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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Warm climate and High ten	nperature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + 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:	140	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate	r:	No					
Parameters shall be declared for	or medium-temp	erature applicat	ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared for	or low-temperate	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	η _s	136	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
T j = + 2 °C	Pdh	13,5	kW	T j = +2 °C	COPd	3,11	-
T j = + 7 °C	Pdh	13,8	kW	T j = +7 °C	COPd	3,48	- 1
T j = + 12 °C	Pdh	14,2	kW	T j = +12 °C	COPd	4,12	-
T j = bivalent temperature	Pdh	13,5	kW	T j = bivalent temperature	COPd	3,21	-
T j = operation limit temperature	Pdh	na	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	na	kW	For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	COPd	na	-
Bivalent temperature	T _{biv}	3	°C	For air-to-water heat pumps: Operation limit temperature	TOL	na	°C
Cycling interval capacity for heating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient (**)	Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,1	kW
Thermostat-off mode	Р _{то}	0,032	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0,000	kW				
Other items		, ,	ļ		ļ		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5396	kWh	flow rate, outdoor heat exchanger	-	3,0	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
Contact details	Enertech AB, Box	< 309, SE-341 26	Ljungby Tel +4	l6 372 88000 www.ctc.se			

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

ENERTECH GROUP Prtech AB. 341 26 Liung

Warm climate and Low ten	nperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + 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:	174	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared f							
Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	170	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = − 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
T j = + 2 °C	Pdh	14,5	kW	T j = +2 °C	COPd	4,55] -
T j = + 7 °C	Pdh	14,7	kW	T j = +7 °C	COPd	4,76	- 1
T j = + 12 °C	Pdh	14,8	kW	T j = +12 °C	COPd	5,02	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,62	-
T j = operation limit	Pdh	na	kW	T j = operation limit	COPd	na	-
temperature				temperature			1
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	0,96	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater		r	5
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,2	kW
Thermostat-off mode	P _{TO}	0,097	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4702	kWh	flow rate, outdoor heat exchanger	-	3,6	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
Contact details	Enertech AB, Boy	< 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and High t	emperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 4	14 + CTC EcoLo	gic			
Air-to-water heat pump:		Νο		Energy efficiency class:	A++	-	
Water-to-water heat pump:		Νο		Controller class:	VII	-	
Brine-to-water heat pump:		Yes		Controller contribution:	3,5	%	
Low-temperature heat pump:		Νο		Package efficiency:	141	%	
Equipped with a supplementa	ry heater:	No		Package efficiency class:	A++	-	
Heat pump combination heate		No					
			tion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	•		11		Cumphiel	Value	11
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit I
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	137	%
Declared capacity for heating to utdoor temperature T j	for part load at in	door temperatu	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,6	kW	T j = – 7 °C	COPd	3,29] -
T j = + 2 °C	Pdh	13,9	kW	T j = +2 °C	COPd	3,68	- 1
T j = + 7 °C	Pdh	14,2	kW	T j = +7 °C	COPd	4,03	- 1
T j = + 12 °C	Pdh	14,4	kW	T j = +12 °C	COPd	4,37	- 1
T j = bivalent temperature	Pdh	13,6	kW	T j = bivalent temperature	COPd	3,34	-
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}	-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	other than active	r	-	Supplementary heater			7
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,7	kW
Thermostat-off mode	Р _{то}	0,032	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	9158	kWh	flow rate, outdoor heat exchanger	-	3,0	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
Contact details	Enertech AB, Bo	k 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and Low to	emperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + CTC EcoLo	gic			
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:	178	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heate		No					
