Warm climate and Medium temperature

CTC AB Ljungby



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Model(s):	CTC GSi 608				
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:	150	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
Heat pump combination heater:	Yes				
Parameters shall be declared for medium-te	mperature application, ex	cept for low-temperature heat pumps.	For low- tem	perature he	at 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	η_{s}	146	%
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	na	kW	T j = - 7 °C	COPd	na] -
T j = + 2 °C	Pdh	6,9	kW	T j = +2 °C	COPd	2,84] -
T j = + 7 °C	Pdh	4,7	kW	T j = +7 °C	COPd	3,68	-
T j = + 12 °C	Pdh	2,3	kW	T j = +12 °C	COPd	4,64	-
T j = bivalent temperature	Pdh	6,9	kW	T j = bivalent temperature	COPd	2,84	-
T j = operation limit temperature	Pdh	6,87	kW	T j = operation limit temperature	COPd	2,84	-
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	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}	0,023	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}	34/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2443	kWh	flow rate, outdoor heat exchanger	-	0,9	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1716	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product importance that th	's life cycle, it mus e product's refrige ousehold waste is	a recycling station or with the installation engine t be sent correctly to a waste station or reseller trant, compressor oil and electrical/electronic ed not permitted. Specific precausions/manuals ca	offering a servio	ce of that type. t	is of great

Warm climate and Low temperature



CTC AB

Ljungby

Model(s):	CTC GSi 608			
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:	210	%
Equipped with a supplementary heater:	Yes	Package efficiency class:	•	-
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	η_{s}	206	%
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	na	kW	T j = − 7 °C	COPd	na] -
T j = + 2 °C	Pdh	7,4	kW	T j = +2 °C	COPd	4,56] -
T j = + 7 °C	Pdh	4,6	kW	T j = +7 °C	COPd	5,40	
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	6,39	-
T j = bivalent temperature	Pdh	7,3	kW	T j = bivalent temperature	COPd	4,56	-
T j = operation limit temperature	Pdh	7,3	kW	T j = operation limit temperature	COPd	4,56	-
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	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}	0,023	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}	34/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	1745	kWh	flow rate, outdoor heat exchanger	-	1,2	m3/h
For heat pump combination he	ater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1716	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 ousehold waste is	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. Specific precausions/manuals ca	offering a servic quipment are pro	e of that type. t	is of great

Average climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC GSi 608			
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:	163	%
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.

parameters shall be declared f	-						
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_s	159	%
Declared capacity for heating foutdoor temperature T j	or part load at ir	idoor temperatu	re 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	5,6	kW	T j = - 7 °C	COPd	3,02] -
T j = + 2 °C	Pdh	4,3	kW	T j = +2 °C	COPd	4,71	1 -
T j = + 7 °C	Pdh	2,3	kW	T j = +7 °C	COPd	4,46	1 -
T j = + 12 °C	Pdh	2,3	kW	T j = +12 °C	COPd	4,86	-
T j = bivalent temperature	Pdh	6,9	kW	T j = bivalent temperature	COPd	2,66	-
T j = operation limit temperature	Pdh	6,87	kW	T j = operation limit temperature	COPd	2,84	-
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	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}	0,023	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}	34/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3467	kWh	flow rate, outdoor heat exchanger	-	0,9	m3/h
For heat pump combination he	eater:						
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1716	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product importance that th	's life cycle, it mus e product's refrige ousehold waste is	a recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted. Specific precausions/manuals ca	offering a servio	ce of that type. t	is of great

CTC AB Ljungby



Average climate and Low temperature			Ljungby		CIC
Model(s):	CTC GSi 608				
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-temperature application, except for low-temperature heat pumps. For low- temperature heat pumps,

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	7	kW	Seasonal space heating energy efficiency	η_s	208	%
Declared capacity for heating f outdoor temperature T j	or part load at ir	ndoor temperatu	ıre 20 °C and	Declared coefficient of performal part load at indoor temperature 2			
T j = -7 °C	Pdh	6,0	kW	T j = − 7 °C	COPd	4,75] -
T j = + 2 °C	Pdh	3,6	kW	T j = +2 °C	COPd	5,68] -
T j = + 7 °C	Pdh	2,5	kW	T j = +7 °C	COPd	5,97	_
T j = + 12 °C	Pdh	2,6	kW	T j = +12 °C	COPd	6,05	-
T j = bivalent temperature	Pdh	7,3	kW	T j = bivalent temperature	COPd	4,56	-
T j = operation limit temperature	Pdh	7,3	kW	T j = operation limit temperature	COPd	4,56	-
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	other than active	e mode	_	Supplementary heater			_
Off mode	P OFF	0,023	kW	Rated heat output	Psup	0,0	kW
Thermostat-off mode	P _{TO}	0,023	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}	34/na	dB	For water-/brine-to-water heat pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	2683	kWh	flow rate, outdoor heat exchanger	-	1,2	m3/h
For heat pump combination he	eater:			-			
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1716	kWh	Annual fuel consumption	AFC	na	GJ
Specific precautions and end of life information:		end of the product importance that th	s's life cycle, it mus ne product's refrige nousehold waste is	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted. Specific precausions/manuals ca	offering a servi quipment are pr	ce of that type. t	is of great

