Information for heat pump space heaters and heat pump combination heaters $% \left(1\right) =\left(1\right) \left(1\right)$

Warm climate and Medium temperature



	temperature				341 20 Lju	iigby	
Model(s):		CTC CombiAir	r 6M + CTC Eco	Logic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	183	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared for parameters shall be declared for	or medium-tem			or low-temperature heat pumps. Fo	or low- tempe	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	179	%
Declared capacity for heating for outdoor temperature T j	or part load at in	ndoor temperat	ure 20 °C and	Declared coefficient of performa	-		
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	4,8	kW	T j = +2 °C	COPd	2,16] -
T j = + 7 °C	Pdh	3,1	kW	T j = +7 °C	COPd	3,95] -
T j = + 12 °C	Pdh	2,6	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	2,16	-
T j = operation limit temperature	Pdh	4,8	kW	T j = operation limit temperature	COPd	2,16	_
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}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	58	°C
Power consumption in modes of	other than active	e mode	_	Supplementary heater			
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items					•		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	35/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	1398	kWh	flow rate, outdoor heat exchanger		iia	1113/11
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	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 production importance that t	ct's life cycle, it mu he product's refrig	a recycling station or with the installation en st be sent correctly to a waste station or rese erant, compressor oil and electrical/electroni old waste is not permitted.	ller offering a serv	vice of that type.	It is of grea
Contact details	Enertech AB. Bo			·			200331

Information for heat pump space heaters and heat pump combination heaters $% \left(1\right) =\left(1\right) \left(1\right)$

CTC CombiAir 6M + CTC EcoLogic

Warm climate and Low temperature

Model(s):



Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	256	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate		No perature applica	tion except for	or low-temperature heat pumps. Fo	r low- tempe	rature heat n	umns
parameters shall be declared for				or low-temperature near pumps. Fo	i low-tempe	rature neat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	η_{s}	252	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	door temperat	ure 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	-
Tj=+2°C	Pdh Pdh	4,2	kW	T j = +2 °C	COPd	2,68	-
Tj=+7°C Tj=+12°C	Pdh Pdh	2,7 2,7	kW kW	T j = +7 °C T j = +12 °C	COPd COPd	6,31 7,79	_
•	Pdh	4,2	kW		COPd	2,68	_
T j = bivalent temperature	ruii	7,2	I. VV	T j = bivalent temperature	COPU	2,00	-
T j = operation limit temperature	Pdh	4,2	kW	T j = operation limit temperature	COPd	2,68	-
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}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	58	°C
Power consumption in modes of	other than active	mode		Supplementary heater			•
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items						ı	r
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	-/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	870	kWh	flow rate, outdoor heat exchanger		110	1113/11
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	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 produc	t's life cycle, it mu he product's refrig	t a recycling station or with the installation en, ist be sent correctly to a waste station or resel gerant, compressor oil and electrical/electronio old waste is not permitted.	ller offering a serv	vice of that type.	It is of great

Information for heat pump space heaters and heat pump combination heaters $% \left(1\right) =\left(1\right) \left(1\right)$

CTC CombiAir 6M + CTC EcoLogic

Average climate and Medium temperature

Model(s):



Air-to-water heat pump:		Yes		Energy efficiency class:	A++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	135	%	
Equipped with a supplementar	ry heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heate	er:	No					
		erature applica	tion, except fo	or low-temperature heat pumps. Fo	r low- tempe	rature heat p	umps,
parameters shall be declared f	or low-temperatu	re application.	•				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	131	%
Declared capacity for heating to outdoor temperature T j	for part load at in	door temperat	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = -7 °C	Pdh	4,7	kW	T j = − 7 °C	COPd	1,88	-
T j = + 2 °C	Pdh	2,8	kW	T j = +2 °C	COPd	3,26	-
T j = + 7 °C	Pdh	1,8	kW	T j = +7 °C	COPd	4,72	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	6,47	-
T j = bivalent temperature	Pdh	4,7	kW	T j = bivalent temperature	COPd	1,88	-
T j = operation limit temperature	Pdh	4,1	kW	T j = operation limit temperature	COPd	1,77	-
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	-10	°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	58	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,1	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items	CK	5,000			<u> </u>		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	-/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	3245	kWh	flow rate, outdoor heat exchanger			
For heat pump combination he	eater:						
Declared load profile	na	Efficiency class	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 productimportance that t	t's life cycle, it mu he product's refrig	a recycling station or with the installation en st be sent correctly to a waste station or rese terant, compressor oil and electrical/electroni old waste is not permitted.	- ller offering a ser	vice of that type.	It is of great

