#### 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 <sub>s</sub>	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 <sub>biv</sub>	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	-	Supplementary heater			
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	Psup	1,0	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW				
Standby mode	P <sub>SB</sub>	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	8728	kWh	flow rate, outdoor heat exchanger	-	3,1/1,6	m3/h
For heat pump combination he	eater:					<del></del>	
Declared load profile /		na		Water heating energy	$\eta_{wh}$	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 <sub>3</sub> 180       9         Package efficiency       1       Proted       2.6       KW       Seasonal space heating energy       n <sub>3</sub> 180       9         Package efficiency       1       Proted       2.6       KW       Seasonal space heating energy       n <sub>3</sub> 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. <b>tem</b> 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 <sub>s</sub>	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 <sub>biv</sub></td><td>3</td><td>°C</td><td></td><td>TOL</td><td>na</td><td>°C</td></t<>	Bivalent temperature	T <sub>biv</sub>	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 <sub>cych</sub>	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 <sub>OFF</sub>	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 <sub>то</sub>	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 <sub>SB</sub>	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 <sub>СК</sub>	0,000	kW				
Capacity control       Fixed       Rated air flow rate, outdoors       na       m3,         Sound power level, indoors/ outdoors       L <sub>WA</sub> 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 $\eta_{wh}$ 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 <sub>WA</sub>	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 <sub>HE</sub>	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 <sub>wb</sub>	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 <b>2</b>	%	
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 <sub>s</sub>	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 <sub>biv</sub>	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	Psup	3	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW				
Standby mode	P <sub>SB</sub>	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>ск</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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	$\eta_{wh}$	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 <sub>s</sub>	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 <sub>biv</sub>	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P <sub>OFF</sub>	0,018	kW	Rated heat output	Psup	3,2	kW
Thermostat-off mode	Р <sub>то</sub>	0,022	kW				
Standby mode	P <sub>SB</sub>	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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	$\eta_{wh}$	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 <sub>s</sub>	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 <sub>biv</sub>	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	- 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 <sub>OFF</sub>	0,018	kW	Rated heat output	Psup	2,8	kW
Thermostat-off mode	P <sub>TO</sub>	0,005	kW			•	
Standby mode	P <sub>SB</sub>	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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	$\eta_{wh}$	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 $\Pi_5$ 1.65 $\pi_5$ 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 <sub>s</sub>	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 <sub>biv</sub>	-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 <sub>cych</sub>	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 <sub>OFF</sub>	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 <sub>то</sub>	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 <sub>SB</sub>	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 <sub>СК</sub>	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 <sub>WA</sub>	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 <sub>HE</sub>	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 <sub>s</sub>	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 <sub>biv</sub>	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	e mode		Supplementary heater			
Off mode	P <sub>OFF</sub>	0,025	kW	Rated heat output	Psup	1,9	kW
Thermostat-off mode	Р <sub>то</sub>	0,117	kW				
Standby mode	P <sub>SB</sub>	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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	$\eta_{wh}$	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> <b>A</b> -         j = + 27 °C <i>Pdh</i> 2.5,1       k/W       Ti = + 2 °C <i>COPd</i> <b>A</b> -         j = braction limit <i>Pdh</i> 2.5,2       k/W       Ti = bivalent temperature <i>COPd</i> <b>A</b> -         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 <sub>s</sub>	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 <sub>biv</sub>	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 $\eta_{wh}$ 101Declared load profile / tonsumption $XXL / A$ Water heating energy efficiency $\eta_{wh}$ 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 <sub>cych</sub>	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 <sub>OFF</sub>	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 <sub>то</sub>	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 <sub>SB</sub>	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 <sub>СК</sub>	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 $\eta_{wh}$ 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 <sub>WA</sub>	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 <sub>HE</sub>	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 $\eta_c$ 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 <sub>s</sub>	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 <sub>biv</sub>	-10	°C		TOL	na	°C