			ion, except for	r low-temperature heat pumps. For	low- tempera	iture heat pu	mps,
parameters shall be declared f							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η _s	174	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	14,6	kW	T j = – 7 °C	COPd	4,64] -
T j = + 2 °C	Pdh	14,7	kW	T j = +2 °C	COPd	4,81	- 1
T j = + 7 °C	Pdh	14,8	kW	T j = +7 °C	COPd	4,97	-
T j = + 12 °C	Pdh	14,9	kW	T j = +12 °C	COPd	5,13	- 1
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,64	-
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	0,96	-	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	2,0	kW
Thermostat-off mode	Р _{то}	0,097	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	7467	kWh	flow rate, outdoor heat exchanger	-	3,6	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
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Cold climate and High tem	perature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + 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:	144	%	
Equipped with a supplementa	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
Parameters shall be declared f	or medium-temp	erature applicat	ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared f	or low-temperate	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	η _s	140	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,8	kW	T j = – 7 °C	COPd	3,59] -
T j = + 2 °C	Pdh	14,1	kW	T j = +2 °C	COPd	3,94	- 1
T j = + 7 °C	Pdh	14,3	kW	T j = +7 °C	COPd	4,26	- 1
T j = + 12 °C	Pdh	14,5	kW	T j = +12 °C	COPd	4,49	-
T j = bivalent temperature	Pdh	13,6	kW	T j = bivalent temperature	COPd	3,28	-
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	1,7	kW
Thermostat-off mode	P _{TO}	0,032	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•			-		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	10139	kWh	flow rate, outdoor heat exchanger	-	3,0	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
Contact details	Enertech AB, Box	< 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Cold climate and Low temp	erature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + 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:	180	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate	er:	No					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pui	mps,
parameters shall be declared f							
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	176	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	14,7	kW	T j = – 7 °C	COPd	4,84] -
T j = + 2 °C	Pdh	14,8	kW	T j = +2 °C	COPd	4,98] -
T j = + 7 °C	Pdh	14,9	kW	T j = +7 °C	COPd	5,08	- 1
T j = + 12 °C	Pdh	14,9	kW	T j = +12 °C	COPd	5,11	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,67	-
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	0,96	-	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	1,8	kW
Thermostat-off mode	P _{TO}	0,097	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8758	kWh	flow rate, outdoor heat exchanger	-	3,6	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
Contact details	Enertech AB, Box	x 309, SE-341 26	Ljungby Tel +4	6 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Warm climate and High ter	nperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + 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:	125	%	
Equipped with a supplementar	ry heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	er:	Yes					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	-	ire application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	n _s	121	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
T j = + 2 °C	Pdh	13,5	kW	T j = +2 °C	COPd	2,81	-
T j = + 7 °C	Pdh	13,8	kW	T j = +7 °C	COPd	3,14	
T j = + 12 °C	Pdh	14,2	kW	T j = +12 °C	COPd	3,67	-
T j = bivalent temperature	Pdh	13,5	kW	T j = bivalent temperature	COPd	2,90	-
T j = operation limit temperature	Pdh	13,5	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	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	1,1	kW
Thermostat-off mode	P _{TO}	0,039	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	6019	kWh	flow rate, outdoor heat exchanger	-	3,0	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Warm climate and Low ten	nperature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + 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:	153	%	
Equipped with a supplementa	ry heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	er:	Yes					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared f	or low-temperatu	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	149	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	na	kW	T j = – 7 °C	COPd	na] -
