ Path23,6KW $T_1 = +2^{+}C^{-}C$ COPd4,66- $T_1 = -15^{+}C^{-}(fTOL < -20^{+}C)$ PathnakW $T_1 = -15^{+}C^{-}(fTOL < -20^{+}C)$ na-Bivalent temperature T_{bw} -20"CFor air-to-water heat pumps: T_1 = -15^{+}C^{-}(fTOL < -20^{+}C)na-Bivalent temperature T_{bw} -20"CGo eration limit temperatureTOLna-Cycling interval capacity for heating P_{orb} 0.018kWGo eration limit temperatureTOLna-Cycling interval capacity for theating P_{orb} 0.018kWGo air-to-water heat pumps: Type of energy inputIeterricna-Capacity control E_{WA} 50/nadBMWType of ene	Item	Symbol	Value	Unit	1	Symbol	value	Unit
outdoor temperature T jT j = - 7 °CPdh23,8kWT j = - 7 °CCOPd4,89-T j = + 7 °CPdh24,2kWT j = - 7 °CCOPd5,06-T j = + 7 °CPdh24,2kWT j = - 7 °CCOPd5,18-T j = + 7 °CPdh24,2kWT j = -7 °CCOPd5,20-T j = 1 °CPdh23,6KWT j = -7 °CCOPd5,20-T j = operation limitPdhnakWT j = operation limitCOPd4,66-T j = operation limitPdhnakWT j = operation limitCOPdna-For alr-to-water heat pumps:PdhnakWT j = -15 °C (If TOL < - 20 °C)	Rated heat output (*)	Prated	24	kW		η _s	185	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = – 7 °C	Pdh	23,8	kW	T j = − 7 °C	COPd	4,89	1 -
T j = + 12 °CPdh24,2kWT j = + 12 °CCOPd5,20-T j = bivalent temperaturePdh23,6kWT j = pivalent temperatureCOPd4,66-T j = oparation limit temperaturePdhnakWT j = poration limit temperatureCOPdna-For air-to-water heat pumps: r j = -15 °C (if TOL < -20 °C)	T j = + 2 °C			4				1 -
Tj = bivalent temperaturePdh23,6KWTj = bivalent temperatureCOPd4,66-T j = operation limit temperaturePdhnakWTj = operation limit temperatureCOPdna-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 7 °C	Pdh	24,2	kW	T j = +7 °C	COPd	5,18	-
T j = operation limit temperaturePdhnakwT j = operation limit temperatureCOPdnaFor ali-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = + 12 °C	Pdh	24,2	kW	T j = +12 °C	COPd	5,20	-
temperaturepannakwtemperaturec.Drana-For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = bivalent temperature	Pdh	23,6	kW	T j = bivalent temperature	COPd	4,66	-
T j = -15 °C (if TOL < - 20 °C)PannakWT j = -15 °C (if TOL < - 20 °C)CDPana-Bivalent temperatureT b_{W} -20°C°CFor air-to-water heat pumps: Operation limit temperatureTOLna°CCycling interval capacity for heatingP $_{cych}$ nakWCycling interval efficiencyCOPcycna-Degradation co-efficientCdh0,98Heating water operating limit temperatureWTOL65°CPower consumption in modes other than active mode0.018kWSupplementary heaterRated heat outputPsup1,4kWType of energy inputElectricSupplementary heaterRated heat outputPsup1,4kWType of energy inputElectricFor air-to-water heat pumps: Rated air flow rate, outdoorsnam3/hCapacity controlFixed50/nadBdBexchangerm3/hFor heat pump combination heater:Electricnam3/hm3/hDeclared load profile / Energy efficiency classnakWhDaily fuel consumptionQfuelnaDaily electricity consumptionQelecnakWhDaily fuel consumptionQfuelnaAnnual electricity consumptionAECnakWhAnnual fuel consumptionAFCnaSpecific precautions and end of the product's life cycle, timus be sent correcity to a wast station or egiler of fing a service of that type. Li of grat imporanse that the product's fire cycle,		Pdh	na	kW		COPd	na	-
Bivalent temperature I biv -20 -C Operation limit temperature I/DL na -C Cycling interval capacity for heating P cych na kW Cycling interval efficiency COPcyc na - Degradation co-efficient Cdh 0,98 - Heating water operating limit WTOL 65 *C Power consumption in modes other than active mode 0,018 kW Supplementary heater Rated heat output Psup 1,4 kW Thermostat-off mode P rop 0,022 kW Type of energy input Electric Electric Capacity control Fixed For air-to-water heat pumps: - na m3/h Copcaret load profile / Pow 0,000 kWh For water-/brine-to-water heat pumps: - na m3/h Copcaret load profile / Electric For air-to-water heat pumps: - na m3/h For heat pump combination heater: Electric/brine-to-water heat pumps: - na Ma/h Daily electricity consumption Qelec na kWh Annual fuel consumption Qf	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency CDPcyc na - Degradation co-efficient Cdh 0,98 - Heating water operating limit WTOL 65 *C Power consumption in modes other than active mode Off mode P ore 0,018 kW Supplementary heater Rated heat output P ore 0,022 kW Supplementary heater Rated heat output P sup 1,4 kW Crankcase heater mode P or 0,022 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Sound power level, indoors/ outdoors L wA 50/na dB pumps: Rated brine or water flow rate, outdoors heat 3,8/2,0 m3/h Annual energy consumption Q HE 12746 kWh Water heating energy na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na % Specific precautions and end of life information: The packaging must be deposited at a recycling station or with the installation engi	Bivalent temperature	T _{biv}	-20	°C		TOL	na	°C
Degradation co-efficient Can 0,98 - temperature W/OL 65 °C Power consumption in modes other than active mode Off mode Power 0,018 kW Supplementary heater Rated heat output Psup 1,4 kW Thermostat-off mode Power 0,022 kW Supplementary heater Rated heat output Psup 1,4 kW Standby mode Psa 0,018 kW Type of energy input Electric Electric Crankcase heater mode Pox 0,000 kW Type of energy input Electric m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Sound power level, indoors/ outdoors L wA 50/na dB dB for water-/brine-to-water heat pumps: Rated brine or water na m3/h Declared load profile / Energy efficiency class na Mater heating energy nwh na % Daily electricity consumption Qelec na kWh Annual fuel consumption AFC na GJ Specific precautions and end of life information:<	Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P oFF 0,018 kW Rated heat output P sup 1,4 kW Thermostat-off mode P ro 0,022 kW Type of energy input Electric Standby mode P sa 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L wA 50/na dB HWh For water-/brine-to-water heat pumps: Rated brine or water - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / na - 3,8/2,0 m3/h Declared load profile / na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption Qelec na kWh Annual fuel consumption AFC na GJ Specific precautions and end of file product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and elec	Degradation co-efficient	Cdh	0,98	-		WTOL	65	°C
Thermostat-off mode P TO 0,022 kW Standby mode P 58 0,018 kW Crankcase heater mode P CK 0,000 kW Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L WA 50/na dB For water/brine-to-water heat pumps: Rated brine or water flow rate, outdoors heat - 3,8/2,0 m3/h Annual energy consumption Q HE 12746 kWh Water heating energy - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / Energy efficiency class na WM Mater heating energy efficiency 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: 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 cycling tends on with the installation engineer of	Power consumption in modes of	other than active	mode	_	Supplementary heater			
Standby mode P 58 0,018 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - 0,000 kW For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ L WA 50/na dB For water-/brine-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Annual energy consumption Q HE 12746 kWh For water near energy engine - 3,8/2,0 m3/h For heat pump combination heater: - - 3,8/2,0 m3/h -	Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	1,4	kW
Crankcase heater mode P cx 0,000 kW Other items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / Energy efficiency class na Water heating energy efficiency n_wh na % Daily electricity consumption consumption Qelec na kWh Annual fuel consumption Qfuel na kWh Annual electricity consumption AEC na 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 creatler of firing a service of that type. It of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Thermostat-off mode	Р _{то}	0,022	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L WA 50/na dB Annual energy consumption Q HE 12746 kWh For heat pump combination heater: - 3,8/2,0 m3/h Declared load profile / Energy efficiency class na kWh Water heating energy efficiency 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: 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 iffer cycle, it must be set correctly to a waste station or reseller offering a service of that type. ti s of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L So/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h Annual energy consumption Q HE 12746 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / na Water heating energy efficiency 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: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors na m3/n Sound power level, indoors/ outdoors L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/n Annual energy consumption Q HE 12746 kWh Betrate the stanger - 3,8/2,0 m3/n For heat pump combination heater: Declared load profile / na Water heating energy n_wh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption Qfuel 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. Disposing of the product as household waste is not permitted.	Other items							1