Degradation co-efficient       Can       0,98       -       temperature       W/UL       65       -         Power consumption in modes other than active mode       Off mode       Power       0,025       kW       Supplementary heater         Off mode       Power       0,025       kW       Supplementary heater       Rated heat output       Psup       0,0       kV         Thermostat-off mode       Power       0,025       kW       Type of energy input       Electric       Electric         Crankcase heater mode       Pox       0,000       kW       Type of energy input       Electric       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 air flow rate, outdoors       -       na       m3         For heat pump combination heater:       Declared load profile /       XXL / A       Water heating energy       n_wh       101       %         Daily electricity consumption       Qelec       9,750       kWh       Annual fuel consumption       AFC       NA       KW         Annual electricity       AEC       2145       kWh       <		P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Off mode       P ofF       0,025       kW       Rated heat output       Psup       0,0       kW         Thermostat-off mode       P ro       0,025       kW       Type of energy input       Electric       Electric         Standby mode       P sg       0,025       kW       Type of energy input       Electric         Crankcase heater mode       P cx       0,000       kW       Type of energy input       Electric         Other items       Fixed       For air-to-water heat pumps: Rated air flow rate, outdoors       -       na       m3         Capacity control       Fixed       Sol/na       dB       dB       pumps: Rated brine or water flow rate, outdoors       -       na       m3         Annual energy consumption       Q HE       15501       kWh       Water heating energy efficiency       -       3,1/1,6       m3         Daily electricity consumption       Qelec       9,750       kWh       Daily fuel consumption       Qfuel       NA       kW         Annual electricity consumption       AEC       2145       kWh       Annual fuel consumption or with the installation engineer for correct waste management. At th end of the product's life cycle, it must be sent correctly to a waste station or weater sentence of that type. t is of gree monetone the of the for the ore of the there of the t	Degradation co-efficient	Cdh	0,98	-		WTOL	65	°C
Thermostat-off mode $P_{TO}$ $0,025$ $kW$ Standby mode $P_{ss}$ $0,025$ $kW$ Crankcase heater mode $P_{CK}$ $0,000$ $kW$ Other items $P_{CK}$ $0,000$ $kW$ 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       - $3,1/1,6$ $m3$ Annual energy consumption $Q_{HE}$ $15501$ $kWh$ Rechanger       - $3,1/1,6$ $m3$ For heat pump combination heater:       Declared load profile / Energy efficiency class       XXL / A       Water heating energy efficiency $\eta_{wh}$ $101$ $\eta_{wh}$ Daily electricity consumption       Qelec $9,750$ $kWh$ Daily fuel consumption       Qfuel       NA $kW$ Annual electricity       AEC $2145$ $kWh$ Annual fuel consumption       AFC       NA $kW$ Specific precautions and end       The packaging must be deposited at a recycling station or with the installation engineer for correct w	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 ck       0,000       kW       Type of energy input       Electric         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/ boutdoors       L wA       50/na       dB       -       For water-/brine-to-water heat pumps: Rated brine or water       -       3,1/1,6       m3         For heat pump combination heater:       -       -       3,1/1,6       m3         Dealy electricity consumption       Qelec       9,750       kWh       Daily fuel consumption       Qfuel       NA       kW         Annual electricity consumption       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 end of the product's life cycle, it must be sent correctly to a waste station or forence waste management. At the end of the product's life cycle, it must be sent correctly to a waste station or differing a service of that type. I is of greateres wheth	Off mode	P <sub>OFF</sub>	0,025	kW	Rated heat output	Psup	0,0	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/ boutdoors       L wA       50/na       dB       For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger       na       m3         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       kW         Annual electricity consumption       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 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 gree	Thermostat-off mode	<b>Р</b> <sub>то</sub>	0,025	kW				
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 <sub>SB</sub>	0,025	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/ butdoors       L WA       50/na       dB       For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat       na       m3         Annual energy consumption       Q HE       15501       kWh       For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat       na       m3         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       kW         Annual electricity consumption       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 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 pre- tion 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 pre- tion of the product's life cycle, it must be sent correctly to a waste station or preseller offering a service of that type. t is of pre- tion of the product's life cycle, it must	Crankcase heater mode	Р <sub>ск</sub>	0,000	kW				
Capacity control       Fixed       Rated air flow rate, outdoors       -       na       m3         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 exchanger       -       3,1/1,6       m3         Annual energy consumption       Q HE       15501       kWh       For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger       -       3,1/1,6       m3         For heat pump combination heater:       -       -       3,1/1,6       m3         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       kW         Annual electricity consumption       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 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 pre- tere the the the fore the the fore and the the fore the thefore the the fore the the fore the the fore th	Other items			ł			_	_
