

Warm climate and Medium temperature

Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	-
Water-to-water heat pump:	No	Controller class:	VI -
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	161 %
Equipped with a supplementary heater:	No	Package efficiency class:	-
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	8	kW	Seasonal space heating energy efficiency	η_s	157	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	<i>P_{dh}</i>	na	kW	T _j = -7 °C	<i>COP_d</i>	na	-
T _j = +2 °C	<i>P_{dh}</i>	8,3	kW	T _j = +2 °C	<i>COP_d</i>	2,75	-
T _j = +7 °C	<i>P_{dh}</i>	5,3	kW	T _j = +7 °C	<i>COP_d</i>	3,78	-
T _j = +12 °C	<i>P_{dh}</i>	2,4	kW	T _j = +12 °C	<i>COP_d</i>	5,12	-
T _j = bivalent temperature	<i>P_{dh}</i>	8,3	kW	T _j = bivalent temperature	<i>COP_d</i>	2,75	-
T _j = operation limit temperature	<i>P_{dh}</i>	8,3	kW	T _j = operation limit temperature	<i>COP_d</i>	2,75	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>P_{dh}</i>	na	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>COP_d</i>	na	-
Bivalent temperature	<i>T_{biv}</i>	2	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P_{cych}</i>	na	kW	Cycling interval efficiency	<i>COP_{cyc}</i>	na	-
Degradation co-efficient	<i>C_{dh}</i>	0,98	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{off}</i>	0,023	kW	Rated heat output	<i>P_{sup}</i>	0,0	kW
Thermostat-off mode	<i>P_{to}</i>	0,000	kW	Type of energy input	Electric		
Standby mode	<i>P_{sb}</i>	0,000	kW				
Crankcase heater mode	<i>P_{ck}</i>	0,000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L_{WA}</i>	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1	m ³ /h
Annual energy consumption	<i>Q_{HE}</i>	2687	kWh				

For heat pump combination heater:

Declared load profile	NA			Water heating energy efficiency/Energy class	$\eta_{wh/-}$	NA	%
Daily electricity consumption	<i>Q_{elec}</i>	NA	kWh	Daily fuel consumption	<i>Q_{fuel}</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.

Contact details [Enertech AB, Box 309, SE-341 26 Ljungby Tel +46 372 88000](mailto:ener@ener.se) www.ctc.se 190618



Warm climate and Low temperature

Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	-
Water-to-water heat pump:	No	Controller class:	VI -
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	204 %
Equipped with a supplementary heater:	No	Package efficiency class:	-
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	10	kW	Seasonal space heating energy efficiency	η_s	200	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j			
T j = - 7 °C	<i>Pdh</i>	na	kW	T j = - 7 °C	<i>COPd</i>	na	-
T j = + 2 °C	<i>Pdh</i>	10,0	kW	T j = + 2 °C	<i>COPd</i>	4,29	-
T j = + 7 °C	<i>Pdh</i>	6,4	kW	T j = + 7 °C	<i>COPd</i>	5,29	-
T j = + 12 °C	<i>Pdh</i>	2,9	kW	T j = + 12 °C	<i>COPd</i>	5,71	-
T j = bivalent temperature	<i>Pdh</i>	10,0	kW	T j = bivalent temperature	<i>COPd</i>	4,29	-
T j = operation limit temperature	<i>Pdh</i>	10,0	kW	T j = operation limit temperature	<i>COPd</i>	na	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	<i>Pdh</i>	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	<i>COPd</i>	na	-
Bivalent temperature	<i>T biv</i>	2	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P cyc</i>	na	kW	Cycling interval efficiency	<i>COPcyc</i>	na	-
Degradation co-efficient	<i>Cdh</i>	0,97	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P off</i>	0,023	kW	Rated heat output	<i>P sup</i>	0,0	kW
Thermostat-off mode	<i>P to</i>	0,000	kW	Type of energy input: Electric			
Standby mode	<i>P sb</i>	0,000	kW				
Crankcase heater mode	<i>P ck</i>	0,000	kW	For air-to-water heat pumps: Rated air flow rate, outdoors			
Other items				For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
Capacity control	Variable			-	na	m ³ /h	
Sound power level, indoors/ outdoors	<i>L WA</i>	41/na	dB	-	1,4	m ³ /h	
Annual energy consumption	<i>Q HE</i>	2566	kWh				

For heat pump combination heater:

Declared load profile	NA			Water heating energy efficiency/Energy class	$\eta_{wh/-}$	NA	%
Daily electricity consumption	<i>Qelec</i>	NA	kWh	Daily fuel consumption	<i>Qfuel</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.

