





EUROSTAR 60 control

/// Data Sheet

Universal 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 0/30 - 2000 rpm. 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









designed for scientists

- 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









designed for scientists

Technical Data

Motor rating uput	Stirring quantity max. per stirring position (H2O) [I]	40
Motor principle Brushless DC TFT	Motor rating input [W]	168
Speed display TFT Speed range [rm] 0/30 - 2000 Intermittent operation yes Viscosity max. [mPas] 60000 Output max. at string shaft [W] 126 Permissible ON time [%] 100 Oraque max at string shaft [Ncm] 60 Speed control stepless Sething accuracy speed [±rm] 1 Deviation of speed measurement n > 300rpm [±/%] 1 Deviation of speed measurement n > 300rpm [±/%] 1 Deviation of speed measurement n > 300rpm [±/%] 1 Connection for ext. temperature sensor PT1000 Connection for ext. temperature sensor PT1000 Chuck range diameter [mm] 0.5 - 10 Hollow shaft (inner diameter [mm] 11 Hollow shaft (inner diameter [mm] 0.5 - 10 Hollow shaft (inner diameter [mm] 220 Extension arm diameter [mm] 16 Extension arm length [mm] 220 Torque display yes Speed control 1 Nominal torque [mm] 0.6 Torque measurement	Motor rating output [W]	131
Speed range [pm] 0/30 - 2000 Intermittent operation yes S0000 Intermittent operation yes S0000 S00000 S00000 S00000 S00000 S00000 S00000 S00000 S000000 S000000 S000000 S0000000 S00000000	Motor principle	Brushless DC
Intermittent operation	Speed display	TFT
Viscosity max. (mPas) 50000 Output max. at stirning shaft [W] 126 Permissible ON time [%] 100 Torque max. at stirning shaft [Ncm] 60 Speed control stepless Setting accuracy speed [±rpm] 1 Deviation of speed measurement in < 300rpm [±m]	Speed range [rpm]	0/30 - 2000
Output max. at stirring shaft [W] 126 Permissible ON time [%] 60 Speed control stepless Setting accuracy speed [±rpm] 1 Deviation of speed measurement n < 300rpm [±%]	Intermittent operation	yes
Permissible ON time [%] 100 Torque max. at stirring shaft [Ncm] 60 Speed control stepless Setting accuracy speed [4rpm] 1 Deviation of speed measurement n > 000rpm [±½] 1 Deviation of speed measurement n < 300rpm [±rpm]	Viscosity max. [mPas]	50000
Torque max. at stirring shaft [Ncm] 60 Speed control stepless Settling accuracy speed (±rpm] 1 Deviation of speed measurement n < 300rpm [±rpm]	Output max. at stirring shaft [W]	126
Speed control stepless Setting accuracy speed [±rpm] 1 Deviation of speed measurement n > 300rpm [±%] 1 Deviation of speed measurement n < 300rpm [±rpm]	Permissible ON time [%]	100
Setting accuracy speed [±rpm] 1 Deviation of speed measurement n > 300rpm [±rpm] 3 Stirring element fastening chuck Connection for ext. temperature sensor PT1000 Temperature display yes Chuck range diameter [mm] 0.5 - 10 Hollow shaft, inner diameter [mm] 11 Hollow shaft (push-through - when stopped) yes Fastening on stand extension arm Extension arm diameter [mm] 16 Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement [±Ncm] 6 Evention for orque measurement [±Ncm] 6 Timer display TFT Time setting range [min] 1 - 6000 Temperature measuring range [min] 1 - 6000 Temperature measurement resolution [K] 0.1 Accuracy of temperature measurement [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] 5 ± (0.15 + 0.002xITI) Housing material <td< td=""><td>Torque max. at stirring shaft [Ncm]</td><td>60</td></td<>	Torque max. at stirring shaft [Ncm]	60
Deviation of speed measurement n < 300rpm [±%]	Speed control	stepless
Deviation of speed measurement n < 300 pm [±rpm]	Setting accuracy speed [±rpm]	1
Stirring element fastening chuck Connection for ext. temperature sensor PT1000 Temperature display yes Chuck range diameter [mm] 0.5 - 10 Hollow shaft, inner diameter [mm] 11 Hollow shaft (push-through - when stopped) yes Fastening on stand extension arm Extension arm diength [mm] 16 Extension arm mength [mm] 220 Torque display yes Speed control electronic Nominal torque [Mm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 Timer display TFT Times etting 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 IEC 751 Class A) Limit deviation temperature measurement [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [Deviation of speed measurement n > 300rpm [±%]	1
