

## Data Sheet

Mixing / Overhead Stirrers



### EUROSTAR 20 high speed control

High speed laboratory stirrer 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 0/150 - 6000 rpm. The stirrer comes equipped with a RS 232 and a USB interface to control and document all parameters, and an update of the current firmware. An integrated torque trend display is provided for the measurement of viscosity changes. The included precision stirrer shaft is 280 mm long and has a maximum immersion depth of 220 mm.

- 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

Accessories: R 1401 Propeller, R 1405 Propeller, R 1402 Dissolver, H 66.53 Temperature sensor, coated, H 62.51 Stainless steel sensor, H 66.51 Stainless steel sensor, glass-coated, H 70 Extension cable, H 67.60 Temperature sensor, stainless steel, H 67.61 Temperature sensor, stainless steel, H 68.55 Temperature sensor, stainless steel, 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®

Technical Data	
Stirring quantity max. per stirring position (H <sub>2</sub> O) [l]	20
Motor rating input [W]	176
Motor rating output [W]	125
Motor principle	Brushless DC
Speed display	TFT
Speed range [rpm]	0/150 - 6000
Reversible direction of rotation	no
Intermittent operation	yes
Viscosity max. [mPas]	10000
Output max. at stirring shaft [W]	125
Permissible ON time [%]	100
Torque max. at stirring shaft [Ncm]	20
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	special output shaft
Connection for ext. temperature sensor	PT1000
Temperature display	yes
Hollow shaft (push-through - when stopped)	no
Fastening on stand	extension arm
Extension arm diameter [mm]	16
Extension arm length [mm]	220
Torque display	yes
Nominal torque [Nm]	0.2
Torque measurement	trend
deviation of torque measurement I [ $\pm$ Ncm]	6
Timer	yes
Timer display	TFT
Time setting range [min]	1 - 6000
Temperature measuring range min. [ $^{\circ}$ C]	-10
Temperature measuring range max. [ $^{\circ}$ C]	+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
clean room qualified	no
explosion proofed	no
communication distance (depend on building) max. [m]	150
Dimensions (W x H x D) [mm]	86 x 325 x 230
Weight [kg]	4.7
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
Analog output	no
Voltage [V]	230 / 115 / 100
Frequency [Hz]	50/60
Power input [W]	176
<b>Ident. No.</b>	<b>0025001314</b>