T j = + 2 °C	Pdh	14,5	kW	T j = +2 °C	COPd	4,01	-
T j = + 7 °C	Pdh	14,7	kW	T j = +7 °C	COPd	4,18	- 1
T j = + 12 °C	Pdh	14,8	kW	T j = +12 °C	COPd	4,39	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,01	-
T j = operation limit temperature	Pdh	14,5	kW	T j = operation limit temperature	COPd	4,07	-
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	0,96	-	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	1,2	kW
Thermostat-off mode	Р _{то}	0,107	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	5335	kWh	flow rate, outdoor heat exchanger	-	3,6	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Boy	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and High t	emperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 4	L4 + CTC EcoZe				
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 supplementa	ry heater:	Yes		Package efficiency class:	A++	-	
Heat pump combination heate		Yes					
			tion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f			11		C	Malara	11
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit I
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	123	%
Declared capacity for heating t outdoor temperature T j	for part load at in	door temperatu	ire 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,6	kW	T j = – 7 °C	COPd	2,96] -
T j = + 2 °C	Pdh	13,9	kW	T j = +2 °C	COPd	3,31	- 1
T j = + 7 °C	Pdh	14,2	kW	T j = +7 °C	COPd	3,59	-
T j = + 12 °C	Pdh	14,4	kW	T j = +12 °C	COPd	3,87	-
T j = bivalent temperature	Pdh	13,6	kW	T j = bivalent temperature	COPd	3,02	-
T j = operation limit temperature	Pdh	13,5	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	other than active	mode	-	Supplementary heater		-	-
Off mode	P _{OFF}	0,018	kW	Rated heat output (*)	Psup	2,7	kW
Thermostat-off mode	P _{TO}	0,039	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	10197	kWh	flow rate, outdoor heat exchanger	-	3,0	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Box	< 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and Low t	emperature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 4	L4 + CTC EcoZe	enith 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:	157	%	
Equipped with a supplementa	ry heater:	Yes		Package efficiency class:	A+++	-	
Heat pump combination heate		Yes					
			tion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	-						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	17	kW	Seasonal space heating energy efficiency	n _s	153	%
Declared capacity for heating to outdoor temperature T j	for part load at in	door temperatu	ire 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	14,6	kW	T j = – 7 °C	COPd	4,08] -
T j = + 2 °C	Pdh	14,7	kW	T j = +2 °C	COPd	4,23	- 1
T j = + 7 °C	Pdh	14,8	kW	T j = +7 °C	COPd	4,35	- 1
T j = + 12 °C	Pdh	14,9	kW	T j = +12 °C	COPd	4,48	l -
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,11	-
T j = operation limit temperature	Pdh	14,5	kW	T j = operation limit temperature	COPd	4,01	-
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	0,96	-	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	2,7	kW
Thermostat-off mode	Р _{то}	0,107	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8881	kWh	flow rate, outdoor heat exchanger	-	3,6	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Box	< 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Cold climate and High tem	perature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + 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:	128	%	
Equipped with a supplementa	ry heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	er:	Yes					
Parameters shall be declared f	or medium-temp	erature applicat	ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	or low-temperate	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	n _s	124	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,8	kW	T j = – 7 °C	COPd	3,23] -
T j = + 2 °C	Pdh	14,1	kW	T j = +2 °C	COPd	3,52] -
T j = + 7 °C	Pdh	14,3	kW	T j = +7 °C	COPd	3,78	-
T j = + 12 °C	Pdh	14,5	kW	T j = +12 °C	COPd	3,97	-
T j = bivalent temperature	Pdh	13,6	kW	T j = bivalent temperature	COPd	2,96	-
T j = operation limit temperature	Pdh	13,5	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}	-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	1,7	kW
Thermostat-off mode	P _{TO}	0,039	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	11314	kWh	flow rate, outdoor heat exchanger	-	3,0	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Box	< 309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljung

Cold climate and Low temp	erature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + 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:	157	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	er:	Yes					
			ion, except for	low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	or low-temperate	ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	n _s	153	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = − 7 °C	Pdh	14,7	kW	T j = – 7 °C	COPd	4,24] -
T j = + 2 °C	Pdh	14,8	kW	T j = +2 °C	COPd	4,35] -
T j = + 7 °C	Pdh	14,9	kW	T j = +7 °C	COPd	4,44	-
T j = + 12 °C	Pdh	14,9	kW	T j = +12 °C	COPd	4,46	-
T j = bivalent temperature	Pdh	14,6	kW	T j = bivalent temperature	COPd	4,10	-
T j = operation limit temperature	Pdh	14,5	kW	T j = operation limit temperature	COPd	4,01	-
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	0,96	-	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	1,8	kW
Thermostat-off mode	Ρ _{το}	0,107	kW				
Standby mode	P _{SB}	0,018	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items		•					
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	9957	kWh	flow rate, outdoor heat exchanger	-	3,6	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency	η_{wh}	102	%
Daily electricity consumption	Qelec	7,515	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1653	kWh	Annual fuel consumption	AFC	NA	GJ
Contact details	Enertech AB, Box	x 309, SE-341 26	Ljungby Tel +4	6 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

perature				Ene	ertech AB, 341	26 Ljungby
	CTC EcoPart 41	L4 + CTC EcoBa	sic			
	No		Energy efficiency class:		-	
	No		Controller class:	1	-	
	Yes		Controller contribution:	1	%	
	No		Package efficiency:	106	%	
heater:	No		Package efficiency class:		-	
:	No					
•	• •	ion, except for	low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
r low-temperatu	re application.					
Symbol	Value	Unit	Item	Symbol	Value	Unit
Prated	14	kW	Seasonal space heating energy efficiency	n _s	105	%
r part load at ind	door temperatu	re 20 °C and				
Pdh	16,6	kW	T j = – 7 °C	COPd	7,56] - [
Pdh	13,4	kW	T j = +2 °C	COPd	3,11] -
Pdh	13,3	kW	T j = +7 °C	COPd	2,98	-
Pdh	13,2	kW	T j = +12 °C	COPd	2,81	-
Pdh	13,4	kW	T j = bivalent temperature	COPd	3,11	-
Pdh	13,4	kW	T j = operation limit temperature	COPd	3,11	-
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	°C
P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Cdh	0,99	-	Heating water operating limit temperature	WTOL	65	°C
ther than active	mode		Supplementary heater			-
P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1	kW
Р _{то}	0,032	kW			-	
P _{SB}	0,007	kW	Type of energy input		Electric	
Р _{ск}	0,000	kW				
	Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Q _{HE}	6821	kWh	flow rate, outdoor heat exchanger	-		m3/h
ater:						
	na		Water heating energy efficiency	η_{wh}	na	%
Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
		1				1
	heater: r medium-temperatu symbol Prated r part load at ind Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pd	CTC EcoPart 41NoNoVesNoheater:Nor medium-temperature application.SymbolValuePrated14r part load at indoor temperaturePdh16,6Pdh13,3Pdh13,4Pdh13,3Pdh13,4Pdh13,4Pdh13,4Pdh13,4Pdh13,4Pdh13,4Pdh13,4Pdh13,2Pdh13,4Por0,007	CTC EcoPart 414 + CTC EcoBaNoNoNonedium-temperature application, except for r low-temperature application.SymbolValueUnitPrated14kWPart load at indoor temperature 20 °C andKWPdh16,6kWPdh13,4kWPdh13,2kWPdh13,4kWPdh14,4KKWPorr0,00	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:NoController class:YesController contribution:NoPackage efficiency:heater:NoPackage efficiency class:Package efficiency class:NoPackage efficiency class:NoPackage efficiency class:rmedium-temperature application.SymbolSymbolValueUnitPrated14KWPrated14kWPrated14kWPrated14kWPrated16.6kWPdh13.4kWPdh13.3kWPdh13.4Pdh14.4Store<	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:NoController class:IYesController contribution:1NoPackage efficiency:106heater:NoPackage efficiency:106no:Timedium-temperature application.ItemSymbolSymbolValueUnitItemSymbolPrated14kWSeasonal space heating energy efficiency Π_s Prated14kWSeasonal space heating energy efficiency Π_s Path13,4kWT j = -7 °CCOPdPdh13,4kWT j = +2 °CCOPdPdh13,4kWT j = initian limit temperatureCOPdPdh13,4kWFor air-to-water heat pumps: T j = -15 °C (If TOL < -20 °C)COPdPdh13,4kWFor air-to-water heat pumps: T j = -15 °C (If TOL < -20 °C)COPdPdh0,032kWFor air-to-water heat pumps: T j = -15 °C (If TOL < -20 °C)COPdPor0,0032kWCycling int	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:-NoController class:IYesController contribution:1%NoPackage efficiency:106%heater:NoPackage efficiency:106%medium-temperature application, except for low-temperature heat pumps. For low- temperature heat puremerature heat pulcation.SymbolValueUnittemSymbolValuePrated14kWSeasonal space heating energy efficiencyns105Prated16,6kWKWPart load at indoor temperature 20 °C and part load at indoor temperature 20 °C and

