BRUSHLESS ELECTRIC MOTOR SYSTEM · EMC-900

EMC-900

A compact brushless electric motor and control unit that connects to your existing handpiece tubing. Drive E-type contra-angles and straights from 100 to 200,000 rpm with four memory presets and an adjustable LED.

EC1 control unit shown



2K–40K rpm
Motor speed range, forward and reverse

3.5 N·cm
Maximum torque

4 presets
M1–M4 memories for speed, ratio and light

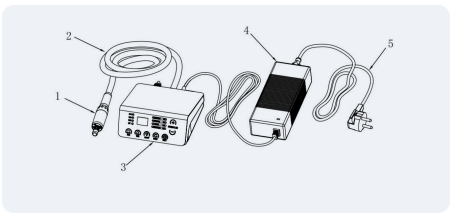
1 year
Limited warranty



One-touch control panel. Speed display, ratio indicators, memory and light keys.



Simple hook-up. Power, motor cord and handpiece tubing connect at the rear.



Complete system. Motor, tubing, control unit, adapter and cord.

TPC Advanced Technology
851 S. Lawson St., City of Industry, CA 91748

tpcdental.com
Tel (800) 560-8222 · Fax (626) 810-4245

Specifications

TPC

01 STANDARD FEATURES

- Brushless EM1 motor, 2,000–40,000 rpm
- Four memory presets (M1–M4) with one-touch recall
- Motor LED with 5 brightness levels
- Air-pressure protection prevents overheating
- Gear ratio selection: 20:1, 16:1, 1:1 and 1:5
- Forward and reverse with REV key
- Connects to ISO 9168 Type B or C handpiece tubing
- Fault codes E1–E4 for quick troubleshooting

02 GEAR RATIO AND SPEED

Gear ratio	Display	Handpiece speed	Each step
20:1 reduction	1–20	100–2,000 rpm	100 rpm
16:1 reduction	1–25	100–2,500 rpm	100 rpm
1:1 direct	2–40	2,000–40,000 rpm	1,000 rpm
1:5 increase	1–20	10,000–200,000 rpm	10,000 rpm

03 SPECIFICATIONS

Motor	**EM1 brushless, Ø21.7 × 70.5 mm**
Speed	**2,000–40,000 rpm**
Torque	**3.5 N·cm max**
Control unit	**EC1, 135 × 135 × 67 mm**
Supply	**32 V DC adapter, 100–240 V AC**
Air pressure	**0.2–0.6 MPa**
Spray water	**65–85 mL/min at 0.2 MPa**
Cooling air	**6–8 NL/min at 0.2 MPa**
Electrical	**Class II, Type B applied part**
Warranty	**1-year limited**

04 PACKAGE INCLUDES

203200	EM1 electric motor
203201	Tubing assembly
203202	EC1 control unit
203204	Power adapter, 32 V DC
203205	Power cord
315026	Tubing handle

05 REPLACEMENT PART

315020	Motor O-ring, black

06 OPTIONAL ATTACHMENTS

1:5 Friction Grip Attachment — EMA-150FG

- Push-button auto chuck
- Speed up to 200,000 rpm
- E-type connection to the electric motor
- Quattro water spray
- Max 32,000 lux light

1:1 Contra Angle Attachment — EMA-110CA

- 1:1 direct drive, 2,000–40,000 rpm
- E-type connection to the electric motor

Uses your existing air and water. The EMC-900 plugs into 4-hole Midwest or ISO handpiece tubing on any delivery unit; supply dry, oil-free air at 0.2–0.6 MPa. Other E-type handpieces are sold separately.