



designed for scientists



## EUROSTAR 200 control

/// Data Sheet

Extremely powerful laboratory stirrer for highly viscous applications and intensive mixing 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 0/6 - 2000 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
- 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

Stirring quantity max. per stirring position (H <sub>2</sub> O) [l]	100
Motor rating input [W]	135
Motor rating output [W]	84
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]	84
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	200
torque I max. [Ncm]	200
torque II max. [Ncm]	40
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 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
Plug-in coupling ( $\varnothing$ ) [mm]	10
Chuck range diameter [mm]	0.5 - 10
Hollow shaft, inner diameter [mm]	10.3
Hollow shaft (push-through - when stopped)	yes
Fastening on stand	extension arm



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Extension arm diameter [mm]	16
Extension arm length [mm]	220
Torque display	yes
Speed control	electronic
Nominal torque [Nm]	2
Torque measurement	trend
deviation of torque measurement I [ $\pm$ Ncm]	20
deviation of torque measurement II [ $\pm$ Ncm]	6
Timer	yes
Timer display	TFT
Time setting range [min]	1 - 6000
Temperature measuring range [ $^{\circ}$ 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]	$\leq \pm (0.15 + 0.002 \times ITI)$
housing material	alu-cast coating / thermoplastic polymer
communication distance (depend on building) max. [m]	150
Dimensions (W x H x D) [mm]	91 x 297 x 231
Weight [kg]	4.9
Permissible ambient temperature [ $^{\circ}$ C]	5 - 40
Permissible relative humidity [%]	80
Protection class according to DIN EN 60529	IP 40
USB interface	yes
RS 232 interface	yes
Voltage [V]	230 / 100 - 115 / 100
Frequency [Hz]	50/60
Power input [W]	130