Information for heat pump sp Warm climate and Medium t		and heat pump	combination	heaters	Enertech A 341 26 Ljur		TC
Model(s):		CTC EcoPart 41	L2 + CTC EcoLo	gic			
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 supplementary	pped with a supplementary heater: No			Package efficiency class:		-	
Heat pump combination heater: Parameters shall be declared for parameters shall be declared for	r medium-temp		ion, except fo	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η _s	137	%
Declared capacity for heating for outdoor temperature T j	r part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of perform part load at indoor temperature			
T j = - 7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	13,6	kW	T j = +2 °C	COPd	3,08] -
T j = + 7 °C	Pdh	11,1	kW	T j = +7 °C	COPd	3,45	-
T j = + 12 °C	Pdh	11,5	kW	T j = +12 °C	COPd	4,14	-
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,18	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than active	e <u>mode</u>	-	Supplementary heater			,
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				

Power consumption in modes other than active mode									
Off mode	P OFF	0,018	kW						
Thermostat-off mode	P _{TO}	0,005	kW						
Standby mode	P_{SB}	0,018	kW						
Crankcase heater mode	P _{CK}	0,000	kW						
Other items			•						

Fixed 50/na dΒ L_{WA} 4364 kWh Q_{HE}

For air-to-water heat pumps: m3/h na Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 2,1 m3/h exchanger

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Q fuel	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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ properly\ disposed\ properly\ p$ of the product as household waste is not permitted.

Capacity control

outdoors

Enertech AB



Information for heat pump s	pace heaters a	nd heat pump	combination	heaters			
Warm climate and Low tem	perature				ngby		
Model(s):		CTC EcoPart 41	12 + CTC EcoLo	ogic			
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:	184	%	
Equipped with a supplementary	y heater:	No		Package efficiency class:		-	
Heat pump combination heater	r:	No					
Parameters shall be declared for parameters shall be declared for		• • • • • • • • • • • • • • • • • • • •		r low-temperature heat pumps. For	low- tempera	iture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	
Rated heat output (*)		T					Unit
- Kateu Heat Output ()	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	180	Unit %
Declared capacity for heating for outdoor temperature T j					nce or prima	ry energy rat	% io for
Declared capacity for heating for				efficiency Declared coefficient of performa	nce or prima	ry energy rat	% io for

outdoor temperature T j	or part load at II	iuoor temperatu	ne zu Canu	part load at indoor temperature	•	, ,,	
T j = - 7 °C	Pdh	na	kW	T j = -7 °C	COPd	na	٦ -
T j = + 2 °C	Pdh	11,8	kW	T j = +2 °C	COPd	4,60	1 -
T j = + 7 °C	Pdh	11,9	kW	T j = +7 °C	COPd	4,83] -
T j = + 12 °C	Pdh	12,0	kW	T j = +12 °C	COPd	5,11	-
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,68	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	e <u>mode</u>	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3618	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination he	eater:						
Declared load profile		na		Water heating energy	η_{wh}	na	%

Annual energy consumption	Q _{HE}	3618	kWh	exchanger	-	2,6	m3/h
For heat pump combination he	eater:						
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ

Specific precautions and end of life information:

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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ prope$ of the product as household waste is not permitted.

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

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412	+ CTC EcoLogic		
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:	142	%
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 fo	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η _s	138	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = - 7 °C	Pdh	11	kW	T j = - 7 °C	COPd	3,25] -
T j = + 2 °C	Pdh	11,2	kW	T j = +2 °C	COPd	3,64	-
T j = + 7 °C	Pdh	11,4	kW	T j = +7 °C	COPd	4,02	-
T j = + 12 °C	Pdh	11,6	kW	T j = +12 °C	COPd	4,40	-
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	-	Supplementary heater			=
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,5	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items			•				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7084	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
For heat pump combination hea	ater:	1	•				
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller grant, compressor oil and electrical/electronic en and permitted.	offering a service	e of that type. t	is of great

Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412 + CTC EcoLogic						
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 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 (*)	Prated	13	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	182	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = - 7 °C	Pdh	11,8	kW	T j = - 7 °C	COPd	4,69] -
T j = + 2 °C	Pdh	11,9	kW	T j = +2 °C	COPd	4,88	1 -
T j = + 7 °C	Pdh	12,0	kW	T j = +7 °C	COPd	5,06	1 -
T j = + 12 °C	Pdh	12,1	kW	T j = +12 °C	COPd	5,23] -
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,69	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items			•				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5814	kWh	flow rate, outdoor heat exchanger	_	2,6	m3/h
For heat pump combination he	ater:						
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	G1
Specific precautions and end				a recycling station or with the installation engine t be sent correctly to a waste station or reseller		-	

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.

Enertech AB



Cold climate and Medium	temperature				341 26 Ljungby			
Model(s):		CTC EcoPart 41	L2 + CTC EcoL	ogic				
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 supplement	ary heater:	No		Package efficiency class:		-		
Heat pump combination hea Parameters shall be declared parameters shall be declared	for medium-temp		ion, except fo	or low-temperature heat pumps. For	r low- tempera	iture heat pu	mps,	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	141	%	
		•	•			•	-	

Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	141	%	
Declared capacity for heating foutdoor temperature T j	or part load at inc	door temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j				
T j = -7 °C	Pdh	11,2	kW	T j = - 7 °C	COPd	3,56	-	
T j = + 2 °C	Pdh	11,4	kW	T j = +2 °C	COPd	3,94	-	
T j = + 7 °C	Pdh	11,6	kW	T j = +7 °C	COPd	4,29	-	
T j = + 12 °C	Pdh	11,7	kW	T j = +12 °C	COPd	4,54	-	
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-	
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-	
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-	
Bivalent temperature	T _{biv}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C	
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-	
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in modes	other than active	mode		Supplementary heater				
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,4	kW	
Thermostat-off mode	P _{TO}	0,005	kW					
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric		
Crankcase heater mode	P _{CK}	0,000	kW					
Other items								
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h	
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water				
Annual energy consumption	Q _{HE}	8195	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h	
For heat pump combination he	eater:					•		
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%	
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh	
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ	

consumption The packaging must be deposited at a recycling station or with the installation engineer for correct waste management. At the 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: $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ prope$

Information for heat pump sp Cold climate and Low tempe		nd heat pump	combination	heaters	Enertech A 341 26 Ljui		CTC
Model(s):		CTC EcoPart 41	.2 + CTC EcoLo	gic			
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:	189	%	
Equipped with a supplementary	heater:	No		Package efficiency class:		-	
Heat pump combination heater:		No					
Parameters shall be declared for parameters shall be declared for			ion, except fo	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	185	%
Declared capacity for heating fo outdoor temperature T j	•		-	Declared coefficient of perform part load at indoor temperature	e 20 °C and ou	itdoor tempe	
T j = - 7 °C	Pdh	11,9	kW	Tj=-7°C	COPd	4,89	-
T j = + 2 °C T j = + 7 °C	Pdh Pdh	12,0 12,1	kW kW	T j = +2 °C T j = +7 °C	COPd COPd	5,06 E 19	
Tj=+7 C Tj=+12 ℃	Pdh Pdh		kW	T j = +12 °C	COPa	5,18	- ·
1]-+12 C	Pull	12,1	KVV		СОРИ	5,20	1
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,66	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-20	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	-	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,7	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				

