Technical parameters for heat pump space heaters and heat pump combination heater

Model: ECONSET GreenTherm PASRW020-BP-PS-D
Air-to-water heat pump: yes
Water-to-water heat pump: no
Brine-to-water heat pump: no
Low-temperature heat pump: no
Equipped with a supplementary heater: no
Heat pump combination heater: no

### Water outlet temperature: 35°C

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	7,45	kW	Seasonal space heating energy efficiency		238	%		
Declared capacity for heating for part load at indoor temperature 20 °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 $T_{j}$					
$T_j = +2 ^{\circ}\text{C}$	Pdh	7,45	kW	$T_j = +2 ^{\circ}\text{C}$	COPd	3,16	-		
<i>Tj</i> = +7 °C	Pdh	4,78	kW	$T_j = +7 ^{\circ}\text{C}$	COPd	5,21	-		
<i>Tj</i> = + 12 °C	Pdh	2,45	kW	<i>Tj</i> = + 12 °C	COPd	7,78	-		
$T_j$ = bivalent temperature °C	Pdh	7,45	kW	$T_j$ = bivalent temperature °C	COPd	3,16	-		
Bivalent temperature	$T_{biv}$	2	°C	Operation limit temperature	TOL	2	°C		
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	75	°C		
Power consumption in modes oth	er than acti	ve mode		Other items					
Off mode	$P_{OFF}$	0,01	kW	Capacity control		variable			
Thermostat-off mode	$P_{TO}$	0,01	kW	Sound power level, indoors/outdoors	$L_{WA}$	- /60	dB		
Standby mode	$P_{SB}$	0,01	kW	Annual energy consumption	QHE	1637	kWh		
Crankcase heater mode	$P_{CK}$	0,042	kW	Rated airflow rate, outdoors	-	2400	m³/h		
Supplementary heater				Seasonal Coefficient of					
Rated heat output (**)	Psup	-	kW	Performance	SCOP	6,03	-		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	7,4	kW	Seasonal space heating energeficiency	gy $\eta_S$	178	%			
Declared capacity for heating for part load at indoor temperature 20 °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 $T_j$					
$T_j = +2 ^{\circ}\text{C}$	Pdh	6,65	kW	Tj = + 2 °C	COPd	2,32	-			
$T_j = +7 ^{\circ}\text{C}$	Pdh	4,73	kW	T <sub>j</sub> = +7 °C	COPd	3,88	-			
<i>Tj</i> = + 12 °C	Pdh	2,12	kW	<i>Tj</i> = + 12 °C	COPd	5,98	-			
$T_j$ = bivalent temperature °C	Pdh	6,87	kW	$T_j$ = bivalent temperature °C	COPd	2,4	-			
Bivalent temperature	$T_{biv}$	3	°C	Operation limit temperature	TOL	2	°C			
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	60	°C			
Power consumption in modes oth	er than acti	ve mode		Other items						
Off mode	$P_{OFF}$	0,01	kW	Capacity control		variable				
Thermostat-off mode	$P_{TO}$	0,01	kW	Sound power level, indoors/outdoors	LWA	- /60	dB			
Standby mode	$P_{SB}$	0,01	kW	Annual energy consumption	QHE	2171	kWh			
Crankcase heater mode	PCK	0,042	kW	Rated airflow rate, outdoors	-	2400	m³/h			
Supplementary heater				Seasonal Coefficient of						
Rated heat output (**)	Psup	0,75	kW	Performance	SCOP	4,52	-			
Contact details	Parallel Diavata	CLIMA CONTROL ANDRYMH EMBOPIKH ETAIPIA STITHMATON BEPMANTHE & ASIMATISMOY DAPATHA FINATIAL ONDY MOMOS AIRBATON T.K. 670 GB. 180 GETSAAONIKH THAN: 2319 600551 574929 FAX: 2310 574893 ADM: 998306120 AOY: ФАЕ BET/NIKHE AP. MAE: 65086/62/B/08/0003								

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters for heat pump space heaters and heat pump combination heater

Model: ECONSET GreenTherm PASRW040-BP-PS-D
Air-to-water heat pump: yes
Water-to-water heat pump: no
Brine-to-water heat pump: no
Low-temperature heat pump: no
Equipped with a supplementary heater: no
Heat pump combination heater: no