CTC CombiAir 6M + CTC EcoLogic

Average climate and Low temperature

Model(s):



iviouei(s).		CTC COIIIDIAII	DIVI + CTC ECO	redgic			
Air-to-water heat pump:		Yes		Energy efficiency class:	A+++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	192	%	
Equipped with a supplementary	y heater:	No		Package efficiency class:	A+++	-	
Heat pump combination heater	:	No					
				or low-temperature heat pumps. Fo	r low- tempe	erature heat p	umps,
parameters shall be declared for	or low-temperat	ure application.	•				
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_s	188	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperati	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	4,3	kW	T j = - 7 °C	COPd	2,60] -
T j = + 2 °C	Pdh	2,6	kW	T j = +2 °C	COPd	4,84	_
Tj=+7°C	Pdh	1,7	kW	T j = +7 °C	COPd	6,91	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	7,72	_
T j = bivalent temperature	Pdh	4,3	kW	T j = bivalent temperature	COPd	2,60	-
T j = operation limit temperature	Pdh	3,2	kW	T j = operation limit temperature	COPd	2,24	-
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	-10	°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	58	°C
Power consumption in modes of	other than active	e mode	i	Supplementary heater			7
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	-/50	dВ	For water-/brine-to-water heat pumps: Rated brine or water			m2/h
Annual energy consumption	Q _{HE}	2072	kWh	flow rate, outdoor heat exchanger	-	na	m3/h
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	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 produc	t's life cycle, it mu he product's refrig	a recycling station or with the installation en st be sent correctly to a waste station or rese gerant, compressor oil and electrical/electroni old waste is not permitted.	ller offering a se	rvice of that type.	It is of grea
Contact details	nertech AR Ro	x 309, SF-341 26	5 Liunghy Tel +	-46 372 88000 www.ctc.se			200331

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



Cold Cilinate and Medium to	inperature				341 26 Lju	iliguy	4
Model(s):		CTC CombiAir	6M + CTC Eco	Logic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	120	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heate	r:	No					
Parameters shall be declared for parameters shall be declared for				or low-temperature heat pumps. Fo	r low- tempe	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	η_{s}	116	%
Declared capacity for heating for outdoor temperature T j	or part load at i	ndoor temperati	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	3,4	kW	T j = − 7 °C	COPd	2,43] -
T j = + 2 °C	Pdh	2,0	kW	T j = +2 °C	COPd	3,95	-
T j = + 7 °C	Pdh	1,3	kW	T j = +7 °C	COPd	4,24	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	6,80	1 -
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	1,96	-
T j = operation limit temperature	Pdh	2,9	kW	T j = operation limit temperature	COPd	1,41	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	1,7	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	3,01	-
Bivalent temperature	T _{biv}	-12	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-20	°C
Cycling interval capacity for heating	P cych	-/58	kW	Cycling interval efficiency	СОРсус	na] .
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	58	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	5,5	kW
Thermostat-off mode	P_{TO}	0,012	kW				
Standby mode	P_{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/l
Sound power level, indoors/ outdoors	L _{WA}	35/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/l
Annual energy consumption	Q _{HE}	4610	kWh	flow rate, outdoor heat exchanger		ila	1113/1
For heat pump combination he	ater:						
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	na	%
Daily electricity consumption	Qelec	na	kWh	Daily fuel consumption	Qfuel	NA	kWł
•	AEC	na	kWh	Annual fuel consumption	AFC	NA	GJ
Annual electricity consumption Specific precautions and end of life information:		na The packaging mu end of the produc importance that t	kWh st be deposited at t's life cycle, it mu he product's refrig		AFC gineer for correct	NA waste managen	nent. A

