Warm climate and Medium temperature

Enertech AB 341 26 Ljungby



Warm climate and Medium temperature					341 26 Ljur	igby	
Model(s):		CTC GSi 12, CT	C Gsi 12 (BE)				
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
Low-temperature heat pump	:	No		Package efficiency:	161	%	
Equipped with a supplementa	ary heater:	Yes		Package efficiency class:		-	
Heat pump combination heat	ter:	Yes					
Parameters shall be declared parameters shall be declared	•		tion, 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	8	kW	Seasonal space heating energy	η_{s}	157	%

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	8	kW	Seasonal space heating energy efficiency	η_{s}	157	%
Declared capacity for heating for	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performa	nce or prima	rv energy rat	io for
outdoor temperature T j		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		part load at indoor temperature			
T j = -7 °C	Pdh	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	8,3	kW	T j = +2 °C	COPd	2,75	-
T j = + 7 °C	Pdh	5,3	kW	T j = +7 °C	COPd	3,78	ļ ·
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,12	ļ ·
T j = bivalent temperature	Pdh	8,3	kW	T j = bivalent temperature	COPd	2,75	-
T j = operation limit temperature	Pdh	8,3	kW	T j = operation limit temperature	COPd	2,75	-
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}	2	°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	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2687	kWh	flow rate, outdoor heat exchanger	-	1	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	Gl
Specific precautions and end of life information:		end of the product' importance that the of the product as h	's life cycle, it mus e product's refrige	· · · · · · · · · · · · · · · · · · ·	offering a service	e of that type. t	is of great

Information for heat pump sp Warm climate and Low temp		nd heat pump	combination	ı heaters	Enertech Al 341 26 Ljun		TC
Model(s):		CTC GSi 12, CTC	C Gsi 12 (BE)				
Air-to-water heat pump:		No		Energy efficiency class:		-	
Water-to-water heat pump:		No		Controller class:	VI	-	
Brine-to-water heat pump:		Yes		Controller contribution:	4	%	
ow-temperature heat pump:		No		Package efficiency:	204	%	
quipped with a supplementary	heater:	Yes		Package efficiency class:		-	
Heat pump combination heater:	:	Yes					
Parameters shall be declared for parameters shall be declared for			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	10	kW	Seasonal space heating energy efficiency	η _s	200	%
Declared capacity for heating fo outdoor temperature T j	r part load at in	door 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] -
Γ j = + 2 °C	Pdh	10,0	kW	T j = +2 °C	COPd	4,29	-
Г j = + 7 °С	Pdh	6,4	kW	T j = +7 °C	COPd	5,29	-
T j = + 12 °C	Pdh	2,9	kW	T j = +12 °C	COPd	5,71	-
Γ j = bivalent temperature	Pdh	10,0	kW	T j = bivalent temperature	COPd	4,29	-
Γ j = operation limit temperature	Pdh	10,0	kW	T j = operation limit temperature	COPd	na	-
For air-to-water heat pumps: $\Gamma j = -15 ^{\circ}C \text{ (if TOL } < -20 ^{\circ}C)$	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	na	°C
Cycling interval capacity for neating	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	-
Degradation co-efficient	Cdh	0.97	_	Heating water operating limit	WTOL	65	°c

_			
Degradation co-efficient	Cdh	0,97	-
Power consumption in modes	other than active	mode	
Off mode	P OFF	0,023	kW
Thermostat-off mode	P _{TO}	0,000	kW
Standby mode	P_{SB}	0,000	kW
Crankcase heater mode	P _{CK}	0,000	kW

Type of energy input	Electric			
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		1.4	m2/h	

Psup

Capacity control		Variable	
Sound power level, indoors/ outdoors	L _{WA}	41/ na	dB
Annual energy consumption	Q _{HE}	2566	kWh

For heat pump combination heater:

Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	kWh	Annual fuel consumption	AFC	na	GJ

temperature

exchanger

Supplementary heater Rated heat output

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.

Other items

°C

kW

m3/h

0,0

1,4

Average climate and Medium temperature

Enertech AB 341 26 Ljungby



Model(s):	CTC GSi 12, CTC Gsi 12 (BE)			
Air-to-water heat pump:	No	Energy efficiency class:	A++	-
Water-to-water heat pump:	No	Controller class:	VI	-
Brine-to-water heat pump:	Yes	Controller contribution:	4	%
Low-temperature heat pump:	No	Package efficiency:	159	%
Equipped with a supplementary heater:	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	7	kW	Seasonal space heating energy efficiency	$\eta_{\mathcal{S}}$	155	%
Declared capacity for heating for outdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performar part load at indoor temperature 2			
T j = - 7 °C	Pdh	6,0	kW	T j = - 7 °C	COPd	3,25	-
T j = + 2 °C	Pdh	3,7	kW	T j = +2 °C	COPd	4,18	-
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	4,70	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,34	-
T j = bivalent temperature	Pdh	6,7	kW	T j = bivalent temperature	COPd	3,00	-
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}	-10	°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	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3444	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	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 servi	ce of that type. t	s of great