outdoors L WA 50/na dB pumps: Rated brine or water Annual energy consumption Q HE 12746 kWh flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / na Water heating energy n_wh na % Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Capacity control		Fixed			-	na	m3/h
Annual energy consumption Q HE 12746 kWn exchanger - 3,8/2,0 m3/n For heat pump combination heater: Declared load profile / Energy efficiency class na Water heating energy efficiency 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: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the importance that the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Sound power level, indoors/	L _{WA}	50/na	dB				
Declared load profile / Energy efficiency class na Water heating energy efficiency 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: The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Annual energy consumption	Q _{HE}	12746	kWh		-	3,8/2,0	m3/h
Energy efficiency class na efficiency I/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 the product's life cycle, it must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.		eater:						
Energy efficiency class efficiency main efficiency Daily electricity consumption Qelec na kWh Daily fuel consumption Qfuel na kWh Annual electricity consumption AEC na kWh Annual fuel consumption AFC na GJ Specific precautions and end of the product's life cycle, it must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Declared load profile /		na			Ŋwb	na	%
Annual electricity consumption AEC na 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. Disposing of the product as household waste is not permitted.	Energy efficiency class	Oelec		kWh				
consumption The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.	Annual electricity			-				
Specific precautions and end 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 of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted. of the product as household waste is not permitted.	consumption							
Contact details CTC AB, Näsvägen 8, SF-341 34 Liungby Tel +46 372 88000 www.ctc.se 221218	Specific precautions and end of life information:		end of the product' importance that the	's life cycle, it must e product's refrige	t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic	er offering a servio	e of that type. t i	s of great
	Contact details	CTC AB. Näsväge	•					231218

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



Warm climate and Medium	temperature				Ljungby		
Model(s):		CTC EcoPart 42	25 + CTC EcoZe	enith i555			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	123	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate Parameters shall be declared for parameters shall be declared for	or medium-temp		tion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	25	kW	Seasonal space heating energy efficiency	η _s	119	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	ire 20 °C and	Declared coefficient of performa part load at indoor temperature			
Г ј = – 7 °С	Pdh	na	kW	T j = – 7 °C	COPd	na] -
Г ј = + 2 °С	Pdh	23,5	kW	T j = +2 °C	COPd	2,79	1 -
г ј = + 7 °С	Pdh	23,8	kW	T j = +7 °C	COPd	3,09	1 -
Г ј = + 12 °С	Pdh	24,5	kW	T j = +12 °C	COPd	3,64	1 -
Γ j = bivalent temperature	Pdh	23,6	kW	T j = bivalent temperature	COPd	2,87	1 -
T j = operation limit temperature	Pdh	23,5	kW	T j = operation limit temperature	COPd	2,79	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	e mode		Supplementary heater			
Off mode	P _{OFF}	0,025	kW	Rated heat output	Psup	1,9	kW
Thermostat-off mode	Р _{то}	0,117	kW				
Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items	en	-,	ļ		ļ		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	10694	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/h
For heat pump combination he	ater:	·	•			•	•
Declared load profile /				Water heating energy	n	101	07
Energy efficiency class		XXL / A		efficiency	η_{wh}	101	%
Daily electricity consumption	Qelec	9,750	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2145	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation enging t be sent correctly to a waste station or reselled rant, compressor oil and electrical/electronic not permitted.	er offering a servio	ce of that type. t	is of great
Contact details	CTC AB, Näsväge			•			231218
	CICAD, NdSVage	0, 31-341 34 L	יאט איז	www.cic.se			201210

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



No Energy efficiency dass: - Water-to-water heat pump: No Controller closs: VII - Water-to-water heat pump: Yes Controller closs: VII - gauppad with a supplementary heater: Yes Package efficiency class: - - gauppad with a supplementary heater: Yes Package efficiency class: - - gauppad with a supplementary heater: Yes Package efficiency class: - - arranteers shall be declared for inve-tomperature application, except for low-temperature least pumps: For low-temperature prove temperature least pumps; - - arranteers shall be declared for inve-tomperature 20 'cland Item Symbol Value Unit tated heat output (*) Proted 29 k/W - - - stated heat output (*) Proted 29 k/W - - - - stated heat output (*) Proted 29 k/W - - - - - - - - - - - - - - - - <t< th=""><th>Warm climate and Low tem</th><th>perature</th><th></th><th></th><th></th><th>Ljungby</th><th></th><th></th></t<>	Warm climate and Low tem	perature				Ljungby		
Nate: to water heat pump: No Controller class: VI - inine-to-water heat pump: Yes Controller class: VI - inine-to-water heat pump: No Package efficiency: 1.47 % iquipped with a supplementury heater: Yes Package efficiency class: - - iquipped with a supplementury heater: Yes Package efficiency class: - - aranneters shall be declared for medium-temperature application. Second space heating energy ng 143 % aranneters shall be declared for invol-temperature application. Even Symbol Value Unit tated heat output (*) Proted 2.9 kW Even declared officiency class: ng 14.3 % beclared coapicity for heating for part load at indoor temperature 20° C and utdoor temperature 7 [1; = 7.°C Pdh 25.4 kW Tj = -7.°C COPd 4.22 - - 1; = 1; = 2.°C COPd 4.23 - - Tj = -7.°C COPd 4.23 - - - - - - - - - - -	Model(s):		CTC EcoPart 4	25 + CTC EcoZe	enith i555			
Vine-to-water heat pump: Ves Controller contribution: 3,5 %. owtemperature heat pump: No Package efficiency: 147 %. supposed with a supplementary heater: Yes Package efficiency: 147 %. stagupod with a supplementary heater: Yes Package efficiency: 147 %. stage bact output (*) Package efficiency: 147 %. stage bact output (*) Package efficiency: 147 %. stage bact output (*) Package efficiency: 143 %. stage bact output (*) Package efficiency: 143 %. bacted capacity for heating for part load at indoor temperature 20° C and outdoor temperature 7. 143 %. bactard capacity for heating for part load at indoor temperature 20° C and outdoor temperature 7. 143 %. i j = -7° C Pdh 25,2 k/W 1 = -7° C COPd 4,02 - i j = -15° C (ff TOL <- 0° C)	Air-to-water heat pump:		No		Energy efficiency class:		-	
No Package efficiency: 147 % quipped with a supplementary heater: Yes Package efficiency class: - arameters shall be declared for medium-temperature application, except for low-temperature heat pumps, for low-temperature heat pumps, and the declared for medium-temperature application. - tem Symbol Value Unit Item Symbol Value Unit tated heat output (*) <i>Protecd</i> 2.9 k/W Seasonal space heating energy in s 14.3 % value output (*) <i>Protecd</i> 2.9 k/W Seasonal space heating energy in s 14.3 % value output (*) <i>Protecd</i> 2.9 k/W Seasonal space heating energy in s 14.3 % value output (*) <i>Protecd</i> 2.9 k/W Ti = -7 °C <i>COPd</i> A - j = + 27 °C <i>Pdh</i> 2.5,1 k/W Ti = + 2 °C <i>COPd</i> A - j = braction limit <i>Pdh</i> 2.5,2 k/W Ti = bivalent temperature <i>COPd</i> A - i = i s value termerature <i>Pdh</i> 2.5,1 k/W Ti = -15 °C (if TOL <	Water-to-water heat pump:		No		Controller class:	VII	-	