Average climate and Medium temperature

Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	A++ -
Water-to-water heat pump:	No	Controller class:	VI -
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	159 %
Equipped with a supplementary heater:	No	Package efficiency class:	A+++ -
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	7	kW	Seasonal space heating energy efficiency	η_s	155	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	<i>P_{dh}</i>	6,0	kW	T _j = -7 °C	<i>COP_d</i>	3,25	-
T _j = +2 °C	<i>P_{dh}</i>	3,7	kW	T _j = +2 °C	<i>COP_d</i>	4,18	-
T _j = +7 °C	<i>P_{dh}</i>	2,4	kW	T _j = +7 °C	<i>COP_d</i>	4,70	-
T _j = +12 °C	<i>P_{dh}</i>	2,4	kW	T _j = +12 °C	<i>COP_d</i>	5,34	-
T _j = bivalent temperature	<i>P_{dh}</i>	6,7	kW	T _j = bivalent temperature	<i>COP_d</i>	3,00	-
T _j = operation limit temperature	<i>P_{dh}</i>	na	kW	T _j = operation limit temperature	<i>COP_d</i>	na	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>P_{dh}</i>	na	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>COP_d</i>	na	-
Bivalent temperature	<i>T_{biv}</i>	-10	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P_{cych}</i>	na	kW	Cycling interval efficiency	<i>COP_{cyc}</i>	na	-
Degradation co-efficient	<i>C_{dh}</i>	0,98	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{off}</i>	0,023	kW	Rated heat output	<i>P_{sup}</i>	0,1	kW
Thermostat-off mode	<i>P_{to}</i>	0,000	kW	Type of energy input	Electric		
Standby mode	<i>P_{sb}</i>	0,000	kW				
Crankcase heater mode	<i>P_{ck}</i>	0,000	kW				
Other items							
Capacity control	Variable			For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L_{WA}</i>	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger	-	1,0	m ³ /h
Annual energy consumption	<i>Q_{HE}</i>	3444	kWh				

For heat pump combination heater:

Declared load profile	NA			Water heating energy efficiency/Energy class	$\eta_{wh/-}$	NA	%
Daily electricity consumption	<i>Q_{elec}</i>	NA	kWh	Daily fuel consumption	<i>Q_{fuel}</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.

Contact details [Enertech AB, Box 309, SE-341 26 Ljungby Tel +46 372 88000](mailto:ener@ener.se) www.ctc.se 190618

Average climate and Low temperature

Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	A++ -
Water-to-water heat pump:	No	Controller class:	VI -
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	212 %
Equipped with a supplementary heater:	No	Package efficiency class:	A+++ -
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	10	kW	Seasonal space heating energy efficiency	η_s	208	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	<i>P_{dh}</i>	8,8	kW	T _j = -7 °C	<i>COP_d</i>	4,59	-
T _j = +2 °C	<i>P_{dh}</i>	5,4	kW	T _j = +2 °C	<i>COP_d</i>	5,60	-
T _j = +7 °C	<i>P_{dh}</i>	3,5	kW	T _j = +7 °C	<i>COP_d</i>	6,05	-
T _j = +12 °C	<i>P_{dh}</i>	2,4	kW	T _j = +12 °C	<i>COP_d</i>	6,03	-
T _j = bivalent temperature	<i>P_{dh}</i>	9,8	kW	T _j = bivalent temperature	<i>COP_d</i>	4,30	-
T _j = operation limit temperature	<i>P_{dh}</i>	na	kW	T _j = operation limit temperature	<i>COP_d</i>	na	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>P_{dh}</i>	na	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>COP_d</i>	na	-
Bivalent temperature	<i>T_{biv}</i>	-10	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P_{cych}</i>	na	kW	Cycling interval efficiency	<i>COP_{cy}</i>	na	-
Degradation co-efficient	<i>C_{dh}</i>	0,97	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{off}</i>	0,023	kW	Rated heat output	<i>P_{sup}</i>	0,1	kW
Thermostat-off mode	<i>P_{to}</i>	0,000	kW	Type of energy input	Electric		
Standby mode	<i>P_{sb}</i>	0,000	kW	For air-to-water heat pumps: Rated air flow rate, outdoors			
Crankcase heater mode	<i>P_{ck}</i>	0,000	kW				
Other items				For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
Capacity control	Variable			-	na	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L_{WA}</i>	41/na	dB	-	1,4	1,4	m ³ /h
Annual energy consumption	<i>Q_{HE}</i>	3800	kWh				

For heat pump combination heater:

Declared load profile	Symbol	Value	Unit	Water heating energy efficiency/Energy class	Symbol	Value	Unit
		NA			$\eta_{wh/-}$	NA	%
Daily electricity consumption	<i>Q_{elec}</i>	NA	kWh	Daily fuel consumption	<i>Q_{fuel}</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.

