



<i>Test Report No.:</i>		NTRF20180097					
<i>Applicant Name:</i>		AS Wilfa Industriveien 25, 1481 Hagan, Norway					
<i>Test item:</i>		Split Air Conditioner					
<i>Identification:</i>		Narvik 35			<i>Serial No.:</i>		Engineering sample
<i>Receipt No.:</i>		RZ00342353			<i>Date of receipt:</i>		2018.6.30
<i>Testing location:</i>		Gree Electric Appliances Inc. of Zhuhai Jinji West Road, Qianshan, Zhuhai, Guangdong 519070, P.R.China					
<i>Test specification:</i>		Commission Regulation (EU) No 206/2012 Commission Delegated Regulation (EU) No 626/2011 EN 14825:2016 EN 14511-2,3:2013 EN 12102-1:2017					
<i>Test Result:</i>		<i>The test items passed the test specification(s).</i>					
<i>Testing Laboratory:</i>		Testing Center of Gree Electric Appliances Inc. of Zhuhai					
<i>tested by:</i>				<i>reviewed by:</i>			
<i>Date</i>	<i>Name/Position</i>	<i>Signature</i>		<i>Date</i>	<i>Name/Position</i>	<i>Signature</i>	
<i>Other Aspects:</i>							
Abbreviations: <i>P(ass) = passed</i> <i>F(ail) = failed</i> <i>N/A = not applicable</i> <i>N/T =not tested</i>							
<i>This test report 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 safety mark on this or similar products.</i>							



NO 626/2011 & EN 14511 and NO 206/2012 & EN 14825			
Clause	Requirement - Test	Result - Remark	Verdict

Summary of testing			
1. The appliance was tested according to EN 14511.			
2. The SEER and SCOP were calculated according to EN14825.			
3. All the models are indeticial with each other except the panels.All the tests were performedon the model Narvik 35 as representative.			
4. The samples are engineering samples without serial numbers.			
Test item particulars			
Class of temperature	T1		
Type	Split Air Conditioner		
Degree of protection	Indoor unit:IPX0 Outdoor unit:IPX4		
Supply Connection	Type Y attachment		
Possible test case verdicts:			
- test case does not apply to the test object	N/A		
- test object does meet the requirement	P(Pass)		
- test object does not meet the requirement	F(Fail)		
Testing			
Date of receipt of test item	2018.6.30		
Date (s) of performance of tests	2018.7.03-2018.7.20		
General remarks			
<ul style="list-style-type: none"> ➤ This appliance is split type air conditioner, which consist of one outdoor unit and one indoor unit. ➤ The indoor unit is a wall mounted type air conditioner, which is usually not accessible (only for maintenance purpose). It will be mounted 2,5 meters above the floor ➤ Cooling and heating modes are applied by reverse cycle method. In the heating mode, defrost operation may be applied. ➤ The indoor unit is equipped with an infrared wireless battery powered remote control unit. 			
Critical components:			
Model	Compressor model	Indoor fan motor	Outdoor fan motor
Narvik 35	QXF-A102zE190B	FN20V-PG	FW30J-ZL


NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825			
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Rating labels and marking:**Match table:**

Whole model	Indoor unit	Outdoor unit
Narvik 35	Narvik 35 /I	Narvik 35/O

The artwork below may be only a draft.





The labels of other **Narvik 35** are indetical to the representative model **Narvik 35** as below except for the model name.




**SPLIT AIR CONDITIONER
INDOOR UNIT**

Model	Narvik 35
Rated Voltage	220-240V~
Rated Frequency	50Hz
Cooling Capacity	3500W
Heating Capacity	3670W
Air Flow Volume	680m ³ /h
Sound Pressure Level(H)	38dB(A)
Weight	10.5kg
Manufactured Date	YYYY.MM

As Wilfa, Industriveien 25, 1481 Hagan, Norway








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AIR CONDITIONER OUTDOOR UNIT

		Narvik 35
220-240V~	Cooling Capacity	3500W
50Hz	Heating Capacity	3670W
T1	Cooling Power Input	1085W
31kg	Heating Power Input	990W
I	Cooling Rated Input	1450W
R32	Heating Rated Input	1500W
0.70kg	Sound Pressure Level	52dB(A)
675	CO ₂ equivalent	0.47tonnes
Moisture Protection		IPX4
Maximum Allowable Pressure Operating		4.3MPa
Pressure for the Discharge Side Operating		4.3MPa
Pressure for the Suction Side		2.5MPa
Manufactured Date		

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Contains fluorinated greenhouse gases
As Wilfa, Industriveien 25, 1481 Hagan, Norway



Rating labels and marking:

Energy lablling

NO 626/2011 & EN 14511 and NO 206/2012 & EN 14825			
Clause	Requirement - Test	Result - Remark	Verdict

Test result of part load according to EN 14825:

Calculation of SEER in cooling mode:

Full load (Pdesignc):3500 W		Tdesignc: 35°C		Tested Voltage: 230V		Frequency: 50Hz	
Test item	Indoor DB/WB(°C)	Outdoor DB/WB(°C)	Ptest (W)	Tested EER	Cd		
A	27/19	35/-	3520	3.460	0,25		
B		30/-	2516	5.260	0,25		
C		25/-	1601	8.550	0,25		
D		20/-	901	12.280	0,25		
Psb= Poff =3.473W; Pck= 0W; Pto=1.4W, Q _{CE} =175kWh/a							
Test SEER				7.001			
Declared SEER				7.0			
Test SEER ≥ Declared SEER				Pass			
The calculation method of SEER according to the clause 6 of EN14825:2016							
According table 1 of NO 626/2011, the result efficiency classes: A+							

Calculation of SCOP in heating mode:

Full load (Pdesignh):3000W		Tdesignh: -10°C		Climate: Average			
Tbivalent: -10°C ; TOL: -10°C		Tested Voltage: 230V		Frequency: 50Hz			
Test item	Indoor DB(°C)	Outdoor DB/WB(°C)	Ptest(W)	Tested COP	Cd		
A	20/-	-7/-8	2760	2.702	0,25		
B		2/1	1673	4.089	0,25		
C		7/6	1097	5.018	0,25		
D		12/11	1117	6.206	0,25		
E		TOL	3071	2.108	0,25		
F		Tbivalent	3071	2.108	0.25		
Psb= Poff=3.473W; Pck= 0W; Pto=9.30W, Q _{HE} = 1033kWh/a							
SCOP				4.066			
Declared SCOP				4.0			
SCOP ≥ Declared SCOP				Pass			
The calculation method of SCOP according to the clause 7 of EN14825:2016							
According table 1 of NO 626/2011, the result efficiency classes: A+							

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825

Clause	Requirement - Test	Result - Remark	Verdict
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Calculation of SCOP in heating mode:

Full load (P _{designh}):4500W		T _{designh} : -22°C	Climate: Colder		
T _{bivalent} : -9°C ; TOL: -22°C		Tested Voltage: 230V	Frequency: 50Hz		
Test item	Indoor DB(°C)	Outdoor DB/WB(°C)	P _{test} (W)	Tested COP	Cd
A	20/-	-7/-8	2760	2.702	0,25
B		2/1	1673	4.121	0,25
C		7/6	1098	5.160	0,25
D		12/11	1117	6.206	0,25
E		TOL	1930	1.524	0,25
F		T _{bivalent}	3060	2.168	0.25
G		-15/-	3149	1.897	0.25
P _{sb} = P _{off} =3.473W; P _{ck} = 0W; P _{to} =9.30W, Q _{HE} = 2952kWh/a					
SCOP				3.201	
Declared SCOP				3.2	
SCOP≥Declared SCOP				Pass	
The calculation method of SCOP according to the clause 7 of EN14825:2016					
According table 1 of NO 626/2011, the result efficiency classes: B					

Calculation of SCOP in heating mode:

Full load (P _{designh}):3500W		T _{designh} : 2°C	Climate: Warmer		
T _{bivalent} : 3°C ; TOL: 2°C		Tested Voltage: 230V	Frequency: 50Hz		
Test item	Indoor DB(°C)	Outdoor DB/WB(°C)	P _{test} (W)	Tested COP	Cd
A	20/-	/	/	/	0,25
B		2/1	3672	2.55	0,25
C		7/6	2253	4.98	0,25
D		12/11	1117	6.21	0,25
E		TOL	3672	2.55	0,25
F		T _{bivalent}	3289	2.57	0.25
P _{sb} = P _{off} =3.473W; P _{ck} = 0W; P _{to} =9.300W, Q _{HE} =961 kWh/a					
SCOP				5.101	
Declared SCOP				5.1	
SCOP≥Declared SCOP				Pass	
The calculation method of SCOP according to the clause 7 of EN14825:2016					
According table 1 of NO 626/2011, the result efficiency classes: A++					

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825			
Clause	Requirement - Test	Result - Remark	Verdict

Appendix I: information according to clause 3 of NO 206/2012 ANNEX I , for air conditioners, except single duct and double duct air conditioners

Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)	Y		
Heating	Y			Warmer(if designed)	Y		
				Colder(if designed)	Y		
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Design load				Seasonal efficiency			
Cooling	Pdesignc	3.5	kW	Cooling	SEER	7.0	—
Heating/average	Pdesignh	3.0	kW	Heating/average	SCOP/A	4.0	—
Heating/warmer	Pdesignh	3.5	kW	Heating/warmer	SCOP/W	5.1	—
Heating/colder	Pdesignh	4.5	kW	Heating/colder	SCOP/C	3.2	—
Declared capacity (*) for cooling, at indoor temperature 27(19) °C and outdoor temperature Tj				Declared energy efficiency ratio (*), at indoor temperature 27(19) °C and outdoor temperature Tj			
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Tj=35°C	Pdc	3.52	kW	Tj=35°C	EERd	3.46	—
Tj=30°C	Pdc	2.52	kW	Tj=30°C	EERd	5.26	—
Tj=25°C	Pdc	1.60	kW	Tj=25°C	EERd	8.55	—
Tj=20°C	Pdc	0.90	kW	Tj=20°C	EERd	12.28	—
Declared capacity (*) for heating/Average season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Average season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=-7°C	Pdh	2.76	kW	Tj=-7°C	COPd	2.70	—
Tj=2°C	Pdh	1.67	kW	Tj=2°C	COPd	4.08	—
Tj=7°C	Pdh	1.09	kW	Tj=7°C	COPd	5.01	—
Tj=12°C	Pdh	1.11	kW	Tj=12°C	COPd	6.20	—
Tj=operating limit	Pdh	3.07	kW	Tj=operating limit	COPd	2.10	—
Tj=bivalent temperature	Pdh	3.07	kW	Tj=bivalent temperature	COPd	2.10	—