Information for heat pump space heaters and heat pump combination heaters

ENERTECH GROUP Enertech AB, 341 26 Ljungby

perature				Ene	ortech AR 341	GROUP
	CTC EcoPart 41	14 + CTC EcoBa	sic	LIK	enteen Ab, 541	20 Ljungby
					_	
				1	_	
	-				%	
hostor:				150	70	
			Package efficiency class.		-	
		tion, except for	· low-temperature heat pumps. For l	ow- tempera	iture heat pu	mps.
Symbol	Value	Unit	Item	Symbol	Value	Unit
Prated	16	kW	Seasonal space heating energy efficiency	η _s	155	%
r part load at in	door temperatu	re 20 °C and				
Pdh	NA	kW	T j = – 7 °C	COPd	NA] -
Pdh	14,5	kW	T j = +2 °C	COPd	4,55] -
Pdh	14,4	kW	T j = +7 °C	COPd	4,42	-
Pdh	14,3	kW	T j = +12 °C	COPd	4,26	-
Pdh	14,5	kW	T j = bivalent temperature	COPd	4,55	-
Pdh	14,5	kW	T j = operation limit temperature	COPd	4,55	-
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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
ther than active	mode	-	Supplementary heater			-
P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,1	kW
P _{TO}	0,097	kW				
P _{SB}	0,007	kW	Type of energy input		Electric	
Р _{ск}	0,000	kW				
	Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Q _{HE}	5128	kWh	flow rate, outdoor heat exchanger	-		m3/h
iter:						
	na		Water heating energy efficiency	η_{wh}	na	%
Qelec	na	kWh	Daily fuel consumption	Qfuel	na	kWh
AEC	na	kWh	Annual fuel consumption	AFC	na	GJ
	r low-temperation Symbol Prated r part load at in Pdh Pdh Pdh Pdh Pdh Pdh Pdh Pdh	CTC EcoPart 43NoNoNoNoheater:Nor medium-temperature application.SymbolValuePrated16r part load at indoor temperaturePdhNAPdh14,5	CTC EcoPart 414 + CTC EcoBaNoNoVesNoheater:Noredium-temperature application, except for r low-temperature application.SymbolValueUnitPrated16kWPdhNAkWPdh14,5kWCdh0,97cFixedIL WA53/nadBQelecnakWh	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:NoController contribution:NoPackage efficiency:heater:NoPackage efficiency class:Normedium-temperature application, except for low-temperature heat pumps. For low-temperature heat pumps. For low-temperature heat pumps. For low-temperature papilication.SymbolValueUnitPrated16KWPrated16kWPathNAKWPdh14,5KWPdh14,3KWPdh14,5KWT	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:INoController contribution:1YesController contribution:1NoPackage efficiency:156heater:NoPackage efficiency class:NoPackage efficiency class:NoNoPackage efficiency class:NoNoPackage efficiency class:NoNoPackage efficiency class:NoNoPackage efficiency class:NoNoPackage efficiency class:NoSymbolValueUnittemSymbolValueUnitEsosonal space heating energy efficiency Π_s Prated16kWSeasonal space heating energy efficiency Π_s PathNAkWSeasonal space heating energy efficiency Π_s Path14,4kWT j = -7 °CCOPdPdh14,5kWT j = -7 °CCOPdPdh14,5kWT j = +2 °CCOPdPdh14,5kWT j = operation limitCOPdPdh14,5kWT j = operation limitCOPdPdh14,5kWT j = operation limitCOPdPdh14,5kWT j = -15 °C (if ToL <-20 °C)COPdPdhnakWSupplementary heaterReading water operating limitWTOLPorc0,007kWPorc0,007kWPorc0,007kWPorcPorc <th< td=""><td>CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:-NoController contribution:1%NoPackage efficiency:156%heater:NoPackage efficiency:156%noPackage efficiency:156%heater:NoPackage efficiency:156%rendium-temperature application.temSymbolValueProted16kWSeasonal space heating energy efficiencyns155prate load at indoor temperature 20 °C and PdhNAkWSeasonal space heating energy efficiencyns155PdhNAkWSeasonal space heating energy efficiencyns155%PdhNAkWSeasonal space heating energy efficiencyns155%PdhNAkWTj = -7 °CCOPdA4,25Pdh14,3kWTj = +2 °CCOPd4,25Pdh14,5kWTj = -15 °C (T CI < $< 20 °C$)QoPd4,55PdhnakWFor air-to-water heat pumps: Tj = -15 °C (T CI < $< 20 °C$)naMoPcychnakWFor air-to-water heat pumps: Tj = -15 °C (G Pocyc)naFor air-to-water heat pumps: Rated heat output (*)Psup1,1PcychnakWPsup1,1For air-to-water heat pumps: Rated brine or water heat pumps: Rated brine or water heat pumps: Rated brine or water heat pumps: Rated brine or water heat pumps: Rated</td></th<>	CTC EcoPart 414 + CTC EcoBasicNoEnergy efficiency class:-NoController contribution:1%NoPackage efficiency:156%heater:NoPackage efficiency:156%noPackage efficiency:156%heater:NoPackage efficiency:156%rendium-temperature application.temSymbolValueProted16kWSeasonal space heating energy efficiencyns155prate load at indoor temperature 20 °C and PdhNAkWSeasonal space heating energy efficiencyns155PdhNAkWSeasonal space heating energy efficiencyns155%PdhNAkWSeasonal space heating energy efficiencyns155%PdhNAkWTj = -7 °CCOPdA4,25Pdh14,3kWTj = +2 °CCOPd4,25Pdh14,5kWTj = -15 °C (T CI < $< 20 °C$)QoPd4,55PdhnakWFor air-to-water heat pumps: Tj = -15 °C (T CI < $< 20 °C$)naMoPcychnakWFor air-to-water heat pumps: Tj = -15 °C (G Pocyc)naFor air-to-water heat pumps: Rated heat output (*)Psup1,1PcychnakWPsup1,1For air-to-water heat pumps: Rated brine or water heat pumps: Rated