Power consumption in modes	other than active	mode	
Off mode	P OFF	0,018	kW
Thermostat-off mode	P _{TO}	0,022	kW
Standby mode	P_{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items			

 L_{WA}

 Q_{HE}

For air-to-water heat pumps: na m3/h Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 2,6 m3/h exchanger

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ

dΒ

kWh

Specific precautions and end of life information:

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

Capacity control

outdoors

Fixed

50/na

6373

	and heat pump	combination	heaters			
temperature	CTC EcoPart 4:	12 + CTC EcoZe	enith i350/ i350F	J41 20 Ljui	igby	
	No				_	
	No			VII	-	
	Yes		Controller contribution:	3,5	%	
	No		Package efficiency:	141	%	
heater:	Yes		· · · · · · · · · · · · · · · · · · ·		-	
	Yes		<u> </u>			
r medium-temp		tion, except fo	r low-temperature heat pumps. Fo	r low- tempera	ture heat pu	mps,
Symbol	Value	Unit	Item	Symbol	Value	Un
Prated	12	kW	Seasonal space heating energy efficiency	η _ς	137	%
r part load at ir	ndoor temperatu	ıre 20 °C and	1 I			
Pdh	na	kW	T j = - 7 °C	COPd	na] -
Pdh	13,6	kW	T j = +2 °C	COPd	3,08	1 -
Pdh	11,1	kW	T j = +7 °C	COPd	3,45] -
Pdh	11,5	kW	T j = +12 °C	COPd	4,14] -
Pdh	11	kW	T j = bivalent temperature	COPd	3,18	-
Pdh	na	kW	T j = operation limit temperature	COPd	na	_
Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°(
P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na] -
Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°(
ther than active		7	Supplementary heater			٦.
P OFF	0,018	kW	Rated heat output	Psup	0,5	kV
			1 1	1		
P _{TO}	0,005	kW				
	temperature Theater:	Temperature CTC EcoPart 4 No No Yes No Theater: Yes Theater: Yes	No No No No No Heater: Yes Transport very ser medium-temperature application, except for low-temperature application. Symbol Value Unit Prated 12 kW Trated 13,6 kW Pdh 13,6 kW Pdh 11,1 kW Pdh 11,5 kW Pdh 11,5 kW Pdh 11 kW Pdh 10 kW Pdh 11 kW	No Energy efficiency class: No Controller class: Yes Controller contribution: No Package efficiency: No Package efficiency class: Yes Package efficiency: Theater: Yes Package efficiency class: Yes Package efficiency classes classe	Temperature CTC EcoPart 412 + CTC EcoZenith i350/ i350F No Energy efficiency class: No Controller class: VII Yes Controller contribution: 3,5 No Package efficiency: 141 Theater: Yes Package efficiency class: Yes Package efficiency coped efficiency coped package efficiency coped classes	CTC EcoPart 412 + CTC EcoZenith i350/ i350F No Energy efficiency class: - No Controller contribution: 3,5 % No Package efficiency: 141 % Pes Package efficiency class: - Yes Package efficiency cope data pumps: For low-temperature heat pumps: All pumps and pump and p

		-,	
Power consumption in modes	other than active	mode	_
Off mode	P OFF	0,018	kW
Thermostat-off mode	P TO	0,005	kW
Standby mode	P _{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items		•	

١				
		_		
	For air-to-water heat pumps: Rated air flow rate, outdoors		na	m3/h
	For water-/brine-to-water heat pumps: Rated brine or water			
	flow rate, outdoor heatexchanger		2,1	m3/h

Capacity control		Fixed	
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB
Annual energy consumption	Q _{HE}	4364	kWh

For heat pump combination heater:

Declared load profile/ Energy efficiency class	XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%	
Daily electricity consumption	Qelec	7,619	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1676	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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ properly\ disposed\ properly\ p$ of the product as household waste is not permitted.

Enertech AB



Warm climate and Low temperature				341 26 Lju	ngby	
Model(s):	CTC EcoPart 4:	12 + CTC EcoZ	enith i350/ i350F			
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:	184	%	
Equipped with a supplementary heater:	Yes		Package efficiency class:		-	
Heat pump combination heater:	Yes					
Parameters shall be declared for medium	-temperature applicat	tion, except fo	or low-temperature heat pumps.	For low- temper	ature heat p	umps,
parameters shall be declared for low-tem	perature application.					
Item Symb	ol Value	Unit	Item	Symbol	Value	Unit
			Casanal anasa bastina ana			

Item	Symbol	Value	Unit	Item	Symbol	Value	U
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	180	ç
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	ıre 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	1
T j = + 2 °C	Pdh	11,8	kW	T j = +2 °C	COPd	4,60	
T j = + 7 °C	Pdh	11,9	kW	T j = +7 °C	COPd	4,83	
T j = + 12 °C	Pdh	12,0	kW	T j = +12 °C	COPd	5,11	
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,68	
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	•
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	
Power consumption in modes of	other than active	mode	_	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,9	k
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items			•				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3618	kWh	flow rate, outdoor heat exchanger	-	2,6	m3
For heat pump combination he	ater:						
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	9
Daily electricity consumption	Qelec	7,619	kWh	Daily fuel consumption	Qfuel	na	k۷
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	na	,
Specific precautions and end		end of the product	's life cycle, it mus	a recycling station or with the installation enging t be sent correctly to a waste station or reseller grant, compressor oil and electrical/electronic e	offering a servi	ice of that type. t	is of gr

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.

Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s): CTC EcoPart 412 + CTC EcoZenith i350/ i350F							
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:	142	%			
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-			
Heat pump combination heater:	Yes						

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	138	%
Declared capacity for heating fooutdoor temperature T j	or part load at in	door temperatu	ire 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = - 7 °C	Pdh	11	kW	T j = - 7 °C	COPd	3,25] -
T j = + 2 °C	Pdh	11,2	kW	T j = +2 °C	COPd	3,64] -
T j = + 7 °C	Pdh	11,4	kW	T j = +7 °C	COPd	4,02] -
T j = + 12 °C	Pdh	11,6	kW	T j = +12 °C	COPd	4,40	-
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,5	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		!					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/i
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7084	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/
For heat pump combination hea	ater:	•	•			•	
Declared load profile/		XL / A		Water heating energy	$\eta_{\sf wh}$	100	%
Energy efficiency class		AL / A	_	efficiency	' Iwh	100	
Daily electricity consumption	Qelec	7,619	kWh	Daily fuel consumption	Qfuel	na	kWl
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	na	Gì
consumption Specific precautions and end of life information:	AEC	The packaging mus	It be deposited at a 's life cycle, it must e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic e	eer for correct w	ce c	te managemen