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



Cold climate and Low temper	crature				341 26 Lju	ligby	4
Model(s):		CTC CombiAir	6M + CTC Eco	Logic			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	147	%	
Equipped with a supplementar	y heater:	No		Package efficiency class:		-	
Heat pump combination heater	r:	No					
Parameters shall be declared for parameters shall be declared for				or low-temperature heat pumps. Fo	r low- tempei	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	η_{S}	143	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperati	ure 20 °C and	Declared coefficient of performa part load at indoor temperature			
T j = - 7 °C	Pdh	2,4	kW	T j = − 7 °C	COPd	3,15] -
T j = + 2 °C	Pdh	2,4	kW	T j = +2 °C	COPd	5,06	-
T j = + 7 °C	Pdh	1,0	kW	T j = +7 °C	COPd	5,17	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	7,90	-
T j = bivalent temperature	Pdh	2,9	kW	T j = bivalent temperature	COPd	2,22	-
T j = operation limit temperature	Pdh	2,0	kW	T j = operation limit temperature	COPd	1,50	-
For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	Pdh	1,7	kW	For air-to-water heat pumps: T j = - 15 °C (if TOL < - 20 °C)	COPd	4,02	-
Bivalent temperature	T _{biv}	-12	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-20	°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	58	°C
Power consumption in modes of	other than active	e mode		Supplementary heater			_
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	4,0	kW
Thermostat-off mode	P_{TO}	0,012	kW				
Standby mode	P_{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	-/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/I
Annual energy consumption	Q _{HE}	2694	kWh	flow rate, outdoor heat exchanger	-	ila	1113/1
For heat pump combination he	ater:	_					
Declared load profile	na	Efficiency class	na	Water heating energy efficiency	η_{wh}	na	%
Daily electricity consumption	Q_{elec}	na	kWh	Daily fuel consumption	\mathbf{Q}_{fuel}	NA	kWh
Annual electricity consumption	AEC	na	kWh	Annual fuel consumption	AFC	NA	GJ
consumption Specific precautions and end of life information:	AEC	The packaging mu end of the produc importance that the	st be deposited at t's life cycle, it mu: he product's refrig	Annual fuel consumption a recycling station or with the installation en st be sent correctly to a waste station or resel erant, compressor oil and electrical/electronic old waste is not permitted.	gineer for correct ller offering a serv	waste managen vice of that type.	nent. At It is of g

Warm climate and Medium temperature



Model(s):		CTC CombiAir	6M + CTC Eco	Zenith i360/EcoVent i360F			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	183	%	
Equipped with a supplementar	v heater:	Yes		Package efficiency class:		-	
Heat pump combination heate	-	Yes		,			
			tion, except fo	or low-temperature heat pumps. Fo	r low- temper	ature heat p	umps,
parameters shall be declared f							•
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	5	kW	Seasonal space heating energy efficiency	η_{s}	179	%
Declared capacity for heating foutdoor temperature T j	or part load at in	door temperat	ure 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	4,8	kW	T j = +2 °C	COPd	2,16	-
T j = + 7 °C	Pdh	3,1	kW	T j = +7 °C	COPd	3,95	-
T j = + 12 °C	Pdh	2,6	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	4,8	kW	T j = bivalent temperature	COPd	2,16	-
T j = operation limit temperature	Pdh	4,8	kW	T j = operation limit temperature	COPd	2,16	-
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}	2	°C	For air-to-water heat pumps: Operation limit temperature	TOL	2	°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	58	°C
Power consumption in modes	other than active	mode		Supplementary heater			_
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P_{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items	CK	-,,,			<u> </u>		
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	35/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	1398	kWh	flow rate, outdoor heat exchanger	-	110	ШЭДП
For heat pump combination he	eater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	121	%
Daily electricity consumption	Qelec	6,610	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1390	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc	t's life cycle, it mu he product's refrig	t a recycling station or with the installation en ust be sent correctly to a waste station or rese gerant, compressor oil and electrical/electroni old waste is not permitted.	ller offering a serv	ice of that type.	It is of great