Cold climate and Medium temperature

CTC AB Ljungby



Model(s):	CTC GSi 608			
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:	166	%
Equipped with a supplementary heater:	Yes	Package efficiency class:		-
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	η_{s}	162	%	
Declared capacity for heating foutdoor temperature T j	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature T j				
T j = -7 °C	Pdh	4,42	kW	T j = − 7 °C	COPd	4,01] -	
T j = + 2 °C	Pdh	2,3	kW	T j = +2 °C	COPd	4,59] -	
T j = + 7 °C	Pdh	2,4	kW	T j = +7 °C	COPd	5,15		
T j = + 12 °C	Pdh	2,7	kW	T j = +12 °C	COPd	5,92	↓ -	
T j = bivalent temperature	Pdh	6,9	kW	T j = bivalent temperature	COPd	2,88	-	
T j = operation limit temperature	Pdh	6,87	kW	T j = operation limit temperature	COPd	2,84	_	
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	0,97	-	Heating water operating limit temperature	WTOL	65	°C	
Power consumption in modes	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}	0,023	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}	34/na	dB	For water-/brine-to-water heat pumps: Rated brine or water				
Annual energy consumption	Q _{HE}	4065	kWh	flow rate, outdoor heat exchanger	-	0,9	m3/h	
For heat pump combination he	eater:	•	•			•	•	
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%	
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh	
Annual electricity consumption	AEC	1716	kWh	Annual fuel consumption	AFC	na	GJ	
Specific precautions and end of life information:		end of the product importance that th	's life cycle, it mus e product's refrige ousehold waste is	recycling station or with the installation engine t be sent correctly to a waste station or reseller rant, compressor oil and electrical/electronic ed not permitted. Specific precausions/manuals ca	offering a servio	ce of that type. t	is of great	



CTC AB

Cold climate and Low temperature			Ljungby		CIC
Model(s):	CTC GSi 608				
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:	221	%	
Equipped with a supplementary heater:	Yes	Package efficiency class:		-	
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	η_{s}	217	%
Declared capacity for heating f	or part load at in	door temperatu	re 20 °C and	Declared coefficient of performan	nce or prima	ry energy rat	io for
outdoor temperature T j				part load at indoor temperature	20 °C and ou	tdoor tempe	rature T j
T j = - 7 °C	Pdh	4,2	kW	T j = - 7 °C	COPd	5,52] -
T j = + 2 °C	Pdh	2,7	kW	T j = +2 °C	COPd	6,11] -
T j = + 7 °C	Pdh	2,6	kW	T j = +7 °C	COPd	6,14] -
T j = + 12 °C	Pdh	2,6	kW	T j = +12 °C	COPd	6,14	-
T j = bivalent temperature	Pdh	7,3	kW	T j = bivalent temperature	COPd	4,56	-
T j = operation limit	Pdh	7,32	kW	T j = operation limit	COPd	4,56	1 _
temperature		7,32		temperature	00.4	4,30	-
For air-to-water heat pumps:	Pdh	na	kW	For air-to-water heat pumps:	COPd	na	-
T j = -15 °C (if TOL < -20 °C)			<u></u>	T j = - 15 °C (if TOL < - 20 °C)			
Divalent temperature	T	22	°C	For air-to-water heat pumps:	TOL		°C
Bivalent temperature	T _{biv}	-22		Operation limit temperature	TOL	na	
Cycling interval capacity for	P _{cych}	na	kW	Cycling interval efficiency	СОРсус	na	1 -
heating	cycn		_	Heating water operating limit	ŕ		
Degradation co-efficient	Cdh	0,97	-	temperature	WTOL	65	°C
Power consumption in modes	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}	0,023	kW				
Standby mode	P_{SB}	0,000	kW	Type of energy input		Electric	
Crankcase heater mode	P _{CK}	0,000	kW				
Other items							_
Consolter control		Mariabla		For air-to-water heat pumps:			2//
Capacity control		Variable		Rated air flow rate, outdoors	-	na	m3/h
Sound power level, indoors/	1	34/na	dB	For water-/brine-to-water heat			
outdoors	L _{WA}	34/11a	- ""	pumps: Rated brine or water			
Annual energy consumption	Q _{HE}	3063	kWh	flow rate, outdoor heat exchanger	-	1,2	m3/h
For heat pump combination he	eater:	•	•				
Declared load profile		XL		Water heating energy efficiency/Energy class	$\eta_{\text{wh/-}}$	98/A	%
Daily electricity consumption	Qelec	8,255	kWh	Daily fuel consumption	Qfuel	na	kWh
Annual electricity consumption	AEC	1716	kWh	Annual fuel consumption	AFC	na	GJ
				recycling station or with the installation engine t be sent correctly to a waste station or reseller		_	
				rant, compressor oil and electrical/electronic ed	-		-
of life information:		•		not permitted. Specific precausions/manuals ca	n be found at		
Specific precautions and end of life information:	CTC 4.D. N.". "	importance that the	e product's refrige ousehold waste is	rant, compressor oil and electrical/electronic ed	quipment are pro		