Contact details [Enertech AB, Box 309, SE-341 26 Ljungby Tel +46 372 88000](mailto:ener@ener.se) www.ctc.se 190618



Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	-
Water-to-water heat pump:	No	Controller class:	VI -
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	167 %
Equipped with a supplementary heater:	No	Package efficiency class:	-
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	7	kW	Seasonal space heating energy efficiency	η_s	163	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T _j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T _j			
T _j = -7 °C	<i>Pdh</i>	4,46	kW	T _j = -7 °C	<i>COPd</i>	4,01	-
T _j = +2 °C	<i>Pdh</i>	2,7	kW	T _j = +2 °C	<i>COPd</i>	4,66	-
T _j = +7 °C	<i>Pdh</i>	2,4	kW	T _j = +7 °C	<i>COPd</i>	5,17	-
T _j = +12 °C	<i>Pdh</i>	2,4	kW	T _j = +12 °C	<i>COPd</i>	5,51	-
T _j = bivalent temperature	<i>Pdh</i>	7,5	kW	T _j = bivalent temperature	<i>COPd</i>	2,86	-
T _j = operation limit temperature	<i>Pdh</i>	7,54	kW	T _j = operation limit temperature	<i>COPd</i>	2,86	-
For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>Pdh</i>	na	kW	For air-to-water heat pumps: T _j = -15 °C (if TOL < -20 °C)	<i>COPd</i>	na	-
Bivalent temperature	<i>T_{biv}</i>	-22	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P_{cych}</i>	na	kW	Cycling interval efficiency	<i>COP_{cyc}</i>	na	-
Degradation co-efficient	<i>Cdh</i>	0,98	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P_{off}</i>	0,023	kW	Rated heat output	<i>P_{sup}</i>	0,0	kW
Thermostat-off mode	<i>P_{to}</i>	0,000	kW	Type of energy input Electric			
Standby mode	<i>P_{sb}</i>	0,000	kW				
Crankcase heater mode	<i>P_{ck}</i>	0,000	kW	For air-to-water heat pumps: Rated air flow rate, outdoors			
Other items				For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
Capacity control	Variable			-	na	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L_{WA}</i>	41/na	dB	-	1,0	1,0	m ³ /h
Annual energy consumption	<i>Q_{HE}</i>	4158	kWh				

For heat pump combination heater:

Declared load profile	NA			Water heating energy efficiency/Energy class	$\eta_{wh/}$	NA	%
Daily electricity consumption	<i>Q_{elec}</i>	NA	kWh	Daily fuel consumption	<i>Q_{fuel}</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.



Cold climate and Low temperature

Model(s):	CTC EcoPart 612M		
Air-to-water heat pump:	No	Energy efficiency class:	-
Water-to-water heat pump:	No	Controller class:	VI
Brine-to-water heat pump:	Yes	Controller contribution:	4 %
Low-temperature heat pump:	No	Package efficiency:	214 %
Equipped with a supplementary heater:	No	Package efficiency class:	-
Heat pump combination heater:	No		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	<i>Prated</i>	11	kW	Seasonal space heating energy efficiency	η_s	210	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature T j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j			
T j = - 7 °C	<i>Pdh</i>	7,0	kW	T j = - 7 °C	<i>COPd</i>	5,33	-
T j = + 2 °C	<i>Pdh</i>	4,2	kW	T j = + 2 °C	<i>COPd</i>	5,90	-
T j = + 7 °C	<i>Pdh</i>	2,8	kW	T j = + 7 °C	<i>COPd</i>	5,95	-
T j = + 12 °C	<i>Pdh</i>	2,4	kW	T j = + 12 °C	<i>COPd</i>	5,74	-
T j = bivalent temperature	<i>Pdh</i>	11,5	kW	T j = bivalent temperature	<i>COPd</i>	3,93	-
T j = operation limit temperature	<i>Pdh</i>	11,45	kW	T j = operation limit temperature	<i>COPd</i>	3,93	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	<i>Pdh</i>	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	<i>COPd</i>	na	-
Bivalent temperature	<i>T biv</i>	-22	°C	For air-to-water heat pumps: Operation limit temperature	<i>TOL</i>	na	°C
Cycling interval capacity for heating	<i>P cyc</i>	na	kW	Cycling interval efficiency	<i>COPcyc</i>	na	-
Degradation co-efficient	<i>Cdh</i>	0,96	-	Heating water operating limit temperature	<i>WTOL</i>	65	°C
Power consumption in modes other than active mode				Supplementary heater			
Off mode	<i>P off</i>	0,013	kW	Rated heat output	<i>P sup</i>	0,0	kW
Thermostat-off mode	<i>P to</i>	0,034	kW	Type of energy input Electric			
Standby mode	<i>P sb</i>	0,000	kW				
Crankcase heater mode	<i>P ck</i>	0,000	kW	For air-to-water heat pumps: Rated air flow rate, outdoors			
Other items				For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger			
Capacity control	Variable			-	na	na	m ³ /h
Sound power level, indoors/ outdoors	<i>L WA</i>	41/na	dB	-	1,0	1,0	m ³ /h
Annual energy consumption	<i>Q HE</i>	5145	kWh				

For heat pump combination heater:

Declared load profile	NA			Water heating energy efficiency/Energy class	η_{wh-}	NA	%
Daily electricity consumption	<i>Qelec</i>	NA	kWh	Daily fuel consumption	<i>Qfuel</i>	NA	kWh
Annual electricity consumption	<i>AEC</i>	NA	kWh	Annual fuel consumption	<i>AFC</i>	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.