Average climate and Low temperature

Enertech AB 341 26 Ljungby



s: A++		
с. Лтт		
3. ATT	-	
VII	-	
on: 3,5	%	
186	%	
iss: A+++	-	
oumps. For low- tem	perature h	eat pumps,
1	n: 3,5 186 ass: A+++	on: 3,5 % 186 %

Symbol Value Unit Symbol Value Unit Item Seasonal space heating energy Rated heat output (*) Prated 13 kW 182 η_s efficiency Declared capacity for heating for part load at indoor temperature 20 °C and Declared coefficient of performance or primary energy ratio for outdoor temperature T j part load at indoor temperature 20 °C and outdoor temperature T j Ti = -7°C Pdh COPd 11,8 kW 4,69 Tj = +2 °CPdh 11,9 T j = +2 °C **COPd** 4,88 kW Tj = +7°C Pdh 12,0 kW Tj = +7 °CCOPd 5,06 **COPd** T j = + 12 °CPdh 12,1 kW T j = +12 °C5,23 T j = bivalent temperature Pdh 11,8 kW T j = bivalent temperature COPd 4,69 T j = operation limit T i = operation limit kW COPd Pdh na na temperature temperature For air-to-water heat pumps: For air-to-water heat pumps: Pdh na kW COPd na T j = -15 °C (if TOL < -20 °C)T j = -15 °C (if TOL < -20 °C)For air-to-water heat pumps: Bivalent temperature -7 °C TOL °C T biv na Operation limit temperature Cycling interval capacity for kW Cycling interval efficiency **COPcyc** na na P cych heating Heating water operating limit Degradation co-efficient Cdh 0,98 WTOL °C 65 temperature Power consumption in modes other than active mode Supplementary heater Off mode P OFF 0,018 kW Rated heat output Psup 1,6 kW Thermostat-off mode P_{TO} 0,022 kW Type of energy input **Electric** Standby mode P_{SB} 0,018 kW Crankcase heater mode P_{CK} 0,000 kWOther items For air-to-water heat pumps: Capacity control **Fixed** na m3/h Rated air flow rate, outdoors Sound power level, indoors/ For water-/brine-to-water heat 50/na dΒ L WA pumps: Rated brine or water outdoors flow rate, outdoor heat 5814 kWh Annual energy consumption 2,6 m3/h Q_{HE} exchanger For heat pump combination heater: Declared load profile/ Water heating energy XL/A 100 η_{wh} effic<u>iency</u> **Energy efficiency class** Daily electricity consumption 7,619 kWh Daily fuel consumption kWh Qelec **Q**fuel na

Specific precautions and end of life information:

Annual electricity

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.

AFC

GJ

181001

Annual fuel consumption

kWh

1676

AEC

Information for heat pump sp Cold climate and Medium te		and heat pump	combination	heaters	Enertech Al 341 26 Ljur		CTC
Model(s):		CTC EcoPart 41	.2 + CTC EcoZe	enith i350/ i350F			
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 supplementary	heater:	Yes		Package efficiency class:		-	
	medium-temp		ion, except for	r low-temperature heat pumps. For	r low- tempera	ture heat pu	mps,
parameters shall be declared for Item	low-temperat Symbol	ure application. Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency		141	%
Declared capacity for heating for outdoor temperature T j	r part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of perform part load at indoor temperature			
T j = -7 °C	Pdh	11,2	kW	T j = - 7 °C	COPd	3,56] -
T j = + 2 °C	Pdh	11,4	kW	T j = +2 °C	COPd	3,94] -
T j = + 7 °C	Pdh	11,6	kW	T j = +7 °C	COPd	4,29	
T j = + 12 °C	Pdh	11,7	kW	T j = +12 °C	COPd	4,54	
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	_
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than active	e <u>mode</u>	-	Supplementary heater			=
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,4	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				

Other items

For air-to-water heat pumps: **Fixed** na Rated air flow rate, outdoors For water-/brine-to-water heat 50/na dΒ L_{WA} pumps: Rated brine or water flow rate, outdoor heat 8195 kWh 2,1 Q_{HE} exchanger

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Declared load profile/ Energy efficiency class	XL / A			Water heating energy efficiency	$\eta_{\sf wh}$	100	%
Daily electricity consumption	Qelec	7,619	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1676	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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ properly\ disposed\ properly\ p$ of the product as household waste is not permitted.

m3/h

m3/h

Capacity control

outdoors

Information for heat pump sp Cold climate and Low tempe		and heat pump	combination	heaters	Enertech A 341 26 Ljur	7	CIC
Model(s):		CTC EcoPart 4	12 + CTC EcoZe	enith i350/ i350F	• · · ,·	.6~1	
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:	189	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heaters Parameters shall be declared for parameters shall be declared for	r medium-tem			r low-temperature heat pumps. For	r low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	185	%
Declared capacity for heating fo outdoor temperature T j	r part load at ii	ndoor temperatu	ure 20 °C and	Declared coefficient of perform part load at indoor temperatur			
T j = -7 °C	Pdh	11,9	kW	T j = -7 °C	COPd	4,89] -
T j = + 2 °C	Pdh	12,0	kW	T j = +2 °C	COPd	5,06] -
T j = + 7 °C	Pdh	12,1	kW	T j = +7 °C	COPd	5,18	
T j = + 12 °C	Pdh	12,1	kW	T j = +12 °C	COPd	5,20	
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,66	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	_
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-20	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than activ	e mode	_	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,7	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	D	0.010	1 /14/	Type of energy input		Electric	

•		•		te
Power consumption in modes	other than active	mode		Su
Off mode	P OFF	0,018	kW	Ra
Thermostat-off mode	P _{TO}	0,022	kW	
Standby mode	P_{SB}	0,018	kW	Ту
Crankcase heater mode	P _{CK}	0,000	kW	╛┕
Other items				

Type of energy input	Electric		
For air-to-water heat pumps:	- -	na	m3/h

Capacity control		Fixed	
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB
Annual energy consumption	Q _{HE}	6373	kWh

Rated air flow rate, outdoors	IIa	1113/11
For water-/brine-to-water heat		
pumps: Rated brine or water		
flow rate, outdoor heat	2,6	m3/h
exchanger	2,0	1113/11

For heat	pump	comb	inatic	on heate	r:

Declared load profile/ Energy efficiency class	XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%	
Daily electricity consumption	Qelec	7,619	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1676	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.

