

Product fiche concerning the
COMMISSION DELEGATED REGULATIONS

(EU)No 811/2013 of 18 February 2013

(EU)No 813/2013 of 02 August 2013

Models: Outdoor Unit: CWP-M 04 A1

Indoor Unit: None

Air-to-water heat pump Yes

Brine-to-water heat pump No

Low temperature heat pump No

Equipped with a supplementary heater No

Heat Pump Combination Heater No

Parameters shall be declared for Medium-temperature applications

Parameters shall be declared for Average Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output (*)	Prated	4.751	kW
Seasonal space heating energy efficiency	η_s	140.6	%
Energy Classes		A++	
Seasonal Coefficient of Performance	SCOP	3.59	kWh/kWh
Annual Energy consumption	QHE	2735	kWh
Sound power level indoors/outdoors	LWA	57	dB(A)

Declared capacity for heating for part load at indoor
Temperature 20°C and outdoor temperature Tj

Declared coefficient of performance or primary energy ratio for
part load at indoor temperature 20°C and outdoor temperature Tj

Tj = -7°C	Pdh	4.203	kW	Tj = -7°C	COPd	2.22	
Tj = +2°C	Pdh	2.627	kW	Tj = +2°C	COPd	3.52	
Tj = +7°C	Pdh	1.793	kW	Tj = +7°C	COPd	4.77	
Tj = +12°C	Pdh	2.040	kW	Tj = +12°C	COPd	6.26	
Tj = bivalent temperature	Pdh	4.203	kW	Tj = bivalent temperature	COPd	2.22	
Tj = operation limit temperature (***)	Pdh	4.475	kW	Tj = operation limit temperature	COPd	2.06	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient (**)	Cdh	0.90	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes other than active mode				Supplementary Heater			

Off Mode	P _{OFF}	0.010	kW	Rate heat output (*)	P _{sup}	0.276	kW
Thermostat-off mode	P _{TO}	0.011	kW				
Standby mode	P _{SB}	0.010	kW	Type of energy input	Electricity		
Crankcase heater mode	P _{CK}	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		1800	m ³ /h
Outlet temperature capacity control	Variable						
Water flow rate capacity control	Fixed						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output <i>Prated</i> is equal to the design load for heating <i>Pdesignh</i> , and the rated heat output of a supplementary heater <i>Psup</i> is equal to the supplementary capacity for heating <i>sup(Tj)</i> . (**) Cdh shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is Cdh = 0,9 (***) If the declared <i>TOL</i> is lower than the <i>Tdesignh</i> of the considered climate, then the outdoor dry bulb temperature is equal to <i>Tdesignh</i> for the part load							

Models: Outdoor Unit: CWP-M 04 A1

Indoor Unit: None

Air-to-water heat pump Yes

Brine-to-water heat pump No

Low temperature heat pump No

Equipped with a supplementary heater No

Heat Pump Combination Heater No

Parameters shall be declared for Low-temperature applications

Parameters shall be declared for Average Climate Conditions

Item	Symbol	Value	Unit
Rated Heat Output	Prated	4.475	kW
Seasonal space heating energy efficiency	ηs	195.4	%
Energy Classes		A+++	
Seasonal Coefficient of Performance	SCOP	4.96	kWh/kWh
Annual Energy consumption	QHE	1864	kWh
Sound power level indoors/outdoors	LWA	57	dB(A)

Declared capacity for heating for part load at indoor Temperature 20°C and outdoor temperature Tj

Declared coefficient of performance or primary energy ratio for part load at indoor temperature 20°C and outdoor temperature Tj

Tj = -7°C	Pdh	3.959	kW	Tj = -7°C	COPd	3.14	
Tj = +2°C	Pdh	2.628	kW	Tj = +2°C	COPd	4.91	

Tj = +7°C	Pdh	1.962	kW	Tj = +7°C	COPd	6.63	
Tj = +12°C	Pdh	2.332	kW	Tj = +12°C	COPd	8.81	
Tj = bivalent temperature	Pdh	3.959	kW	Tj = bivalent temperature	COPd	3.14	
Tj = operation limit temperature	Pdh	4.244	kW	Tj = operation limit temperature	COPd	2.81	
Bivalent temperature	Tbiv	-7	°C	Operation limit temperature	TOL	-10	°C
Degradation Coefficient (**)	Cdh	0.90	-	Heating water operating limit temperature	WTOL	75	°C
Power consumption in modes other than active mode				Supplementary Heater			
Off Mode	POFF	0.010	kW	Rate heat output	Psup	0.231	kW
Thermostat-off mode	PTO	0.011	kW				
Standby mode	PSB	0.010	kW	Type of energy input	Electricity		
Crankcase heater mode	PCK	0.042	kW				
Other items							
Capacity control	Variable			Rated airflow rate, outdoors		1800	m³/h
Outlet temperature capacity control	Variable						
Water flow rate capacity control	Fixed						
(*) For heat pump space heaters and heat pump combination heaters, the rated heat output P_{rated} is equal to the design load for heating $P_{designh}$, and the rated heat output of a supplementary heater P_{sup} is equal to the supplementary capacity for heating $sup(T_j)$. (**) Cdh shall be determined for each part load ratio, where applicable, by measurement. If not, the default degradation coefficient is Cdh = 0,9 (***) If the declared TOL is lower than the $T_{designh}$ of the considered climate, then the outdoor dry bulb temperature is equal to $T_{designh}$ for the part load							

Contact Details:

CAIROX BELGIUM NV/SA

Address: Hoogstraat 180, 1930 Zaventem, Belgium