



# 承 认 书

## SPECIFICATION

文件编号: DGKD/JS-MT-004

版 次: A/3

CUSTOMER NAME 客户名称: \_\_\_\_\_

CUSTOMER PARTS 客户编号: \_\_\_\_\_ YF7672

DESCRIPTION 产品系列: \_\_\_\_\_ MULTI FUNCTION SWITCH

KWAN DA MODEL NO 型号: \_\_\_\_\_ MT-008A TR

KWAN DA PARTS NO 料号: \_\_\_\_\_ 40126008A002G

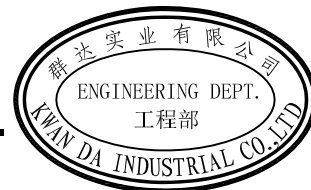
CUSTOMER MODEL NO 客户型号: \_\_\_\_\_

CUSTOMER PARTS NO 客户料号: \_\_\_\_\_

CUSTOMER APPROVED 客户承认	
<input type="checkbox"/> APPROVED 接受	<input type="checkbox"/> REJECTED 不接受
CHECKED BY 审核:	APPROVED BY 承认:
DATE 日期:	DATE 日期:

DRAWN BY 制 訂	CHECKED BY 核 對	APPROVED BY 審 批	DESIGN DEPARTMENT 設計單位	RoHS PRODUCT RoHS 產品
溫浩浩	張桂成	周丽琼		
DATE: 2020-08-31	DATE: 2020-08-31	DATE: 2020-08-31		

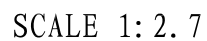
群達實業有限公司  
KWAN DA INDUSTRIAL CO., LTD.



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KD

KWAN DA INDUSTRIAL CO., LTD.

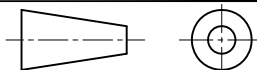
TITLE : MULTI FUNCTION SWITCH

MODEL : MT-008A (W01004)

UNIT : MM	DWN.	温浩浩	DATE	2020-08-31
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SCALE : 6 : 1	CHK'D	张柱成	DATE	2020-08-31
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VERSION	01	APPD.	周丽琼	DATE	2020-08-31
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TOLERANCE

 $\pm 0.3$ 


ANGLE TOL

 $\pm 2^\circ$ 

6	CONTACT	SUS	10	Ag CLAD
5	TERMINAL	PBS STRIP t=0.15mm	6	Ag PLATED
4	COVER	SUS t=0.15mm	1	NATURE
3	CASE	LCP	1	BLACK
2	SLIDER	LCP	1	BLACK
1	KNOB	LCP	1	BLACK
NO.	PART NAME	MATERIAL	QTY.	FINISHING

		SPECIFICATION		KWAN DA INDUSTRIAL CO.,LTD.	
		承認書		群 达 实 业 有 限 公 司	
文件編號	DGKD/JS-MT-004	版 本	A / 3	頁 碼	共 3 頁, 第 1 頁
DESCRIPTION	產品系列: MULTI FUNCTION SWITCH			DRAWN BY	制訂: 溫 浩 浩
MODEL NO	產品型號: MT-008A			CHECKED BY	核對: 張 柱 成
1. RATING	額定值: 50mA 12V DC			APPROVED BY	審批: 周 麗 琼
2. ELECTRICAL CHARACTERISTICS 電氣性能規格:					
ITEM 項目		TEST CONDITIONS 測試條件		PERFORMANCE 性能	
2.1	CONTACT RESISTANCE 接觸電阻	MEASURED AT SMALL CURRENT (10 mA OR LESS) 1000HZ 在微小電流 (10 mA) 以下測試		100mΩ MAX. 100 毫歐以下。	
2.2	INSULATION RESISTANCE 絕緣電阻	APPLY A VOLTAGE OF 100V DC SHALL BE APPLIED FOR 1 MIN AFTER WHICH MEASUREMENT BE MADE: (1) BETWEEN CONDUCTORS NOT TO BE CONTACT (2) BETWEEN INDIVIDUAL TERMINALS AND FRAME 輸入 100V DC 電壓 1 分鐘, 按以下接觸方法測試: (1) 不接觸的插腳之間 (2) 插腳與外殼之間		100MΩ MIN. 100 兆歐以上。	
2.3	DIELECTRIC STRENGTH 耐電壓	AC 100V rms (50-60HZ) FOR 1 MIN TRIP CURRENT: (1) BETWEEN CONDUCTORS NOT TO BE CONTACT. (2) BETWEEN INDIVIDUAL TERMINLS AND FRAME 輸入 AC 100V (50-60HZ) 電壓, 1 分鐘; 按以下接觸方法測試: (1) 不接觸的插腳之間 (2) 插腳與外殼之間		WITHOUT DAMAGE TO PARTS ARCING OR BREAKDOWN ETC. 沒有絕緣破壞等異常。	
3. MECHANICAL CHARACTERISTICS 機械性能規格:					
ITEM 項目		TEST CONDITIONS 測試條件		PERFORMANCE 性能	
3.1	OPERATING FORCE 作動力	PLACING THE SWITHCH SUCH THAT THE DIRECTION OF SWITCH OPERATION IS VERTICAL, AND THEN GRADUALLY INCREASING THE LOAD APPLIED TO THE CENTER OF THE KNOB. THE MAXIMUM LOAD FOR THE KNOB TO COME TO A STOP SHALLL BE MEASURED. 開關垂直於操作方向放置, 在膠頭中心逐漸施力, 測量開關導通所需的最大力度。		CENTRAL: 130±50gf 4-DIRECTIONAL: 240±50gf	
3.2	TERMINAL STRENGTH 端子強度	A STATIC LOAD OF 500gf SHALL BE APPLIED TO THE TERMINAL FOR 15 SEC. IN ANY DIRECTION . 在插腳前端任意一個方向加 500gf 力度測試, 時間為 15 秒。		ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED WITHOUT DAMAGE OR EXCESSIVE LOOSENESS OF TERMINALS. 在插腳中沒有裂開、鬆動異常, 滿足於機械、電器性能。	
3.3	PRACTICAL TEMPERATURE RANGE 使用溫度範圍	-10℃ ~ +60℃ 在-10℃ ~ +60℃ 溫度內使用			