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and High t	emperature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + CTC EcoBa	asic			
Air-to-water heat pump:		No		Energy efficiency class:	A+	-	
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:	108	%	
Equipped with a supplemental	ry heater:	No		Package efficiency class:	A+	-	
Heat pump combination heate		No					
			ion, except for	r low-temperature heat pumps. For	low- tempera	ature heat pu	mps,
parameters shall be declared f	•						
Item	Symbol	Value	Unit	ltem	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η _s	107	%
Declared capacity for heating f outdoor temperature T j	for part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,5	kW	T j = – 7 °C	COPd	3,11] -
T j = + 2 °C	Pdh	13,3	kW	T j = +2 °C	COPd	2,95	-
T j = + 7 °C	Pdh	13,2	kW	T j = +7 °C	COPd	2,86	-
T j = + 12 °C	Pdh	13,2	kW	T j = +12 °C	COPd	2,76	-
T j = bivalent temperature	Pdh	13,5	kW	T j = bivalent temperature	COPd	3,11	-
T j = operation limit temperature	Pdh	13,5	kW	T j = operation limit temperature	COPd	3,11	-
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	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode	-	Supplementary heater			
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	2,4	kW
Thermostat-off mode	Р _{то}	0,032	kW				
Standby mode	P _{SB}	0,007	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{ск}	0	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}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	11389	kWh	flow rate, outdoor heat exchanger	-	3,0	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
Contact details	Enertech AB, Boy	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Average climate and Low te	emperature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + CTC EcoBa	isic			
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:	160	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heate	er:	No					
	•		ion, except for	r low-temperature heat pumps. For	low- temper	ature heat pu	nps,
parameters shall be declared f		ure application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	16	kW	Seasonal space heating energy efficiency	η _s	159	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	NA	kW	T j = – 7 °C	COPd	NA	-
T j = + 2 °C	Pdh	14,4	kW	T j = +2 °C	COPd	4,38	-
T j = + 7 °C	Pdh	14,3	kW	T j = +7 °C	COPd	4,29	-
T j = + 12 °C	Pdh	14,3	kW	T j = +12 °C	COPd	4,20	-
T j = bivalent temperature	Pdh	14,5	kW	T j = bivalent temperature	COPd	4,55	-
T j = operation limit temperature	Pdh	14,5	kW	T j = operation limit temperature	COPd	4,55	-
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	other than active	mode	-	Supplementary heater			
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,9	kW
Thermostat-off mode	Р _{то}	0,097	kW				
Standby mode	P _{SB}	0,007	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	8113	kWh	flow rate, outdoor heat exchanger	-		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
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP ertech AB. 341 26 Liungh

