

# DECLARATION OF PERFORMANCE - Regulation (EU) 305/2011



**Manufacturer:** Arada Ltd, The Fireworks, Weycroft Avenue, Axminster, Devon, United Kingdom EX13 5HU

**Range Designation:** Eco boiler HE freestanding boiler stoves

**Intended Use:** Free Standing Domestic Room & Water Heating Appliance

**Independent Performance and Safety tested :** UKCA - Kiwa Gastec, Notified Body No. 0558

CE - SGS Netherlands BV, Notified Body No. 0608

**Constancy of Performance System AVCP:** System 3

Model	EBW12-G2	EB12HE-G5	EB16HE-G5	EB20HE-G5	EB25HE-G5
Approximate Output Range: (kW)	4-14	4 - 14	4 - 18	5 - 22	6 - 26
Harmonised EN European Standard (hEN):	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004	BS EN 13240:2001 + Amd 2:2004
Additional Characteristics Test Standard:	N/A	N/A	N/A	N/A	N/A
Additional Particulate Emission Test Standard:	N/A	N/A	N/A	N/A	N/A
Test Report reference:	60448	6180-1/Mod01/Mod02	60110-2/EZKA/2017-12/00013-1	60150/EZKA/2017-12/00013-2	60110-3/EZKA/2017-12/00013-3
<b>Performance Characteristics on Wood Fuel</b>					
Total Efficiency: (%)	73.4	N/A	73.8	68.2	73.0
Total Nominal Output: (kW)	19.8	N/A	14.1	19.7	24.9
Nominal Output to Space: (kW)	8	N/A	5.5	4.8	9.2
Nominal Output to Water: (kW)	11.8	N/A	8.6	14.9	15.7
Flue gas mass flow: (g/s)	15.2	N/A	9.6	16.2	18.3
Mean CO emission (@13% O2) : (%)	0.3	N/A	0.52	0.51	0.5
Mean OGC emission (@13% O2): (Nmg/m3)	N/A	N/A	80	48	92
Mean NOx emission (@13% O2): (Nmg/m3)	N/A	N/A	79	79	82
DIN+ particulates (@13% O2): (Nmg/m3)	N/A	N/A	N/A	N/A	N/A
PD6434 Particulate Emissions High output: (gh-1)	N/A	N/A	N/A	N/A	N/A
PD6434 Particulate Emissions Low output: (gh-1)	N/A	N/A	N/A	N/A	N/A
Mean Flue Temperature: (Deg C)	372	N/A	385	438	379
Underhearth Temperature: (Deg C)	75.1	N/A	144	156.1	156.1
Approximate Max Log Length: (mm)	350	N/A	300	300	350
<b>Performance Characteristics on Manufactured Smokeless Fuel (MSF)</b>					
Total Efficiency: (%)	N/A	71.5	70.5	70.5	72.4
Total Nominal Output: (kW)	N/A	19.8	23.1	28	35.2
Nominal output to Space: (kW)	N/A	7.7	9.5	10	12.7
Nominal output to Water: (kW)	N/A	12.1	13.6	18	22.5
Flue gas mass flow: (g/s)	N/A	13.1	11.5	18.9	18.9
Mean CO emission (@13% O2) : (%)	N/A	0.31	0.81	0.81	0.77
Mean OGC emission (@13% O2): (Nmg/m3)	N/A	N/A	N/A	N/A	N/A
Mean NOx emission (@13% O2): (Nmg/m3)	N/A	N/A	N/A	N/A	N/A
DIN+ particulates (@13% O2): (Nmg/m3)	N/A	N/A	N/A	N/A	N/A
Mean Flue Temperature: (Deg C)	N/A	403	516	516	456
Underhearth Temperature: (Deg C)	N/A	135.6	144	156.1	156.1
<b>Safety Distances from Combustibles (standard flue connection)</b>					
Side Wall: (mm)	100	130	100	150	150
Rear Wall: (mm)	150	150	175	200	200

Signed On Behalf Of Manufacturer:

C. Tribble

21/05/2021