pupped with a supplementary heater: Yes Package efficiency class: - read pupped with a supplementary heater: Yes Yes - read pupped with a supplementary heater: Yes - - rarmeters shall be declared for low-temperature application, except for low-temperature heat pumps, rarmeters shall be declared for low-temperature application. - Yes tem Symbol Value Unit tem Symbol Value Unit tem Symbol Practed 29 KW Second space heating energy n_s 14/3 % bedraded capacity for heating for part load at indoor temperature 20°C and outdoor temperature 1 -	Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Vest Vest arrantetars shall be declared for dow-temperature application. market shall be declared for low-temperature application. term Symbol Value Unit seasonal space heating energy n_s 14.3 % Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and undoor temperature 10°C part load at indoor temperature 20°C and 4.02°C indo ind	Low-temperature heat pump:		No		Package efficiency:	147	%	
Parameters shall be declared for wellow temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, marameters shall be declared for low-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps, marameters shall be declared for low-temperature application. Except for low-temperature heat pumps. For low-temperature heat pumps, marameters shall be declared for low-temperature application. Except for low-temperature heat pumps. For low-temperature heat pumps, for low-temperature heat pumps. For low-temperature heat pumps. For low-temperature heat pumps. For low-temperature heat pumps, for low-temperature for low-temperatur	Equipped with a supplementary	y heater:	Yes		Package efficiency class:		-	
parameters shall be declared for low-temperature application. term Symbol Value Unit temperature 3 protect 29 kW because output (*) Protect 29 kW performance or primary energy ratio for particle data indoor temperature 20 °C and publication temperature 7 is 1 = 7 °C Pdh 25,1 kW T i = -7 °C C OPd 4,02 - 1 = 1 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C OPd 4,02 - 1 = 0 + 2 °C C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n a - 1 = -1 5 °C (FTOL < - 2 °C C) Pd n	Heat pump combination heater	r:	Yes					
temSymbolValueUnitItemSymbolValueUnittated heat output (*) $Prated$ 29kWSeasonal space heating energy ended at indoor temperature 20 °C and beclared capacity for heating for part load at indoor temperature 20 °C and utdoor temperature 7 jSeasonal space heating energy 					r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
tated heat output (*)Protect29kWbeclared capacity for heating for part load at indoor temperature 20 °C and updoor temperature T JSeasonal space heating energy efficiency n_5 143%beclared capacity for heating for part load at indoor temperature 20 °C and updoor temperature T JT = -7 °CPdh $25,3$ WWT = -2 °CCOPH $4,23$ - $j = -7 °C$ Pdh $25,3$ KWT = -2 °CCOPH $4,23$ $j = -12 °C$ Pdh $25,3$ KWT = -2 °CCOPH $4,23$ $j = -12 °C$ Pdh $25,3$ KWT = -2 °CCOPH $4,23$ $j = -12 °C$ Pdh $25,3$ KWT = -2 °CCOPH $4,23$ $j = -12 °C$ Pdh $25,3$ KWT = -12 °CCOPH $4,23$ $j = operation limitPdh25,1KWT = -12 °CCOPH4,23j = operation limitPdh25,1KWT = -12 °CCOPH4,34j = -15 °C (ff TOL < -20 °C)$	parameters shall be declared for							
value near output (1)Proteco2.5KWefficiencyns1.43%beckared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 25,6MWTj = -7 °CCOPd4,02-Tj = +2 °CPah25,1KWTj = -7 °CCOPd4,02Tj = paration limitPah25,1KWTj = bivalent temperatureCOPd4,02-Tj = oparation limitPah25,1KWTj = -15 °C (fTOL < -20 °C)	Item	Symbol	Value	Unit	1	Symbol	Value	Unit
putdoor temperature T jpart load at indoor temperature 2 °C and outdoor temperature T j $j = -7^{\circ}C$ Pdhna $j = +2^{\circ}C$ PdhZ5,1 $j = +7^{\circ}C$ PdhZ5,2 $j = +12^{\circ}C$ COPd4,02 $j = +12^{\circ}C$ PdhZ5,2 $j = +12^{\circ}C$ COPd4,14 $- j = operation limitPdhZ5,1kWT j = operation limitCOPd4,14- j = operation limitPdhZ5,1kWT j = operation limitCOPd4,02- j = -15^{\circ}C (lf TOL < -20^{\circ}C)$	Rated heat output (*)	Prated	29	kW		η _s	143	%
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Declared capacity for heating for outdoor temperature T j	or part load at in	idoor temperatu	ure 20 °C and				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = − 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	т ј = + 2 °С	Pdh			-	COPd] -
j = bivalent temperature Pdh $25,2$ kW T j = bivalent temperature $COPd$ $4,14$ $-$ j = operation limit Pdh $25,1$ kW T j = operation limit $COPd$ $4,02$ $-$ for air-to-water heat pumps: Pdh na kW $T j = -15 {}^{\circ}C (if TOL < -20 {}^{\circ}C)$ $COPd$ na $-$ Bivalent temperature T_{bW} 4 ${}^{\circ}C$ $For air-to-water heat pumps:TOLna-Bivalent temperatureT_{bW}4{}^{\circ}COperation limit temperatureTOLna-Bivalent temperatureT_{bW}4{}^{\circ}COperation limit temperatureTOLna-Bivalent temperatureT_{bW}4{}^{\circ}COperation limit temperatureTOLna-Degradation co-efficientCdh0,94 Heating water operating limitWTOL65^{\circ}CPor exer consumption in modes other than active modeP_{ore}0,025kWHeating water operating limitWTOL65^{\circ}CDiff modeP_{ore}0,025kWType of energy inputElectricElectricCankcase heater modeP_{ox}0,025kWType of energy inputElectricCankcase heater modeP_{ox}0,025kWType of energy inputElectricCankcase heater modeP_{ox}0,025kWType of energy inputElectri$	T j = + 7 °C	Pdh	25,3	kW	T j = +7 °C	COPd	4,23	- 1
j = operation limit emperaturePdh25,1kwT j = operation limit temperature $COPd$ 4,02.for air-to-water heat pumps: r j = -15 °C (lf TOL < -20 °C)	T j = + 12 °C	Pdh	25,6	kW	T j = +12 °C	COPd	4,45	-
emperaturePan25,1KWtemperatureCDPa4,02-for air-to-water heat pumps: j = -15 °C (if TOL < -20 °C)	T j = bivalent temperature	Pdh	25,2	kW	T j = bivalent temperature	COPd	4,14	-
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = operation limit temperature	Pdh	25,1	kW		COPd	4,02	-
avalant temperature r_{bw} 4 r_{c} Operation limit temperature r_{OL} na r_{c} Cycling interval capacity for neating P_{cych} na kW Cycling interval efficiency $COPcyc$ na $-$ Degradation co-efficient Cdh $0,94$ $-$ Heating water operating limit temperature $WTOL$ 65 c_{c} Power consumption in modes other than active mode $0,94$ $-$ Heating water operating limit temperature $WTOL$ 65 c_{c} Supplementary heater 	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW		COPd	na	-
heating P_{cych} nakWCycling interval efficiency $COPcyc$ na-begradation co-efficient Cdh 0,94-Heating water operating limit $WTOL$ 65"CPower consumption in modes other than active modeDiff mode P_{orr} 0,025 kW Supplementary heaterRated heat output $Psup$ $4,4$ kW Type of energy input $Electric$ Fixankase heater mode P_{cx} 0,000 kW Type of energy input $Electric$ Capacity control $Fixed$ $Fixed$ For air-to-water heat pumps: Rated air flow rate, outdoors-na $m3/h$ Capacity control $Fixed$ 10386 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat $3,8/2,0$ $m3/h$ Cor heat pump combination heater: XXL / A Water heating energy 	Bivalent temperature	T _{biv}	4	°C		TOL	na	°C
Degradation co-efficientCdn0,94-Dewer consumption in modes other than active mode $temperature$ $W10L$ 65Diff mode P_{OFF} 0,025 kW Chermostat-off mode P_{TO} 0,354 kW Thermostat-off mode P_{TO} 0,354 kW Crankcase heater mode P_{cx} 0,000 kW Date ritems P_{cx} 0,000 kW Capacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors-Capacity control $Fixed$ I_{WA} 50/na dB Sound power level, indoors/ L_{WA} 50/na dB Annual energy consumption Q_{HE} 10386 kWh rechangerCor heat pump combination heater: VXL / A Water heating energy efficiency η_{wh} 101Declared load profile / tonsumption XXL / A Water heating energy efficiency η_{wh} 101The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's iffecycle, 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 iffecycle, it must be sent correctly on a waste station or reseller offering a service of that type. t is of great importance that the product's iffegreant, compressor oil and electrical/electronic equipment are properly disposed of. Disposition	Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orf 0,025 kW Rated heat output P sup 4,4 kW Chermostat-off mode P TO 0,354 kW Type of energy input Electric Standby mode P SB 0,025 kW Type of energy input Electric Other items 0,000 kW For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Capacity control Fixed For water-/brine-to-water heat pumps: Rated air flow rate, outdoors na m3/h Sound power level, indoors/ L WA 50/na dB pumps: Rated brine or water flow rate, outdoors na m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's life cycle, it m	Degradation co-efficient	Cdh	0,94	-		WTOL	65	°C
