




Prüfbericht-Nr.: <i>Test Report No.:</i>	16072292 001	Auftrags-Nr.: <i>Order No.:</i>	174042328	Seite 1 von 10 Page 1 of 10
Kunden-Referenz-Nr.: <i>Client Reference No.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2015.12.11	
Auftraggeber: <i>Client:</i>	Palm Air conditioning & Equipment Co., Ltd. #2 Chuangye Road SongXia Industrial Zone, SongGang, Nanhai District Foshan, Guangdong Province 528234 P.R.China			
Prüfgegenstand: <i>Test item:</i>	Air to water heat pump			
Bezeichnung / Typ-Nr.: <i>Identification / Type No.:</i>	intel-11i and AH-11DC/R-XXX			
Auftrags-Inhalt: <i>Order content:</i>	ERP test			
Prüfgrundlage: <i>Test specification:</i>	EN 14825:2013			
Wareneingangsdatum: <i>Date of receipt:</i>	2015.12.11	Detaillierte Fotodokumentation siehe Anlage zu diesem Bericht Detailed photo documentation see appendix to this report		
Prüfmuster-Nr.: <i>Test sample No.:</i>	HU20160111110010			
Prüfzeitraum: <i>Testing period:</i>	2015.12.11 to 2016.02.18			
Ort der Prüfung: <i>Place of testing:</i>	Palm Air conditioning & Equipment Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Guangdong) Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
<i>2016.02.24</i>	Felix Tong	<i>2016.02.24</i>	Brenda Fan	
Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>	Unterschrift <i>Signature</i>	Datum <i>Date</i>	Name / Stellung <i>Name / Position</i>
				
Sonstiges / Other:				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged</i>		
* Legende:	1 = sehr gut P(ass) = entspricht o.g. Prüfgrundlage(n)	2 = gut F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	3 = befriedigend N/A = nicht anwendbar	4 = ausreichend N/T = nicht getestet
Legend:	1 = very good P(ass) = passed a.m. test specification(s)	2 = good F(ail) = failed a.m. test specification(s)	3 = satisfactory N/A = not applicable	4 = sufficient N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

Rating labels and marking:

	
Air to water heat pump and chiller	
Manufacturer: Palm AC & Equipment Co.Ltd Address: 2# Chuangye Road, SongXia Industrial Area, SongGang Town, Nanhai area, Foshan city, GuangDong, China	
Model:	AH-11DC/R-XXX
Rated Heating Capacity	10.30 kW
Rated cooling Capacity	9.45 kW
Rated Heating Input	2.50 kW
Rated cooling Input	3.05 kW
Rated Heating Input Current	11.2A
Rated cooling Input Current	13.4 A
COP (STC AIR 7°C、 WATER 35°C)	4.12 W/W
Rated voltage / frequency	230V/50Hz
Maximum input power	3.45 KW
Maximum input current	15.0A
Maximum system pressure of running	4.20 MPa
Refrigerant	R410A (3.30 Kg)
Waterproof grade	IPX4
Noise	49 dB(A)
Max water outlet temperature	60 °C
Water connection	DN 25
Water Flow	1.85m³/h
Net Dimensions (mm)	1115/425/960
Net Weight	125 kg
Serial No.	
 	

Measurements and calculations

Model	Intel-11i								
Test method	Air enthalpy method								
Outlet temperautre type	<input type="checkbox"/> Fixed outlet <input checked="" type="checkbox"/> Variable outlet								
Test result	Test condition								
	A	B	C	D	E	F			
Inlet dry bulb temperature for outdoor air °C	-6.90	2.10	7.00	12.07	-9.90	-6.90			
Inlet wet bulb temperature for outdoor air °C	-8.17	1.00	6.00	11.00	-11.07	-8.17			
Inlet temperatures for indoor °C	30.06	26.13	23.45	21.84	31.61	30.06			
Outlet temperatures for indoor °C	33.93	30.01	27.02	23.97	35.35	33.93			
Measured capacity W	7717	7691	7115	4232	7439	7717			
Measured power input W	2546	2012	1292	559	2600	2546			
Static pressure difference kPa	19.47	19.54	19.24	19.32	19.31	19.47			
Water volume flow rate m ³ /h	1.72	1.71	1.71	1.71	1.71	1.72			
Meausred power input of compressor off state W	7	7	7	7	7	7			
Corrections of the power input of liquid pump if applicable									
P _{hydrau} W	9	9	9	9	9	9			
Efficiency of the pump	0.15	0.15	0.15	0.15	0.15	0.15			
Fraction power for calculation W	63	63	63	63	63	63			
Effective capacity W	7653	7628	7052	4169	7376	7653			
Effectivte power input W	2483	1949	1230	496	2537	2483			
Calculated COP	3.08	3.91	5.74	8.41	2.91	3.08			
Electric power consumption during thermostat-off mode, standby mode, crankcase heater mode and off mode									
Off mode kW	0.00728								
Thermostat-off mode kW	0								
Standby mode kW	0.00728								
Crankcase heater mode kW	0								
Calculations for seasonal space heating energy efficiency									
Test condition	Outdoor heat exchanger	Indoor heat exchanger	Part Load Ratio %	Part Load kW	Tested Capacity kW	Tested COP	Cc	CR	COP at A, B, C, D, E, F condition
	Outdoor air °C	Outlet water temperature °C							
A	-7	34	88%	7.7	7.653	3.08	1.00	1.00	3.08
B	2	30	54%	4.7	7.628	3.91	1.00	0.61	3.91
C	7	27	35%	3.0	7.052	5.74	0.99	0.42	5.69

D	12	24	15%	1.3	4.169	8.41	0.99	0.32	8.15
E	-10	35.3	100%	8.7	7.376	2.91	1.00	1.00	2.91
F	-7	34	88%	7.7	7.653	3.08	1.00	1.00	3.08
SCOPon	4.32				SCOPnet	4.35			
SCOP	4.32								