<div><div></div><div>SPECIFICATION</div><div>承認書</div></div>		<div>KWAN DA INDUSTRIAL CO.,LTD.</div> <div>群达实业有限公司</div>																
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ITEM 項目		TEST CONDITIONS 測試條件				PERFORMANCE 性能												
3.4		STANDARD ATMOSPHERIC CONDITIONS 測試標準狀態				UNLESS OTHERWISE SPECIFIED, THE STANDARD RANGE OF ATMOSPHERIC CONDITIONS FOR MAKING MEASUREMENTS AND TESTS ARE AS FOLLOWS : (1) AMBIENT TEMPERATURE : 5°C TO 35°C (2) RELATIVE HUMIDITY: 45% TO 85% (3) AIR PRESSURE: 86Kpa TO 106Kpa 在沒有指定的情況下測試溫度、濕度、氣壓如下： (1) 溫度為 5~35°C (2) 濕度為 45%~85% (3) 氣壓為 86Kpa~106Kpa												
4・ENDURANCE CHARACTERISTICS (耐久性)：																		
ITEM 項目		ITEM 項目				ITEM 項目												
4.1		MECHANICAL-LIFE TEST 機械壽命				SWITCH SHALL BE SUBJECTED TO 200, 000 CYCLES AT A SPEED OF 25~30PER MINUTE WITHOUT LOAD. 開關在無負荷的條件下以每分鐘 25~30 回的速度進行 200, 000 次的測試。												
4.2		SOLDERABILITY TEST 可焊性試驗				1. CONTACT RESISTANCE: ≤500mΩ 2. INSULATION RESISTANCE: ≥50MΩ 3. UNDER A VOLTAGE 100V DC (50Hz) WITHOUT DESTROYING AND LOSSING. 4. NO DEFORMATION AND LOOSENESS 1. 接觸電阻：≤500 毫歐 2. 絕緣電阻：≥50 兆歐 3. 施加 50Hz 100V 的交流電壓無擊穿和飛孤現象。 4. 開關外觀無異常，鉚合部分應牢固，緊固部分應無鬆動。												
4.3		RESISTANCE TO SOLDERING HEAT TEST 耐焊性試驗				THE TOP OF THE TERMINALS SHALL BE DIPPED 2mm IN THE SOLDER BATH OF 240±5°C FOR 3±0.5 SECONDS. 端子頂部被浸入錫焊池中 2mm 深, 溫度為 240±5°C, 時間為 3±0.5 秒。  1. THE CONDITION MENTIONED ABOVE IS THE TEMPERATURE ON THE MOUNTING SURFACE OF A PC BOARD. THERE ARE CASES WHERE THE PC BOARD' S TEMPERATURE GREATLY DIFFERS FROM THAT OF THE SWITCH, DEPENDING ON THE PC BOARD' S MATERIAL, SIZE, THICKNESS, ETC. CARE SHOULD BE TAKEN TO PRVENT THE SWITCH' S SURFACE TEMPERATURE FROM EXCEEDING 250°C. 測試報告是以 PC 板銅箔面作基準，因 PC 板分開之溫差是直接受 PC 板之物料、大小、厚度等影響，不論任何情況及條件都需避免防止開關之表面溫度超過 250°C。 2. SOLDERING CONDITIONS DIFFER DEPENDING ON REFLOW SOLDERING MACHINE. YOU ARE REQUESTED TO VERIFY THE SOLDERING CONDITIONS THOROUGHLY BEFOREHAND. 條件變化是直接受回流焊接儀器影響，請注意，其儀器是否正常。 3. TEMPERATURE PROFILE. 溫度示意圖。 <div></div> <table><tr><td>SERIES 系列</td><td>A(°C) 3s MAX</td><td>B(°C)</td></tr><tr><td>LCP</td><td>250</td><td>240</td></tr><tr><td></td><td></td><td></td></tr></table>		SERIES 系列	A(°C) 3s MAX	B(°C)	LCP	250	240				THE AREA OF SOLDERABILITY SHOULD BE OVER 75%. 焊接面積要有 75%以上。  WITHOUT DEFORMATION OF CASE OR EXCESSIVE LOOSENESS OF TEMINALS. ELECTRICAL CHARACTERISTICS SHALL BE SATISFIED. 本體無變形，能滿足於機械、電器性能。	
SERIES 系列	A(°C) 3s MAX	B(°C)																
LCP	250	240																