Thermostat-off mode P ro. 0,354 kW Standby mode P ss 0,025 kW Crankcase heater mode P cx 0,000 kW Dther items 0,000 kW Type of energy input Electric Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ butdoors L wA 50/na dB For water-/brine-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Annual energy consumption Q HE 10386 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h Cor heat pump combination heater: Declared load profile / XXL / A Water heating energy nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 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 installat	Power consumption in modes o	other than active	e mode		Supplementary heater			_
Standby mode P 58 0,025 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items - na m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Gound power level, indoors/ L WA 50/na dB For water-/brine-to-water heat pumps: Rated bine or water - 3,8/2,0 m3/h For heat pump combination heater: - - 3,8/2,0 m3/h Declared load profile / XXL / A Water heating energy nwh 101 % Cannual electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 importance that the product's refrigerant, compressor oil and electrici/electronic equipment are properly disposed of. Disposin	Off mode	P _{OFF}	0,025	kW	Rated heat output	Psup	4,4	kW
Crankcase heater mode P ck 0,000 kW Dther items Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors na m3/h Sound power level, indoors/ L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat na m3/h Annual energy consumption Q HE 10386 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy efficiency nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 kWh Annual fuel consumption AFC NA GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end product's iffer cycle, it must be sent correctly to a waste station or reseller offering a service of that type. It is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipme	Thermostat-off mode	Р _{то}	0,354	kW				
Dther items Capacity control Fixed Sound power level, indoors/ L WA Sound power level, indoors/ Water heating energy Sound power level, indoors/ XXL / A Seergy efficiency class XXL / A	Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ butdoors L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - Na m3/h Annual energy consumption Q HE 10386 kWh Power level, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 kWh Annual fuel consumption AFC NA GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. ti s of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposir	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors na m3/h Gound power level, indoors/ L WA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water Annual energy consumption Q HE 10386 kWh For water-/brine-to-water heat 3,8/2,0 m3/h For heat pump combination heater: Declared load profile /	Other items							1
L wa 50/na dB pumps: Rated brine or water Annual energy consumption Q HE 10386 kWh pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: - 3,8/2,0 m3/h Declared load profile / XXL / A Water heating energy n_wh 101 % Energy efficiency class XXL / A Water heating energy n_wh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposir	Capacity control		Fixed			-	na	m3/h
Annual energy consumption Q HE 10386 kWh exchanger - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency η_{wh} 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposir	Sound power level, indoors/	L _{WA}	50/na	dB				
For heat pump combination heater: Water heating energy nwh 101 % Declared load profile / XXL / A Water heating energy nwh 101 % Daily efficiency class Mater heating energy nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposint	Annual energy consumption	Q _{HE}	10386	kWh		-	3,8/2,0	m3/h
Emergy efficiency class XXL / A efficiency Iui % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 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. Disposin		ater:						
Energy efficiency class efficiency Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 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. Disposin	Declared load profile /		XXL / A			n+	101	%
Annual electricity consumption AEC 2145 kWh Annual fuel consumption AFC NA GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposir	Energy efficiency class				efficiency	• Iwn		
AEC2145kWhAnnual fuel consumptionAFCNAGJconsumptionFNAFGJSpecific 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. Disposin	Daily electricity consumption	Qelec	9,750	kWh	Daily fuel consumption	Qfuel	NA	kWh
Specific precautions and end 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. Disposin	Annual electricity consumption	AEC						
	Specific precautions and end of life information:		end of the product importance that the	t's life cycle, it mus ne product's refrige	t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic	er offering a servi	ce of that type. t	is of great

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



Rated heat output (*) $Prated$ 25kWDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 j $Prated$ $23,7$ kWDeclared capacity for heating for part load at indoor temperature 20 °C and $T = -7 °C$ Pdh $23,7$ kWT = -7 °C Pdh $23,7$ kWT = -7 °C Pdh $8,0$ kWT = -7 °C Pdh $8,0$ kWT = + 12 °C Pdh $8,1$ kWT = + 12 °C Pdh $8,1$ kWT = bivalent temperature Pdh $23,5$ kWT = bivalent temperature Pdh $23,5$ kWT = operation limit temperature Pdh $23,5$ kWT = -15 °C (HTOL < -20 °C) Pdh na kWFor air-to-water heat pumps: t = -15 °C (HTOL < -20 °C) Pdh na T = -15 °C (HTOL < -20 °C) Pdh na kWBivalent temperature T_{bW} -10 °CCycling interval capacity for heating P_{cych} na Degradation co-efficient Cdh $0,98$ $-$ Power consumption in modes other than active mode RW RW Off mode P_{sx} $0,025$ kW Capacity controlFixed $0,025$ kW Capacity control $Fixed$ $0,025$ kW Capacity control C_{WA} $50/na$ dB Capacity control C_{WA} $50/na$ dB Capacity control C_{WA}	Average climate and Mediu	m temperatur	e			Ljungby		
Water to water heat pump: No Controller class: VII - Brine-towater heat pump: Yes Controller contribution: 3.5 % Deciver control heat pump: No Package efficiency: 1.29 % Equipped with a supplementary heater: Yes Package efficiency: 1.29 % Parameters shall be declared for medium-temperature application. Seasonal space heating energy n.5 1.25 % Brain term shall be declared for medium-temperature application. Item Seasonal space heating energy n.5 1.25 % Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 7 i Item - 7 °C COrd 2.3,7 KW T j = - 7 °C Path 16,3 KW T j = -7 °C COrd 2,3,2 - T j = - 7 °C Path 8,0 KW T j = -7 °C COrd 2,3,7 KW T j = -7 °C Path 8,0 KW T j = -7 °C COrd 2,8,1 - T j = -2 °C Path 8,0 KW T j = -1 °C COrd 2,8,1 -	Model(s):		CTC EcoPart 42	25 + CTC EcoZe	enith i555			
Brine-to-water heat pump: Yes Controller centribution: 3,5 % Low-temperature heat pump: No Package efficiency: 129 % Equipode with a supplementary heater: Yes Package efficiency class: A++ - Heat pump combination heater: Yes Package efficiency class: A++ - Parameters shall be declared for invi-temperature application. Heat many combination heater: Symbol Value Unit Rated heat output (*) Protecd 2.5 kW Item Symbol Value Unit State heat output (*) Protecd 2.5 kW Item Symbol Value Unit T j = 7 °C Pdh 6.3 kW T j = 7 °C C Ord dido timberature 20 °C and outdoor temperature 20 °C and outdoor	Air-to-water heat pump:		No		Energy efficiency class:	A++	-	
No Package efficiency: 129 % Equipped with a supplementary heater: Yes Package efficiency class: A++ - Parameters shall be declared for medium-temperature application. Yes Package efficiency class: A++ - Parameters shall be declared for medium-temperature application. Symbol Value Unit Symbol Value Unit Rated heat output (*) Practed 25 kW Exeaonal space heating energy ns 125 y Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 20 °C and 0utdoor temperature 7 (* part load at indoor temperature 20 °C and 0utdoor temperature 20 °C and 0utdoor temperature 20 °C and 0utdoo	Water-to-water heat pump:		No		Controller class:	VII	-	
