








Mixer Selection Guide

Features	Eppendorf ThermoMixer C	Eppendorf ThermoMixer F0.5	Eppendorf ThermoMixer F1.5	Eppendorf ThermoMixer F2.0	Eppendorf ThermoMixer FP	Eppendorf ThermoStat™ C	Eppendorf MixMate®	
								
Basic application	Heating / mixing / cooling	Heating / mixing	Heating / mixing	Heating / mixing	Heating / mixing	Heating / cooling	Mixing	
Temperature control range	min: 15 °C ^{*2} below RT, max: 100 °C	min: 4 °C above RT, max: 100 °C	min: 4 °C above RT, max: 100 °C	min: 4 °C above RT, max: 100 °C	min: 4 °C above RT, max: 100 °C	min: 30 °C ^{*2} below RT, max: 110 °C	–	
Lowest and highest settings	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	1 °C / 100 °C	-10 °C / 110 °C (110 °C can be set when using 12 mm and cryo)	–	
Maximum temperature accuracy	± 0.5 °C at 20–45 °C	± 0.5 °C at 20–45 °C	± 0.5 °C at 20–45 °C	± 0.5 °C at 20–45 °C	± 1 °C at 20–45 °C	± 0.5 °C at 20–45 °C	–	
Temperature homogeneity	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	Max. ± 0.5 °C at 20–45 °C (all SmartBlock positions)	–	
Maximum heating rate	7 °C / min	15 °C / min	11 °C / min	13 °C / min	18 °C / min	5.5 °C / min	–	
Maximum cooling rate	2.5 °C / min between 100 °C and RT	–	–	–	–	5 °C / min between 110 °C and RT	–	
Mixing frequency	300–3,000 rpm (depends on SmartBlock used)	300–2,000 rpm	300–1,500 rpm	300–1,500 rpm	300–2,000 rpm	–	300–3,000 rpm 3,500 rpm (vortexing)	
Mixing orbit in Ø (orbit)	3 mm	3 mm	3 mm	3 mm	3 mm	–	3 mm	
Timer	15 sec to 99:30 h, continuous	–	–	–	–	15 sec to 99:30 h, continuous	15 sec to 99:30 h, continous	
Accessories	> Exchangeable SmartBlocks (automatic block recognition) > ThermoTop with condens.protect® technology	> ThermoTop with condens.protect® technology	> ThermoTop with condens.protect® technology	> ThermoTop with condens.protect® technology	> ThermoTop with condens.protect® technology	> Exchangeable SmartBlocks (automatic block recognition) > ThermoTop with condens.protect® technology	> 5 tube holders (0.5mL, 1.5/ 2.0 mL, 96 well PCR, 5/ 15 mL, 25/ 50 mL)	
Programs	> 20 program slots available > 5 program keys (pre-defined, rewritable) > Programmable: up to 4 program levels	> 5 temperature keys (pre-defined at 37 °C, 42 °C, 56 °C, 95 °C and temp off)	> 5 temperature keys (pre-defined at 37 °C, 42 °C, 56 °C, 95 °C and temp off)	> 5 temperature keys (pre-defined at 37 °C, 42 °C, 56 °C, 95 °C and temp off)	> 5 temperature keys (pre-defined at 37 °C, 42 °C, 56 °C, 95 °C and temp off)	> 15 program slots available > 5 temperature keys pre-defined at 4 °C, 16 °C, 37 °C, 56 °C and 95 °C) > Programmable: up to 4 program levels	> 5 softkeys (pre-defined, most common mixing parameters)	
Additional functions	> ^{2D} Mix-Control > Anti-spill technology > Short Mix > Interval Mix > Time/temp mode > Pause function > USB interface* ¹	> ^{2D} Mix-Control > Anti-spill technology > USB interface* ¹ > Short Mix	> ^{2D} Mix-Control > Anti-spill technology > USB interface* ¹ > Short Mix	> ^{2D} Mix-Control > Anti-spill technology > USB interface* ¹ > Short Mix	> ^{2D} Mix-Control > Anti-spill technology > USB interface* ¹ > Short Mix	> ^{2D} Mix-Control > Anti-spill technology > USB interface* ¹ > Short Mix	> Pause function > USB interface* ¹ > Time/temp mode	> ^{2D} Mix-Control > Anti-spill technology > Touch vortexing
Mains/power connection	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz	100 V–130 V ±10 %, 50 Hz–60 Hz 220 V–240 V ±10 %, 50 Hz–60 Hz
Output	200 W (max.)	200 W (max.)	200 W (max.)	200 W (max.)	200 W (max.)	200 W (max.)	40 W (max.)	
	20.6 × 30.4 × 13.6 cm	20.6 × 30.4 × 16.3 cm	20.6 × 30.4 × 17.0 cm	20.6 × 30.4 × 17.0 cm	20.6 × 30.4 × 16.4 cm	20.6 × 30.4 × 13.1 cm	17.0 × 23.0 × 13.0 cm	
Weight	6.3 kg	6.2 kg	6.3 kg	6.3 kg	6.1 kg	4.3 kg	4.2 kg	

*¹ Only for Eppendorf Service

*² ± 2 °C

Technical specifications subject to change.