

Customer: \_\_\_\_\_

No. KX-97-1789

Attention: \_\_\_\_\_

Date: Feb. 18, 1997

Your ref. No: \_\_\_\_\_

Your Part. No: 29 0024

## SPECIFICATIONS

ALPS: \_\_\_\_\_

MODEL . 29 0024 \_\_\_\_\_

Spec. No. : \_\_\_\_\_

Sample No. : W1011785M

RECEIPT STATUS

RECEIVED

By. Date \_\_\_\_\_

Signature \_\_\_\_\_

Name

Title

ALPS. ELECTRIC CO., LTD.

HEAD OFFICE  
1-7, YUKIGAYA-OHTSUKA-CHO,  
OHTA-KU, TOKYO 145 JAPAN

DSG'D H. Kimura

APP'D Y. Ohya

ENG. DEPT. DIVISION

Sales

**SPECIFICATIONS**

**No. KX-97-1799**

1. THIS SPECIFICATIONS APPLY TO R809K130 POTENTIOMETERS.

2. CONTENTS OF THIS SPECIFICATIONS.

W101768A  
K09100ZAG

3. MARKING

-MARKING ON ALL UNITS  
DATE CODE, RESIST. VALUE, TAPER

4. REMARKS

• NOTES

-METHOD OF MARKING

TO BE STAMPED WITH BLACK INK OR LASER MARKING  
This unit uses polycarbonate. To be careful for using this unit in such violent  
gas atmosphere condition as ammonia, amine, alkaline aqueous solution, aromatic  
hydrocarbon, keton, ester, alkyl hydrocarbon, etc.

# SPECIFICATIONS

## ELECTRICAL

1. Total resistance : 100kΩ ±20%
2. Rated power : 0.05 W
3. Rated voltage :  
 The rated voltage shall be the voltage of D. C. or A. C. (commercial frequency, effective value) corresponding to the rated power (dissipation), and be obtained from the following formula. When the obtained rated voltage exceeds the maximum working voltage given in the following, however, the maximum working voltage of the following shall be the rated voltage.  

$$E = \sqrt{P \cdot R} \text{ (V)}$$
 Where E : Rated voltage (V)  
 P : Rated power (dissipation) (W)  
 R : Nominal total resistance (Ω)  
 Maximum working voltage : 50 V A. C. , 20 V D. C.
4. Residual resistance between terminals  
 between term. 1&2, term. 2&3 : 300Ω max.
5. Sliding noise : Less than 100 mV measured by method of JIS C 6443.
6. Insulation resistance : Greater than 100 MΩ measured by D. C. 250V.
7. Withstand voltage: More than 1 minute with an application of A. C. 250 V.
8. Taper : B

## MECHANICAL


1. Overall rotational angle : 280° ±5°
2. Operation torque : 10~80 gf·cm
3. Shaft end stop strength : 3 Kgf·cm MIN.
4. Starting torque : 100 gf·cm MAX.
5. Resistance to soldering heat :  
 After soldering (less than 300°C and quicker than 3 seconds) there shall be no evidence of poor contact between resistance element and terminals, or any physical damages as a result of the test.
6. Play of shaft :  
 The resistor shall be mounted by soldering the mounting leads on the panel, and a side thrust of 250 gf·cm at the end of the shaft shall be applied, then the total play of the shaft shall not exceed 0.5 × L / 20 mm e-p.
7. Eccentricity of shaft :  
 The eccentricity of the root of shaft shall not exceed 0.35mm against the center of the mounting position.
8. Robustness of shaft against end thrust :  
 The shaft shall withstand against end thrust of not less than 5 Kgf for 3 seconds.
9. Robustness of shaft against side thrust :  
 The shaft shall withstand against side thrust of not less than 4 Kgf·cm for 3 seconds on the end of the shaft at right angles to the axis of the shaft after mounting the resistor by soldering.

