

# ES-20/60, Orbital Shaker-Incubator

#### Premium Product Class

### DESCRIPTION

Orbital Shaker–Incubator ES-20/60 for biotechnological and pharmaceutical laboratories is a professional category equipment designed for cultivation of microorganisms and eukaryotic cells including animal, plant and insect cells. It is also possible to cultivate thermofilic bacteria in ES-20/60 shaker-incubator.

Shaker is equipped with a direct-drive mechanism for platform motion. It provides reliable and stable operation for the long term experiments needed for cell growth.

Shaker-Incubator ES-20/60 provides smooth or intensive mixing in flasks installed on the platform.

Built-in noiseless thermoresistant brushless fan provides precise temperature distribution inside the chamber (adjustable for up to +80°C). The inner chamber is made of stainless steel. State—of—the—art motor, newest thermal insulation materials, soft-start of the platform motion and temperature PID—control decrease the energy consumption and make the Shaker—Incubator highly energy efficient despite its relatively large size.



### SPECIFICATIONS

Temperature setting range	+25°C +80°C
Speed control range	50–250 rpm (increment 10 rpm)
Temperature control range	10°C above ambient +80°C
Temperature setting resolution	0.1°C
Temperature stability	±0.5°C
Temperature accuracy at +37°C	±0.5°C
Temperature uniformity at +37°C	±0.5°C
Orbit	20 mm
Display	LCD, 2 × 16 signs
Digital time setting	1 min–96 hrs / non–stop (1 min increment)
Maximum load	8 kg
Maximum continuous operation time	30 days
Dimensions of the inner chamber	460 × 350 × 400 mm
Overall dimensions (W×D×H)	590 × 525 × 510 mm
Weight	41.1 kg
Power consumption (230V / 120 V)	450 W (2 A) / 450 W (4.5 A)
Nominal operating voltage	230 V, 50/60 Hz or 120 V, 50/60 Hz

## CAT. NUMBER

	Without platform
BS-010135-AAA	230VAC 50/60Hz Euro plug
BS-010135-AAB	230VAC 50/60Hz UK plug
BS-010135-AA3	230VAC 50/60Hz AU plug
BS-010135-AAC	120VAC 60Hz US plug
please, inquire	100VAC 50/60Hz US plug
BS-010135-HK	IQ OQ document
BS-010135-IK	PQ document

ES-20/60, Orbital Shaker-Incubator Page 1 of 2



**P-30/100** BS-010135-BK platform

Platform with clamps for flasks.



P-16/250 BS-010135-CK platform

Platform with clamps for flasks.



**P-9/500** BS-010135-AK platform

Platform with clamps for flasks.



**P-6/1000** BS-010135-DK platform

Platform with clamps for flasks.



PP-400 BS-010135-JK platform

Flat platform with non-slip silicone mat can accommodate various low profile containers.



UP-168 BS-010135-JK platform

Universal platform with clamps can accommodate flasks or bottles of different volume sizes. Clamps are not included with platform and need to be ordered separately.



**TR-44/15**BS-010135-LK rack

Adjustable angle test tube rack for UP-168



**TR-21/50**BS-010135-KK rack

Adjustable angle test tube rack for UP-168



**FC-50** BS-010126-MK clamp

Clamp 50 ml - Ø50 mm for UP-168



FC-100 BS-010126-HK clamp

Clamp 100 ml - Ø65 mm for UP-168



FC-250 BS-010126-JK clamp

Clamp 250 ml - Ø85 mm for UP-168



**FC-500** BS-010126-LK clamp

Clamp 500 ml - Ø105 mm for UP-168



**FC-1000** BS-010126-IK clamp

Clamp 1000 ml - Ø130 mm for UP-168

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