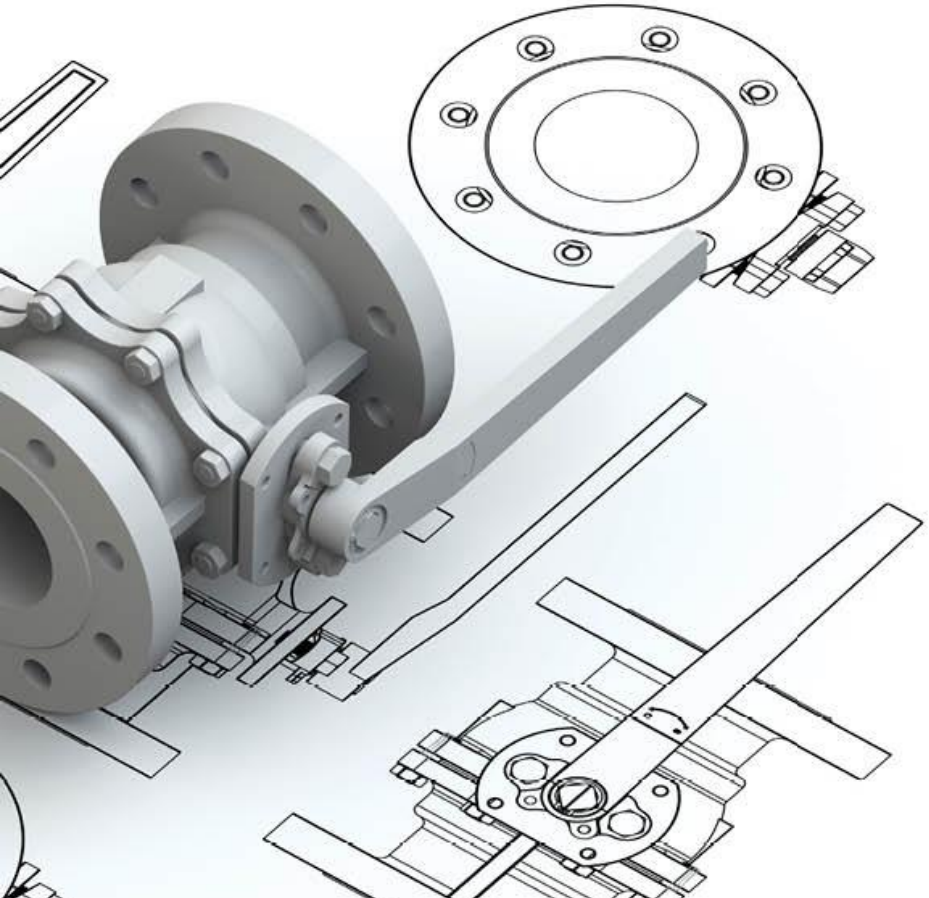


ENERGY EFFICIENCY OF APPLIANCES

STATUS ON ENABLING STANDARDS

Presented by Willa Breed

2013-05-30

SANS 941

SABS

This standard covers energy efficiency requirements, & energy efficiency labelling, & measurement methods

- Air conditioners not exceeding 5 kW *(of the non-ducted type)* & heat pumps.
- Audio & video equipment, including video recording equipment, set top boxes (STBs), audio equipment & multi-function equipment for consumer use.
- Television sets that include, but are not limited to those with a cathode ray tube (CRT), liquid crystal display (LCD), a plasma display panel (PDP), or projection technologies.
- Dishwashers, electric ovens, refrigerators & freezers, tumble dryers, washer-dryer combination & washing machines.

SANS 941

SABS

SANS 62552/IEC 62552, *Household refrigerating appliances: Characteristics and test methods.*

Adopt EU Directive of 2010,update label to reflect D to A^{+++}

(annual energy consumption in kWh per year, and volume in litres, noise emission in dB is optional)

SANS 54511-3/EN 14511-3, *Air conditioners, liquid chilling packages and heat pumps with electrically driven compressors for space heating and cooling – Part 3: Test methods*

Adopt EU Directive of 2011. Three labels.

