

# VIADRUS

## Hercules DUO

### Dual-mode cast-iron solid fuel boiler

The main advantage is easy switch between manual and automatic mode. The upper part of boiler is used in manual mode just like any other ordinary solid fuel boiler. Retort burner installed in the base of boiler allows to use granular fuels in automatic mode. Fuel is supplied to the burner with the screw feeder having advanced protection against fuel reservoir fire penetration. The boilers designed for open heating systems needn't to be equipped with the overheating security device. To specify size and position of fuel reservoir when ordering the boiler.

#### Advantages:

- high fuel variability
- long service life of cast iron heat exchanger
- equithermal regulator w/ fan speed control
- control unit also serving as a room thermostat
- two sizes of fuel reservoir
- left and right version of fuel reservoir

#### Fuel - automatic mode / fuel humidity:

- hard coal, 10~18 mm / <12%
- soft coal, 10~25 mm / <20%
- wooden pellets, Ø 6~8 mm / <12%

#### Fuel - manual mode / fuel humidity:

- hard coal, 24~60 mm / <12%
- coke, 24~60 mm / <12%
- firewood, up to Ø 100 x 300 mm / <20%

#### Boiler output - automatic mode:

- 6,3~21,0 kW

#### Boiler output - manual mode:

- hard coal / coke / firewood  
16,5 / 22,5 / 15,8 kW



## Technical parameters

Operating mode			automatic	manual
Boiler class according to EN 303 - 5		-	2	1
Modulating or rated output	- hard coal	kW	6,3~21,0	16,5
	- soft coal / wooden pellets	kW	6,3~21,0	-
	- coke	kW	-	22,5
	- firewood	kW	-	15,8
Fuel consumption	- hard coal	kg/hour	0,7~3,8	2,8
	- soft coal / wooden pellets	kg/hour	1,6~5,3 / 1,7~5,7	-
	- coke	kg/hour	-	3,6
	- firewood	kg/hour	-	5,0
Fuel consumption in standby mode	- hard coal / soft coal / wooden pellets	kg/hour	0,13 / 0,10 / 0,35	-
Efficiency	- hard coal	%	<79,1	<75
	- soft coal / wooden pellets	%	<75,1 / <78,8	-
	- coke	%	-	<80
	- firewood	%	-	<75
Max. flue gases temperature	- hard coal	°C	160~275	220~300
	- soft coal / wooden pellets	°C	180~295 / 150~275	-
	- coke	°C	-	220~250
	- firewood	°C	-	220~300
Fuel reservoir capacity, small / big		l	269 / 528	-
Burning time at rated output	- hard coal, small / big reservoir	hour	40,5 / 79,5	4
	- soft coal, small / big reservoir	hour	36,4 / 71,5	-
	- wooden pellets, small / big reservoir	hour	23,2 / 45,3	-
	- coke	hour	-	4
	- firewood	hour	-	2
Dimensions incl. small reservoir	- total width x height x depth	mm	1340 x 1700 x 750	
Dimensions incl. big reservoir	- total width x height x depth	mm	1990 x 1700 x 750	
Weight	- aftercooling valve, small / big reservoir	kg	416 / 446	
	- aftercooling loop, small / big reservoir	kg	435 / 466	
Chimney connection diameter		mm	156	
Chimney draught		Pa	10~15	>15
Heating and return water connection		-	2"	
Max. operating / testing water overpressure		kPa	250 / 500	
Recommended water working temperature		°C	50~80	60~85
Return water min. temperature		°C	45	
Water volume		l	33,3	
Noise level		dB	<65 dB (A)	
Connecting voltage		-	1 PEN ~ 50 Hz 230 V TN-S	
Maximum electric input		W	230	
Control box electric protection		-	IP44	