Connection for ext. temperature sensor PT1000 Temperature display yes Chuck range diameter [mm] 0.5 - 10 Hollow shaft, inner diameter [mm] 11 Hollow shaft (push-through - when stopped) extension arm Eastening on stand 16 Extension arm diameter [mm] 16 Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 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 IEC 751 Class A) Limit deviation temperature sensor [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 50 Dimensio	Deviation of speed measurement n < 300rpm [±rpm]	3
Temperature display yes Chuck range diameter [mm] 0.5 - 10 Hollow shaft (push-through - when stopped) yes Fastening on stand extension arm Extension arm diameter [mm] 16 Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement I [±Ncm] 6 Timer display TFT Time setting range [min] 1 - 6000 Temperature measuring range [°C] -10 - 4350 Temperature measurement resolution [k] 0.1 Accuracy of temperature measurement [k] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [k] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40	Stirring element fastening	chuck
Chuck range diameter [mm] 0.5 - 10 Hollow shaft, inner diameter [mm] 11 Hollow shaft (push-through - when stopped) yes Fastening on stand extension arm Extension arm diameter [mm] 16 Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 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 IEC 751 Class A) Limit deviation temperature sensor [K] \$± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible relative humidity [%]	Connection for ext. temperature sensor	PT1000
Hollow shaft, inner diameter [mm]	Temperature display	yes
Hollow shaft (push-through - when stopped) yes	Chuck range diameter [mm]	0.5 - 10
Extension arm diameter [mm] extension arm Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 Timer yes Timer display TFT Time setting range [min] 1 - 6000 Temperature measurement resolution [K] 0.1 Accuracy of temperature measurement [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ±(0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [*C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 VSS interface yes Voltage [V] 230 / 115 / 100	Hollow shaft, inner diameter [mm]	11
Extension arm length [mm] 220 Extension arm length [mm] 220 Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 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 sensor [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ± ± (0.15 + 0.002xlTI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 47 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 1P 40 VSS interface yes VSS interface yes	Hollow shaft (push-through - when stopped)	yes
Extension arm length [mm] 220 Torque display yes Speed control electronic Mominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement [±Ncm] 6 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 sensor [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ≤ t (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 VSB interface yes Voltage [V] 230 / 115 / 100	Fastening on stand	extension arm
Torque display yes Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement I [±Ncm] 6 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 IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Extension arm diameter [mm]	16
Speed control electronic Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement I [±Ncm] 6 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 IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Extension arm length [mm]	220
Nominal torque [Nm] 0.6 Torque measurement trend Deviation of torque measurement I [±Ncm] 6 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 IEC 751 Class A) Limit deviation temperature sensor [K] ≤± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Torque display	yes
Torque measurement trend Deviation of torque measurement I [±Ncm] 6 Timer yes Timer display TFT Time setting range [min] 1 - 6000 Temperature measuring range [°C] -10 - 4350 Temperature measurement resolution [K] 0.1 Accuracy of temperature measurement [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Speed control	electronic
Deviation of torque measurement I (±Ncm) 6 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 sensor [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002x TI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Nominal torque [Nm]	0.6
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 IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002xlTl) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Torque measurement	trend