SANS 61121/IEC 61121,*Tumble dryers for household use : Methods for measuring the performance*

Align with BS EN 61121, EU Directive of 1995

SANS 941 cont.

SANS 60456/IEC 60456, *Clothes washing machines for household use: Methods for measuring the performance*

Adopt 2010 edition of IEC 60456, add a national annex

List of all products that have to comply with a standby power of 1W to be added as an annex to the standard.

SANS 151

SABS

Fixed electric storage water heaters Ed. 7 : 2012

Annex E, Energy labelling

Table E.1 — Energy efficiency classes of storage water heaters

Energy efficiency class	Standing loss *S*
A	$S \leq 5 + 4{,}16\ V^{0,4}$
B	$11 + 6{,}25\ V^{0,4} \leq S < 5+4{,}16\ V^{0,4}$
C	$16{,}66 + 8{,}33\ V^{0,4} \leq S < 11+ 6{,}25\ V^{0,4}$
D	$21+ 10{,}33\ V^{0,4} \leq S < 16{,}66 + 8{,}33\ V^{0,4}$
E	$26 + 13{,}66\ V^{0,4} \leq S < 21+10{,}33\ V^{0,4}$
F	$31+ 16{,}66\ V^{0,4} \leq S < 26 + 13{,}66\ V^{0,4}$
G	$S > 31+ 16{,}66\ V^{0,4}$
V = actual measured volume	

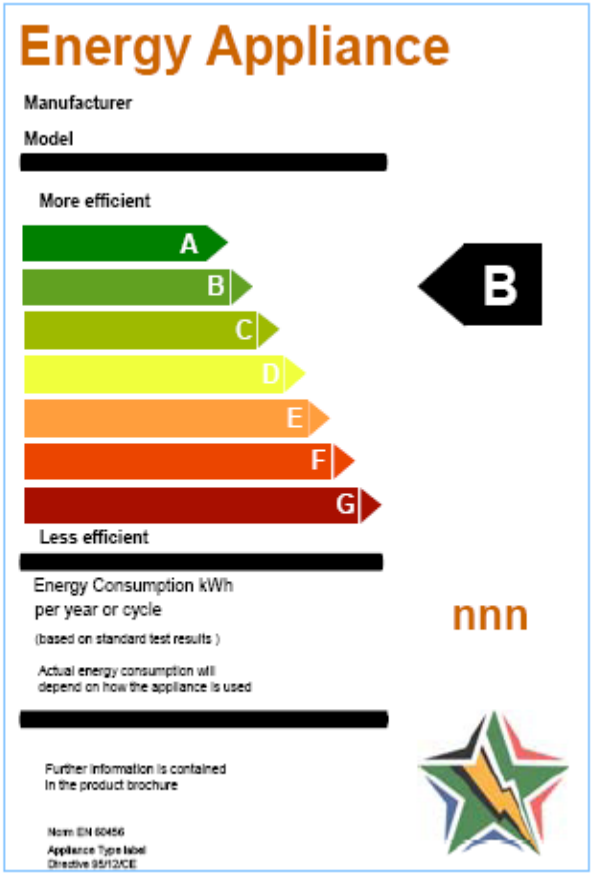
SANS 151 standing loss

SABS

Table 3 — Maximum permissible standing loss

1	2	3	4
Nominal capacity of water container L	**Maximum permissible standing loss per 24 h** kWh		
	Open outlet type water heater	**Cistern type water heater**	**Closed type water heater**
≤ 15	0,86	1,08	0,86
25	1,30	1,62	1,30
50	1,62	2,16	1,62
75	1,84	2,48	1,84
100	2,16	2,81	2,16
125	2,38	3,02	2,38
150	2,59	3,24	2,59
175	2,78	3,44	2,78
200	3,02	3,67	3,02
225		3,89	3,24
250		4,10	3,46
275		4,28	3,68
300		4,45	3,89
350		4,78	4,32
400			4,75
450			5,18

Energy label (Example)



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Thank you