

**Data Sheet**

Mixing / Overhead Stirrers

**EUROSTAR 200 control P4**

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.

- 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

Accessories: R 1342 Propeller stirrer, 4-bladed, R 1345 Propeller stirrer, 4-bladed, R 1381 Propeller stirrer, 3-bladed, R 1382 Propeller stirrer, 3-bladed, R 1385 Propeller stirrer, 3-bladed, R 1388 Propeller stirrer, 3-bladed, R 1389 (PTFE-coated) Propeller stirrer, 3-bladed, R 1311 Turbine stirrer, R 1312 Turbine stirrer, R 1313 Turbine stirrer, R 1300 Dissolver stirrer, R 1302 Dissolver stirrer, R 1303 Dissolver stirrer, R 1352 Centrifugal stirrer, R 1355 Centrifugal stirrer, R 1375 Paddle stirrer, R 1376 Paddle stirrer, R 1330 Anchor stirrer, R 1331 Anchor stirrer, R 1333 Anchor stirrer, H 66.53 Temperature sensor, coated, H 62.51 Stainless steel sensor,

**Technical Data**

Stirring quantity max. (H <sub>2</sub> O) [l]	100
Motor rating input [W]	121
Motor rating output [W]	99
Motor principle	Brushless DC
Speed display	TFT
Speed range [rpm]	0/4 - 530
Reversible direction of rotation	no
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 > 300rpm [ $\pm$ rpm]	3
deviation of speed measurement n < 300rpm [ $\pm$ %]	1
Stirring element fastening	chuck
Connection for ext. temperature sensor	PT1000
Temperature display	yes
Chuck range min. diameter [mm]	0.5
Chuck range max. diameter [mm]	10
Hollow shaft (push-through $\varnothing$ when stopped)	no
Fastening on stand	extension arm
Extension arm diameter [mm]	16
Extension arm length [mm]	220
Torque display	yes
Nominal torque [Nm]	6.6
Torque measurement	trend
deviation of torque measurement I [ $\pm$ Ncm]	60
deviation of speed measurement II [ $\pm$ Ncm]	10
Timer	yes
Timer display	TFT
Time setting range [min]	1 - 6000
Temperature measuring range min. [°C]	-10
Temperature measuring range max. [°C]	+350
Temperature measurement resolution [K]	0.1
Accuracy of temperature measurement [K]	$\pm 0.5 + \text{tolerance PT1000 (DIN IEC 751 Class A)}$
Limit deviation temperature sensor [K]	$\leq \pm (0.15 + 0.002 \times \text{ITI})$
housing material	alu-cast coating / thermoplastic polymer
clean room qualified	no
explosion proofed	no
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 moisture [%]	80
Protection class according to DIN EN 60529	IP 40
RS 232 interface	yes
USB interface	yes
Analog output	no
Voltage [V]	230 / 100 - 115
Frequency [Hz]	50/60
Power input [W]	134
<b>Ident. No.</b>	<b>4090000</b>

H 66.51 Stainless steel sensor, glass-coated, H 70 Extension cable, R 301 Stirring shaft protection, R 270 Boss head clamp, R 271 Boss head clamp, RH 5 Strap clamp, R 2722 H-Stand, R 2723 Telescopic stand, labworldsoft®