Equipped with a supplementary heater: Yes Package efficiency class: A++ - Ves Package efficiency Class Package efficiency Class Package efficiency Class Package efficiency Class Package efficiency Package Package efficiency Class Package efficiency Class Package efficiency Class Package efficiency Class Package efficiency Package Package efficiency Package Package efficiency Package Package Package efficiency Package	Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Heat pump combination haster: Yes Parameters shall be declared for low-temperature application. Item Symbol Value Unit Rated heat output (*) Prated 25 kW Seasonal space heating energy η_c 1.25 9 Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j Ti = -7 °C Pdh 23,7 kW Ti = -7 °C COPd 2,95 -7 T j = -7 °C Pdh 23,7 kW Tj = -7 °C COPd 2,95 - - part load at indoor temperature 20 °C and outdoor temperature 7 j Tj = -7 °C COPd 2,95 - - part load at indoor temperature 20 °C and outdoor temperature 7 j - <td>Low-temperature heat pump:</td> <td></td> <td>No</td> <td></td> <td>Package efficiency:</td> <td>129</td> <td>%</td> <td></td>	Low-temperature heat pump:		No		Package efficiency:	129	%	
Parameters shall be declared for modulum-temperature application. tem Symbol Value Unit tem Symbol Value Unit tem Symbol Value Unit Symbol Value Unit Rated heat output (*) Protect 2.5 k/W Beclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and 0 state indoor temperature 23,5 KW T j = -7 °C C OPd 2,95 - 2,324 - 2,95 / 2,95 / 2,324 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,81 - 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,97 / 2,9	Equipped with a supplementar	y heater:	Yes		Package efficiency class:	A++	-	
parameters shall be declared for low-temperature application. term Symbol Value Unit tem Symbol Value Urit Rated heat output (*) $Prated$ 2.5 k/W Feasonal space heating energy n_S 1.2.5 s Declared capacity for heating for part load at indoor temperature 20°C and outdoor temperature 20°C and outdoor temperature 20°C and outdoor temperature 1 Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature 20°C and 0.3,711 T j = - 7°C $COPd$ $2,95$ - T j = + 12°C Path $8,0$ K/W T j = 7°C $COPd$ $3,71$ - T j = + 12°C Path $8,0$ K/W T j = 7°C $COPd$ $2,81$ - T j = bivalent temperature Path $23,5$ K/W T j = +12°C $COPd$ $2,81$ - For air-to-water heat pumps: Path na K/W T j = -15°C (if TOL < -20°C)	Heat pump combination heater	r:	Yes					
temSymbolValueUnittemSymbolValueUnitRated heat output (*) $Proted$ 2.5k.WSeasonal space heating energy n_s 1.25 s Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j $T = -7^{\circ}$ C Pdh $23,7$ k.W $Filedon temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 20 °C and 3,24T = -7^{\circ} CCOPd2,95-10^{\circ}T = -7^{\circ} CPdh8,0k.WT = -7^{\circ} CCOPd2,95-10^{\circ}T = +12^{\circ} CPdh8,0k.WT = -7^{\circ} CCOPd2,95-10^{\circ}T = +12^{\circ} CPdh8,0k.WT = -7^{\circ} CCOPd2,81-10^{\circ}T = -paration limitPdh23,5k.WT = operation limitCOPd2,81-10^{\circ}T = -paratrice varter heat pumps:regratureT_{BW}-10^{\circ} CCCCOPd2,81-10^{\circ}T = -15^{\circ} C (if TOL < -20^{\circ} C)Pdhnak.WT = -15^{\circ} C (if TOL < -20^{\circ} C)COPdna-10^{\circ}Bivalent temperatureT_{BW}-10^{\circ} CCCCOPd2,81-10^{\circ}T = -15^{\circ} C (if TOL < -20^{\circ} C)COPdna-10^{\circ} CCOPdna-10^{\circ}Pour (apacity forrestingC_{BO}0,025^{\circ} k.WNWT = -15^{\circ} C (if TOL < -20^{\circ} C)COPdna$			perature applicat	tion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
Rated heat output (*)Proted25kWDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T jSeasonal space heating energy efficiency n_5 125%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j n_5 125%T j = -7 °CPdh23,7kWWT j = -7 °CC OPd $3,24$ T j = -7 °CPdh8,0kWT j = +2 °CC OPd $3,24$ T j = +12 °CPdh8,1kWT j = +12 °CC OPd $3,24$ T j = operation limitPdh23,5kWT j = bavient temperatureC OPd $2,81$ T j = operation limitPdh23,5kWT j = operation limitC OPd $2,81$ For air-to-water heat pumps: T j = -1 5 °C (if TOL < -20 °C)	parameters shall be declared for	or low-temperat	ure application.					
Name near output (*)Protect2.5KWefficiency(151.2.5%Declared capacity for heating for part load at indoor temperature 20 *C and outdoor temperature 2)Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 *C and outdoor 20 *C and 00 *C and *	Item	Symbol	Value	Unit	1	Symbol	Value	Unit
outdoor temperature T jT j = -7 °CPdh23,7kWT j = + 2 °CPdh16,3kWT j = + 2 °CPdh8,0kWT j = + 12 °CPdh8,1kWT j = + 12 °CPdh8,1kWT j = operation limitPdh23,5kWT j = operation limitPdh23,5kWT j = operation limitPdh23,5kWT j = operation limitPdh23,5kWFor air-to-water heat pumps:PdhnaT j = -15 °C (if TOL < -20 °C)	Rated heat output (*)	Prated	25	kW		η _s	125	%
T j = + 2 °C Pain 15,3 WW T j = + 7 °C Pain 6,0 WW T j = + 7 °C Pain 8,0 WW T j = + 2 °C COPd 3,24 3,71 - T j = + 12 °C Pain 8,1 KW T j = + 7 °C COPd 4,03 - T j = obvalent temperature Pain 23,5 KW T j = ibvalent temperature COPd 2,81 - For air-to-water heat pumps: Pain na KW T j = operation limit COPd 2,81 - For air-to-water heat pumps: Pain na KW For air-to-water heat pumps: TOL na - Bivalent temperature T bw -10 °C Coperation limit temperature TOL na - - Bivalent temperature T bw -10 °C Coperation limit temperature TOL na - <t< td=""><td></td><td>or part load at ir</td><td>ndoor temperatu</td><td>ire 20 °C and</td><td></td><td></td><td></td><td></td></t<>		or part load at ir	ndoor temperatu	ire 20 °C and				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T j = − 7 °C	Pdh	23,7	kW	T j = – 7 °C	COPd	2,95] -
T j = + 7 °CPdh8,0kWT j = +7 °CCOPd3,71T j = +12 °CPdh8,1KWT j = +12 °CCOPd4,03T j = bivalent temperaturePdh23,5KWT j = bivalent temperatureCOPd2,81T j = operation limitPdh23,5KWT j = operation limitCOPd2,81For air-to-water heat pumps:Pdh23,5KWT j = operation limitCOPd2,81For air-to-water heat pumps:Pdh23,5KWT j = operation limitCOPd2,81For air-to-water heat pumps:PdhnaKWT j = -15 °C (if TOL < -20 °C)	-	Pdh		-	-			1 -
T j = bivalent temperaturePdh23,5kWT j = bivalent temperatureCOPd2,81T j = operation limit temperaturePdh23,5kWT j = operation limit temperatureCOPd2,81For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Г ј = + 7 °С	Pdh	8,0	kW	T j = +7 °C	COPd	3,71	- [
T j = operation limit temperature Pdh 23,5kWT j = operation limit temperature $COPd$ 2,81For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	Г ј = + 12 °С	Pdh	8,1	kW	T j = +12 °C	COPd	4,03	-
temperaturePon23,5KWtemperatureCOPa2,81-For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	Г ј = bivalent temperature	Pdh	23,5	kW	T j = bivalent temperature	COPd	2,81	-
T j = -15 °C (if TOL < -20 °C)PannaKWT j = -15 °C (if TOL < -20 °C)COPanaBivalent temperatureT biv-10°CFor air-to-water heat pumps: Operation limit temperatureTOLna°CCycling interval capacity for heating P_{cych} nakWCycling interval efficiencyCOPcycna~Degradation co-efficientCdh0,98Heating water operating limit temperatureWTOL65°CPower consumption in modes other than active mode0,025kWSupplementary heater Rated heat outputPsup0,0kWThermostat-off modeP r_0 0,025kWType of energy inputElectricFor air-to-water heat pumps: Rated air flow rate, outdoorsnam3Capacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoorsnam3Sound power level, indoors/ outdoorsL w_A 50/nadBdBfor water-frine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger-3,1/1,6m3For har pump combination heater:Declared load profile / Energy efficiencyNaXL / AWater heating energy efficiencyNaNAKWDaily fuel consumptionQelec9,750kWhDaily fuel consumptionQfuelNAKWAnnual electricity consumptionAEC2145kWhAnnual fuel consumptionAFCNAGDaily electricity consumptionQelec9,		Pdh	23,5	kW		COPd	2,81	-
swalent temperature I_{biv} -10 C Operation limit temperature IOL na C Cycling interval capacity for heating P_{cych} nakWOperation limit temperature IOL na C Degradation co-efficient Cdh 0.98 -Cycling interval efficiency $COPcyc$ na-Power consumption in modes other than active mode 0.925 kW Heating water operating limit $WTOL$ 655 C Off mode P_{orr} 0.025 kW Rated heat output $Psup$ $0,0$ kV Thermostat-off mode P_{orr} 0.025 kW Type of energy input $Electric$ Crankcase heater mode P_{cx} 0.000 kW Type of energy input $Electric$ Capacity controlFixedFor air-to-water heat pumps: flow rate, outdoorsna $m3$ Sound power level, indoors/ outdoors L_{WA} $50/na$ dB B Annual energy consumption Q_{HE} 15501 kWh $Water heating energy$ n_{wh} 101 g Declared load profile / Energy efficiency class XXL / A Water heating energy n_{wh} 101 g Daily electricity consumptionQelec $9,750$ kWh Daily fuel consumption AFC NA KW Annual electricity consumptionAEC 2145 kWh Annual fuel consumption AFC NA KW Specific precautions and endThe packaging must be depo		Pdh	na	kW		COPd	na	-