Average climate and Low temperature

Enertech AB 341 26 Ljungby



<u> </u>				, , ,	
Model(s):	CTC GSi 12, CTC Gsi 12 (BE)				
Air-to-water heat pump:	No	Energy efficiency class:	A++	-	
Water-to-water heat pump:	No	Controller class:	VI	-	
Brine-to-water heat pump:	Yes	Controller contribution:	4	%	
Low-temperature heat pump:	No	Package efficiency:	212	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:	A+++	-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	emperature application, except fo	r low-temperature heat pumps.	For low- tem	perature hea	at pumps,

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	10	kW	Seasonal space heating energy efficiency	η_{s}	208	%
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 2			
T j = - 7 °C	Pdh	8,8	kW	T j = - 7 °C	COPd	4,59] -
T j = + 2 °C	Pdh	5,4	kW	T j = +2 °C	COPd	5,60	-
T j = + 7 °C	Pdh	3,5	kW	T j = +7 °C	COPd	6,05	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	6,03	-
T j = bivalent temperature	Pdh	9,8	kW	T j = bivalent temperature	COPd	4,30	-
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}	-10	°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 of	other than active	mode	_	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,1	kW
Thermostat-off mode	P TO	0,000	kW				
Standby mode	P_{SB}	0,000	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	-	na	m3/h
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3800	kWh	flow rate, outdoor heat exchanger	-	1,4	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	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 the sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

Cold climate and Medium temperature

Enertech AB 341 26 Ljungby



	_			, , ,	
Model(s):	CTC GSi 12, CTC Gsi 12 (BE)				
Air-to-water heat pump:	No	Energy efficiency class:		-	
Water-to-water heat pump:	No	Controller class:	VI	-	
Brine-to-water heat pump:	Yes	Controller contribution:	4	%	
Low-temperature heat pump:	No	Package efficiency:	167	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	emperature application, except fo	or low-temperature heat pumps.	For low- te	mperature hea	at pumps,
parameters shall be declared for low-temper	erature application.				

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_{s}	163	%
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\text{C}$ and outdoor temperature T j			Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j				
T j = - 7 °C	Pdh	4,46	kW	T j = - 7 °C	COPd	4,01] -
T j = + 2 °C	Pdh	2,7	kW	T j = +2 °C	COPd	4,66] -
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	5,17	-
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,51	-
T j = bivalent temperature	Pdh	7,5	kW	T j = bivalent temperature	COPd	2,86	-
T j = operation limit temperature	Pdh	7,54	kW	T j = operation limit temperature	COPd	2,86	-
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}	-22	°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	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,000	kW				
Standby mode	P_{SB}	0,000	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	-	na	m3/h	
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	4158	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h
For heat pump combination he	ater:						
Declared load profile	XL			Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1678	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 the sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted.	offering a servi	ce of that type. t	is of great

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Cold climate and Low temperature				341 26 Ljungby		
Model(s):	CTC GSi 12, C	TC Gsi 12 (BE)				
Air-to-water heat pump:	No		Energy efficiency class:		-	
Water-to-water heat pump:	No		Controller class:	VI	-	
Brine-to-water heat pump:	Yes		Controller contribution:	4	%	
Low-temperature heat pump:	No		Package efficiency:	214	%	
Equipped with a supplementary heater:	Yes		Package efficiency class:		-	
Heat pump combination heater:	Yes					
Parameters shall be declared for medium	-temperature applic	ation, except fo	or low-temperature heat pumps.	For low- tempera	ature heat p	umps,
parameters shall be declared for low-tem	perature application					
Item Symb	ol Value	Unit	Item	Symbol	Value	Unit
			T			

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	η_s	210	%	
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\text{C}$ and outdoor temperature T j				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j				
T j = - 7 °C	Pdh	7,0	kW	T j = - 7 °C	COPd	5,33] -	
T j = + 2 °C	Pdh	4,2	kW	T j = +2 °C	COPd	5,90	-	
T j = + 7 °C	Pdh	2,8	kW	T j = +7 °C	COPd	5,95	-	
T j = + 12 °C	Pdh	2,4	kW	T j = +12 °C	COPd	5,74	-	
T j = bivalent temperature	Pdh	11,5	kW	T j = bivalent temperature	COPd	3,93	-	
T j = operation limit temperature	Pdh	11,45	kW	T j = operation limit temperature	COPd	3,93	-	
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}	-22	°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	0,013	kW	Rated heat output	Psup	0,0	kW	
Thermostat-off mode	P _{TO}	0,034	kW					
Standby mode	P _{SB}	0,000	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	-	na	m3/h	
Sound power level, indoors/ outdoors	L _{WA}	41/na	dB	For water-/brine-to-water heat pumps: Rated brine or water				
Annual energy consumption	Q _{HE}	5145	kWh	flow rate, outdoor heat exchanger	-	1,0	m3/h	
For heat pump combination he	eater:							
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	100/A	%	
Daily electricity consumption	Qelec	7,628	kWh	Daily fuel consumption	Qfuel	na	kWh	
Annual electricity consumption	AEC	1678	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 rrant, compressor oil and electrical/electronic ed not permitted.	offering a service	e of that type. t i	s of great	