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Clause	Requirement - Test			Result - Remark			Verdict
Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)		Y	
Heating	Y			Warmer(if designed)		Y	
				Colder(if designed)		Y	
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Declared capacity (*) for heating/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Warmer season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=2°C	Pdh	3.67	kW	Tj=2°C	COPd	2.55	—
Tj=7°C	Pdh	2.25	kW	Tj=7°C	COPd	4.98	—
Tj=12°C	Pdh	1.11	kW	Tj=12°C	COPd	6.21	—
Tj=operating limit	Pdh	3.67	kW	Tj=operating limit	COPd	2.55	—
Tj=bivalent temperature	Pdh	3.28	kW	Tj=bivalent temperature	COPd	2.57	—
Declared capacity (*) for heating/Colder season, at indoor temperature 20 °C and outdoor temperature Tj				Declared coefficient of performance(*)/Colder season, at indoor temperature 20 °C and outdoor temperature Tj			
Tj=-7°C	Pdh	2.76	kW	Tj=-7°C	COPd	2.70	—
Tj=2°C	Pdh	1.67	kW	Tj=2°C	COPd	4.12	—
Tj=7°C	Pdh	1.09	kW	Tj=7°C	C-OPd	5.16	—
Tj=12°C	Pdh	1.11	kW	Tj=12°C	COPd	6.20	—
Tj=operating limit	Pdh	1.93	kW	Tj=operating limit	COPd	1.52	—
Tj=bivalent temperature	Pdh	3.06	kW	Tj=bivalent temperature	COPd	2.16	—
Tj=-15°C	Pdh	3.14	kW	Tj=-15°C	COPd	1.89	—
Bivalent temperature				Operating limit temperature			
Heating/Average	Tbiv	-10	°C	Heating/Average	Tol	-10	°C
Heating/Warmer	Tbiv	3	°C	Heating/Warmer	Tol	2	°C
Heating/Colder	Tbiv	-9	°C	Heating/Colder	Tol	-22	°C
Cycling interval capacity				Cycling interval efficiency			
for cooling	Pcycc	x,x	kW	for cooling	EERcyc	x,x	—
for heating	Pcyhc	x,x	kW	for heating	COPcyc	x,x	—
Degradation co-efficient cooling (**)	Cdc	0.25	—	Degradation co-efficient heating (**)	Cdh	0.25	—

NO 626/2011 &EN 14511 and NO 206/2012 & EN 14825							
Clause	Requirement - Test			Result - Remark			Verdict
Function (indicate if present)				Only for heating mode, if applicable			
Cooling	Y			Average(mandatory)	Y		
Heating	Y			Warmer(if designed)	N		
				Colder(if designed)	N		
Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Electric power input in power modes other than 'active mode'				Annual electricity consumption			
Off mode	P _{OFF}	0.00347	kW	Cooling	Q _{CE}	175	kWh/a
Standby mode	P _{SB}	0.00347	kW	Heating/Average	Q _{HE}	1050	kWh/a
Thermostat-off mode	P _{TO}	0.0014/0.00930	kW	Heating/Warmer	Q _{HE}	961	kWh/a
Crankcase heater mode	P _{CK}	0	kW	Heating/Colder	Q _{HE}	2953	kWh/a
Capacity control (indicate one of three options)				Other items			
fixed	N			Sound power level (indoor/outdoor)	L _{WA}	57/62	dB(A)
staged	N			Global warming potential	GWP	675	kgCO ₂ eq.
variable	Y			Rated air flow (indoor/outdoor)	—	680/2200	m ³ /h
Contact details for obtaining more information on the setting of the unit			AS Wilfa Industriveien 25, 1481 Hagan, Norway Email: support@wilfa.com				
<p>(*) For staged capacity units, two values divided by a slash ('/') will be declared in each box in the section 'Declared capacity of the unit' and 'declared EER/COP' of the unit.</p> <p>(**) If default Cd = 0,25 is chosen then (results from) cycling tests are not required. Otherwise either the heating or cooling cycling test value is required.</p> <p>For units with capacity control marked 'staged', two values for the highest and lowest, noted 'hi/lo' divided by a slash ('/') will be declared in each box under 'Declared capacity'.</p>							

--End of report--