

<b>Manufacturer</b>		COOPER AND HUNTER INTERNATIONAL CORPORATION	
<b>Model</b>		CH-HM	
<b>Outdoor unit model</b>		CH-HM12IVRLA4	
<b>Product description</b>			
<b>Air-to-water heat pump</b>	yes/no	yes	
<b>Water-to-water heat pump</b>	yes/no	no	
<b>Brine-to-water heat pump</b>	yes/no	no	
<b>Low-temperature heat pump</b>	yes/no	no	
<b>Equipped with a supplementary heater</b>	yes/no	no	
<b>Heat pump combination heater</b>	yes/no	no	
<b>Main specifications</b>		<b>Temperature application:</b>	Medium temperature (55 °C)
		<b>Climate condition:</b>	Average
<b>Rated heat output</b>	$P_{rated}$	4,2	kW
<b>Seasonal space heating energy efficiency</b>	$\eta_s$	131	%
<b>Declared COP (<math>T_j = +7\text{ °C}</math>)</b>	$COP_d$	4.2	-
<b>Heating water operating limit</b>	$W_{TOL}$	65	°C
<b>Capacity control</b>	Inverter		
<b>Rated airflow (outdoor)</b>	-	2400	m <sup>3</sup> /h
<b>Sound power level (indoors/outdoors)</b>	$L_{WA}$	35/54	dB
<b>Contact details</b>		Baltic CH OÜ, Mustamäe tee 2410621 Tallinn, Estonia	

<b>Rated heat output</b>	$P_{rated}$	4,2	kW	<b>Seasonal space heating energy efficiency</b>	$\eta_s$	131	%
<b>Declared capacity for part load at outdoor temperature <math>T_j</math></b>				<b>Declared coefficient of performance for part load at outdoor</b>			
$T_j = -7\text{ °C}$	$P_{dh}$	2,9	kW	$T_j = -7\text{ °C}$	$COP_d$	1,95	-
$T_j = +2\text{ °C}$	$P_{dh}$	2,0	kW	$T_j = +2\text{ °C}$	$COP_d$	3,10	-
$T_j = +7\text{ °C}$	$P_{dh}$	1,6	kW	$T_j = +7\text{ °C}$	$COP_d$	4,20	-
$T_j = +12\text{ °C}$	$P_{dh}$	1,5	kW	$T_j = +12\text{ °C}$	$COP_d$	5,74	-
$T_j = biv$	$P_{dh}$	2,8	kW	$T_j = biv$	$COP_d$	2,40	-
$T_j = TOL$	$P_{dh}$	2,9	kW	$T_j = TOL$	$COP_d$	1,95	-
$T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	$P_{dh}$		kW	$T_j = -15\text{ °C}$ (if $TOL < -20\text{ °C}$ )	$COP_d$		-

<b>Bivalent temperature</b>	$T_{biv}$	-4,4	°C	<b>Operation limit temperature</b>	$TOL$	-10	°C
<b>Cycling interval capacity for heating</b>	$P_{cyc}$		kW	<b>Cycling interval efficiency</b>	$COP_{cyc}$		-
<b>Degradation coefficient</b>	$C_{dh}$	0,90	-	<b>Heating water operating limit</b>	$WTOL$	65	°C

Power consumption in modes other than active mode				Supplementary heater			
Off mode	POFF	0,002	kW	Rated heat output	Psup	-	kW
Thermostat-off mode	PTO		kW				
Standby mode	PSB	0,015	kW				
Crankcase heater mode	PCK		kW				
Other items				Type of energy	Electric		
Capacity control	inverter			Rated air flow		2400	m <sup>3</sup> /h
Sound power level, indoors/outdoors	LWA	35/54	dB	Rated water flow rate, indoor heat exchanger			m <sup>3</sup> /h
Annual energy consumption	QHE	2900	kWh	Rated brine or water flow			m <sup>3</sup> /h
For heat pump combination heater:							
Declared load profile	-			Water heating	η <sub>wh</sub>	-	%
Daily electricity consumption	Q <sub>elec</sub>	-	kWh	Daily fuel	Q <sub>fuel</sub>		kWh
Annual electricity	AEC	-	kWh	Annual fuel	AFC		GJ

Performance Correction								
	Ambient Temperature °C							
	-15	-10	-7	0	7	15	20	25
30	0.91	1.00	1.10	1.18	1.26	1.35	1.41	1.45
35	0.84	0.93	1.03	1.11	1.19	1.28	1.36	1.41
40	0.77	0.87	0.96	1.04	1.12	1.20	1.25	1.31
45	0.70	0.80	0.89	0.97	1.06	1.13	1.19	1.25
50	0.63	0.73	0.82	0.90	1.03	1.08	1.12	1.18
55	0.56	0.66	0.74	0.83	1.00	1.05	1.10	1.15

Computer of actual heating capacity: actual heating capacity = Rated heat output x heating capacity correction coefficient.

Applied standards: EN14511: 2013; EN14825: 2013; EN50564: 2011; EN12102: 2011; (ES) No. 811/2013; (ES) No. 813/2013; OL 2014 / C 207/02