Warm climate and Medium temperature

Enertech AB 341 26 Ljungby



warm chinate and wiedlam temperati	uie			341 ZU LJ	ungby		
Model(s):	CTC EcoPart 4	12 + CTC EcoZenith 250					
Air-to-water heat pump:	No	Energy 6	efficiency class:		-		
Water-to-water heat pump:	No	Controll	ler class:	VII	-		
Brine-to-water heat pump:	Yes	Controll	ler contribution:	3,5	%		
Low-temperature heat pump:	No	Package	e efficiency:	126	%		
Equipped with a supplementary heater:	Yes	Package	e efficiency class:		-		
Heat pump combination heater:	Yes						
Parameters shall be declared for medium-t	temperature applica	tion, except for low-tempe	erature heat pumps.	For low- tempe	rature he	at pun	nps,
parameters shall be declared for low-temp	erature application.						
Item Symbo	l Value	Unit Item		Symbol	Val	110	Unit

Pdh Pdh	12 door temperatu	kW re 20 °C and	Seasonal space heating energy efficiency Declared coefficient of performar	n _s	122	%
Pdh Pdh		re 20 °C and	Declared coefficient of performan			
Pdh			part load at indoor temperature 2			
	na	kW	T j = - 7 °C	COPd	na] -
	10,9	kW	T j = +2 °C	COPd	2,81	1 -
Pdh	11,3	kW	T j = +7 °C	COPd	3,14	1 -
Pdh	11,7	kW	T j = +12 °C	COPd	3,72] -
Pdh	11,0	kW	T j = bivalent temperature	COPd	2,90	-
Pdh	10,9	kW	T j = operation limit temperature	COPd	2,81] -
Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
P cych	na	kW	Cycling interval efficiency	СОРсус	na] -
Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
r than active	mode	_	Supplementary heater			
P OFF	0,018	kW	Rated heat output	Psup	1,3	kW
P _{TO}	0,034	kW	[]			
P_{SB}	0,018	kW	Type of energy input		Electric	
P _{CK}	0,000	kW				
	<u>.</u>					
	Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Q _{HE}	4905	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
:						
	L/A		Water heating energy efficiency	$\eta_{\sf wh}$	86	%
Qelec	5,434	kWh	Daily fuel consumption	Qfuel	na	kWh
AEC	1195	kWh	Annual fuel consumption	AFC	na	GJ
	Pdh Pdh Pdh T biv P cych Cdh r than active P off P TO P SB P CK L WA Q HE :	Pdh 11,0 Pdh 10,9 Pdh na T biv 3 P cych na Cdh 0,99 r than active mode P off 0,018 P TO 0,034 P SB 0,018 P CK 0,000 Fixed L WA 50/na Q HE 4905 E L / A Qelec 5,434 AEC 1195 The packaging muse end of the product The packaging muse end of the product	Pdh 11,0 kW Pdh 10,9 kW Pdh na kW T biv 3 °C P cych na kW Cdh 0,99 - r than active mode P off 0,018 kW P ro 0,034 kW P sB 0,018 kW P ck 0,000 kW Fixed L WA Q HE Solvan 4905 kWh The packaging must be deposited at a end of the product's life cycle, it must end of the product's life cycle	Pdh 11,0 kW T j = bivalent temperature T j = operation limit temperature T j = operation limit temperature For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature Cycling interval efficiency Heating water operating limit temperature Cycling interval efficiency Heating water operating limit temperature Supplementary heater Rated heat output Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger L / A Qelec 5,434 kWh Daily fuel consumption The packaging must be deposited at a recycling station or with the installation engine end of the product's life cycle, it must be sent correctly to a waste station or reseller	Pdh 11,0 kW T j = bivalent temperature COPd Pdh 10,9 kW T j = operation limit temperature Pdh na kW T j = operation limit temperature For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C) For air-to-water heat pumps: Operation limit temperature COPd For air-to-water heat pumps: Operation limit temperature COPd T biv 3 °C For air-to-water heat pumps: Operation limit temperature COPd To air-to-water heat pumps: Operation limit temperature COPd To air-to-water heat pumps: Supplementary heater Rated heat output Pour On,034 kW Pour On,034 kW Pour On,000 kW Type of energy input For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Luna 4905 kWh Coperation limit temperature COPd To air-to-water heat pumps: Rated heat output For air-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Luna 4905 kWh Coperation limit COPd To air-to-water heat pumps: Rated heat output Pour Air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat exchanger Coperation limit To air-to-water heat pumps: Rated heat output Pour Air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoors For water-/brine-to-	Pdh 11,0

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.

Information for heat numbers and heat numbers and heat numbers and heat numbers

Enartach AR



181001

	space heaters a	neaters	Enertech A				
Warm climate and Low ten		341 26 Ljur	ngby				
Model(s):		CTC EcoPart 41	12 + CTC EcoZe	enith 250			
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:	154	%	
Equipped with a supplementa	ry heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	er:	Yes					
Parameters shall be declared t	for medium-temp	erature applicat	tion, except fo	r low-temperature heat pumps. For	low- tempera	iture heat bu	ımps.
parameters shall be declared t	for low-temperatu	re application.			·		ļ /
•	for low-temperatu Symbol	re application. Value		Item	Symbol	Value	Unit
Item	· ·	• • • • • • • • • • • • • • • • • • • •				·	
Item Rated heat output (*) Declared capacity for heating to	Symbol Prated	Value 13	Unit kW	Item Seasonal space heating energy	Symbol $\eta_{\mathcal{S}}$ ance or prima	Value 150 ry energy rat	Unit %
Rated heat output (*) Declared capacity for heating to outdoor temperature T j	Symbol Prated	Value 13	Unit kW	Item Seasonal space heating energy efficiency Declared coefficient of performa	Symbol $\eta_{\mathcal{S}}$ ance or prima	Value 150 ry energy rat	Unit %
parameters shall be declared for them Rated heat output (*) Declared capacity for heating to outdoor temperature T j T j = -7 °C T j = +2 °C	Symbol Prated for part load at inc	Value 13 door temperatu	Unit kW	Item Seasonal space heating energy efficiency Declared coefficient of performa part load at indoor temperature	Symbol $\eta_{\mathcal{S}}$ ance or prima 20 °C and our	Value 150 ry energy rattdoor tempe	Unit %

				efficiency			
Declared capacity for heating foutdoor temperature T j	or part load at ir	ndoor temperatu	ire 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	٦ -
T j = + 2 °C	Pdh	11,9	kW	T j = +2 °C	COPd	4,11	1 -
T j = + 7 °C	Pdh	12,0	kW	T j = +7 °C	COPd	4,30	1 -
T j = + 12 °C	Pdh	12,1	kW	T j = +12 °C	COPd	4,54] -
T j = bivalent temperature	Pdh	11,9	kW	T j = bivalent temperature	COPd	4,17	-
T j = operation limit temperature	Pdh	11,9	kW	T j = operation limit temperature	COPd	4,11] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: $T j = -15 ^{\circ}C \text{ (if TOL } < -20 ^{\circ}C \text{)}$	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency COPcyc		na] -
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	e mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,110	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items			•				•
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water]
Annual energy consumption	Q _{HE}	4331	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination he	eater:			-			
Declared load profile/		L/A		Water heating energy	$\eta_{\sf wh}$	86	%
Energy efficiency class		-/ -	1	efficiency	' Iwh	00	
Daily electricity consumption	Qelec	5,434	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity	ΔFC	1105	k\\/h	Annual fuel consumption	۸EC	na	- GI

AEC 1195 kWh Annual fuel consumption consumption

Specific precautions and end of life information:

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

Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412 + CTC EcoZenith 250					
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:	127	%		
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-		
Heat pump combination heater:	Yes			_		