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ITEM 項目		TEST CONDITIONS 測試條件		PERFORMANCE 性能	
4.4	COLD TEST 耐冷試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $-25\pm3^{\circ}\text{C}$ FOR 48 HOURS. AND THEN IT SHALL BE SUBJECTED TO THE CONTROLLED RECOVERY CONDITIONS FOR 1 HOUR AFTER WHICH MEASURE MENT SHALL BE MADE. 開關放置在溫度 $-25\pm3^{\circ}\text{C}$ 中 48 小時後，再放置常溫常濕中 1 小時來進行測試。		THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外觀無異常，滿足於機械、電器性能。	
4.5	HEAT TEST 耐熱試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $70\pm2^{\circ}\text{C}$ FOR 48 HOURS. THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITIONS FOR 1 HOUR AFTER WHICH MEASUREMENT SHALL BE MADE. 開關放置在溫度 $70\pm2^{\circ}\text{C}$ 中測試 48 小時後，再放置正常室溫中 1 小時來測定。		THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外觀無異常，滿足於機械、電器性能。	
4.6	HUMIDITY TEST 潮濕試驗	THE SWITCH SHALL BE STORED AT A TEMPERATURE OF $40\pm2^{\circ}\text{C}$ AND A HUMIDITY OF 90% TO 95% FOR 96 HOURS. THEN THE SWITCH SHALL BE MAINTAINED AT STANDARD ATMOSPHERIC CONDITION FOR 1 HOUR PROCEDURES BE MADE. 放置 $40\pm2^{\circ}\text{C}$ 的相對濕度為 90%~95% 環境中 96 小時後，再將樣板放在正常環境 1 小時後進行測試。		THERE SHALL BE NO DEFORMATION OR CRACKS IN MOLDED PART. 外觀無異常，滿足於機械、電氣性能。	
5.0	CONSERVATION TEMPERATURE 保存溫度	THE SWITCHES' STORE CONDITIONS REQUIREMENT AND STORE TIME LIMIT: 1. THE SWITCHES PACKED IN THE CARTON BOARD BOXES AND WOODEN BOXES CAN BE TRANSPORTED BY ANY KINDS OF VEHICLES, BUT NEED AVOIDING BEING STRICKEN BY RAIN, SNOW AND MECHANISM. 2. THE SWITCHES SHOULD BE KEPT UNDER THE BELOW CONDITIONS: THE TEMPERATURE IS KEPT WITHIN THE LIMITS OF SUBZERO THEN DEGREE CENTIGRADE TO FORTY DEGREE CENTIGRADE; THE RELATIVE HUMIDITY SHOULD BE NOT MORE THAN EIGHTY PERCENT AND THERE IS NO ACID, ALKALI, SULFIDE, OZONE, ALKALINE AIR AND ANY OTHER POISONOUS GAS AROUND THE STOREHOUSE. 開關保存條件要求和期限： 1、裝有產品的紙箱或木箱允許用任何方法運輸，唯需避免雨雪直接淋襲和機械撞擊。 2、產品應存放在環境為 $-10\sim+40^{\circ}\text{C}$ ，相對濕度不大於 80%，周圍空氣不應有酸、堿、硫化物、臭氧、氨氣及其它對產品有害氣體的倉庫內。			
6.0	CHINA OF ORIGIN 原產國	MADE IN DONG GUAN CHINA. 中國東莞製造。			
7.0	ROHS COMPLIANT 符合 RoHS 指令	ON THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT, THE USE OF PROHIBITED SUBSTANCE IS LIMITED TO: (1) Cd $<100\text{ppm}$ ; (2) Pb, Hg, Cr (VI), PBB AND PBDE $<1000\text{ppm}$ . (3) INCLUDE THE RANGE OF THAT RoHS RELEASE. 電子電氣設備中限制使用某種特定有害物質，禁用物質允許最大含量值的 MCV: (1) Cd 為 $<100\text{ppm}$ ; (2) Pb, Hg, Cr (VI), PBB AND PBDE 為 $<1000\text{ppm}$ . (3) 包括 RoHS 最新豁免的範圍。		MEET THE ABOVE REQUIREMENT. 符合要求。	