



LEENDERS

SINCE 1979

SORENNE MkII

DATASHEET

EN

NL

DE

FR

TECHNICAL DOCUMENTATION FOR SOLID FUEL LOCAL SPACE HEATERS

Manufacturer	Harrie Leenders Haardkachels B.V., Industrieweg 25, 5688 DP Oirschot, The Netherlands	General description	Freestanding solid fuel local space heater without hot water supply
Model identifier	SORENNE MkII	Specific precautions for assembly, installation or maintenance	Precautions for assembly, installation and maintenance are described in: - Installation instructions - Instructions for use & maintenance
Equivalent models			
Test report nr.	1639-AoP-EZKA/2025-11/006-1		
Harmonized European standard	EN16510-2-1:2022	Calculations	$EEI = (\mu_{S,on} \cdot BLF) - 10\% + F(2) + F(3) - F(4) - F(5)$ $\mu_{S,on} = \mu_{th,nom}$ $\eta_s = \eta_{nom} - 10\% + F(2) + F(3) - F(4) - F(5)$
Indirect heating function	No	Testing conditions	Tested according: EN16510-2-1:2022
Direct heat output (kW)	5,0		
Indirect heat output (kW)	-		
Air tightness class	Type BF		

Fuel	Preferred fuel (only one)	Other suitable fuel(s)	Emissions at nominal heat output [mg/Nm ³ (13 % O ₂)]				Emissions at minimum heat output [mg/Nm ³ (13 % O ₂)]			
			PM	OGC	CO	NOx	PM	OGC	CO	NOx
Wood logs, moisture content < 25 %	Yes	No	29	73	1001	106	N/A	N/A	N/A	N/A
Compressed wood, moisture content < 12 %	No	Yes	29	73	1001	106	N/A	N/A	N/A	N/A
Other woody biomass	No	No								
Non-woody biomass	No	No								
Anthracite and dry steam coal	No	No								
Hard coke	No	No								
Low temperature coke	No	No								
Bituminous coal	No	No								
Lignite briquettes	No	No								
Peat briquettes	No	No								
Blended fossil fuel briquettes	No	No								
Other fossil fuel	No	No								
Blended biomass and fossil fuel briquettes	No	No								
Other blend of biomass and solid fuel	No	No								

Characteristics when operating with the preferred fuel

Seasonal space heating efficiency η_s [%]	71,3
Energy efficiency index (EEI)	108,9

	Symbol	Value	Unit	Type of heat output/room temperature control (select one)	
Heat output					
Nominal heat output	P_{nom}	5,0	kW	Single-stage heat output, no room temperature control	No
Minimum heat output (indicative)	P_{min}	N/A	kW	Two or more manual stages, no room temperature control	Yes
Useful efficiency (NCV as received)				With mechanic thermostat room temperature control	No
Useful efficiency at nominal heat output	$\eta_{th,nom}$	81,3	%	With electronic room temperature control	No
Useful efficiency at minimum heat output (indicative)	$\eta_{th,min}$	N/A	%	With electronic room temperature control plus day timer	No
Auxiliary power consumption				With electronic room temperature control plus week timer	No
At nominal heat output	e_{lmax}	N/A	kW		
At minimum heat output	e_{lmin}	N/A	kW		
In standby mode	e_{lSB}	N/A	kW		
Permanent pilot flame power requirement				Other control options (multiple selection possible)	
Pilot flame power requirement (if applicable)	P_{pilot}	N/A	kW	Room temperature control, with presence detection	No
				Room temperature control, with open window detection	No
				With distance control option	No



