

Annexe H (informative)

Essai préalable pour la détermination du réglage pour le frémissement concernant la mesure de la consommation d'énergie

H.1 Objet

Pour la mesure de la consommation d'énergie selon le 7.5.3, les données empiriques relatives à la densité de puissance indiquent qu'il convient que cette dernière soit proche de 0,8 W/cm². La densité de puissance q est définie comme la capacité thermique par unité de surface du fond de l'ustensile de cuisine, en W/cm².

Cette valeur sert uniquement d'orientation.

Si le réglage correspondant à la densité de puissance exigée de 0,8 W/cm² n'est pas connu, il peut être déterminé par la procédure décrite à l'Article H.2.

H.2 Procédure de détermination d'un réglage approprié pour le frémissement

Pour déterminer le réglage approprié, un essai préalable est effectué selon les étapes suivantes:

- pour les **zones de cuisson** et les plaques chauffantes, choisir un ustensile de cuisine rempli d'eau conforme au Tableau 3, et pour les surfaces de cuisson, conforme à l'Annexe A avec une température initiale de (20 ± 5) °C;
- pour les zones de cuisson, placer l'ustensile de cuisine au centre de la zone de cuisson. Pour les surfaces de cuisson, suivre les règles de positionnement décrites à l'Annexe A;
- allumer la **zone de cuisson** ou la surface de cuisson en utilisant le réglage le plus bas;
- mesurer la consommation d'énergie (EC_{mean}) dans un délai de 10 min;
- éteindre la **zone de cuisson** ou la surface de cuisson et enregistrer la consommation d'énergie EC_{mean} en Wh, puis calculer la puissance moyenne $\bar{P}$ à l'aide de la Formule (H.1):

$$\bar{P} = \frac{6 \times EC_{\text{mean}}}{1h} \quad (\text{H.1})$$

- calculer la densité de puissance q à l'aide de la formule (H.2):

$$q = \frac{\bar{P}}{a_c} \quad (\text{H.2})$$

où

$\bar{P}$ est la puissance moyenne en W;

EC_{mean} est la consommation d'énergie en Wh dans un délai de 10 min;

q est la densité de puissance en W/cm²;

a_c est la surface du fond de l'ustensile de cuisson, voir Tableau 3, en cm².

Augmenter le réglage de la puissance et répéter le mesurage jusqu'à ce que la densité de puissance dépasse $0,8 \text{ W/cm}^2$. Il n'est pas nécessaire de refroidir la table de cuisson pendant les mesurages. A partir des deux derniers mesurages, déterminer quelle densité de puissance est la plus proche de $0,8 \text{ W/cm}^2$. Le réglage qui a été déterminé comme étant celui qui donne la densité de puissance la plus proche de $0,8 \text{ W/cm}^2$, en prenant le plus faible des deux derniers mesurages si ceux-ci sont à égale distance de $0,8 \text{ W/cm}^2$, peut être utilisé comme point de départ pour l'essai principal de 7.5.3. Toutefois, le réglage doit être vérifié comme spécifié en 7.5.4.1.

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FINAL VERSION

VERSION FINALE



**Household electric cooking appliances –
Part 2: Hobs – Methods for measuring performance**

**Appareils de cuisson électrodomestiques –
Partie 2: Tables de cuisson – Méthodes de mesure de l'aptitude à la fonction**

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