### Water outlet temperature: 35°C

Item	Symbol	Value	Unit	Item		Symbol	Value	Unit		
Rated heat output (*)	Prated	11,1	kW		nal space heating energy ency		237,2	%		
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\mathrm{C}$ and outdoor temperature $T_{j}$				part	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_{j}$					
<i>Tj</i> = +2 °C	Pdh	11,1	kW	$T_j = +$	2 °C	COPd	3,05	-		
<i>Tj</i> = +7 °C	Pdh	7,26	kW	$T_j = +$	· 7 °C	COPd	5,21	-		
<i>Tj</i> = +12 ℃	Pdh	4,10	kW	$T_j = +$	- 12 °C	COPd	7,89	-		
$T_j$ = bivalent temperature °C	Pdh	11,10	kW	$T_j = b$	ivalent temperature °C	COPd	3,05	-		
Bivalent temperature	$T_{biv}$	2	°C	Operat	ion limit temperature	TOL	-25	°C		
Degradation co-efficient (**)	Cdh	0.9	-	Heating	g water operating limit rature	WTOL	75	°C		
Power consumption in modes oth	er than acti	ve mode		Other	items	•				
Off mode	$P_{OFF}$	0,009	kW	Capaci	ty control		variable			
Thermostat-off mode	$P_{TO}$	0,009	kW		power level, s/outdoors	LWA	- /57	dB		
Standby mode	$P_{SB}$	0,009	kW	Annua	l energy consumption	QнЕ	2454	kWh		
Crankcase heater mode	$P_{CK}$	0,042	kW	Rated	airflow rate, outdoors	-	3600	m³/h		
Supplementary heater				Seaso	nal Coefficient of					
Rated heat output (**)	Psup	0	kW		mance	SCOP	6,01	-		

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit		
Rated heat output (*)	Prated	11	kW		Seasonal space heating energy efficiency	$\eta_S$	176,0	%		
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}$ 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 Tj						
$T_j = +2 ^{\circ}\text{C}$	Pdh	9,82	kW		$T_j = +2 ^{\circ}\text{C}$	COPd	2,02	-		
<i>Tj</i> = + 7 °C	Pdh	7,11	kW		$T_j = +7 ^{\circ}\text{C}$	COPd	4,09	-		
$T_j$ = + 12 °C	Pdh	4,03	kW		<i>T<sub>j</sub></i> = + 12 °C	COPd	6,29	-		
$T_j$ = bivalent temperature °C	Pdh	9,43	kW		$T_j$ = bivalent temperature °C	COPd	2,12	-		
Bivalent temperature	$T_{biv}$	4	°C		Operation limit temperature	TOL	-25	°C		
Degradation co-efficient (**)	Cdh	0.9	-		Heating water operating limit temperature	WTOL	75	°C		
Power consumption in modes other	er than acti	ve mode			Other items					
Off mode	$P_{OFF}$	0,009	kW		Capacity control		variable			
Thermostat-off mode	$P_{TO}$	0,009	kW		Sound power level, indoors/outdoors	LWA	- /57	dB		
Standby mode	$P_{SB}$	0,009	kW		Annual energy consumption	QHE	3270	kWh		
Crankcase heater mode	PCK	0,042	kW		Rated airflow rate, outdoors	-	3600	m³/h		
Supplementary heater					Seasonal Coefficient of					
Rated heat output (**)	Psup	1,2	kW		Performance	SCOP	4,47	-		
Contact details	Clima C Paralle Diavata Thessa	l of Egna Junctio	atia Str on	T.K. 570 d8 - 1 67 180 BELLANDNIKH						

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters for heat pump space heaters and heat pump combination heater

Model: ECONSET GreenTherm PASRW040S-BP-PS-D
Air-to-water heat pump: yes
Water-to-water heat pump: no
Brine-to-water heat pump: no
Low-temperature heat pump: no
Equipped with a supplementary heater: no
Heat pump combination heater: no

