

# Technical submittal

Products: **Dorchester DR-SG 20-210, 25-210, 30-210**

Project:

Customer:

Date:

- ⊙ Storage tank, heat exchanger and coil all manufactured from stainless steel
- ⊙ Enhanced durability under challenging water conditions
- ⊙ NOx under 40 mg/kWh across the range (Class 6)
- ⊙ Quick and easy burner access
- ⊙ Operated via the popular Siemens LMS Mini controls platform
- ⊙ Integrated flue non-return valve
- ⊙ Can deliver flow rates to satisfy high demand environments
- ⊙ Suitable for natural gas and LPG systems (conversion kit included).



Model:		DR-SG 20-210	DR-SG 25-210	DR-SG 30-210	
Part Number:		AA031256	AA031257	AA031258	
Energy	Max Heat Input (Gross)	kW	20	25	30
	Max Power Output (Net)	kW	21	26.3	31.5
	Building regulations Part L, EN89 100% efficiency (NCV)	%	105	105	105
	Building regulations Part L, EN89 100% efficiency (GCV)	%	94.6	94.6	94.6
	Standby Loss	kWh/day	1.6	1.6	1.6
	Building regulations Part L, Maintenance Consumption (EN89)	kWh/day	2.7	2.7	2.7
	ErP efficiency rating		A	A	A
	Water Heater Efficiency (ErP)	%	95.9	91.7	93.5
	ErP Load Profile		XXL	XXL	XXL
	Storage Capacity	L	210	210	210
Water	1st 10 mins at ΔT 50°C	l/10'	175	205	220
	1st hour at ΔT 50°C	l/60'	450	570	580
	Continuous Flow at ΔT 50°C	l/hr	360	450	540
	Max DHW temperature setpoint	°C	80	80	80
	Max operating pressure (open vented)	bar	7	7	7
	Max operating pressure (unvented)	bar	6.5	6.5	6.5
	Heat-up time (mins) 50°C rise		36	29	24
	Heat-up time (mins) 55°C rise		40	32	26
Gas	Gas Inlet Pressure (Nominal nat gas)	mbar	20	20	20
	Gas flow rate (Nominal nat gas)	m³/hr	2.1	2.6	3.2
	Gas Inlet Pressure (Nominal, LPG)	mbar	37	37	37
	Gas flow rate (LPG)	m³/hr	0.8	1	1.2
Flues	Max flue gas temperature	°C	100	100	100
	Nominal flue gas operating temp	°C	39	55	60
	Flue gas Volume @15°C	kg/h	33.1	41.4	49.7
	NOx emissions	mg/kWh	29	29	29
	Pressure at flue outlet	Pa	110	170	200
	Air inlet/Flue outlet diameter	mm	80	80	80
	Max system length – concentric flues	m	20	20	20
Electrical	Electrical Supply	230 V AC (+10%, -15%) 50Hz			
	Fuse rating	amp	6.3	6.3	6.3
	Power consumption (maximum)	W	34	50	68
	Power consumption (standby)	W	3.6	3.6	3.6
	Sounds Power Level (LWA)	dBA	64	64	64
Misc	Number of Anodes		1	1	1
	Dry weight	kg	96	96	96
	Filled Weight	kg	306	306	306

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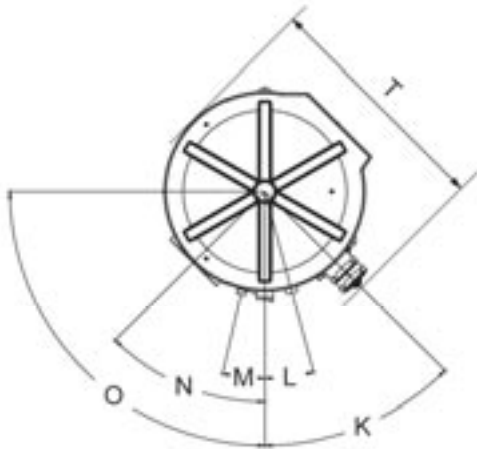
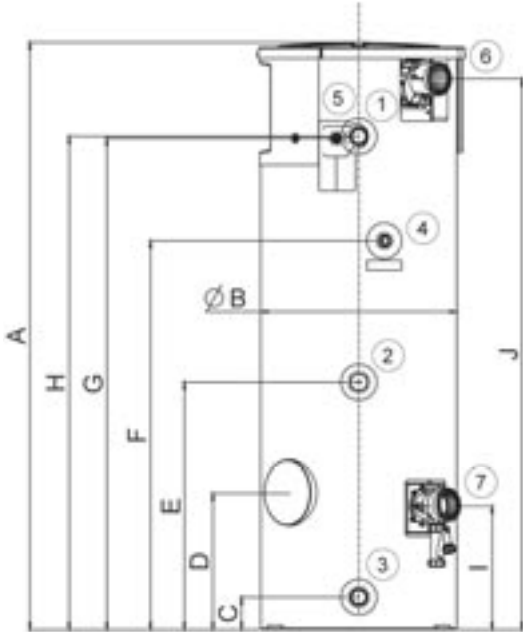
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**Dorchester  
DR-SG XX-210  
20, 25, 30**



## Connections

	Dorchester DR-SG XX-210		
	20	25	30
1 Hot water outlet	Rp 1"½		
2 Loop return	Rp 1"½		
3 Cold water inlet	Rp 1"½		
4 T&P valve	Rp 1"		
5 Gas inlet	R ¾"		
6 Air inlet	Ø 80		
7 Flue outlet	Ø 80		

## Clearances

ALL MODELS		DR-SG
Clearance – front (service)	mm	Min 500
Clearance – sides	mm	500
Clearance – rear	mm	500
Clearance – top	mm	175

## Dimensions

	DR-SG XX-210
A Overall height	1802
B Diameter	Ø 600
C Height to cold water inlet	100
D Height to inspection hatch	419
E Height to secondary return	759
F Height to T&P valve connection	1193
G Height to gas connection	1508
H Height to hot water outlet	1514
I Height to flue outlet	380
J Height to air inlet	1691
K Angle position of flue outlet	45°
L Angle position of T&P valve fitting	13°
M Angle position of gas connection	12.9°
N Angle position of inspection hatch	45°
O Angle position of HMI	90°
P Height of lower anode fitting	NA
Q Angle position of lower anode fitting	NA
R Overall width with LPG conversion kit	NA
S Angle position of gas connection with LPG conversion kit	NA
T Max installed width	699
U Height to condensate trap outlet	233

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