Power range: min./ max per hour [1]	2.5-9 kWh
Vermogensbereik; min./max. per uur	
Leistungsbereich; min.max. pro Stunde	
Plage d'utilisation, puissance min./max. par heure	
Fuel requirement per hour, min./max. [2]	0.7- 3 kg
Navul hoeveelheid per uur, min./max.	
Holzaufgabemenge pro Stunde, min./max.	
Charge de bois par heure, min./max.	
Weight	163 Kg
Gewicht	
Gewicht	
Poids	
Efficiency	81.3 %
Rendement	
Wirkungsgrad	
Rendement	
Energy Efficiency Class	A+
Energie Efficiëntie Klasse	
Energie Effizienz Klasse	
Classe d'efficacité énergétique	
Energy Efficiency Index	108,9
Energie Efficiëntie Index	
Energie Effizienz Index	
Index d'efficacité énergétique	
Dust	29 mg/Nm ³
Stof	
Staub	
Poussieres fines	
CO	0.05 %
Information for chimney calculation	5.0 kWh
Informatie voor schoorsteenberekening	4.7 g/s
Information für den Schornsteinfegermeister	284 °C
Information pour le calcul de conduit et de tirage de cheminée	0.08% CO
	0.115 mbar
EN 13240	1639-AoP-EZKA/2025-11/006-1
Art.15a B-VG	☒
VKF	☒
BImSchV. Stufe 2	☒
Flamme Rucola	☒
Smoke Control	☒

[1]

The minimum power is required to keep the stove at operating temperature.

Het minimale vermogen is nodig om de haard op bedrijfstemperatuur te houden.

Die minimale Leistung ist notwendig, damit die Betriebstemperatur des Kaminofens aufrechterhalten bleibt.

Une puissance minimum est nécessaire pour maintenir le poêle à une bonne température de fonctionnement.

[2]

At 80% efficiency, 1kg of wood with 15% rest moist, gives of approx. 3,5kW energy.

Bij een rendement van 80%, geeft 1kg stookhout met 15% restvocht, ongeveer 3,5kW energie.

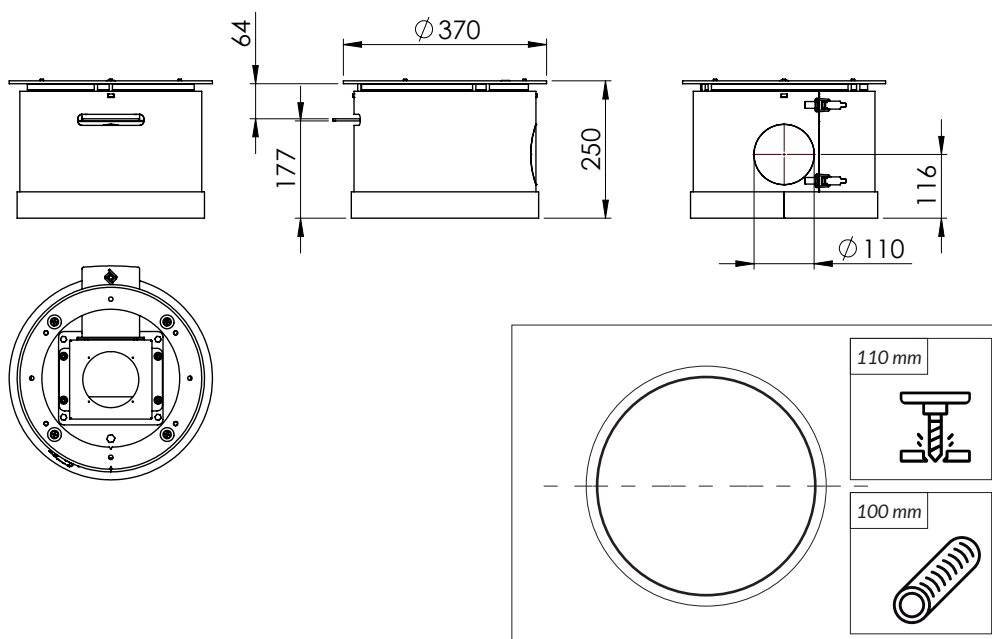
Bei einem Wirkungsgrad von 80%, ergibt 1 kg Holz mit 15% Restfeuchtigkeit etwa 3,5kW Energie.

Avec un rendement de 80%, 1kg de bois avec un taux d'humidité de 15% délivre environ 3,5 kW de énergie.