### Water outlet temperature: 35°C

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	11	kW	Seasonal space heating energy efficiency	$\eta_S$	233,6	%
Declared capacity for heating for part load at indoor temperature 20 °C and outdoor temperature $T_j$			Declared coefficient of performance part load at indoor temperature $T_j$	e or prima are 20 °	ry energy C and	ratio for outdoor	
<i>Tj</i> = +2 °C	Pdh	11	kW	<i>Tj</i> = + 2 °C	COPd	3,06	-
<i>Tj</i> = +7 °C	Pdh	7,17	kW	<i>Tj</i> = + 7 °C	COPd	5,08	-
<i>Tj</i> = +12 °C	Pdh	4,39	kW	<i>Tj</i> = + 12 °C	COPd	7,94	-
$T_j$ = bivalent temperature °C	Pdh	11	kW	$T_j$ = bivalent temperature °C	COPd	3,06	-
Bivalent temperature	$T_{biv}$	2	°C	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes oth	er than acti	ve mode		Other items			_
Off mode	$P_{OFF}$	0,008	kW	Capacity control		variable	
Thermostat-off mode	$P_{TO}$	0,008	kW	Sound power level, indoors/outdoors	LWA	- /58	dB
Standby mode	$P_{SB}$	0,008	kW	Annual energy consumption	QHE	2464	kWh
Crankcase heater mode	$P_{CK}$	0,064	kW	Rated airflow rate, outdoors	-	3600	m³/h
Supplementary heater				Seasonal Coefficient of	2225	<b>=</b> 0.4	
Rated heat output (**)	Psup	0	kW	Performance	SCOP	5,91	-

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit	
Rated heat output (*)	Prated	11,3	kW		Seasonal space heating energy efficiency	$\eta_S$	175,6	%	
Declared capacity for heating for part load at indoor temperature 20 °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 $T_j$						
<i>Tj</i> = + 2 °C	Pdh	9,66	kW		Tj = + 2 °C	COPd	1,97	-	
<i>Tj</i> = +7 °C	Pdh	7,25	kW		Tj = + 7 °C	COPd	4,11	-	
<i>Tj</i> = + 12 °C	Pdh	4,29	kW		<i>Tj</i> = + 12 °C	COPd	6,25	-	
$T_j$ = bivalent temperature °C	Pdh	9,69	kW		$T_j$ = bivalent temperature °C	COPd	2,18	-	
Bivalent temperature	$T_{biv}$	4	°C		Operation limit temperature	TOL	-25	°C	
Degradation co-efficient (**)	Cdh	0.9	-		Heating water operating limit temperature	WTOL	75	°C	
Power consumption in modes other	er than acti	ve mode			Other items				
Off mode	$P_{OFF}$	0,008	kW		Capacity control		variable		
Thermostat-off mode	$P_{TO}$	0,008	kW		Sound power level, indoors/outdoors	LWA	- /58	dB	
Standby mode	$P_{SB}$	0,008	kW		Annual energy consumption	QHE	3361	kWh	
Crankcase heater mode	$P_{CK}$	0,064	kW		Rated airflow rate, outdoors	-	3600	m³/h	
Supplementary heater					Seasonal Coefficient of				
Rated heat output (**)	Psup	1,64	kW		Performance	SCOP	4,46	-	
Contact details	Clima C Parallel Diavata Thessa	of Egna Junctio	atia Str on	T.K. 570 d8 . 1 9 100 0511 AAONIKH					

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters for heat pump space heaters and heat pump combination heater

Model: ECONSET GreenTherm PASRW060-BP-PS-D
Air-to-water heat pump: yes
Water-to-water heat pump: no
Brine-to-water heat pump: no
Low-temperature heat pump: no
Equipped with a supplementary heater: no
Heat pump combination heater: no