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 IEC 751 Class A) Limit deviation temperature sensor [K] ≤ ± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Deviation of torque measurement I [±Ncm]	6
Time setting range [min] Temperature measuring range [°C] Temperature measurement resolution [K] Accuracy of temperature measurement [K] Limit deviation temperature sensor [K] Housing material Communication distance (depend onbuilding) max. [m] Dimensions (W x H x D) [mm] Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface Voltage [V] 1 - 6000 1 - 0 - +350 0 .1 ± 0.5 + tolerance PT1000 (DIN IEC 751 Class A) ± ± (0.15 + 0.002xITI) alu-cast coating / thermoplastic polymer 150 86 x 267 x 230 4.7 5 - 40 80 IP 40 yes Voltage [V]	Timer	yes
Temperature measuring range [°C] Temperature measurement resolution [K] Accuracy of temperature measurement [K] Limit deviation temperature sensor [K] Housing material Communication distance (depend onbuilding) max. [m] Dimensions (W x H x D) [mm] Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 USB interface Voltage [V] -10 - +350 0.1 ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) ** **Experiment temperature product to play a large product to p	Timer display	TFT
Temperature measurement resolution [K]0.1Accuracy of temperature measurement [K]±0.5 + tolerance PT1000 (DIN IEC 751 Class A)Limit deviation temperature sensor [K]≤ ± (0.15 + 0.002xITI)Housing materialalu-cast coating / thermoplastic polymerCommunication distance (depend onbuilding) max. [m]150Dimensions (W x H x D) [mm]86 x 267 x 230Weight [kg]4.7Permissible ambient temperature [°C]5 - 40Permissible relative humidity [%]80Protection class according to DIN EN 60529IP 40RS 232 interfaceyesUSB interfaceyesVoltage [V]230 / 115 / 100	Time setting range [min]	1 - 6000
Accuracy of temperature measurement [K] ±0.5 + tolerance PT1000 (DIN IEC 751 Class A) Limit deviation temperature sensor [K] ≤± (0.15 + 0.002xITI) Housing material alu-cast coating / thermoplastic polymer Communication distance (depend onbuilding) max. [m] 150 Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Temperature measuring range [°C]	-10 - +350
Limit deviation temperature sensor [K] $\leq \pm (0.15 + 0.002xITI)$ Housing materialalu-cast coating / thermoplastic polymerCommunication distance (depend onbuilding) max. [m]150Dimensions (W x H x D) [mm] $86 \times 267 \times 230$ Weight [kg] 4.7 Permissible ambient temperature [°C] $5 - 40$ Permissible relative humidity [%] 80 Protection class according to DIN EN 60529IP 40RS 232 interfaceyesUSB interfaceyesVoltage [V] $230 / 115 / 100$		0.1
Housing material Communication distance (depend onbuilding) max. [m] Dimensions (W x H x D) [mm] Weight [kg] Permissible ambient temperature [°C] Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] alu-cast coating / thermoplastic polymer 150 86 x 267 x 230 4.7 5 - 40 80 IP 40 yes 230 / 115 / 100		,
Communication distance (depend onbuilding) max. [m] Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] 150 80 4.7 Permissible relative humidity [%] 80 IP 40 230 / 115 / 100	Limit deviation temperature sensor [K]	$\leq \pm (0.15 + 0.002xITI)$
Dimensions (W x H x D) [mm] 86 x 267 x 230 Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100		alu-cast coating / thermoplastic polymer
Weight [kg] 4.7 Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Communication distance (depend onbuilding) max. [m]	150
Permissible ambient temperature [°C] 5 - 40 Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Dimensions (W x H x D) [mm]	86 x 267 x 230
Permissible relative humidity [%] 80 Protection class according to DIN EN 60529 IP 40 RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100		4.7
Protection class according to DIN EN 60529 RS 232 interface USB interface Voltage [V] Protection class according to DIN EN 60529 yes 230 / 115 / 100	Permissible ambient temperature [°C]	5 - 40
RS 232 interface yes USB interface yes Voltage [V] 230 / 115 / 100	Permissible relative humidity [%]	80
USB interface yes Voltage [V] 230 / 115 / 100	Protection class according to DIN EN 60529	IP 40
Voltage [V] 230 / 115 / 100	RS 232 interface	yes
Frequency [Hz] 50/60	Voltage [V]	230 / 115 / 100
Power input [W] 176	Power input [W]	176







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