

Technical submittal

Products: **Dorchester DR-SG 35-356, 50-356, 60-356**

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 35-356 AA031259	DR-SG 50-356 AA031260	DR-SG 60-356 AA031261	
Part Number:					
Energy	Max Heat Input (Gross)	kW	35	50	56.6
	Max Power Output Net)	kW	37	53	60
	Building regulations Part L, EN89 100% efficiency (NCV)	%	106	106	106
	Building regulations Part L, EN89 100% efficiency (GCV)	%	95.5	95.5	95.5
	Standby Loss	kWh/day	1.9	1.9	1.9
	Building regulations Part L, Maintenance Consumption (EN89)	kWh/day	3.4	3.4	3.4
	ErP efficiency rating		A	A	A
	Water Heater Efficiency (ErP)	%	90.3	92.5	91.4
	ErP Load Profile		XXL	XXL	XXL
	Water	Storage Capacity	L	356	356
1st 10 mins at ΔT 50°C		l/10'	330	400	435
1st hour at ΔT 50°C		l/60'	630	1100	1210
Continuous Flow at ΔT 50°C		l/hr	640	910	1090
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			35	24	20
Heat-up time (mins) 55°C rise			39	27	22
Gas		Gas Inlet Pressure (Nominal nat gas)	mbar	20	20
	Gas flow rate (Nominal nat gas)	m³/hr	3.7	5.3	6
	Gas Inlet Pressure (Nominal, LPG)	mbar	37	37	37
	Gas flow rate (LPG)	m³/hr	1.4	2	2.4
Flues	Max flue gas temperature	°C	100	100	100
	Nominal flue gas operating temp	°C	40.3	50.9	51.6
	Flue Gas Volume @15°C	kg/h	53.3	79.9	95
	NOx emissions	mg/kWh	32	32	32
	Pressure at flue outlet	Pa	130	200	200
	Air inlet/Flue outlet diameter	mm	100	100	100
Max system length – concentric flues	m	20	20	20	
Electrical	Electrical Supply		V 230 V AC (+10%, -15%) 50Hz		
	Fuse rating	amp	6.3	6.3	6.3
	Power consumption (maximum)	W	79	197	266
	Power consumption (standby)	W	3.7	3.7	3.7
	Sounds Power Level (LWA)	dBA	75	75	75
Misc	Number of Anodes		2	2	2
	Dry weight	kg	142	142	142
	Filled Weight	kg	498	498	498

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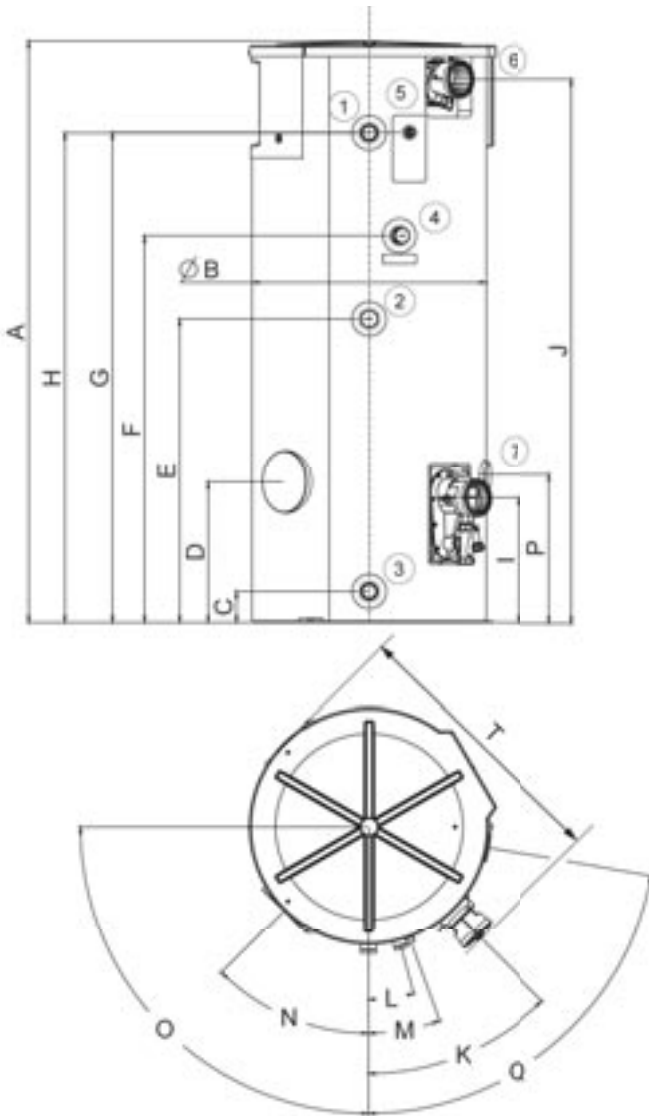
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**Dorchester
DR-SG XX-356
35, 50, 60**



Connections

	Dorchester DR-SG XX-356		
	35	50	60
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"¼		
5 Gas inlet	R ¾"		
6 Air inlet	Ø 100		
7 Flue outlet	Ø 100		

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-356
A Overall height	1874
B Diameter	Ø 750
C Height to cold water inlet	100
D Height to inspection hatch	454
E Height to secondary return	980
F Height to T&P valve connection	1248
G Height to gas connection	1580
H Height to hot water outlet	1579
I Height to flue outlet	402
J Height to air inlet	1752
K Angle position of flue outlet	45°
L Angle position of T&P valve fitting	15°
M Angle position of gas connection	20°
N Angle position of inspection hatch	45°
O Angle position of HMI	90°
P Height of lower anode fitting	478
Q Angle position of lower anode fitting	80°
R Overall width with LPG conversion kit	NA
S Angle position of gas connection with LPG conversion kit	NA
T Max installed width	884
U Height to condensate trap outlet	230

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