### Water outlet temperature: 35°C

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heat output (*)	Prated	15,27	kW	Seasonal space heating energy efficiency	$\eta_S$	243	%
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\mathrm{C}$ and outdoor temperature $\mathit{Tj}$				Declared coefficient of performance part load at indoor temperature $T_j$	e or prima ure 20 °	ry energy C and	ratio for outdoor
$T_j = +2 ^{\circ}\text{C}$	Pdh	15,27	kW	$T_j = +2 ^{\circ}\text{C}$	COPd	3,43	-
<i>Tj</i> = + 7 °C	Pdh	9,82	kW	<i>Tj</i> = + 7 °C	COPd	5,29	-
<i>Tj</i> = + 12 °C	Pdh	5,50	kW	<i>Tj</i> = + 12 °C	COPd	7,97	-
$T_j$ = bivalent temperature °C	Pdh	15,27	kW	$T_j$ = bivalent temperature °C	COPd	3,43	-
Bivalent temperature	$T_{biv}$	2	°C	Operation limit temperature	TOL	-25	°C
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes other	er than acti	ve mode		Other items			
Off mode	$P_{OFF}$	0,011	kW	Capacity control		variable	
Thermostat-off mode	$P_{TO}$	0,011	kW	Sound power level, indoors/outdoors	LWA	- /64	dB
Standby mode	$P_{SB}$	0,011	kW	Annual energy consumption	QHE	3301	kWh
Crankcase heater mode	$P_{CK}$	0,058	kW	Rated airflow rate, outdoors	-	5000	m³/h
Supplementary heater				Seasonal Coefficient of	0000		
Rated heat output (**)	Psup	-	kW	Performance	SCOP	6,14	•

Item	Symbol	Value	Unit	Item		Symbol	Value	Unit		
Rated heat output (*)	Prated	14,28	kW	Seaso effici	onal space heating energy ency	$\eta_S$	191	%		
Declared capacity for heating for part load at indoor temperature $20^{\circ}\text{C}$ and outdoor temperature $T_{j}$				part	Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $T_j$					
$T_j = +2 ^{\circ}\text{C}$	Pdh	14,28	kW	$T_j = -$	+ 2 °C	COPd	2,56	-		
$T_j = +7 ^{\circ}\text{C}$	Pdh	9,28	kW	$T_j = -$	+ 7 °C	COPd	4,23	-		
$T_j = +12 ^{\circ}\text{C}$	Pdh	5,36	kW	$T_j = -$	+ 12 °C	COPd	6,26	-		
$T_j$ = bivalent temperature °C	Pdh	14,28	kW	$T_j = 1$	bivalent temperature °C	COPd	2,56	-		
Bivalent temperature	$T_{biv}$	2	°C	Opera	tion limit temperature	TOL	-25	°C		
Degradation co-efficient (**)	Cdh	0.9	1		ng water operating limit erature	WTOL	75	°C		
Power consumption in modes oth	er than acti	ve mode		Power	Power consumption in modes other than active mode					
Off mode	$P_{OFF}$	0,011	kW	Capac	ity control		variable			
Thermostat-off mode	$P_{TO}$	0,011	kW		power level, rs/outdoors	LWA	- /64	dB		
Standby mode	$P_{SB}$	0,011	kW	Annua	al energy consumption	QHE	3924	kWh		
Crankcase heater mode	PCK	0,058	kW	Rated	l airflow rate, outdoors	-	5000	m³/h		
Supplementary heater				Seaso	onal Coefficient of	2200				
Rated heat output (**)	Psup	-	kW		rmance	SCOP	4,85	-		
Contact details	Parallel Diavata	Clima Control S.A.  Parallel of Egnatia Street, Diavata Junction Thessaloniki, Greece  CLIMA CONTROL MICKYMH EMIDOPIKH ETAIPIA  IXITHMATON GEPMANEHE & KALMATIEMOY  DAPATA CHATTAL OXOY MOMOO ALBATON  TIME: 2519 680551 574920 FAX: 2310 574893  ADM 998306126 ADY: DAE GEE/NIKHE  AP. MAE: 65086/62/B/08/0003								

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.

Technical parameters for heat pump space heaters and heat pump combination heater

Model: ECONSET GreenTherm PASRW060S-BP-PS-D
Air-to-water heat pump: yes
Water-to-water heat pump: no
Brine-to-water heat pump: no
Low-temperature heat pump: no
Equipped with a supplementary heater: no
Heat pump combination heater: no