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	123	%
Declared capacity for heating for	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar	nce or prima	ry energy rati	o for
outdoor temperature T j				part load at indoor temperature 2	20 °C and ou	tdoor temper	ature T j
T j = - 7 °C	Pdh	11,1	kW	T j = - 7 °C	COPd	2,97	-
T j = + 2 °C	Pdh	11,5	kW	T j = +2 °C	COPd	3,32	-
T j = + 7 °C	Pdh	11,6	kW	T j = +7 °C	COPd	3,63	-
T j = + 12 °C	Pdh	11,8	kW	T j = +12 °C	COPd	3,94	-
T j = bivalent temperature	Pdh	11,2	kW	T j = bivalent temperature	COPd	3,02	-
T j = operation limit temperature	Pdh	10,9	kW	T j = operation limit temperature	COPd	2,81	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-6	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output	Psup	2,2	kW
Thermostat-off mode	P _{TO}	0,034	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8476	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
For heat pump combination hea	ater:						
Declared load profile/		L/A		Water heating energy	$\eta_{\sf wh}$	86	%
Energy efficiency class		-,	1	efficiency	· IWI	30	,,
Daily electricity consumption	Qelec	5,434	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1195	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	s life cycle, it mus	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec	offering a servi	e of that type. t i	s of great

Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412 +	CTC EcoPart 412 + CTC EcoZenith 250						
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:	159	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-				
Heat pump combination heater:	Yes							

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	14	kW	Seasonal space heating energy efficiency	η_s	155	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = - 7 °C	Pdh	11,9	kW	T j = - 7 °C	COPd	4,19] -
T j = + 2 °C	Pdh	12,0	kW	T j = +2 °C	COPd	4,36	-
T j = + 7 °C	Pdh	12,1	kW	T j = +7 °C	COPd	4,50	-
T j = + 12 °C	Pdh	12,2	kW	T j = +12 °C	COPd	4,64	-
T j = bivalent temperature	Pdh	11,9	kW	T j = bivalent temperature	COPd	4,21	-
T j = operation limit temperature	Pdh	11,9	kW	T j = operation limit temperature	COPd	4,11	
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-6	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,95	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	7	Supplementary heater			1
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	2,2	kW
Thermostat-off mode	P _{TO}	0,110	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/i
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7153	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/l
For heat pump combination hea	ater:			<u>-</u>			
Declared load profile/ Energy efficiency class		L/A		Water heating energy efficiency	η_{wh}	86	%
Daily electricity consumption	Qelec	5,434	kWh	Daily fuel consumption	Qfuel	na	kWł
Annual electricity consumption	AEC	1195	kWh	Annual fuel consumption	AFC	na	GJ

of life information:

ct's refrigerant, compressor oil and electrical/electronic equipment are properly disposed of. Disposing of the product as household waste is not permitted.



Information for heat pump sp Cold climate and Medium te		and heat pump	combination	heaters	Enertech AB 341 26 Ljungby		C
Model(s):		CTC EcoPart 4:	12 + CTC EcoZe	enith 250			
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:	129	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater: Parameters shall be declared for parameters shall be declared for	medium-temp		tion, except fo	r low-temperature heat pumps. Fo	r low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	125	%
Declared capacity for heating for outdoor temperature T j	r part load at ir	ndoor temperatu	ire 20 °C and	Declared coefficient of perform part load at indoor temperatur			
T j = - 7 °C	Pdh	11,4	kW	T j = -7 °C	COPd	3,24] -
T j = + 2 °C	Pdh	11,6	kW	T j = +2 °C	COPd	3,56] -
T j = + 7 °C	Pdh	11,8	kW	T j = +7 °C	COPd	3,85	-
T j = + 12 °C	Pdh	11,9	kW	T j = +12 °C	COPd	4,06	-
T j = bivalent temperature	Pdh	11,1	kW	T j = bivalent temperature	COPd	3,00	-
T j = operation limit temperature	Pdh	10,9	kW	T j = operation limit temperature	COPd	2,81] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	_
Bivalent temperature	T _{biv}	-17	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than active	e mode		Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,9	kW
Thermostat-off mode	P _{TO}	0,034	kW			·	-
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW		I		

Standby mode	P_{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items			
Capacity control		Fixed	
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB

 Q_{HE}

For air-to-water heat pumps: Rated air flow rate, outdoors	na	m3/h
For water-/brine-to-water heat pumps: Rated brine or water		
flow rate, outdoor heat exchanger	2,1	m3/h

For heat pump combination heater:

Annual energy consumption

Declared load profile/ Energy efficiency class		L/A		Water heating energy efficiency	$\eta_{\sf wh}$	86	%
Daily electricity consumption	Qelec	5,434	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1195	kWh	Annual fuel consumption	AFC	na	GJ

kWh

Specific precautions and end of life information:

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

9526



Information for heat pump sp Cold climate and Low tempe		and heat pump	combination	heaters	Enertech AB 341 26 Ljungby		C
Model(s):		CTC EcoPart 41	L2 + CTC EcoZe	nith 250			
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:	160	%	
Equipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared fo parameters shall be declared fo	r medium-tem _l		ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	156	%
Declared capacity for heating fo outdoor temperature T j	r part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of perform part load at indoor temperature			
T j = -7 °C	Pdh	12,0	kW	T j = -7 °C	COPd	4,37] -
T j = + 2 °C	Pdh	12,1	kW	T j = +2 °C	COPd	4,50] -
T j = + 7 °C	Pdh	12,1	kW	T j = +7 °C	COPd	4,60	-
T j = + 12 °C	Pdh	12,2	kW	T j = +12 °C	COPd	4,62	-
T j = bivalent temperature	Pdh	11,9	kW	T j = bivalent temperature	COPd	4,21	-
T j = operation limit temperature	Pdh	11,9	kW	T j = operation limit temperature	COPd	4,11	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-18	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na] -
Degradation co-efficient	Cdh	0,95	_	Heating water operating limit temperature	WTOL	65	°C

Power consumption in modes other than active mode							
Off mode	P OFF	0,018	kW				
Thermostat-off mode	P _{TO}	0,110	kW				
Standby mode	P_{SB}	0,018	kW				
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							

Type of energy input		Electric	
For air-to-water heat pumps: Rated air flow rate, outdoors For water-/brine-to-water heat	-	na	m3/h

1,5

kW

Capacity control		Fixed	
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB
Annual energy consumption	Q _{HE}	8028	kWh

Annual energy consumption	Q HE	8028	KVVN		exchanger	-	2,6	m3/n
For heat pump combination he	ater:							
Declared load profile/		1 / ^			Water heating energy	n	86	%
Energy efficiency class		L/A		efficiency		$\eta_{\sf wh}$	80	70
Daily electricity consumption	Qelec	5,434	kWh		Daily fuel consumption	Qfuel	na	kWh
Annual electricity	AEC	1195	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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ properly\ disposed\ properly\ p$ of the product as household waste is not permitted.

