



Engineering Test Institute, Public Enterprise, Czech Republic
Prüfanstalt der Maschinenbauindustrie, s.U., Tschechische Republik

CERTIFICATE OF TEST PRÜFZEUGNIS

Number
Nummer **O-B-00969-22**

Manufacturer - Hersteller Herz Energietechnik GmbH
Herzstrasse 1
A-7423 Pinkafeld
Austria – Österreich

Product - Produkt Hot-water boiler - Warmwasserkessel

Type designation - Typenbezeichnung **firematic-E 120, firematic-E 130, firematic-E 149, firematic-E 151,
firematic-E 180, firematic-E 199, firematic-E 201**

Tested boilers - Getestete Kessel **firematic-E 120, firematic-E 201**

Ecodesign requirements - Ökodesign-Anforderungen Commission Regulation (EU) No. 2015/1189, Annex II, Art. 1
Verordnung (EU) Nr. 2015/1189, Anhang II, Art. 1
Commission Regulation (EU) No. 2015/1187
Verordnung (EU) Nr. 2015/1187

Test method - Prüfverfahren EN 303-5:2021

Heating method - Heizart automatic - automatisch

Preferred fuel - Bevorzugter Brennstoff wood chips-B1 – Hackschnitzel-B1

Results - Resultate

| Type - Typ | | firematic- E 120 | firematic- E 130 *) | firematic- E 149 *) | firematic- E 151 *) | firematic- E 180 *) | firematic- E 199 *) | firematic- E 201 |
|---|-------------------|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---------------------|
| Nominal output - Nennlast | | | | | | | | |
| CO (10% O ₂) | mg/m ³ | 28 | 27 | 25 | 25 | 23 | 21 | 21 |
| OGC (10% O ₂) | mg/m ³ | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Dust - Staub (10% O ₂) | mg/m ³ | 1.1 | 1.2 | 1.3 | 1.3 | 1.5 | 1.6 | 1.6 |
| NOx (10% O ₂) | mg/m ³ | 128 | 129 | 132 | 132 | 136 | 139 | 139 |
| Useful efficiency - Brennstoff- Wirkungsgrad (GCV) | % | 86.8 | 86.6 | 86.3 | 86.2 | 85.7 | 85.3 | 85.3 |
| Efficiency - Wirkungsgrad (NCV) | % | 95.3 | 95.1 | 94.7 | 94.6 | 94.0 | 93.6 | 93.6 |

*) values of non-tested boilers determined by interpolation according EN303-5:2021 Art. 5.1.4 - Werte von nicht geprüften Kesseln, bestimmt durch Interpolation gemäß EN303-5: 2021 Art. 5.1.4

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| Type - Typ | | firematic- E 120 | firematic- E 130 *) | firematic- E 149 *) | firematic- E 151 *) | firematic- E 180 *) | firematic- E 199 *) | firematic- E 201 |
|---|--------------------------------|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---------------------|
| Minimal output - Teillast | | | | | | | | |
| CO (10% O ₂) | mg/m _n ³ | 51 | 51 | 51 | 51 | 51 | 51 | 51 |
| OGC (10% O ₂) | mg/m _n ³ | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Dust - Staub (10% O ₂) | mg/m _n ³ | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| NO _x (10% O ₂) | mg/m _n ³ | 116 | 116 | 116 | 116 | 116 | 116 | 116 |
| Useful efficiency - Brennstoff- Wirkungsgrad (GCV) | % | 86.5 | 86.5 | 86.5 | 86.5 | 86.5 | 86.5 | 86.5 |
| Efficiency - Wirkungsgrad (NCV) | % | 94.9 | 94.9 | 94.9 | 94.9 | 94.9 | 94.9 | 94.9 |
| Seasonal emissions - Raumheizungs-Jahres-Emissionen | | | | | | | | |
| CO (10% O ₂) | mg/m _n ³ | 48 | 48 | 48 | 48 | 47 | 47 | 47 |
| OGC (10% O ₂) | mg/m _n ³ | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 | < 1 |
| Dust - Staub (10% O ₂) | mg/m _n ³ | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 | 1.3 |
| NO _x (10% O ₂) | mg/m _n ³ | 118 | 118 | 118 | 118 | 119 | 119 | 119 |
| η _{son} | % | 86.5 | 86.5 | 86.4 | 86.4 | 86.4 | 86.3 | 86.3 |
| F1 | % | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| F2 | % | 0.9 | 0.9 | 0.9 | 0.9 | 0.8 | 0.8 | 0.8 |
| Seasonal space heating energy efficiency - Raumheizungs-Jahresnutzungsgrad | | | | | | | | |
| η _s | % | 83 | 83 | 83 | 83 | 83 | 83 | 83 |
| Energy Efficiency Index – Energieeffizienzindex | | | | | | | | |
| EEI | - | 122 | 122 | 122 | 122 | 121 | 121 | 121 |
| Energy Efficiency Class - Energieeffizienzklasse | | | | | | | | |
| | | A+ | A+ | A+ | A+ | A+ | A+ | A+ |

*) values of non-tested boilers determined by interpolation according EN303-5:2021 Art. 5.1.4 - Werte von nicht geprüften Kesseln, bestimmt durch Interpolation gemäß EN303-5: 2021 Art. 5.1.4

Reports No. - Protokoll Nr.

39-16286/T and follow-up reports - und anknüpfende Protokolle,
issued by Testing Laboratory No. 1045.1, accredited by CAI,
Accreditation Certificate No. 205/2022 -
ausgestellt von Prüflabor Nr. 1045.1, das von ČIA akkreditiert ist,
Akkreditierungsbescheinigung Nr. 205/2022

Basis for Certificate issue - Grundlage für die
Zertifikatserteilung

The Engineering Test Institute certifies by this Certificate of Test to have conducted for the given product the test and calculation with above stated results.

Die Prüfanstalt der Maschinenbauindustrie, s.U., bescheinigt mit dieser Bescheinigung, dass sie bei diesem Produkt die Prüfungen mit folgenden Ergebnissen durchgeführt hat.

Brno, 2022-06-01



Milan Holomek

Head of Heat and Ecological Equipment Test Station
Leiter der Prüfstelle für Wärme- und Umwelteinlagen

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