## ENDURANCE

1. Rotational life : 5,000 cycles min.

## NOTE

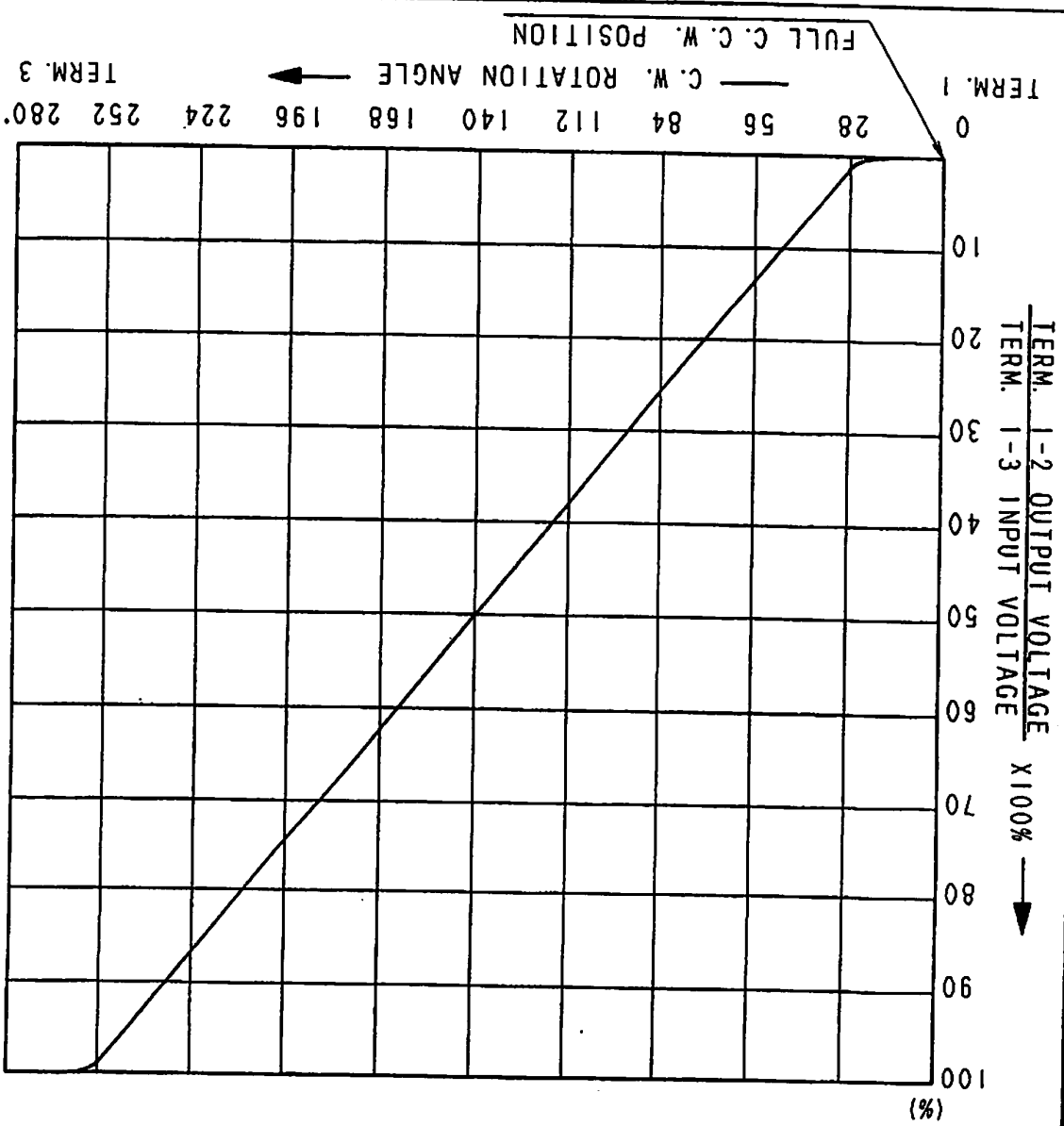
1. The items except above mentioned items shall meet or exceed JIS C 6443.
2. Operating temperature : -10°C ~ +60°C. 3. Storage temperature : -30°C ~ +70°C.

 <b>ALPS ELECTRIC CO., LTD.</b>				
		APPD.	CHKD.	DSGD.
		Sep. 13. '96	Sep. 13. '96	Sep. 13. '96
		S. Aizawa	M. Saloh	Y. Saitoh
SYMB	DATE	APPD	CHKD	DSGD
				DOCUMENT NO. W1011765M