heating P_{cych} nakwCycling interval efficiency $CDPcyc$ na-Degradation co-efficient Cdh $0,98$ -Heating water operating limit temperature $WTOL$ 65*CPower consumption in modes other than active mode $0,025$ kW Supplementary heaterSupplementary heaterSupplementary heaterOff mode P_{orr} $0,025$ kW Type of energy input $Electric$ Standby mode P_{sa} $0,025$ kW Type of energy input $Electric$ Crankcase heater mode P_{cx} $0,000$ kW Type of energy input $Electric$ Capacity controlFixedFor air-to-water heat pumps: nated air flow rate, outdoorsna $m3$ Capacity control $Fixed$ $50/na$ dB $Pore vater-/brine-to-water heatpumps: Rated brine or waterflow rate, outdoorsnam3For heat pump combination heater:VXL / AWater heating energyefficiencyn_{wh}101\%Deally electricity consumptionQelec9,750kWhDaily fuel consumptionAFCNAAnnual electricityAEC2145kWhAnnual fuel consumptionAFCNASpecific precautions and endThe packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At theend of the product's life cycle, it must be sent correctly to a waste station or reseller of the rece of t$	Bivalent temperature	T _{biv}	-10	°C		TOL	na	°C
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Other items Capacity control Fixed Sound power level, indoors/ L WMA 50/na outdoors - Annual energy consumption Q HE 15501 KWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger For heat pump combination heater: - Declared load profile / XXL / A Daily electricity consumption Qelec 9,750 kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA Annual fuel consumption AEC 2145 KWh Annual fuel consumption AFC NA Gespecific precautions and end	Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
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L WA S0/na dB Annual energy consumption Q HE 15501 kWh pumps: Rated brine or water flow rate, outdoor heat - 3,1/1,6 m3, For heat pump combination heater: - 3,1/1,6 m3, Declared load profile / XXL / A Water heating energy nwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kW Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA G Specific precautions and end The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the function 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 gree	Capacity control		Fixed			-	na	m3/h
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Specific precautions and end 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 gre		AEC						GJ
of life information: importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposed of the product as household waste is not permitted.	• •		end of the product importance that th	's life cycle, it mus e product's refrige	t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic	er offering a servi	ce of that type. t	is of great
	Contact dataila		•		•			231218

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



Rated heat output (*)Proted30kWBeckered capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 j149%Deckared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 jbeckared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 1 j = r - 7 °C C COPd 4.26 °C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 7 °C C COPd 4.40 °C Fi = r - 15 °C (If TOL < - 20 °C) Prode finance finan	Average climate and Low te	emperature				Ljungby		
Water to water heat pump: No Controller class: VII Sine-to-water heat pump: Yes Controller controlution: 3,5 % Soutemperature heat pump: No Package efficiency: 15,5 % Soutemperature heat pump: No Package efficiency: 15,5 % Equipped with a supplementary heater: Yes Package efficiency: 15,5 % Parameters shall be declared for medium-temperature application. For allow temperature heat pumps; Package efficiency: 1,6 No Package efficiency: 1,7 No Package efficiency: 1,8 No Package efficiency: 1,9 No Package efficiency: 1,9 No Package efficiency: 1,9 No Package efficiency: 1,8 No Package efficiency: 1,8 No Package efficiency: 1,9 No Package efficiency: 1,9<	Model(s):		CTC EcoPart 42	25 + CTC EcoZe	enith i555			
Brink-to-water heat pump: Yes Controller contribution: 3,5 % Low-temperature heat pump: No Package efficiency: 153 % Equipped with supplementary heater Yes Package efficiency: 153 % Franchers shall be declared for dimum temperature application. Xex temperature heat pumps. A++ - parameters shall be declared for dimum temperature application. Xex temperature heat pumps. No Low temperature heat pumps. parameters shall be declared for dimum temperature application. Xex temperature heat pumps. No Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °c and outdoor temperature 20 °c	Air-to-water heat pump:		No		Energy efficiency class:	A+	-	
Low-temperature heat pump: No Package efficiency: 153 % Equipped with a supplementary heater: Yes Package efficiency: A++ - Beat pump: Environmentary heater: Yes Package efficiency: A++ - Package efficiency: Attent pumps: Package efficiency: A++ - - Package efficiency: Attent pumps: Package efficiency: A++ - - Package efficiency: Attent pumps: Package efficiency: A++ - - Package efficiency: Attent pumps: Package efficiency: Package efficiency: Attent pumps: Package efficiency: Package efficiency: Attent pumps: Package efficiency: Package efficie	Water-to-water heat pump:		No		Controller class:	VII	-	
Equipped with a supplementary heater: Yes Package efficiency class: A++ Heat pump combination heater: Yes Package efficiency class: A++ - Heat pump combination heater: Yes Yes Package efficiency class: A++ - Parameters shall be declared for medium-temperature application. The match shall be declared for medium-temperature application. Telem Symbol Value Unit The match shall be declared for medium-temperature application. The package efficiency The shall be declared for medium-temperature application. Telem Symbol Value Unit The match shall be declared for medium-temperature application. The shall be declared for medium-temperature application.	Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Heat pump: combination heater:YesParameters shall be declared for moleum-remperature application.TermSymbolValueUnitRated heat output (*)Proted30KWBearameters shall be declared for moleum-remperature application.Seasonal space heating energyn_s1.49Kated heat output (*)Proted30KWDeclared capacity for heating for part load at indoor temperature 20 °C and uotidoor temperature 1Tile - 7°CCCOP44.10-T j = - 7°CPdn25.2KWTile - 2°CCOP44.10T j = - 7°CPdn25.2KWTile - 2°CCOP44.10-T j = - 7°CPdn25.2KWTile - 2°CCOP44.13-T j = - 12°CPdn25.2KWTile - 12°CCOP44.13-T j = operation limitPdn25.1KWTile - 13°CCOP44.02-Bivalent temperaturePdn25.1KWTile - 2°CCOP44.13-T j = - 15°C (#TOL < - 20°C)PdnnaKWTile - 15°C (#TOL < 20°C)COP4naBivalent temperatureT gav-6°CCCyclin	Low-temperature heat pump:		No		Package efficiency:	153	%	
Parameters shall be declared for weltiom-temperature application. term design and the declared for low-temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature application. term design and the declared for low temperature appli	Equipped with a supplementary	y heater:	Yes		Package efficiency class:	A++	-	
parameters shall be declared for low-temperature application. Item Symbol Value Unit East of the state of t	Heat pump combination heater	r:	Yes					
temSymbolValueUnitHemSymbolValueUnitRated heat output (*)Proted30kWSeasonal space heating energy n_s 149%Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 7 jDeclared capacity for heating for part load at indoor temperature 20 °C and $T_1 = -7 ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ} ^{\circ}$				tion, except for	r low-temperature heat pumps. For	low-tempera	ature heat pu	mps,
Rated heat output (*)Proted30kWDeclared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 20 °C and outdoor temperature 1 = 1 = -7 °C C C Ord 4.20 °C T = -7 °C C C Ord 4.20 °C T = -7 °C C C Ord 4.20 °C T = -1 = -7 °C C C Ord 4.20 °C T = -1 = -7 °C C C Ord 4.20 °C T = -1 = -7 °C C C Ord 4.20 °C T = -1 = -1 = -7 °C C C Ord 4.20 °C T = -1 = -1 = -7 °C C C Ord 4.20 °C T = -1 = -1 = -1 = -1 = -1 = -1 = -1 =	parameters shall be declared for		ure application.					