pumps: Rated brine or water flow rate, outdoor heat

Rated heat output



	Information for heat pump space heaters and heat pump combination Warm climate and Medium temperature				Enertech A 341 26 Ljur		C
Model(s):		CTC EcoPart 4	12 + CTC EcoZe	enith 550			
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 supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater: Parameters shall be declared for parameters shall be declared for	medium-tem		tion, except fo	r low-temperature heat pumps. Fol	· low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	122	%
Declared capacity for heating for outdoor temperature T j	r part load at ir	ndoor temperatu	ıre 20°C and	Declared coefficient of perform part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	10,9	kW	T j = +2 °C	COPd	2,81] -
T j = + 7 °C	Pdh	11,3	kW	T j = +7 °C	COPd	3,14	
T j = + 12 °C	Pdh	11,7	kW	T j = +12 °C	COPd	3,72	-
T j = bivalent temperature	Pdh	11,0	kW	T j = bivalent temperature	COPd	2,90	-
T j = operation limit temperature	Pdh	10,9	kW	T j = operation limit temperature	COPd	2,81] -
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	ther than active	e <u>mode</u>	_	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,025	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW	1 1			

For air-to-water heat pumps: na m3/h Rated air flow rate, outdoors For water-/brine-to-water heat pumps: Rated brine or water flow rate, outdoor heat 2,1 m3/h exchanger

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%
Daily electricity consumption	Qelec	7,620	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	NA	GJ

dΒ

kWh

Specific precautions and end of life information:

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

Capacity control

outdoors

Fixed

 L_{WA}

 Q_{HE}

50/na

4879

	and heat pump	combination	heaters			
, c. a ta. c	CTC EcoPart 42	12 + CTC EcoZe	enith 550	0 12 20 3,41	.6~1	
	No		Energy efficiency class:		-	
	No		Controller class:	VII	-	
	Yes		Controller contribution:	3,5	%	
	No		Package efficiency:	158	%	
heater:	Yes		Package efficiency class:		-	
	Yes		·			
		tion, except for	r low-temperature heat pumps. Fo	r low- tempera	ture heat pu	mps,
Symbol	Value	Unit	Item	Symbol	Value	Ur
Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	154	9
r part load at ir	ndoor temperatu	ıre 20 °C and				
Pdh	na	kW	T j = -7 °C	COPd	na] -
Pdh	11,9	kW	T j = +2 °C	COPd	4,11	1.
Pdh	12,0	kW	T j = +7 °C	COPd	4,30] .
Pdh	12,1	kW	T j = +12 °C	COPd	4,54	
Pdh	11,9	kW	T j = bivalent temperature	COPd	4,17	
Pdh	11,9	kW	T j = operation limit temperature	COPd	4,11] .
Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°
P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na] .
Cdh	0,97	-	Heating water operating limit temperature	WTOL	65	۰
ther than activ		7	Supplementary heater			٦.
P OFF	0,018	kW	Rated heat output	Psup	0,9	kl
P _{TO}	0.073	1.147	1 1			
P TO	0,073	kW				
	heater: redium-temperate Symbol Prated repart load at in Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pd	No No No Yes No heater: Yes remedium-temperature application. Symbol Value Prated 13 repart load at indoor temperature Pdh na Pdh 11,9 Pdh 12,0 Pdh 12,1 Pdh 11,9 Pdh 10,0 Pdh 11,9 Pdh 11,9 Pdh 10,0 Pdh 11,9 Pdh	No N	No Energy efficiency class: No Controller class: Yes Controller contribution: No Package efficiency: Package efficiency class: Yes Package efficiency: Package efficiency class: Yes Package efficiency: Package efficiency class: Yes Package efficiency class. Yes Package efficiency classes. Yes Package efficiency classes. Yes Package Package classes. Yes Package Package classes. Yes Packag	Terrature CTC EcoPart 412 + CTC EcoZenith 550	CTC EcoPart 412 + CTC EcoZenith 550 No Energy efficiency class: No Controller class: VII - Yes Controller contribution: 3,5 % No Package efficiency: 158 % Theater: Yes Package efficiency class: Yes Package fici

Degradation to emelent	cun	0,57	
Power consumption in modes	other than active	mode	_
Off mode	P OFF	0,018	kW
Thermostat-off mode	P _{TO}	0,073	kW
Standby mode	P_{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items			

 L_{WA}

 Q_{HE}

Fixed

50/na

4228

		_		
For air-to-water Rated air flow ra		-	na	m3/h
For water-/brine pumps: Rated br				
flow rate, outdo exchanger	or heat	-	2,6	m3/h

For heat pump combination heater:

Sound power level, indoors/

Annual energy consumption

Capacity control

outdoors

Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%
Daily electricity consumption	Qelec	7,620	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	NA	GJ

dΒ

kWh

Specific precautions and end of life information:

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

Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412 + 0	CTC EcoZenith 550		, , ,
Air-to-water heat pump:	No 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:	127	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-
Heat pump combination heater:	Yes			

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_s	123	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = -7 °C	Pdh	11,1	kW	T j = - 7 °C	COPd	2,97] -
T j = + 2 °C	Pdh	11,5	kW	T j = +2 °C	COPd	3,32] -
T j = + 7 °C	Pdh	11,6	kW	T j = +7 °C	COPd	3,63	
T j = + 12 °C	Pdh	11,8	kW	T j = +12 °C	COPd	3,94	
T j = bivalent temperature	Pdh	11,2	kW	T j = bivalent temperature	COPd	3,02	-
T j = operation limit temperature	Pdh	10,9	kW	T j = operation limit temperature	COPd	2,81	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-6	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°c
Cycling interval capacity for heating	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	e <u>mode</u>	_	Supplementary heater			-
Off mode	P OFF	0,018	kW	Rated heat output	Psup	2,3	kW
Thermostat-off mode	P _{TO}	0,025	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		·•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7388	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/
For heat pump combination he	ater:			-			
Declared load profile/ Energy efficiency class		XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%
Daily electricity consumption	Qelec	7,620	kWh	Daily fuel consumption	Qfuel	NA	kW
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	NA	Gì
Specific precautions and end of life information:		end of the product	's life cycle, it must	a recycling station or with the installation enging t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ev	offering a serv	ice of that type. t	is of gre

of life information:

 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ prope$ of the product as household waste is not permitted.

