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MOTOR SPECIFICATION (TENTATIVE)

MOTOR MODEL Y07-43D4-5065D

CUSTOMER MODEL

1. SCOPE

THIS SPECIFICATION COVERS THE GENERAL REQUIREMENTS FOR THE STEP MOTOR Y07-43D4-5065D THAT CONSISTS OF BIPOLAR WINDING STATOR AND HYBRID MAGNET ROTOR

2. ELECTRICAL CHARACTERISTICS

ITEM	SPECIFICATION	DESCRIPTION
DUTY	CONTINUOUS	
DRIVE VOLTAGE	24 V D.C	
RATED CURRENT	1.0 A (PHASE)	
STEP ANGLE	1.8°(DEG) FULL STEP	
NUMBER OF PHASE	2PHASE BIPOLAR 2PHASE EXCITING	
INSULATION CLASS(UL)	CLASS B (COIL)	
WINDING RESISTANCE	1.8Ω±15%	25°C
WINDING INDUCTANCE	4.0mH±20%	NOTE)1
HOLDING TORQUE	0.54N·m(5.4kgf·cm) MIN.	NOTE)2
DETENT TORQUE	30mN·m(300gf·cm) REF.	
MAX STARTING PULSE RATE	800PPS MIN.	NOTE)3
POSITIONAL ACCURACY	±0.09°(DEG) MAX.	NOTE)4
DIELECTRIC STRENGTH	500V A.C 1MINUTE NO ABNORMAL	NOTE)5
INSULATION RESISTANCE	100 MΩ MIN.	NOTE)6
TEMPERATURE RISE	80 K (80 DEG) MAX.	NOTE)7

3. MECHANICAL CHARACTERISTICS

ITEM	SPECIFICATION	DESCRIPTION
MECHANICAL DEMENSION	ACCORDING TO SPECIFICATION Y-21-0816-1(PAGE3/3)	
SHAFT MATERIAL	SUS303	
BEARING	SINGLE ROW BALL BEARING	
END BELL MATERIAL	ALUMINUM ALLOY	
MASS	APPROXIMATELY 380g	
ROTOR INERTIA	66g·cm ² (66×10 ⁻³ g·cm·s ²) APPROXIMATELY 66g·cm ² (66×10 ⁻³ g·cm·s ²)	

4. ADDITIONAL

ITEM	SPECIFICATION	DESCRIPTION
DIRECTION OF ROTATION	PHASE SEQUENCE TO PRODUCE CLOCKWISE ROTATION VIEWED FROM MOUNTING END IS AS TABLE 1	
TYPE OF LEAD WIRE	-----	
COLOR OF LEAD WIRE	ACCORDING TO TABLE 2	
LIFE	20000 HOURS MIN.	NOTE)8
MATERIALS OF MOTOR CONTAIN TEN SUBSTANCES Pb Cr(VI+) Cd Hg PBB PBDE DEHP BBP DBP AND DIBP THOSE CONTENTS COMPLY WITH THE RoHS INSTRUCTION.		

ITEM	SPECIFICATION	DESCRIPTION
OPERATION AMBIENT TEMPERATURE	0°C~+50°C	
OPERATION AMBIENT HUMIDITY	20%RH ~ 90%RH	NOTE)9
STORAGE AMBIENT TEMPERATURE	0°C~+50°C	
STORAGE AMBIENT HUMIDITY	15%RH ~ 95%RH	NOTE)9

CAUTION AND RECOMMENDATION

PLEASE DON'T HOLD MOTOR BY LEAD WIRES NO OUTSIDE FORCE ON THE EXIT OF LEAD WIRES


PLEASE DON'T PLUG OR UNPLUG THE MOTOR CONNECTOR WHILE POWER ON

PLEASE DON'T DROP HURL AND DUMP MOTOR AGAINST HARD MATERIAL MALFUNCTION MAY NOT BE OBSERVED AT EARLY STAGE AFTER SUCH SHOCK BUT IT MAY BE FOUND LATER THIS TYPE OF MISHANDLING VOIDS OUR WARRANTY

THE FUNCTION OR PERFORMANCE SHALL BE EVALUATED BY INSTALLING MOTOR TO APPLICATION THAT SHOULD BE CHECKED AT BUYER'S SIDE

PLEASE DON'T REUSE DISASSEMBLED MOTOR

OUR CORPORATION WILL NOT BE RESPONSIBLE FOR ANY PATENT DISPUTE OR PROBLEM CAUSED BY ACTUAL APPLICATIONS


MATERIAL	----								Y07-43D4-5065D
FINISH	----	—	21-8-16	----	00 First version	Huang Youli			
		SYM	DATE	REVISION NO.	REVISIONS	BY			NOTE
DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	FREE	TITLE	MOTR SPECIFICATION	THIRD ANGLI PROJECTION	
Dongguan Kaifull 21-8-16 Huang Youli	Dongguan Kaifull 21-8-16 Huang Youli					DWG.NO.	Y-21-0816-1		
							SHEET	1/3	