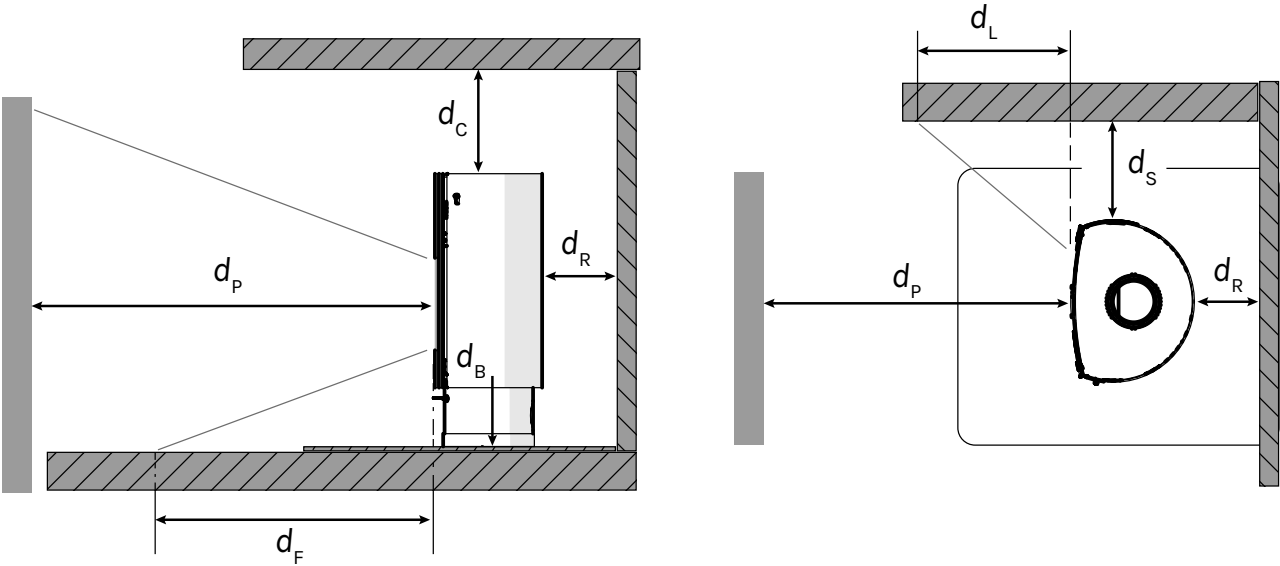
Color variations mantle	black/antracite
Kleurvariaties mantel	zwart/antraciet
Farbvariationen Mantel	schwarz/anthrazit
Les variations de couleur manteau	noir/anthracite
Color sole & top plate	black
Kleur voet & bovenplaat	zwart
Farb Fuß & obere Platte	schwarz
Couleur pied & plateau dessus	noir
Flue Diameter	Ø150 mm
Diameter afvoer	
Anschlussdurchmesser	
Diamètre de conduit	
Rotatable top flue	2 x 60° - 360°
Draaibaar bovenafvoer	
Drehbar mit Anschluss oben	
Sortie dessus pivotable	
Optional Plus heat storage / weigth	9h -> 40 °C / 39,1 kg
Optionele Plus stenen set / gewicht	
Optional Plus Speicherset / gewicht	
Ceramiques d'accumultion optional / poids	
Fresh air supply	in base: to floor
Verse luchtvoorziening	in voet: naar vloer
Frischluftezufuhr	im Fuß: zum Boden
Prise d'air	à pied: par le sol
Possibility to level foot	☒
Voet waterpas te stellen	
Fuss mit Wasserwaage ausrichten	
Mise à niveau du pied	

Fresh air supply/verse luchtvoorziening/Frischluftezufuhr/prise d' air





Minimum distances



Around appliance	
d_B	0 mm
d_R	100 mm
d_S	100 mm
d_C	750 mm

In front of appliance	
d_F	300 mm
d_P	1300 mm
d_L	1300 mm