Warm climate and Low temperature



Warm chinate and Low tem	perature				341 20 Lju	ligby	
Model(s):		CTC CombiAir	6M + CTC Eco	Zenith i360/EcoVent i360F			
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	256	%	
Equipped with a supplementary	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heater		Yes					
				or low-temperature heat pumps. Fo	or low- tempe	rature heat p	umps,
parameters shall be declared for	or low-tempera	ture application.					
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	4	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	252	%
Declared capacity for heating for outdoor temperature T j	or part load at i	ndoor temperatu	ure 20 °C and	Declared coefficient of performa			
•	- "						7
Tj=-7°C	Pdh Pdh	na 4.2	kW	Tj=-7°C	COPd	na 2.69	-
T j = + 2 °C T i = + 7 °C	Pdh Pdh	4,2 2,7	kW kW	T j = +2 °C T j = +7 °C	COPd COPd	2,68 6,31	1
Tj=+12°C	Pdh	2,7	kW	T j = +12 °C	COPd	7,79	1
1 j = 1 12 C				1 1 - +12 C			1
T j = bivalent temperature	Pdh	4,2	kW	T j = bivalent temperature	COPd	2,68	-
T j = operation limit	Pdh	4.2	kW	T j = operation limit	COPd	2 60	1
temperature	ran	4,2	KVV	temperature	COPa	2,68	
For air-to-water heat pumps:				For air-to-water heat pumps:			
Γ j = -15 °C (if TOL < -20 °C)	Pdh	na	kW	T j = - 15 °C (if TOL < - 20 °C)	COPd	na	-
, (4
Bivalent temperature	T	2	°C	For air-to-water heat pumps:	TOL	2	°C
bivalent temperature	T _{biv}	2	C	Operation limit temperature	TOL	2	
Cycling interval capacity for	_						1
heating	P _{cych}	na	kW	Cycling interval efficiency	COPcyc	na	-
Degradation co-efficient	Cdh	0,98	_	Heating water operating limit	WTOL	58	°C
Degradation co-emcient	Cuii	0,50	_	temperature	WIOL	30	
Power consumption in modes of	other than activ	re mode		Supplementary heater			7
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	0,0	kW
Thermostat-off mode	P TO	0,012	kW				
Standby mode	P_{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
L Sound power level, indoors		1 . 1		For water-/brine-to-water heat			
outdoors	L _{WA}	-/50	dB	pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	870	kWh	flow rate, outdoor heat	-	na	m3/h
				exchanger			
For heat pump combination he	ater:	Efficiency	ı	Water heating energy		I	I
Declared load profile	XL	class	na	efficiency	$\eta_{\sf wh}$	121	%
Daily electricity consumption	Qelec	6,610	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1390	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the product importance that the	t's life cycle, it mus ne product's refrig	a recycling station or with the installation er st be sent correctly to a waste station or rese erant, compressor oil and electrical/electroni old waste is not permitted.	ller offering a serv	vice of that type	It is of grea

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

Enertech AB 341 26 Ljungby



Model(s):	CTC CombiAir 6M + CTC EcoZenith i360/EcoVent i360F							
Air-to-water heat pump:	Yes	Energy efficiency class:	A++	-				
Water-to-water heat pump:	No	Controller class:	VI	-				
Brine-to-water heat pump:	No	Controller contribution:	4	%				
Low-temperature heat pump:	No	Package efficiency:	135	%				
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	5	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	131	%
Declared capacity for heating for outdoor temperature T j	or part load at ir	ndoor temperat	ure 20 °C and	Declared coefficient of performal part load at indoor temperature	•		
T j = -7 °C	Pdh	4,7	kW	T j = -7 °C	COPd	1,88] -
T j = + 2 °C	Pdh	2,8	kW	T j = +2 °C	COPd	3,26	-
T j = + 7 °C	Pdh	1,8	kW	T j = +7 °C	COPd	4,72	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	6,47	-
T j = bivalent temperature	Pdh	4,7	kW	T j = bivalent temperature	COPd	1,88	-
T j = operation limit temperature	Pdh	4,1	kW	T j = operation limit temperature	COPd	1,77	-
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	-10	°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	58	°C
Power consumption in modes of	ther than active	e mode		Supplementary heater			-
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	1,1	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items	CK	5,555					
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	-/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	3245	kWh	flow rate, outdoor heat exchanger		110	msym
For heat pump combination hea	ater:		•				
Declared load profile	XL	Efficiency class	A	Water heating energy efficiency	η_{wh}	100	%
Daily electricity consumption	Qelec	7,990	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1682	kWh	Annual fuel consumption	AFC	NA	GJ

Specific precautions and end of life information:

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

Average climate and Low temperature

Model(s):