### Water outlet temperature: 35°C

Item	Symbol	Value	Unit	Item Symbo	l Value	Unit		
Rated heat output (*)	Prated	15,27	kW	Seasonal space heating energy efficiency $\eta_S$	245	%		
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}\text{C}$ and outdoor temperature $\textit{T}_{j}$				Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20 °C and outdoor temperature $\mathit{T}_{j}$				
$T_j = +2 ^{\circ}\text{C}$	Pdh	15,27	kW	$T_j = +2 ^{\circ}\text{C}$ COPd	3,44	-		
<i>Tj</i> = +7 °C	Pdh	9,85	kW	$T_j = +7 ^{\circ}\text{C}$ COPd	5,27	-		
<i>Tj</i> = +12 °C	Pdh	5,52	kW	$T_j = +12 ^{\circ}\text{C}$ COPd	8,06	-		
$T_j$ = bivalent temperature °C	Pdh	15,27	kW	$T_j$ = bivalent temperature °C COPd	3,44	-		
Bivalent temperature	$T_{biv}$	2	°C	Operation limit temperature TOL	-25	°C		
Degradation co-efficient (**)	Cdh	0.9	-	Heating water operating limit temperature WTOI	75	°C		
Power consumption in modes other than active mode				Other items				
Off mode	$P_{OFF}$	0,011	kW	Capacity control	variable			
Thermostat-off mode	$P_{TO}$	0,011	kW	Sound power level, indoors/outdoors	- /62	dB		
Standby mode	$P_{SB}$	0,011	kW	Annual energy consumption QHE	3289	kWh		
Crankcase heater mode	$P_{CK}$	0,017	kW	Rated airflow rate, outdoors -	5000	m³/h		
Supplementary heater				Seasonal Coefficient of				
Rated heat output (**)	Psup	-	kW	Performance SCOP	6,19	-		

Item	Symbol	Value	Unit		Item	Symbol	Value	Unit			
Rated heat output (*)	Prated	14,28	kW		Seasonal space heating energy efficiency	$\eta_S$	191	%			
Declared capacity for heating for part load at indoor temperature 20 $^{\circ}$ 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 $T_{j}$						
$T_j = +2 ^{\circ}\text{C}$	Pdh	14,28	kW		Tj = + 2 °C	COPd	2,53	-			
$T_j = +7 ^{\circ}\text{C}$	Pdh	9,20	kW		T <sub>j</sub> = +7 °C	COPd	4,19	-			
<i>Tj</i> = +12 °C	Pdh	5,34	kW		<i>T<sub>j</sub></i> = + 12 °C	COPd	6,35	-			
$T_j$ = bivalent temperature °C	Pdh	14,28	kW		$T_j$ = bivalent temperature °C	COPd	2,53	-			
Bivalent temperature	$T_{biv}$	2	°C		Operation limit temperature	TOL	-25	°C			
Degradation co-efficient (**)	Cdh	0.9	1		Heating water operating limit temperature	WTOL	75	°C			
Power consumption in modes oth	Power consumption in modes other than active mode				Power consumption in modes other than active mode						
Off mode	$P_{OFF}$	0,011	kW		Capacity control		variable				
Thermostat-off mode	$P_{TO}$	0,011	kW		Sound power level, indoors/outdoors	LWA	- /62	dB			
Standby mode	$P_{SB}$	0,011	kW		Annual energy consumption	QHE	3918	kWh			
Crankcase heater mode	$P_{CK}$	0,017	kW		Rated airflow rate, outdoors	-	5000	m³/h			
Supplementary heater					Seasonal Coefficient of						
Rated heat output (**)	Psup	-	kW		Performance	SCOP	4,86	-			
Contact details	Parallel Diavata	Control S l of Egna l Junctio loniki, (	atia Str on	ree	CLIMA CONTROL AMONYMHEMOPIKH ETAIPIA  1 Y 1 THMATON ΘΕΡΜΑΝΙΚΙ ΔΙΚΛΙΜΑΤΙΣΜΟΥ ΠΑΡΧΙΝ. ΕΠΑΙΤΙΑΙ ΟΛΟΥ ΚΟΜΘΟΙ ΔΙΑΒΑΤΟΝ  1 Κ. 670 08/ 1 0/ 120  ΘΕ 1 ΣΑΛΟΝΙΚΗ  ΤΗΛΑ: 2919 600531 5/74929 FAX: 2310 574893  ΑΦΜ. 998306126 ΔΟΥ: ΦΑΕ ΘΕΣ/ΝΙΚΗΣ  ΑΡ. ΜΑΕ: 65086/62/8/08/0003						

<sup>(\*)</sup> For heat pump space heaters and heat pump combination heaters, the rated heat output Prated is equal to the design load for heating Pdesignh, and the rated heat output of a supplementary heater Psup is equal to the supplementary capacity for heating sup(Tj). (\*\*) If Cdh is not determined by measurement then the default degradation coefficient is Cdh = 0,9.