

DIN EN 13203-2:2022-10 (E)

Gas-fired domestic appliances producing hot water - Part 2: Assessment of energy consumption

Contents	Page
European foreword	4
Introduction	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 General test conditions	8
4.1 Reference conditions	8
4.2 Measurement uncertainties	9
4.2.1 General	9
4.2.2 Steady-state conditions	9
4.3 Test conditions	9
4.3.1 General	9
4.3.2 Test room	10
4.3.3 Water supply	10
4.3.4 Initial adjustment of the appliance	10
4.3.5 Conditions for the determination of the maximum load profile	11
4.3.6 Electrical supply	11
5 Determination of the energy consumption of the appliance	11
5.1 General	11
5.2 Load profiles	11
5.3 Determination of the energy recovered by the useful water	20
5.4 Calculation of gas energy	20
5.4.1 Calculation of daily gas energy consumption in summer mode	20
5.4.2 Calculation of daily gas energy consumption in winter mode	21
5.4.3 Daily gas energy consumption seasonally weighted	22
5.5 Calculation of daily electrical energy consumption	22
5.6 Measurement of energy consumption in standby mode	23
5.6.1 General	23
5.6.2 Calculation of daily gas energy consumption in standby mode	23
5.6.3 Calculation of daily auxiliary electrical energy consumption in standby mode	24
5.7 Determination of daily auxiliary electrical energy consumption in off mode	24
6 Determination of the ratio of wasted water to total water	24
7 Eco design related products data	25
7.1 Water heating energy efficiency	25
7.2 Smart control factor (SCF) and smart	26
7.3 Annual fuel consumption (AFC)	27
7.4 Annual electricity consumption (AEC)	27
Annex A (informative) Test conditions	29
Annex B (informative) Examples of test rig and measurement devices	32
B.1 General	32

B.2	Pressure measurement	33
B.3	Temperature measurement	33
Annex C (informative) Declaration of the maximum load profile		37
Annex ZA (informative) Relationship between this European Standard and the ecodesign requirements of Commission Regulation (EU) n° 814/2013 [OJEU L239 of 6 September 2013] aimed to be covered		38
Annex ZB (informative) Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EU) No 812/2013 [OJEU L239 of 6 September 2013] aimed to be covered		40
Annex ZC (informative) Relationship between this European Standard and the Ecodesign requirements of Commission Regulation (EU) n° 813/2013 [OJEU L239 of 6 September 2013] aimed to be covered		41
Annex ZD (informative) Relationship between this European Standard and the energy labelling requirements of Commission Delegated Regulation (EU) No 811/2013 [OJEU L239 of 6 September 2013] aimed to be covered		42
Bibliography		43