


Herz Firematic 199HD Boiler Specificaton

Category	Field	Units	Value
Boiler Details	Manufacturer	-	Herz
	Model/Type	-	Firematic 199HD
	Turn down ratio (chip / pellet)	(%)	35% / 39%
	Output range (chip / pellet)	kW	69.6 – 199 / 76.8 - 199
	RHI Certificate	Yes / No	Yes
	Clean Air Act	Yes / No	Yes - under Firematic 249
	Combustion unit/Boiler	Details	Sheet steel boiler welded and pressure tested. Fully insulated boiler casing, vertical heat exchanger with automatic cleaning
Dimensions	Length x Width x Height (inc. Ash Bin)	mm	2672 x 2096 x 1911
	Length x Width x Height (exc. Ash Bin)	mm	1906 x 2096 x 1911
	Dry Weight	kg	2264
Efficiency	Min η @100% Load (chip / pellet)	%	93.1 / 92.8
	Min η @30% Load (chip / pellet)	%	93.1 / 95.2
Hydraulic Details	Max flow temp	°C	85 as standard (102 upon request)
	Max Working Pressure	bar	5
	Max Test Pressure	bar	7.5
	Water Content	l	436
	Flow / Return	-	DN80 / PN6
Connections	Drain	"	1 / 2
	Thermal safety circuits flow/return	"	1 / 2
	Flue	mm	250
Image			
Emissions	Max NOx at min output (chip / pellet)	mg/Nm ³ *	67 / 89
	Max NOx at min output (chip / pellet)	mg/MJ	42 / 57
	Max NOx at max output (chip / pellet)	mg/Nm ³ *	92 / 127
	Max NOx at max output (chip / pellet)	mg/MJ	58 / 82
	Max PM at min output (chip / pellet)	mg/Nm ³ *	19 / 8
	Max PM at min output (chip / pellet)	mg/MJ	12 / 5
	Max PM at max output (chip / pellet)	mg/Nm ³ *	23 / 15
	Max PM at max output (chip / pellet)	mg/MJ	14 / 10
	Max COx at min output (chip / pellet)	mg/Nm ³ *	91 / 17
	Max COx at min output (chip / pellet)	mg/MJ	57 / 11
	Max COx at max output (chip / pellet)	mg/Nm ³ *	5 / 4
	Max COx at max output (chip / pellet)	mg/MJ	3 / 2
Biomass Fuel	Max Pellet Consumption Rate	kg/hr	46
	Pellet grade		EN 14961-2- 6mm,8mm, 10mm (class A1 or A2)
	Max chip Consumption Rate	kg/hr	58 @W25
	Chip grade		EN 14961-4 - P16B P31.5 P45A (class A1, A2 or B1) 15-35% MC
Buffer Vessel	Volume (Recommended minimum)	l	3,000
	Max Pressure	bar	5
Electrical Supply	Volts/ph/Hz/A	-	400 / 3 / 50 / 16
Key Features	Heat exchanger bypass flap	Details	Prevents moisture condensing in the heat exchanger during start-up. Automatic operation
	Burn back protection	Details	Back Fire Protection (BFP) flap which closes when the auger is not in use
	Burner design	Details	Fully Modulating, 2-zone moving grate manufactured from cast chromium steel
	Automatic heat exchanger cleaning	Details	Vertical heat exchanger tubes with automatic cleaning and ash removal using turbulators (mechanical).

* 0°C / 1013 mbar / 13% O₂

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