1.	MEASURED AT 1kHz 1Vrms
2.	MEASURED AT RATED CURRENT AND 2PHASE EXCITING
3.	MEASURED AT NO LOAD
4.	EXCLUDING HYSTERESIS 2PHASE EXCITING
5.	THERE SHOULD BE NO BREAK DOWN AT 50Hz&60Hz APPLIED FOR 1MINUTE BETWEEN MOTOR FRAME AND LEAD WIRES AND THE CUT OFF CURRENT IS 3mA MAX.
6.	APPLY 500V D.C BETWEEN MOTOR FRAME AND LEAD WIRES
7.	WITH TEST CIRCUIT OF FIG.1 MEASURED BY RESISTANCE METHOD WHEN MOTOR IS OPERATED AT 2PHASE EXCITING 2.0A/PHASE(PEAK)800PPS NO LOAD WITH ALUMINIUM HEAT SINK160×160×16
8.	WITH TEST CIRCUIT OF FIG.1 2PHASE EXCITING I=2.0A/PHASE(PEAK) AT 800PPS BEARING TEMPERATURE MUST BE 80°C MAX. TO DO LIFE TEST AFTER LIFE TEST IT SHOULD CONFORMS THE ELECTRICAL SPECIFICATION UNDER OPERATION AMBIENT
9.	NO CONDENSATION

STEP	A	B	\bar{A}	\bar{B}
1	+	+	-	-
2	-	+	+	-
3	-	-	+	+
4	+	-	-	+
5	+	+	-	-

PHASE	A	B	\overline{A}	\overline{B}
COLOR	BROWN	ORANGE	RED	YELLOW

Y2SD1R5

MATERIAL	----							Y07-43D4-5065D	
FINISH	----		--	21-8-16	----	00 First version	Huang Youli		
			SYM	DATE	REVISION NO.	REVISIONS		BY	NOTE
DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	FREE	TITLE	MOTR SPECIFICATION		THIRD ANGLI PROJECTION
Dongguan Kaifuall 21-8-16 Huang Youli	Dongguan Kaifuall 21-8-16 Huang Youli					DWG.NO.	Y-21-0816-1		
							SHEET	2/3	

Technical drawing of a transformer component, showing front, side, and detail views, along with a table of lead wire colors and a table of dimensions.

TABLE 2: COLOR OF LEAD WIRES

WIRE	COLOR
A+	BROWN
A-	ORANGE
B+	RED
B-	YELLOW

TABLE 3: DIMENSIONS

ITEM	1	2	3	4	5	6	7
PIN NUMBER	1	2	3	4	5	6	7
LEAD COLOR	BROWN	-	ORANGE	RED	-	YELLOW	-

Front View: Shows a square component with a central circular feature. Dimensions include 42 (width), 31±0.2 (inner width), 31±0.2 (inner height), 42 (outer height), 19 (bottom width), and 6.7 (bottom height). Four mounting holes are indicated by stars.

Side View: Shows the component's profile. Dimensions include 20±0.5 (top width), 49.5±0.8 (main body width), 15±1 (right width), 14±0.2 (right height), 15±0.2 (inner width), 2 (inner height), 10 (bottom width), 2-φ5-0.013 (bottom holes), and 2-φ22-0.03 (top hole).

Detail View: Shows a close-up of the bottom mounting holes. Dimensions include 4-M3*0.5 (hole size) and Depth 4.5min (hole depth).

Table 1: Tolerances

TOLERANCES (EXCEPT AS NOTED)	±0.3
MATERIAL	---
FINISH	---

Table 2: PORTIONS MARKED BY ★ ARE USED BY CUSTOMER (MOUNTING • POWER TRANSMISSION • POWER SUPPLY)


SYMBOL	DATE	REVISION NO.	REVISIONS	BY	NOTE
---	21-8-16	---	00 First version	Huang Youli	Y07-43D4-5065D

Table 3: DRAWN, DESIGNED, CHECKED, SCALE, TITLE, MOTR SPECIFICATION, THIRD ANGLE PROJECTION

DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	TITLE	MOTR SPECIFICATION	THIRD ANGLE PROJECTION
Dongguan Kaifull 21-8-16 Huang Youli	Dongguan Kaifull 21-8-16 Huang Youli			2:1	DWGNO.	Y-21-0816-1	

Table 4: SHEET

SHEET	3/3

TOLERANCES (EXCEPT AS NOTES)		±0.3		PORTIONS MARKED BY ★ ARE USED BY CUSTOMER(MOUNTING • POWER TRANSMISSION • POWER SUPPLY)					
MATERIAL	----							Y07-43D4-5065D	
FINISH	----		--	21-8-16	----	00 First version	Huang Youli		
			SYM	DATE	REVISION NO.	REVISIONS	BY	NOTE	
DRAWN	DESIGNED	CHECKED	CHECKED	SCALE	2:1	TITLE	MOTR SPECIFICATION	THIRD ANGLI PROJECTION	
Dongguan Kaifull 21-8-16 Huang Youli	Dongguan Kaifull 21-8-16 Huang Youli					DWG.NO.	Y-21-0816-1		
							SHEET	3/3	