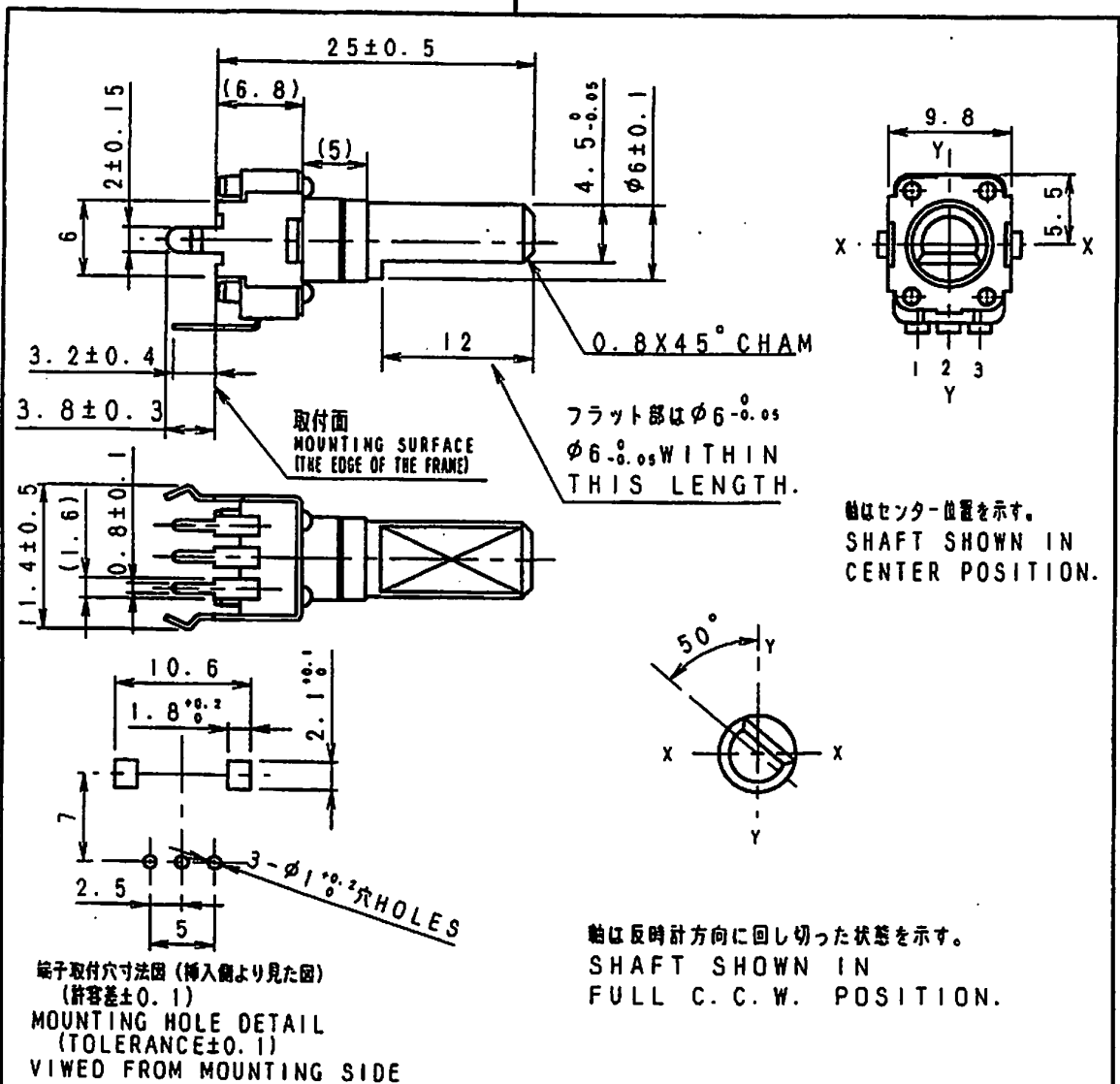
KX09

SYMB	DATE	APPD	CHKD	OSGD	APPO.	CHKO.	DSGD.	NAME	RESISTANCE TAPER (B)	DOCUMENT NO.
					Jan. 13, '93	Jan. 13, '93	Jan. 13, '93	K. Hasegami		W1011765M
					Jan. 13, '93	Jan. 13, '93	Jan. 13, '93	K. Sasaki		
								K. Suzuki		

AT 140° C. W. SHAFT ROTATION FROM FULL C. C. W. POSITION VOLTAGE PERCENT SHALL FALL WITHIN THE LIMITS OF 40~60 PERCENT.



ALPS ELECTRIC CO., LTD  
 1-7 YUKIGAYA OTSUKA-CHO OTA-KU TOKYO JAPAN



端子取付穴寸法図 (挿入側より見た図)  
(許容差±0.1)  
MOUNTING HOLE DETAIL  
(TOLERANCE±0.1)  
VIEWED FROM MOUNTING SIDE

製品重量: 1.8 g  
NET WEIGHT

指定なき部分の許容差 TOLERANCES UNLESS OTHERWISE SPEC	
$L \leq 10$	±0.3
$10 < L \leq 100$	±0.5
$100 \leq L$	±0.8
角度 ANGULAR DIMENSION	±5'

				SHAFT COLOR : BLACK (B)			
PART NO.		NAME		MATERIAL NAME / CODE		FINISH	
<b>ALPS ELECTRIC CO., LTD.</b>							
DSGD. I-28H18				SCALE		TITLE	
Y. Saitoh 96-09-13				2 : 1		W1011765M	
CHKD.				UNIT		DOCUMENT NO.	
Y. Satoh 96-09-13							
APPD.				UNIT		DOCUMENT NO.	
SYMB DATE APPD CHKD DSGD				S. Aizawa 96-09-13		F18	
				K091C0Z4G			