

APPROVAL SHEET

承認書編號:

SHEET NO: NDE1117081701A

客 戶

CUSTOMER

品 名

PARTNAME

E1171S-DAK3-2020-K01

規 格

DESCRIPTION

客 戶 料 號

CUSTOMER' S PART NO.

日 期

DATE

2017-8-17

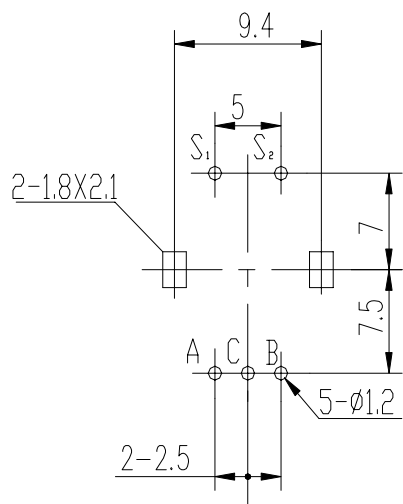
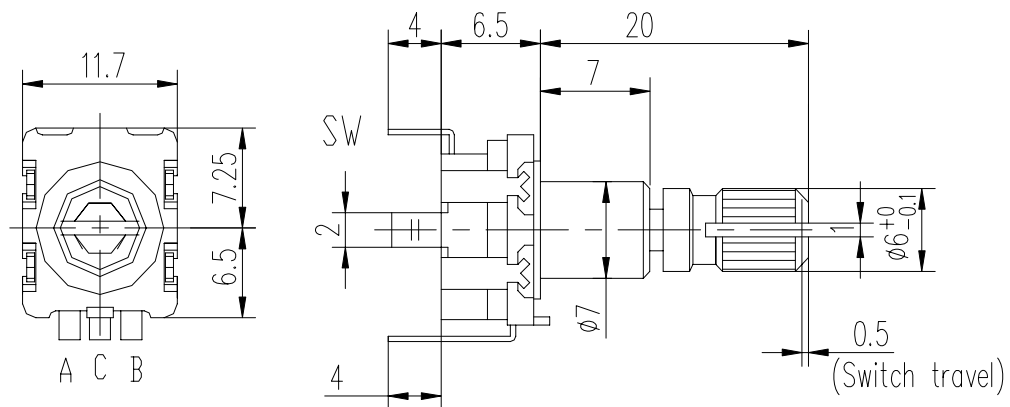
客戶承認


Customer Approved by

供應商經辦

Supplier Handle by

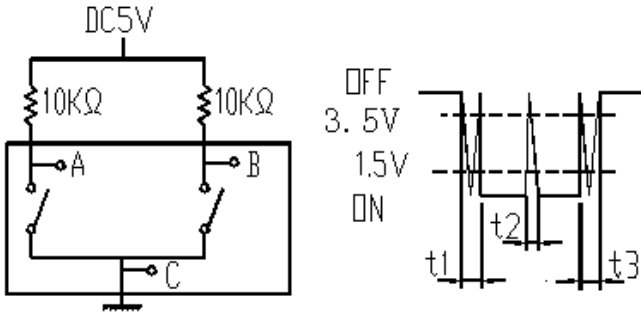
* 承認後請回簽一份 Please sign back after approval. THANKS!



			<div>Projected view </div> <div>机种 E1171S</div>		
MO.	DESCRIPTION	DATE	TOL UNLESS OTHERWISE STATED		
DRAWN BY	CHECKED BY	APPROVED BY	<div>Less than 10 ± 0.3</div> <div>above 10~30 ± 0.5</div> <div>above 30~100 ± 1</div> <div>above $\pm 5^\circ$</div>		
			品名 E1171S-DAK3-2020-K01		图号

WI-QE-012/2011.11.16

1. General Characteristics			1. 一般特性		
1.1 Shape and dimensions In accordance with the outline and dimension drawing.			1.1 形状尺寸 见附图		
1.2 Operating temperature range -10℃~+75℃			1.2 使用温度范围 -10℃~+75℃		
1.3 Conserving temperature range -20℃~+85℃			1.3 保存温度范围 -20℃~+85℃		
1.4 Test conditions Ordinary temperature (5~35℃) Ordinary humidity (45~85℃) Ordinary atmospheric pressure (86~106kPa)			1.4 测试条件 常温 (温度 5~35℃) 常湿 (湿度 45~85%) 常压 (气压 86~106kPa)		
2. Mechanical Characteristics			2. 机械特性		
	Item 项目		Measuring condition 测试条件		Specifications 规格
Rotation operation (Encoder block) 回转操作	2.1	Total rotation angle 全回转角度	Angle of effective rotation 有效回转角度		360°
	2.2	Encoder rotation torque 回转力矩	Measure the slip-off torque of the detent. 测试脱离定位点时的力矩		30~200gf.cm
	2.3	Each detent angle 每定位角度	Rotation angle per detent 每定位旋转角度		18°±3°(20detent points) (20 个定位点)
	2.4	Switch circuit and number of pulse 开关电路、接点数			Single pole and single throw 单极单掷（推“通”）
	2.5	Operating force of switch 开关按压动作力			300~900gf
	2.6	Push-pull strength 轴推拉强度			≥8kgf
3. Encoder electrical characteristic s			3. 电气特性		
Item 项目		Measuring condition 测试条件		Specifications 规格	
3.1	Rating 额定值	Rating of voltage and current between COM and A (COM and B). C端和A端 (C 端和B端)间额定电压和电流		D.C5V 10mA	
3.2	Output signal 输出信号	Rotate the knob at a speed of 60r/min, to CW and CCW. 以 60r/min 的速度正、反向分别旋转		A.B.2signals.(different phase) A.B 2 个(不同脉冲)	
3.3	Phase difference 相位差	The shaft shall be rotated at a constant speed (for those not having detents). 以一稳定速度旋转轴（不带定位时） A: A-C 端之间 <div><div>ON OFF ON OFF</div><div></div></div> B: B-C 端之		T1,T3≥3.5ms	