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
Annual energy consumption       Q HE       15501       kWn       exchanger       -       3,1/1,6       M3,         For heat pump combination heater:       Declared load profile / Energy efficiency class       XXL / A       Water heating energy efficiency $\eta_{wh}$ 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 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 gree		L <sub>WA</sub>	50/na	dB				
For heat pump combination heater:         Declared load profile /         Declared load profile /       XXL / A       Water heating energy efficiency $\eta_{wh}$ 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 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 gree	Annual energy consumption	Q <sub>HE</sub>	15501	kWh		-	3,1/1,6	m3/h
Energy efficiency class       XXL / A       efficiency       Iun       101       %         Daily electricity consumption       Qelec       9,750       kWh       Daily fuel consumption       Qfuel       NA       kW         Annual electricity consumption       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 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 given and end is the product's life cycle, it must be for more prile of electricity of a waste station or reseller offering a service of that type. t is of given and 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 given and 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 given and 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 given and 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 given and 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 given and 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 given and 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 given a	For heat pump combination he	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       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 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 gree	• •		XXL / A		Water heating energy	n+	101	%
Annual electricity consumption AEC 2145 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 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 gree		Oplas	T	1.1.4.1-				-
AEC     2145     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 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 greater that the under th	, , ,	Qelec	9,750	кvvn	Daily rule consumption	Qtuel	INA	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 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.					
Name name output (1)ProductSUKWefficiencyIsL49YeDeclared capacity for heating for part load at indoor 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 1 is - 7 °CPath $25,2$ KWTj = -7 °CCOPd $4,20$ -T j = + 7 °CPath $25,5$ KWTj = -7 °CCOPd $4,40$ T j = + 12 °CPath $25,5$ KWTj = +7 °CCOPd $4,40$ -T j = paration limitPath $25,5$ KWTj = -15 °C (f TOL < -20 °C)	Item	Symbol	Value	Unit		Symbol	Value	Unit
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 <sub>s</sub>	149	%
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		or part load at ir	idoor 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 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)	•			-				<b>]</b> -
Tj = bivalent temperaturePdh25,2kWTj = bivalent temperatureCOPd4,13.Tj = operation limitPdh25,1kWTj = operation limitCOPd4,02.For air-to-water heat pumps:PdhnakWFor air-to-water heat pumps:COPdna.For air-to-water heat pumps:Tj = -15 °C (if TOL < -20 °C)	•	Pdh	-	kW		COPd		] -
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 <sub>biv</sub>	-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 <sub>cych</sub>	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 <sub>OFF</sub>	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	<b>Р</b> <sub>то</sub>	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 <sub>SB</sub>	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 <sub>WA</sub> 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 <sub>СК</sub>	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 $\eta_{wh}$ 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 <sub>WA</sub>	50/na	dB				
For heat pump combination heater:       Water heating energy $\eta_{wh}$ 101       %         Declared load profile / Energy efficiency class       XXL / A       Water heating energy $\eta_{wh}$ 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 <sub>HE</sub>	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 <sub>wb</sub>	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 <sub>s</sub>	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 <sub>biv</sub>	-17	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for neating	P <sub>cych</sub>	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 <sub>OFF</sub>	0,025	kW	Rated heat output	Psup	3,8	kW
hermostat-off mode	P <sub>TO</sub>	0,117	kW				
standby mode	P <sub>SB</sub>	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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 <sub>wh</sub>	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 <sub>s</sub>	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 <sub>biv</sub>	-17	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P <sub>cych</sub>	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,93	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P <sub>OFF</sub>	0,025	kW	Rated heat output	Psup	4,0	kW
Thermostat-off mode	Р <sub>то</sub>	0,354	kW				
Standby mode	P <sub>SB</sub>	0,025	kW	Type of energy input		Electric	
Crankcase heater mode	Р <sub>СК</sub>	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 <sub>WA</sub>	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q <sub>HE</sub>	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 <sub>wh</sub>	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
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