



ENCODE CONTROL	1	2	3	4	5	6
LEAD COLOR	BLK	RED	BLU/ WHT	BLU	ORG/ WHT	ORG
DESCRIPTION	GND	VCC	EA-	EA+	EB-	EB+

FULL STEP 2 PHASE-EX. WHEN FACING MOUNTING END (X)

STEP	A+	B+	A-	B-	CCW	CW
1	+	+	-	-	←	→
2	-	+	+	-	←	→
3	-	-	+	+	←	→
4	+	-	-	+	←	→

WINDING		CONNECTION	
		BIPOLAR	
PIN NO	BIPOLAR	LEADS	
1	A+	BLK	
2	A-	GRN	
3	B+	RED	
4	B-	BLU	
SPECIFICATION		CONNECTION	
AMPS/PHASE		4.00	
RESISTANCE/PHASE(Ohms)@25°C		0.45±10%	
INDUCTANCE/PHASE(mH)@1KHz		1.40±20%	
HOLDING TORQUE(Nm)[lb-in]		1.20 [10.63]	
STEP ANGLE(°)		1.80	
STEP ACCURACY(NON-ACCUM)		±5.00%	
ROTOR INERTIA(g-cm²)		280	
IP RATING		IP65	
AMBIENT TEMPERATURE		-10°C~50°C[14°F~122°F]	
INSULATION CLASS		B 130°C[266°F]	
TEMPERATURE RISE		MAX.80°C	

UNIT mm
GB/T 1804-M EQV. ISO
2768-1 CLASS M:
≤6 ±0.1
>6~30 ±0.2
>30~120 ±0.3
>120~400 ±0.5



OSMTEC®

Stepper Motor Specialists

mm	
UNITS	2:3
SCALE	

DRN	LDJ	1.13.2026
APVD	ZPJ	1.19.2026
SIGNATURE		
DATE		

STEPPER MOTOR
23E1KIP65-12