Cold climate and High temp	perature				En	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	4 + CTC EcoBa	isic			
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:	107	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:		-	
Heat pump combination heate		No					
			ion, except for	low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared f	-						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	n _s	106	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	13,3	kW	T j = – 7 °C	COPd	2,97	- 1
T j = + 2 °C	Pdh	13,2	kW	T j = +2 °C	COPd	2,86	-
T j = + 7 °C	Pdh	13,2	kW	T j = +7 °C	COPd	2,79	-
T j = + 12 °C	Pdh	13,1	kW	T j = +12 °C	COPd	2,73	-
T j = bivalent temperature	Pdh	13,5	kW	T j = bivalent temperature	COPd	3,11	-
T j = operation limit temperature	Pdh	13,4	kW	T j = operation limit temperature	COPd	3,11	-
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	0,99	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,032	kW				
Standby mode	P _{SB}	0,007	kW	Type of energy input		Electric	
Crankcase heater mode	Р _{СК}	0,000	kW				
Other items							•
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	12997	kWh	flow rate, outdoor heat exchanger	-		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
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	46 372 88000 www.ctc.se			

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

ENERTECH GROUP Enertech AB, 341 26 Ljungby

Cold climate and Low temp	erature				Ene	ertech AB, 341	26 Ljungby
Model(s):		CTC EcoPart 41	L4 + CTC EcoBa	isic			
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:	158	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate	r:	No					
Parameters shall be declared for	or medium-temp	erature applicat	ion, except for	r low-temperature heat pumps. For	low- tempera	ture heat pu	mps,
parameters shall be declared for	or low-temperatu	are application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15	kW	Seasonal space heating energy efficiency	n _s	157	%
Declared capacity for heating f outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = – 7 °C	Pdh	14,4	kW	T j = − 7 °C	COPd	4,40] -
T j = + 2 °C	Pdh	14,3	kW	T j = +2 °C	COPd	4,29] -
T j = + 7 °C	Pdh	14,3	kW	T j = +7 °C	COPd	4,23	- 1
T j = + 12 °C	Pdh	14,3	kW	T j = +12 °C	COPd	4,17	-
T j = bivalent temperature	Pdh	14,5	kW	T j = bivalent temperature	COPd	4,55	-
T j = operation limit temperature	Pdh	14,5	kW	T j = operation limit temperature	COPd	4,55	-
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	0,97	-	Heating water operating limit temperature	WTOL	65	°C
Power consumption in modes	other than active	mode		Supplementary heater			
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	0,8	kW
Thermostat-off mode	Р _{то}	0,097	kW				
Standby mode	P _{SB}	0,007	kW	Type of energy input		Electric	
, Crankcase heater mode	Р _{СК}	0,000	kW				
Other items	-				ļ.		
Capacity control		Fixed		For air-to-water heat pumps: Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	53/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	9162	kWh	flow rate, outdoor heat exchanger	-		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
Contact details	Enertech AB, Box	309, SE-341 26	Ljungby Tel +4	l6 372 88000 www.ctc.se			