



#### **EUROSTAR 400 control**

/// Data Sheet

Powerful laboratory stirrer for high viscous applications and intensive mixing for quantities up to 150 I (H2O). It automatically adjusts the speed within the range of 0/6 - 2000 rpm (two speed ranges) through microprocessor controlled technology. The control 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, as well as integrated safety circuits ensure automatic cut-off in an anti-stall or overload conditions. Continuous comparison of shaft to desired speed is performed and variations are adjusted automatically. This ensures constant speed even with changes in viscosities of the sample.









- -Multilingual TFT display
- -Programmable functions
- -Integrated temperature measurement
- -Interval operation
- -Timer function
- -Adjustable safety circuit
- -Locked function
- -Infinitely adjustable speed
- -Push-through agitator shafts
- -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**

| l echnical Data  |  |
|--|--|
| Stirring quantity max. per stirring position (H2O) [I] | 150  |
| Motor rating input [W]                                 | 220  |
| Motor rating output [W]                                | 176  |
| Motor principle  | Brushless DC                                   |
| Speed display  | TFT  |
| Speed range [rpm]                                      | 0/6 - 2000                                     |
| Intermittent operation                                 | yes  |
| Viscosity max. [mPas]                                  | 100000   |
| Output max. at stirring shaft [W]                      | 167  |
| Permissible ON time [%]                                | 100  |
| Torque max. at stirring shaft [Ncm]                    | 400  |
| Torque I max. [Ncm]                                    | 400  |
| Torque II max. [Ncm]                                   | 80   |
| Speed range I (50 Hz) [rpm]                            | 6 - 400  |
| Speed range II (50 Hz) [rpm]                           | 30 - 2000                                      |
| Speed range I (60 Hz) [rpm]                            | 6 - 400  |
| Speed range II (60 Hz) [rpm]                           | 30 - 2000                                      |
| Speed adjustment                                       | stepless                                       |
| Setting accuracy speed [rpm]                           |  |
| Deviation of speed measurement n gt; 300rpm [%]        | ±1   |
| Deviation of speed measurement n lt; 300rpm [rpm]      | ±3   |
| Stirring element fastening                             | chuck  |
| Connection for ext. temperature sensor                 | PT1000   |
| Temperature display                                    | yes  |
| Chuck range diameter [mm]                              | 3 - 16   |
| Hollow shaft, inner diameter [mm]                      | 10.3   |
| Hollow shaft (push-through - when stopped)             | yes  |
| Fastening on stand                                     | extension arm                                  |
| Extension arm diameter [mm]                            | 16   |
| Extension arm length [mm]                              | 160  |
| Torque display   | yes  |
| Speed control  | electronic                                     |
| Nominal torque [Nm]                                    | 4  |
| Torque measurement                                     | trend  |
| Deviation of torque measurement I [Ncm]                | ±40  |
| Deviation of torque measurement II [Ncm]               | ±12  |
| 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]                | ±0.5 + tolerance PT1000 (DIN EN 60751 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 onbuilding) max. [m]    | 150  |
| Dimensions (W x H x D) [mm]                            | 114 x 345 x 268                                |
| Weight [kg]  | 8.8  |
| Permissible ambient temperature [°C]                   | 5 - 40   |
| 1 L = 1  |  |









| Permissible relative humidity [%]          | 80    |
|--|-------|
| Protection class according to DIN EN 60529 | IP 42 |
| RS 232 interface                           | yes   |
| USB interface                              | yes   |
| Voltage [V]                                | 115   |
| Frequency [Hz]                             | 50/60 |
| Power input [W]                            | 226   |