Item 项目		Measuring condition 测试条件	Specifications 规格
3.4	Output resolution 分解能力	Count number of pulses/round. 计算每周脉冲数	20 pulses/360° 20 脉冲/360°
3.5	Contact resistance between terminals 端阻	Measure the contact resistance between COM and A.COM and B. 测试C和A、C和B 之间的接触电阻。 Instrument: 1kHz 20mV 5~50mA Micro current contact. 仪器：1kHz 20mV 5~50mA 微电流接触。	1Ωmax
3.6	Chattering 滑动噪声	Measurement shall be done under the measuring circuit in Fig by rotating the shaft at a speed of 360° per second. Chattering is specified by the signal's passage time from 3.5 to 1.5V or from 1.5 to 3.5 V of each switching position(code OFF→ON or ON→OFF)  按照如图的测试电路测试，以 360°/秒的速度转动转轴。	$t_1, t_3 \leq 3\text{ms}$
3.7	Insulation resistance 绝缘电阻	Measure to Apply D.C300V. (Between terminal for reinforcing and the other terminals) D.C300V 测试（在塑胶与接线端之间）	100MΩ min.
3.8	Withstand voltage 耐电压	Apply A.C300V for 1min. (Between terminal for reinforcing and the other terminals) A. C300V1 分钟（在塑胶与接线端之间）	No damage. Arc and dielectric breakdown. 无损伤、电弧和电故障
3.9	Switch rating 开关功率	Resistance load 电阻负荷	D.C12V50mA
3.10	Contact resistance 开关接触电阻	Voltage step-down test at D.C5V 10mA 在 D.C5V 10mA 下测定	200mΩ max 小于 200mΩ
4. Endurance		4. 耐久特性	

Item 项目		Measuring condition 测试条件	Specifications 规格
4.1	Heat resistance 耐热特性	Temperature $85 \pm 3^{\circ}\text{C}$ Time 240 ± 10 hours After that , leave in ordinary temp and humidity for 1.5 hour. Then measure. 温度 $85 \pm 3^{\circ}\text{C}$ 时间 240 ± 10 小时 然后放置在常温和湿度下 1.5 小时再测试。	Item 2.2 3.2 3.3 3.6 The same as the initial spec. 同初始规格 Item 3.5 : 100Ω max
4.2	Moisture resistance 耐湿特性	Temperature $40 \pm 2^{\circ}\text{C}$ Humidity 90~95%Rh Time 240 ± 10 hours After that , leave in ordinary temp and humidity for 1.5 hour. Then measure. 温度 $40 \pm 2^{\circ}\text{C}$ 湿度 90~95%Rh 时间 240 ± 10 小时 然后放置在常温和湿度下 1.5 小时再测试。	The same as above. 同上
4.3	Low temperature resistance 耐寒特性	Temperature $-40 \pm 3^{\circ}\text{C}$ Time 240 ± 10 hours After that , leave in ordinary temp and humidity for 1.5 hour. Then measure. 温度 $-40 \pm 3^{\circ}\text{C}$ 时间 240 ± 10 小时 然后放置在常温和湿度下 1.5 小时再测试。	The same as above. 同上
4.4	Encoder rotation life 旋转寿命	The shaft of encoder shall be rotated to 30,000 cycles at a speed of 600-1000/h without electrical load, after which measurements shall be made. 在无负荷条件下轴以 600-1000/h 速度旋转 30,000 周。	振荡: $T1, T3 \geq 3.5\text{mS}$ 卡点出脱力矩减少: 10% ~ 30% Chattering $T1, T3 \geq$ 3.5mS Decent torque: -10% ~ 30%
4.5	Switch life 开关寿命	Push-pull 按压轴	50,000cycles 50,000 次

设计:	审核:	批准
		日期: