



designed for scientists



## EUROSTAR 200 control P4

/// Data Sheet

Extremely powerful laboratory stirrer for highly viscous applications for quantities up to 100 l (H<sub>2</sub>O). It is designed with a removable wireless controller and a digital TFT display. It automatically adjusts the speed through microprocessor controlled technology within the speed range of 0/4 - 530 rpm (two speed ranges). The stirrer comes equipped with a RS 232 and a USB interface to control and document all parameters. An integrated torque trend display is provided for the measurement of viscosity changes. Safety circuits installed ensures automatic cut-off in an anti-stall or overload conditions. Continuous comparison of shaft speed to desired speed is maintained and variations are adjusted automatically. This guarantees a constant speed even with changes in viscosities of the sample.



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- Multilingual TFT display
- Programmable functions
- Integrated temperature measurement
- Interval operation
- Timer function
- Adjustable safety circuit
- Locked function
- Infinitely adjustable speed
- Overload protection
- Short-term overload operation
- Slim casing
- Quiet operation
- Error code display
- H 67.60 temperature sensor and WH 11 WiCo holder included in delivery



## Technical Data

|   |  |
|---|--|
| Stirring quantity max. per stirring position (H2O) [l]    | 100  |
| Motor rating input [W]                                    | 134  |
| Motor rating output [W]                                   | 76   |
| Motor principle   | Brushless DC                                       |
| Speed display   | TFT  |
| Speed range [rpm]   | 0/4 - 530  |
| Intermittent operation                                    | yes  |
| Viscosity max. [mPas]                                     | 150000   |
| Output max. at stirring shaft [W]                         | 76   |
| Permissible ON time [%]                                   | 100  |
| Torque max. at stirring shaft [Ncm]                       | 660  |
| Torque I max. [Ncm]                                       | 660  |
| Torque II max. [Ncm]                                      | 130  |
| Speed range I (50 Hz) [rpm]                               | 4 - 108  |
| Speed range II (50 Hz) [rpm]                              | 16 - 530   |
| Speed range I (60 Hz) [rpm]                               | 4 - 108  |
| Speed range II (60 Hz) [rpm]                              | 16 - 530   |
| Speed control   | stepless   |
| Setting accuracy speed [ $\pm$ rpm]                       | 1  |
| Deviation of speed measurement $n > 300$ rpm [ $\pm$ %]   | 1  |
| Deviation of speed measurement $n < 300$ rpm [ $\pm$ rpm] | 3  |
| Stirring element fastening                                | chuck  |
| Connection for ext. temperature sensor                    | PT1000   |
| Temperature display                                       | yes  |
| Chuck range diameter [mm]                                 | 0.5 - 10   |
| Fastening on stand  | extension arm                                      |
| Extension arm diameter [mm]                               | 16   |
| Extension arm length [mm]                                 | 220  |
| Torque display  | yes  |
| Speed control   | electronic   |
| Nominal torque [Nm]                                       | 6.6  |
| Torque measurement  | trend  |
| Deviation of torque measurement I [ $\pm$ Ncm]            | 60   |
| Deviation of torque measurement II [ $\pm$ Ncm]           | 10   |
| Timer   | yes  |
| Timer display   | TFT  |
| Time setting range [min]                                  | 1 - 6000   |
| Temperature measuring range [°C]                          | -10 - +350   |
| Temperature measurement resolution [K]                    | 0.1  |
| Accuracy of temperature measurement [K]                   | $\pm 0.5$ + tolerance PT1000 (DIN IEC 751 Class A) |
| Limit deviation temperature sensor [K]                    | $\leq \pm (0.15 + 0.002 \times  T )$               |
| Housing material  | alu-cast coating / thermoplastic polymer           |
| Communication distance (depend on building) max. [m]      | 150  |
| Dimensions (W x H x D) [mm]                               | 91 x 379 x 231                                     |
| Weight [kg]   | 5.8  |
| Permissible ambient temperature [°C]                      | 5 - 40   |
| Permissible relative humidity [%]                         | 80   |
| Protection class according to DIN EN 60529                | IP 40  |



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|                  |                 |
|------------------|-----------------|
| RS 232 interface | yes             |
| USB interface    | yes             |
| Voltage [V]      | 230 / 100 - 115 |
| Frequency [Hz]   | 50/60           |
| Power input [W]  | 134             |