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outdoor temperature T jT j = - 7 °CPdh25,2KWT j = - 7 °CC OPd4,10-T j = + 7 °CPdh25,6KWT j = + 7 °CC OPd4,26-T j = + 7 °CPdh25,6KWT j = + 7 °CC OPd4,26-T j = + 7 °CPdh25,6KWT j = + 7 °CC OPd4,26-T j = brivalent temperaturePdh25,1KWT j = + 12 °CC OPd4,54-T j = operation limitPdh25,1KWT j = operation limitC OPd4,02-For air-to-water heat pumps:PdhnakWT j = -15 °C (if TOL < - 20 °C)	Rated heat output (*)	Prated	30	kW		η _s	149	%
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$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	T i = − 7 °C	Pdh	25.2	kW	T i = – 7 °C	COPd	4.10] -
T j = + 12 °CPdh25,8kWT j = + 12 °CCOPd4,54T j = bivalent temperaturePdh25,2kWT j = operation limitCOPd4,02T j = operation limitPdh25,1kWT j = operation limitCOPd4,02For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdnaT j = -15 °C (if TOL < -20 °C)	•			-] -
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T j = operation limit temperature Pdh $25,1$ kWT j = operation limit temperature $COPd$ $4,02$ $-$ For air-to-water heat pumps: T j = -15 °C (if TOL < - 20 °C)	T j = + 12 °C	Pdh	25,8	kW	T j = +12 °C	COPd	4,54	-
temperaturePan25,1KWtemperatureCDPa4,02.For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	T j = bivalent temperature	Pdh	25,2	kW	T j = bivalent temperature	COPd	4,13	-
T j = -15 °C (if TOL < -20 °C)PannakWT j = -15 °C (if TOL < -20 °C)COPanara-Bivalent temperatureT biv-6°C°CFor air-to-water heat pumps: Operation limit temperatureTOLna°CCycling interval capacity for heatingP cychnakWCycling interval efficiency $COPcyc$ na-Degradation co-efficient Cdh 0,94-Heating water operating limit temperatureWTOL65°CPower consumption in modes other than active mode0,025 kW Supplementary heaterSupplementary heaterSupplementary heaterRated heat output P_{Sup} 4,7 kW Type of energy inputElectricCrankcase heater mode P_{cx} 0,000 kW Other itemsCapacity controlFixedFor air-to-water heat pumps: Rated air flow rate, outdoors-naCapacity control $Fixed$ So(nadB-For water-/brine-to-water heat pumps: Rated brine or water How rate, outdoors-naCapacity control L_{WA} SO(nadBefficiency T_{wh} 101%Declared load profile / Energy efficiency classXXL / AWater heating energy efficiency T_{wh} 101%Daily electricity consumptionQelec9,750kWhDaily fuel consumptionAFCNAGJAnnual electricity consumptionAEC2145kWhAnnual fuel consumptionAFC <td></td> <td>Pdh</td> <td>25,1</td> <td>kW</td> <td></td> <td>COPd</td> <td>4,02</td> <td>-</td>		Pdh	25,1	kW		COPd	4,02	-
Bivalent temperature I_{biv} $-b$ $-c$ Operation limit temperature IOL na $-c$ Cycling interval capacity for heating P_{CyCh} na kW $Cycling interval efficiency COPcyc na -c Cycling interval efficiency COPcyc na -c Heating water operating limit WTOL 65 cC heating perature P_{orr} 0,94 -c Heating water operating limit WTOL 65 cC Supplementary heater R ated heat output PSup 4,7 kW remperature P_{orr} 0,025 kW Type of energy input Electric Crankcase heater mode P_{cx} 0,000 kW Type of energy input Electric Crankcase heater mode P_{cx} 0,000 kW Type of energy input Electric remperature P_{orr} na m3/h row ater/brine-to-water heat pumps: R ated air flow rate, outdoors -R rated air flow rate, outdoors -R rated prime or water R ated brine or water R row ater/brine-to-water heat P_{orr} na m3/h row ater/brine-to-water heat P_{orr} na m3/h row ater/brine-to-water heat P_{orr} na m3/h row ater P_{orr} na row ater P_{orr} na row ater P_{orr} na m3/h row ater P_{orr} na row ater P_{orr} na row ater P_{orr} na row ater P_{orr} na m3/h row ater P_{orr} na na row ater P_{orr} na na m3/h row ater P_{orr} na na row ater P_{orr} na na m3/h row ater P_{orr} na na na na na na na na$		Pdh	na	kW		COPd	na	-
heating P cych na kW Cycling interval efficiency COPCyc na Degradation co-efficient Cdh 0,94 - Heating water operating limit WTOL 65 *C Power consumption in modes other than active mode 0,025 kW Supplementary heater Rated heat output Psup 4,7 kW Off mode P orr 0,0354 kW Type of energy input Electric Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric m3/h Capacity control Fixed Sound power level, indoors/ L wA 50/na dB pumps: Rated brine or water flow rate, outdoors na m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy g,wh 101 % Daily electricity consumption Qelec 9,750 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 wate management. At the end of the product's life cycle, it must be sent correctitu/electroic/electroi	Bivalent temperature	T _{biv}	-6	°C		TOL	na	°C
Degradation co-efficient Can 0,94 - temperature W/OL b5 *C Power consumption in modes other than active mode Off mode Power 0,025 kW Supplementary heater Rated heat output Psup 4,7 kW Thermostat-off mode P ro 0,354 kW Standby mode P sa 0,025 kW Crankcase heater mode P cx 0,000 kW Other items For air-to-water heat pumps: - na Capacity control Fixed For air-to-water heat pumps: - na Sound power level, indoors/ L wA 50/na dB - For water-/brine-to-water heat pumps: Rated profile / Energy efficiency class L wA 50/na dB - - 3,8/2,0 m3/h Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA KWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA KWh Annual electricity AEC 2145		P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode P orf 0,025 kW Thermostat-off mode P ro 0,354 kW Standby mode P sa 0,025 kW Crankcase heater mode P cc 0,000 kW Other items 0,000 kW Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L wA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors - na m3/h Annual energy consumption Q HE 15661 kWh Water heating energy efficiency - 3,8/2,0 m3/h Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency The packaging must be deposited at a recycling station or water stated are product's life cycle, it must be sent correctly to a waste station or crectler offring a service of that type. It is of great end of the product's life cycle, it must be sent orrectly in a waste station or crectler offring a service of that type. It is of great of the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is not permitted.	Degradation co-efficient	Cdh	0,94	-		WTOL	65	°C
Thermostat-off mode P_{TO} $0,354$ kW Standby mode P_{ss} $0,025$ kW Crankcase heater mode P_{cx} $0,000$ kW Other items $Capacity control$ Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na $m3/h$ Sound power level, indoors/ outdoors L_{WA} $50/na$ dB for water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors heat - $3,8/2,0$ $m3/h$ Annual energy consumption Q_{HE} 15661 kWh For water heating energy efficiency n_{wh} 101 % Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency n_{wh} 101 % Daily electricity consumption Qelec $9,750$ kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 forcert wase management. At the end of the product's infe-cycl	Power consumption in modes of	other than active	e mode		Supplementary heater			
Standby mode P s8 0,025 kW Type of energy input Electric Crankcase heater mode P cx 0,000 kW Type of energy input Electric Other items Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L wA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy efficiency Twh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 fire cycle, it must be sent correctly to a waste station or seller offering a service of that type. It of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is	Off mode	P _{OFF}	0,025	kW	Rated heat output	Psup	4,7	kW
Crankcase heater mode P cx 0,000 kW Other items For air-to-water heat pumps: na m3/h Capacity control Fixed For air-to-water heat pumps: na m3/h Sound power level, indoors/ L wA 50/na dB For water-/brine-to-water heat pumps: na m3/h Sound power level, indoors/ L wA 50/na dB For water-/brine-to-water heat pumps: na m3/h Annual energy consumption Q_HE 15661 kWh For water-/brine-to-water heat pumps: a, 8/2,0 m3/h For heat pump combination heater: Declared load profile /	Thermostat-off mode	Р _{то}	0,354	kW				
