

Technical Specifications

NETZSCH

DSC 204 **F1** Phoenix®

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| Furnace Type | Silver Furnace |
| Temperature range (max.) | -180°C to 700°C |
| Cooling rate / heating rate | 0.001 to 200 K/min |
| Measuring range (max.) | ± 750 mW (τ-sensor) |
| Enthalpy accuracy | < 1%* |
| Precision of specific heat capacity determination | < 2 to 3% (for sapphire, RT to 500°C) |
| Exchangeable sensors | <ul style="list-style-type: none"> ▪ τ-sensor (-180°C to 700°C) ▪ μ-sensor (-150°C to 400°C) |
| Cooling options | <ul style="list-style-type: none"> ▪ Air compressor: RT to 700°C ▪ Compressed air: <0°C to 700°C (Vortex) ▪ Intracooler: -85°C to 600°C ▪ Liquid nitrogen: -180°C to 700°C |
| Gas atmospheres | Inert, oxidizing, static, dynamic |
| Gas-tight | Yes |
| Mass flow controller for purge/protective gas | 3, integrated (0 ... 250 ml/min) |
| Gas flow regulation | Software-controlled |
| Automatic sample changer (ASC) | Optional, for up 192 samples + up to 12 calibration samples |
| Evolved Gas Analysis | MS and/or FT-IR, possible with ASC |
| Photocalorimetry (optional) | UV extension for various commercial lamps, possible with ASC |
| Proteus® software (included features) | <ul style="list-style-type: none"> ▪ <i>SmartMode</i> ▪ <i>ExpertMode</i> ▪ <i>AutoCalibration</i> ▪ <i>AutoCooling</i> ▪ <i>AutoEvaluation</i> ▪ <i>Identify</i> ▪ <i>Advanced BeFlat®</i> |
| Proteus® software extensions (optional) | <ul style="list-style-type: none"> ▪ Temperature modulation, TM-DSC ▪ <i>Purity</i> |
| Advanced software extensions (optional) | <ul style="list-style-type: none"> ▪ <i>Peak Separation</i> ▪ <i>Kinetics Neo</i> ▪ <i>Thermal Simulations</i> ▪ <i>Component Kinetics</i> |
| Size (W x H x D) - incl. ASC and physical connections | approx. 62 cm x 42 cm x 58 cm |

The system works in line with all relevant DSC standards (DIN, ISO, ASTM).

* for metals