Enertech AB 341 26 Ljungby



Air-to-water heat pump:		Yes		Energy efficiency class:	A+++	-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	192	%	
Equipped with a supplementar	ry heater:	Yes		Package efficiency class:	A+++	-	
Heat pump combination heate		Yes					
Parameters shall be declared f parameters shall be declared f				or low-temperature heat pumps. Fo	or low- tempe	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
	•			Seasonal space heating energy	•,•		
Rated heat output (*)	Prated	5	kW	efficiency	η_s	188	%
Declared capacity for heating f	or part load at in	ndoor temperat	ure 20 °C and	Declared coefficient of performa	ance or prima	ry energy rati	o for
outdoor temperature T j	o. pa	.acc. temperat		part load at indoor temperature	=		
T j = - 7 °C	Pdh	4,3	kW	T i = -7 °C	COPd	2,60] _
Tj=+2°C	Pdh	2,6	kW	T j = +2 °C	COPd	4,84	_
T j = + 7 °C	Pdh	1,7	kW	T j = +7 °C	COPd	6,91	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	7,72	-
T j = bivalent temperature	Pdh	4,3	kW	T j = bivalent temperature	COPd	2,60	l <u> </u>
	7 477	4,5	KVV		coru	2,00	
T j = operation limit temperature	Pdh	3,2	kW	T j = operation limit temperature	COPd	2,24	-
·							
For air-to-water heat pumps: $T = -15 ^{\circ}\text{C}$ (if $TOL < -20 ^{\circ}\text{C}$)	Pdh	na	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	na	-
1] = -13 C(11 10L < -20 C)							
Division to the second section of	_	_	0.0	For air-to-water heat pumps:	TO	10	0.0
Bivalent temperature	T _{biv}	-7	°C	Operation limit temperature	TOL	-10	°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	WTOL	58	°C
		·		temperature			
Power consumption in modes		The state of the s	l	Supplementary heater	D	4.6	1 ,,,,
Off mode	P _{OFF}	0,007	kW	Rated heat output (*)	Psup	1,6	kW
Thermostat-off mode	P _{TO}	0,012	kW			=1	
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							ı
Capacity control		Variable		For air-to-water heat pumps:		2526	m3/h
Capacity control		variable		Rated air flow rate, outdoors	-	2320	1113/11
Sound power level, indoors/	,	/50	d۵	For water-/brine-to-water heat			
outdoors	L _{WA}	-/50	dB	pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	2072	kWh	flow rate, outdoor heat		· iu	1113/11
				exchanger			
For heat pump combination he	eater.	Efficiency		Water heating energy			
Declared load profile	XL	class	Α	efficiency	η_{wh}	100	%
Daily electricity consumption	Qelec	7,990	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	1682	kWh	Annual fuel consumption	AFC	NA	GJ
				at a recycling station or with the installation er			
Specific precautions and end				ust be sent correctly to a waste station or rese gerant, compressor oil and electrical/electroni			
of life information:		•	•	nold waste is not permitted.		,, 0.500360	

CTC CombiAir 6M + CTC EcoZenith i360/EcoVent i360F

Cold climate and Medium temperature



Model(s):	<u> </u>	CTC CombiAir	6M + CTC Eco	Zenith i360/EcoVent i360F	341 20 Lju	6~ /	
Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	120	%	
Equipped with a supplementar	y heater:	Yes		Package efficiency class:		-	
Heat pump combination heater Parameters shall be declared for parameters shall be declared for	or medium-tem		•	or low-temperature heat pumps. Fo	r low- tempe	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	6	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	116	%
Declared capacity for heating for outdoor temperature T j	or part load at i	ndoor temperati	ure 20 °C and	Declared coefficient of performa			
T j = - 7 °C	Pdh	3,4	kW	T j = -7 °C	COPd	2,43] -
T j = + 2 °C	Pdh	2,0	kW	T j = +2 °C	COPd	3,95	
T j = + 7 °C	Pdh	1,3	kW	T j = +7 °C	COPd	4,24	_
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	6,80	
T j = bivalent temperature	Pdh	4,1	kW	T j = bivalent temperature	COPd	1,96	-
T j = operation limit temperature	Pdh	2,9	kW	T j = operation limit temperature	COPd	1,41	_
For air-to-water heat pumps: T j = – 15 °C (if TOL < – 20 °C)	Pdh	1,7	kW	For air-to-water heat pumps: T j = -15 °C (if TOL < -20 °C)	COPd	3,01	-
Bivalent temperature	T _{biv}	-12	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-20	°C
Cycling interval capacity for heating	P cych	-/58	kW	Cycling interval efficiency	СОРсус	na	_
Degradation co-efficient	Cdh	0,98	-	Heating water operating limit temperature	WTOL	58	°C
Power consumption in modes of	other than activ	e mode		Supplementary heater			_
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	5,5	kW
Thermostat-off mode	P_{TO}	0,012	kW				
Standby mode	P_{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							
Capacity control		Variable		For air-to-water heat pumps: Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/ outdoors	L _{WA}	35/50	dB	For water-/brine-to-water heat pumps: Rated brine or water	_	na	m3/h
Annual energy consumption	Q _{HE}	4610	kWh	flow rate, outdoor heat exchanger		110	1113/11
For heat pump combination he	ater:						
Declared load profile	XL	Efficiency class	na	Water heating energy efficiency	$\eta_{\sf wh}$	82	%
Daily electricity consumption	Qelec	9,700	kWh	Daily fuel consumption	Qfuel	NA	kWh
Annual electricity consumption	AEC	2046	kWh	Annual fuel consumption	AFC	NA	GJ
Specific precautions and end of life information:		end of the produc importance that the	t's life cycle, it mu he product's refrig	a recycling station or with the installation en st be sent correctly to a waste station or rese erant, compressor oil and electrical/electroni old waste is not permitted.	ller offering a serv	vice of that type.	It is of grea