Average climate and Low temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC EcoPart 412 + CTC EcoZenith 550							
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:	162	%				
Equipped with a supplementary heater:	Yes	Package efficiency class:	A++	-				
Heat pump combination heater:	Yes							

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	158	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = - 7 °C	Pdh	11,9	kW	T j = - 7 °C	COPd	4,19] -
T j = + 2 °C	Pdh	12,0	kW	T j = +2 °C	COPd	4,34	-
T j = + 7 °C	Pdh	12,1	kW	T j = +7 °C	COPd	4,49	-
T j = + 12 °C	Pdh	12,2	kW	T j = +12 °C	COPd	4,64	-
T j = bivalent temperature	Pdh	11,9	kW	T j = bivalent temperature	COPd	4,19	-
T j = operation limit temperature	Pdh	11,9	kW	T j = operation limit temperature	COPd	4,11	-
For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,002	kW	Rated heat output	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,073	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	6728	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination hea	ater:	•	•			•	•
Declared load profile/		XL / A		Water heating energy	$\eta_{\sf wh}$	100	%
Energy efficiency class		AL / A	_	efficiency	' Iwh	100	J 70
Daily electricity consumption	Qelec	7,620	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic en ant permitted	offering a service	ce of that type. t	is of great



Information for heat pump space heaters and heat pump combination Cold climate and Medium temperature				heaters	Enertech Al 341 26 Ljun		TC
Model(s):	•	CTC EcoPart 41	.2 + CTC EcoZe	nith 550	-		
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:	129	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	r:	Yes					
Parameters shall be declared for parameters shall be declared for			ion, except for	low-temperature heat pumps. Fo	r low- tempera	ture heat pu	mps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η _s	125	%
Declared capacity for heating for outdoor temperature T j	or part load at ind	door temperatu	re 20 °C and	Declared coefficient of perform part load at indoor temperatur	•		
T j = - 7 °C	Pdh	11,4	kW	T j = - 7 °C	COPd	3,23] -
T j = + 2 °C	Pdh	11,6	kW	T j = +2 °C	COPd	3,55	1 -
T j = + 7 °C	Pdh	11,7	kW	T j = +7 °C	COPd	3,84	-
T j = + 12 °C	Pdh	11,9	kW	T j = +12 °C	COPd	4,05	-
T j = bivalent temperature	Pdh	11,1	kW	T j = bivalent temperature	COPd	2,96	-
T j = operation limit	Pdh	10,9	kW	T j = operation limit	COPd	2,81	

1 J = - / C	Pan	11,4	KVV
T j = + 2 °C	Pdh	11,6	kW
T j = + 7 °C	Pdh	11,7	kW
T j = + 12 °C	Pdh	11,9	kW
T j = bivalent temperature	Pdh	11,1	kW
T j = operation limit temperature	Pdh	10,9	kW
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW
Bivalent temperature	T _{biv}	-18	°C
Cycling interval capacity for heating	P _{cych}	na	kW
Degradation co-efficient	Cdh	0,99	-
Power consumption in modes ot	her than active	e mode	
Off mode	Poss	0.018	kW

Degradation co-efficient	Can	0,99	-
Power consumption in modes	other than active	mode	
Off mode	P OFF	0,018	kW
Thermostat-off mode	P _{TO}	0,025	kW
Standby mode	P _{SB}	0,018	kW
Crankcase heater mode	P _{CK}	0,000	kW
Other items			
Capacity control		Fixed	
Sound power level, indoors/	1	50/na	dR

 L_{WA}

 Q_{HE}

COPd	2,81	-	
COPd	na	-	
TOL	na	°C	
СОРсус	na	-	
WTOL	65	°C	
		_	
Psup	1,5	kW	
	Electric		
-	na	m3/h	
	COPd TOL COPcyc WTOL	COPd na TOL na COPcyc na WTOL 65 Psup 1,5 Electric	COPd na - TOL na °C COPcyc na - WTOL 65 °C Psup 1,5 kW Electric

For heat	pump	combination	heater:
Da alama		l f:1 - /	

Annual energy consumption

Declared load profile/ Energy efficiency class	XL / A		Water heating energy efficiency	$\eta_{\sf wh}$	100	%	
Daily electricity consumption	Qelec	7,620	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1676	kWh	Annual fuel consumption	AFC	NA	GJ

dΒ

kWh

Specific precautions and end of life information:

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

outdoors

50/na

9177

Cold climate and Low temperature

Enertech AB 341 26 Ljungby



				-, 6 ,	
Model(s):	CTC EcoPart 412 +	CTC EcoPart 412 + CTC EcoZenith 550			
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:	163	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	emperature application	, except for low-temperature heat pumps.	For low- tem	perature he	at pumps,
parameters shall be declared for low-temper	erature application.				

Symbol	Value	Unit
energy $\eta_{\mathcal{S}}$	159	%
performance or prima perature 20 °C and ou		
COPd	4,37	_ ٦
COPd	4,50	┨ .
COPd	4,60	┨ .
COPd	4,62	1 .
re <i>COPd</i>	4,21	-
COPd	4,11	_
mps: COPd	na	-
mps: ture	na	°C
у СОРсус	na	_
; limit <i>WTOL</i>	65	°C
		_
Psup	1,5	kW
	Electric	
		_
mps: loors	na	m3/l
er heat vater		
-	2,6	m3/l
η _{wh}	100	%
' Iwh	100	
Qfuel	NA	kWh
n AFC	NA	GJ
1	n AFC ation engineer for correct of or reseller offering a service.	

Enertech AB



Warm climate and Medium	•	ina neat pump	Combination	i fleaters	341 26 Ljur		
Model(s):		CTC EcoPart 4:	12 + CTC Basic	styrning			
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	1	-	
Brine-to-water heat pump:		Yes		Controller contribution:	1	%	
Low-temperature heat pump:		No		Package efficiency:	138	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	•	No		,			
Parameters shall be declared f	or medium-temp	perature applicat	tion, except fo	r low-temperature heat pumps. For	low- tempera	iture heat pu	mps,
parameters shall be declared f	or low-temperat	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	137	%
Declared capacity for heating foutdoor temperature T j	for part load at ir	ndoor temperatu	re 20 °C and	Declared coefficient of performation part load at indoor temperature			
T j = - 7 °C	Pdh	na	kW	T j = -7 °C	COPd	na] -
T j = + 2 °C	Pdh	13,6	kW	T j = +2 °C	COPd	3,08] -
T j = + 7 °C	Pdh	11,1	kW	T j = +7 °C	COPd	3,45	
T j = + 12 °C	Pdh	11,5	kW	T j = +12 °C	COPd	4,14	
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,18	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	e <u>mode</u>	_	Supplementary heater		-	-
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,5	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		-					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4364	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
For heat pump combination he	eater:						
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity			1				1

Specific precautions and end of life information:

Annual electricity

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 $importance\ that\ the\ product's\ refrigerant,\ compressor\ oil\ and\ electrical/electronic\ equipment\ are\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ disposed\ of.\ Disposing\ properly\ disposed\ properly\ properly\ disposed\ properly\ p$ of the product as household waste is not permitted.