Other items Capacity control Fixed Sound power level, indoors/ outdoors L WA 50/na dB Annual energy consumption Q HE 15661 kWh For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy efficiency class Nuh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 resulter offering a service of that type. It is of great importance that the product's life cycle, it must be sent correctly to a waste station or resulter offering a service of that type. It is of great importance that the product's life cycle, it must be sent correctly to a waste station or resulter offering a service of that type. It is of great importance that the product's life cycle, it must be sent correctly to a waste station or resulter offering a service of that type. It is of great importance that the product's life cycle, i	Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Capacity control Fixed For air-to-water heat pumps: Rated air flow rate, outdoors - na m3/h Sound power level, indoors/ outdoors L _{WA} 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger - 3,8/2,0 m3/h For heat pump combination heater: - 3,8/2,0 m3/h 101 % Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency null % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA Annual electricity consumption AEC 2145 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 refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is not permitted.	Crankcase heater mode	Р _{СК}	0,000	kW				
Capacity control Fixed Rated air flow rate, outdoors na m3/h Sound power level, indoors/ outdoors L wA 50/na dB For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 3,8/2,0 m3/h For heat pump combination heater: XXL / A Water heating energy efficiency class 0 0 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is not permitted.	Other items		•	•		•	_	_
outdoors L WA 50/na dB pumps: Rated brine or water Annual energy consumption Q HE 15661 kWh flow rate, outdoor heat - 3,8/2,0 m3/h For heat pump combination heater: Declared load profile / XXL / A Water heating energy - 3,8/2,0 m3/h Declared load profile / XXL / A Water heating energy flow name - 3,8/2,0 m3/h Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ Specific precautions and end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is not permitted.	Capacity control		Fixed			-	na	m3/h
Annual energy consumption Q HE 15661 KWn exchanger - 3,8/2,0 m3/n For heat pump combination heater: Declared load profile / Energy efficiency class XXL / A Water heating energy efficiency η_{wh} 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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 importance that 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. Disposi of the product as household waste is not permitted.		L _{WA}	50/na	dB				
For heat pump combination heater: Water heating energy η_{wh} 101 % Declared load profile / Energy efficiency class XXL / A Water heating energy η_{wh} 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity AEC 2145 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. Disposi of the product as household waste is not permitted.	Annual energy consumption	Q _{HE}	15661	kWh		-	3,8/2,0	m3/h
Energy efficiency class XXL / A efficiency Iuwh 101 % Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 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. Disposi of the product as household waste is not permitted.	<u> </u>	ater:						
Energy efficiency class efficiency Daily electricity consumption Qelec 9,750 kWh Daily fuel consumption Qfuel NA kWh Annual electricity consumption AEC 2145 kWh Annual fuel consumption AFC NA GJ Specific precautions and end of the product's life cycle, it 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. Disposi of the product as household waste is not permitted.	•		XXL / A			n _{wb}	101	%
Annual electricity AEC 2145 kWh Annual fuel consumption AFC NA GJ The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or reseller offering a service of that type. t is of great importance that the product's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposi of the product as household waste is not permitted.								
AEC2145KWnAnnual fuel consumptionAFCNAGJConsumptionFree 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. Disposi of the product as household waste is not permitted.	, , ,	Qelec	9,750	ĸwh	Daily fuel consumption	Qfuel	NA	ĸWh
Specific precautions and endend 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. Disposi of the product as household waste is not permitted.		AEC						
			end of the product importance that th	's life cycle, it mus e product's refrige	t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic	er offering a servi	ce of that type. t	is of great
	Contact details	CTC AB, Näsväge						231218

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



Cold climate and Medium to	emperature	OTO 5 5 1 1			Ljungby		
Model(s):		CTC EcoPart 42	25 + CTC EcoZe				
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	126	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared fo parameters shall be declared fo	or medium-temp		tion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
ltem	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	27	kW	Seasonal space heating energy efficiency	η _s	122	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
「j=−7 °C	Pdh	23,9	kW	T j = − 7 °C	COPd	3,18] -
ī j = + 2 ℃	Pdh	24,3	kW	T j = +2 °C	COPd	3,49	1 -
ī j = + 7 °C	Pdh	24,7	kW	T j = +7 °C	COPd	3,77] -
Г ј = + 12 °С	Pdh	25,0	kW	T j = +12 °C	COPd	3,98	- [
ī j = bivalent temperature	Pdh	23,7	kW	T j = bivalent temperature	COPd	2,96] -
Γ j = operation limit temperature	Pdh	23,5	kW	T j = operation limit temperature	COPd	2,79	-
For air-to-water heat pumps: - j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
livalent temperature	T _{biv}	-17	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,025	kW	Rated heat output	Psup	3,8	kW
hermostat-off mode	P _{TO}	0,117	kW				
standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		-,	ļ		ļ.		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/l
L Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	20723	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/l
or heat pump combination he	ater:		<u> </u>			•	•
Declared load profile /		XXL/A		Water heating energy	η _{wh}	101	%
Energy efficiency class			T	efficiency	' Iwh	101	70
Daily electricity consumption	Qelec	9,750	kWh	Daily fuel consumption	Qfuel	NA	kWł
Annual electricity consumption	AEC	2145	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 engin t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic en not permitted.	er offering a servio	ce of that type. t	is of great
Contact details	CTC AB, Näsväge	•		•			23121
	CIC AD, NdSVage	an o, 36-341 34 L	jungoy rei +46	www.uu.se			23121

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



Cold climate and Low temp	erature				Ljungby		
Model(s):		CTC EcoPart 42	25 + CTC EcoZe	nith i555			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		No		Package efficiency:	153	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
parameters shall be declared for			lion, except for	r low-temperature heat pumps. For	low- tempera	iture heat pu	mps,
Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	29	kW	Seasonal space heating energy efficiency	η _s	149	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	25,4	kW	T j = − 7 °C	COPd	4,29	1 -
T j = + 2 °C	Pdh	25,6	kW	T j = +2 °C	COPd	4,41	1 -
T j = + 7 °C	Pdh	25,7	kW	T j = +7 °C	COPd	4,50] -
T j = + 12 °C	Pdh	25,7	kW	T j = +12 °C	COPd	4,52	- [
T j = bivalent temperature	Pdh	25,2	kW	T j = bivalent temperature	COPd	4,15	-
T j = operation limit temperature	Pdh	25,1	kW	T j = operation limit temperature	COPd	4,02	-
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	4,18	-
Bivalent temperature	T _{biv}	-17	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,93	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,025	kW	Rated heat output	Psup	4,0	kW
Thermostat-off mode	Р _{то}	0,354	kW				
Standby mode	P _{SB}	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	18242	kWh	flow rate, outdoor heat exchanger	-	3,8/2,0	m3/h
For heat pump combination he	eater:		•				•
Declared load profile /		XXL / A		Water heating energy	η _{wh}	101	%
Energy efficiency class			1	efficiency	' Iwh	101	70
Daily electricity consumption	Qelec	9,750	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2145	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	a recycling station or with the installation engin t be sent correctly to a waste station or reselle rant, compressor oil and electrical/electronic en not permitted.	r offering a servio	ce of that type. t	s of great
Contact details	CTC AB, Näsväge	n 8, SE-341 34 Li	jungby Tel +46	372 88000 www.ctc.se			231218
	,						