Cold climate and Low temperature

Model(s):

Enertech AB 341 26 Ljungby



Air-to-water heat pump:		Yes		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		No		Controller contribution:	4	%	
Low-temperature heat pump:		No		Package efficiency:	147	%	
Equipped with a supplementary heater:		Yes		Package efficiency class:		-	
Heat pump combination heate		Yes					
Parameters shall be declared f parameters shall be declared f				or low-temperature heat pumps. Fo	r low- tempe	rature heat p	umps,
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
				Seasonal space heating energy	- Cynnaen		
Rated heat output (*)	Prated	4	kW	efficiency	η_{S}	143	%
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			
T j = -7 °C	Pdh	2,4	kW	T j = -7 °C	COPd	3,15	1 -
T j = + 2 °C	Pdh	2,4	kW	T j = +2 °C	COPd	5,06	-
T j = + 7 °C	Pdh	1,0	kW	T j = +7 °C	COPd	5,17	-
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	7,90] -
T j = bivalent temperature	Pdh	2,9	kW	T j = bivalent temperature	COPd	2,22	_
T j = operation limit				T j = operation limit			
temperature	Pdh	2,0	kW	temperature	COPd	1,50	-
For air-to-water heat pumps:				For air-to-water heat pumps:			
T j = -15 °C (if TOL < -20 °C)	Pdh	1,7	kW	T j = - 15 °C (if TOL < - 20 °C)	COPd	4,02	-
							1
Bivalent temperature	T _{biv}	-12	°C	For air-to-water heat pumps: Operation limit temperature	TOL	-20	°C
Cycling interval capacity for	P cych	na	kW	Cycling interval efficiency	СОРсус	na	-
heating	•			Heating water operating limit			1
Degradation co-efficient	Cdh	0,97	-	temperature	WTOL	58	°C
Power consumption in modes other than active mode				Supplementary heater			_
Off mode	P OFF	0,007	kW	Rated heat output (*)	Psup	4,0	kW
Thermostat-off mode	P _{TO}	0,012	kW				
Standby mode	P _{SB}	0,012	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items					<u> </u>		
				For air-to-water heat pumps:			
Capacity control		Variable		Rated air flow rate, outdoors	-	2526	m3/h
Sound power level, indoors/		1 .		For water-/brine-to-water heat			
outdoors	L _{WA}	-/50	dB	pumps: Rated brine or water			2 /h
Annual energy consumption	0	2694	kWh	flow rate, outdoor heat	-	na	m3/h
<u> </u>	Q _{HE}	2034	KVVII	exchanger			
For heat pump combination he	eater:	Efficiency		Water heating energy		<u> </u>	1
Declared load profile	XL	class	na	efficiency	η_{wh}	82	%
Daily electricity consumption	Q_{elec}	9,700	kWh	Daily fuel consumption	\mathbf{Q}_{fuel}	NA	kWh
Annual electricity	AEC	2046	kWh	Annual fuel consumption	AFC	NA	GJ
consumption				at a recycling station or with the installation en			
Specific precautions and end			•	ust be sent correctly to a waste station or rese	-	_	
of life information:		•	•	gerant, compressor oil and electrical/electroninold waste is not permitted.	c equipment are	properly disposed	d of.

CTC CombiAir 6M + CTC EcoZenith i360/EcoVent i360F