

Rinnai

REFERENCE GUIDE



Commercial Hot Water

Experience Our Innovation

Heavy Duty Units

What is Rinnai Heavy Duty Continuous flow?

The continuous flow is a hot water system that will never run out, providing a constant outlet temperature at all times. Rinnai Heavy Duty (HD) water heaters are high efficiency gas continuous flow water heaters with minimum 5 Star energy rating which ensures minimal gas consumption. All models have full electronic ignition with no pilot light and operate on demand only, consuming no gas when not in use.

What are some suitable applications?

- Cafés
- Child Care Centres
- Hair Dressing Salons
- Small Amenities Blocks
- Butchers
- Factories
- Laundromats with domestic style top loader machines

What clearances are required?

All Rinnai continuous flow HD water heaters are fan assisted. This means reduced clearances are required from doors and windows when compared to natural draft water heaters.

Internal:

The unique Rinnai twin skin flue used with the internal HD200i is balanced and classifies the heater as a room sealed appliance. Natural draft common flue also available. See flueing information on page 12.

What are the flow rates for the individual units?

The maximum flow rate through a continuous flow water heater is dependent on the outlet temperature.

Cold Water Temperature + Temperature Rise = Outlet Temperature

The maximum flow rate cannot be exceeded and will be limited to that flow rate to ensure that the temperature does not fall below the set point.

Model	Flow @ 20°C rise l/min	Flow @ 25°C rise l/min	Flow @ 35°C rise l/min	Flow @ 50°C rise l/min	Flow @ 60°C rise l/min	Flow @ 75°C rise l/min	Flow @ 85°C rise l/min
HD200e	32	26	18.6	13.1	10.9	8.7	n/a
HD250e	37	32	24.1	16.9	14.1	11.2	9.9
HD200i	32	26	18.1	12.7	10.6	8.5	n/a

kW	Flow Rate (l/min)					
	5	10	15	20	24	
Degrees °C Rise	5	2	3	5	7	8
	10	3	7	10	14	17
	15	5	10	16	21	25
	20	7	14	21	28	34
	25	9	17	26	35	42
	30	10	21	31	42	45
	35	12	24	37	45	
	40	14	28	42		
	45	16	31	45		
	50	17	35			

KW output from HD200 or HD250 based on flow rate and temperature rise when outlet temperature set to 60deg or higher. Maximum flow rate is 24 l/min (0.4 l/s). Water pressure loss dependent on outlet temperature and flow rate. Contact Rinnai Commercial for details.

- Outlet temperature preset and remains constant, even when flow varies
- Standard factory preset 75°C. Temperatures between 55°C and 85°C are site adjustable via DIP switch
- 50°C, 40°C and 42°C preset options are available for ablation areas. State and Territory legislation dependent
- Factory 50°C presets offer site adjustable incremental temperature adjustment to deliver true 50°C at tap
- HD250e set at 95°C is not to be used with heated incoming water or on re-circulating systems
- Maximum flow rate set at 60°C or above: 24/Lmin



HD200 External Model



HD200 Internal Model



HD250 External Model

Heavy Duty Selection Table

Model Identification			HD200e VRM2632WC	HD250e VRM3237WC	HD200i VRM2632FFU
Star Rating			5.9	5.6	6.1
Installation			External	External	Internal
Gas Consumption MJ/h (Hi / Low)	NG		199/16	250/21	195/16
	LPG		199/16	250/21	195/16
Gas Pressures Required kPa	NG		1.13 - 2.75	1.13 - 2.75	1.13 - 2.75
	LPG		2.75	2.75	2.75
Dimensions	mm	Width	350	470	350
		Height	600	600	600
		Depth	224	244	224
Weight			22 kg	29 kg	22 kg
Water Flow	L/min	minimum	2.4	2.4	2.4
Antifrost			Standard		Optional
Flue System	(FF=Forced Flued)		FF external	FF external	FF internal
Standard Temp (°C)	Pre-set (default) Temperatures		50 or 75	50 or 75	50 or 75
	On-site adjustable via dipswitch		55, 60, 70, 75 & 85	55, 60, 70, 75 & 85	55, 60, 70, 75 & 85
Made to Order Pre-set Temp (°C)	NSW health approved		40 & 42	42	40 & 42
	Hi-temperature		-	95	-
Burner System			Low Nox, Multi Stage - Fully Modulating		
Connections	gas supply, cold, hot		R 3/4 - 20A (right), R 3/4 - 20A (centre), R 3/4 - 20A (left)		
Maximum Water Operating Pressure kPa			1000		
Maximum Outlet Temperature			85°C	95°C	85°C
Electrical Consumption (Watts) Normal / Standby / Anti frost protection			65 / 6 / 100	83 / 12 / 100	80 / 7.5 / 100
Ignition System			Direct electronic ignition with automatic flame sensing		
Thermal Efficiency (AS 4552:2005)			81.6%	80.8%	83.4%
kW Output			45.9	58.9	44.3
Power Supply	Appliance		AC 240 Volts 50 Hz (10 Amp power point required)		
	Remote Control		DC 12 Volts (Digital)		
dB Level			49	49	49
Colour			Titanium		

Note:

1. Factory pre-set 50°C models can have a maximum delivery temperature incrementally increased by the installer to compensate for heat losses in pipework. 2. Solar preheated units to be set to min 70°C.

Rinnai reserves the right to modify specifications