Annual fuel consumption

AEC

GJ

kWh

Enertech AB Warm climate and Low temperature 341 26 Ljungby



Model(s):	CTC EcoPart 412 + CTC Basicstyrning					
Air-to-water heat pump:	No	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	I	-		
Brine-to-water heat pump:	Yes	Controller contribution:	1	%		
Low-temperature heat pump:	No	Package efficiency:	181	%		
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,

Rated heat output (*) Declared capacity for heating fo outdoor temperature T j	Prated	13	1347	Seasonal space heating energy			
	r part load at !-		kW	efficiency	η_{s}	180	%
	n partioad at in	door temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	11,8	kW	T j = +2 °C	COPd	4,60] -
T j = + 7 °C	Pdh	11,9	kW	T j = +7 °C	COPd	4,83	-
T j = + 12 °C	Pdh	12,0	kW	T j = +12 °C	COPd	5,11	-
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,68	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,9	kW
Thermostat-off mode	P _{TO}	0,022	kW	[]			•
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		,					_
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3618	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination hea	ater:	•	•			•	•
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product'	s life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ec not permitted.	offering a service	e of that type. t	is of great

Average climate and Medium temperature

Enertech AB 341 26 Ljungby



				, , ,
Model(s):	CTC EcoPart 412 +	CTC Basicstyrning		
Air-to-water heat pump:	No	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	I	-
Brine-to-water heat pump:	Yes	Controller contribution:	1	%
Low-temperature heat pump:	No	Package efficiency:	139	%
Equipped with a supplementary heater:	No	Package efficiency class:	A++	-
Heat pump combination heater:	No			

parameters shall be declared fo	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η _s	138	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature			
T j = - 7 °C	Pdh	11	kW	T j = - 7 °C	COPd	3,25] -
T j = + 2 °C	Pdh	11,2	kW	T j = +2 °C	COPd	3,64	-
T j = + 7 °C	Pdh	11,4	kW	T j = +7 °C	COPd	4,02	-
T j = + 12 °C	Pdh	11,6	kW	T j = +12 °C	COPd	4,40	-
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,5	kW
Thermostat-off mode	P _{TO}	0,005	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		•	•				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7084	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
For heat pump combination hea	ater:	•	•				
Declared load profile		na		Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it mus e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a service	e of that type. t	is of great

Average climate and Low temperature

Enertech AB 341 26 Ljungby



Average climate and Low temperature			541 20 1	-jungoy	
Model(s):	CTC EcoPart 412 +	- CTC Basicstyrning			
Air-to-water heat pump:	No	Energy efficiency class:	A++	-	
Water-to-water heat pump:	No	Controller class:	I	-	
Brine-to-water heat pump:	Yes	Controller contribution:	1	%	
Low-temperature heat pump:	No	Package efficiency:	183	%	
Equipped with a supplementary heater:	No	Package efficiency class:	A+++	-	
Heat pump combination heater:	No				
Parameters shall be declared for medium-te	emperature application	, except for low-temperature heat pumps.	For low- temp	perature he	eat pumps,
parameters shall be declared for low-temper	rature application.				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	13	kW	Seasonal space heating energy efficiency	η_{s}	182	%
Declared capacity for heating fooutdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = - 7 °C	Pdh	11,8	kW	T j = - 7 °C	COPd	4,69] -
T j = + 2 °C	Pdh	11,9	kW	T j = +2 °C	COPd	4,88] -
T j = + 7 °C	Pdh	12,0	kW	T j = +7 °C	COPd	5,06	-
T j = + 12 °C	Pdh	12,1	kW	T j = +12 °C	COPd	5,23] -
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,69	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-7	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes o	ther than active	mode	_	Supplementary heater			
Off mode	P OFF	0,018	kW	Rated heat output	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P_{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		!	!				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5814	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination hea	ater:	<u> </u>					
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed	offering a servic	e of that type. t	is of gre

Cold climate and Medium temperature

Model(s):	CTC EcoPart 412 + CTC Basicstyrning					
Air-to-water heat pump:	No	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	I	-		
Brine-to-water heat pump:	Yes	Controller contribution:	1	%		
Low-temperature heat pump:	No	Package efficiency:	142	%		
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.

Rated heat output (*)	Prated			l le		i	
		12	kW	Seasonal space heating energy efficiency	η_{s}	141	%
Declared capacity for heating fo	r part load at in	door temperatu	re 20 °C and	Declared coefficient of performar	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature 2	20 °C and out	tdoor tempe	rature T
T j = - 7 °C	Pdh	11,2	kW	T j = - 7 °C	COPd	3,56] -
T j = + 2 °C	Pdh	11,4	kW	T j = +2 °C	COPd	3,94	-
T j = + 7 °C	Pdh	11,6	kW	T j = +7 °C	COPd	4,29	_
T j = + 12 °C	Pdh	11,7	kW	T j = +12 °C	COPd	4,54	-
T j = bivalent temperature	Pdh	11	kW	T j = bivalent temperature	COPd	3,25	-
T j = operation limit	Ddb		kW	T j = operation limit	COD4		1
temperature	Pdh	na	KVV	temperature	COPd	na	_
For air-to-water heat pumps:	ם אוי		1347	For air-to-water heat pumps:	CO.DI		
T j = - 15 °C (if TOL < - 20 °C)	Pdh	na	kW	T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
				For air-to-water heat pumps:			
Bivalent temperature	T _{biv}	-18	°C	Operation limit temperature	TOL	na	°C
Cycling interval capacity for							1
heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,99	-	Heating water operating limit	WTOL	65	°C
Power consumption in modes o	ther than active	mode		temperature Supplementary heater			
Off mode	P _{OFF}	0,018	kW	Rated heat output	Psup	1,4	kW
Thermostat-off mode	P _{TO}	0,005	kW	[. 00.10		
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Γ				For air-to-water heat pumps:]
Capacity control		Fixed		Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/				For water-/brine-to-water heat			
outdoors	L _{WA}	50/na	dB	pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8195	kWh	flow rate, outdoor heat exchanger	-	2,1	m3/h
For heat pump combination hea	iter:			Textiluinger			
Declared load profile		na		Water heating energy	$\eta_{\sf wh}$	na	%
		1	1	efficiency	TWII		1
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
consumption				recycling station or with the installation engine			

Cold climate and Low temperature

Model(s):	CTC EcoPart 412 + CTC Basicstyrning					
Air-to-water heat pump:	No	Energy efficiency class:		-		
Water-to-water heat pump:	No	Controller class:	I	-		
Brine-to-water heat pump:	Yes	Controller contribution:	1	%		
Low-temperature heat pump:	No	Package efficiency:	186	%		
Equipped with a supplementary heater:	No	Package efficiency class:		-		
Heat numn combination heater:	No					

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

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	12	kW	Seasonal space heating energy efficiency	η_{s}	185	%
Declared capacity for heating fo outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = - 7 °C	Pdh	11,9	kW	T j = - 7 °C	COPd	4,89] -
T j = + 2 °C	Pdh	12,0	kW	T j = +2 °C	COPd	5,06] -
T j = + 7 °C	Pdh	12,1	kW	T j = +7 °C	COPd	5,18] -
T j = + 12 °C	Pdh	12,1	kW	T j = +12 °C	COPd	5,20] -
T j = bivalent temperature	Pdh	11,8	kW	T j = bivalent temperature	COPd	4,66	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	-20	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes of	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,018	kW	Rated heat output	Psup	0,7	kW
Thermostat-off mode	P _{TO}	0,022	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items		-1	<u>!</u>				
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	50/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	6373	kWh	flow rate, outdoor heat exchanger	-	2,6	m3/h
For heat pump combination he	ater:	•	•				
Declared load profile		na		Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product	's life cycle, it must e product's refrige	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic econor permitted	offering a service	e of that type. t	is of g