

SPECIFICATION

J/HH 001-2008

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A	編制 PLANNER	
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	1 OF 5	審核 VERIFIED	
				批准 APPROVAL	

1. 一般事項(General affairs)

1-1 適用範圍(Applicable range)

KBQ 型氣動開關適用於家用電器等電子設備作電路通斷之用。

KBQ type AIR PRESSURE SWITCH is applicable for home appliances etc electronic equipment ON and OFF circuit.

1-2 標準狀態(Standard state)

除另規定外，測量應在以下狀態下進行：

Testing at the state as follow accept the special spec.

溫度：15°C ~ 35°C

Temperature: 15°C ~ 35°C

相對濕度：45% ~ 70%

Relative humidity: 45% ~ 70%

氣壓：86KPa ~ 106Kpa

Atmospheric pressure: 86KPa ~ 106Kpa

1-3 使用溫度範圍：-25°C ~ +85°C

Practical temperature range: -25°C ~ +85°C

使用濕度範圍：≤85%RH

Practical humidity range: ≤85%RH

1-4 環保要求：產品符合歐盟 ROHS 指令的環保要求。

Environment requirement: Products according to ROHS.

2. 外形結構(Appearance and structure)

2-1 外觀：應無明顯收縮、飛邊、劃傷，鍍層均勻，無脫落等現象。

Appearance: It should no obvious shrinking、upset metal、Scrape、plating path well-distributed and no coming off.

2-2 尺寸：按產品圖製作（附外形圖）

Size: Making according to product drawing (drawing attached).

3. 額定值(Rating)

額定負荷：250VAC 20mA

Rated load: 250VAC 20mA

SPECIFICATION

J/HH 001-2008

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	2 OF 5

4、電氣性能 (Electricity function)

序號 NO.	項目 Item	條件 Condition	要求 Requirement	備注 Remark
4-1	接觸電阻 Contact resistance	開關內相互接觸的端子之間 Between the contacting terminal of switches.	$\leq 50\text{m}\Omega$	≥ 1.2 倍 压力
4-2	絕緣電阻 Insulation Resistance	不相連接的各導電件之間、 端子與絕緣外殼之間施加 DC500V Apply DC 500V among non-connecting conductors 、terminal and insulator shell	$\geq 50\text{M}\Omega$	
4-3	耐電壓 Withstand voltage	不相連接的端子之間、端子 與絕緣外殼之間施加 AC1500V/4000V、1mA、1min Apply AC1500V/4000V、1mA、1min among non-connecting terminal and terminal and insulator shell	無擊穿或飛弧現象 No puncture or flash-over	

5. 機械性能 (Mechanical Function)

序號 NO.	項目 Item	條件 Condition	要求 Requirement	備註 Remark
5-1	接通壓力 Switch on pressure	在產品的負壓端施加規定的氣壓後產品應能接通 After apply air pressure on the minus pressure end of product, product shall be switch on.	0.3kpa-75kpa	可按客戶 要求參數 定制
5-2	密封性 Pressurize	在施加的氣壓停止後保壓 30秒內應無漏氣現象 After stop air pressure Keep force 30 sec, product shall not leak air.	氣壓下降不超過 10kpa Air pressure fall shall not exceed 10kpa	

SPECIFICATION

J/HH 001-2008

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	3 OF 5

序號 NO.	項目 Item	條件 Condition	要求 Requirement	備註 Remark
5-3	端子強度 Terminal strength	端子前端的任意方向施加 10N 的靜負荷力 10 秒鐘 Apply 10N static electricity load for 10 sec to every direction on the front of terminal	端子不得有明顯裂紋及移位，但允許變形 No obvious crack and replacement on the terminal accept deformation	
5-4	可焊性 Solderability	端子先端浸助焊劑 焊接溫度：235±5℃ 浸錫時間：2±0.5S 浸入深度不超過印製板厚度的二分之一 Put the front of jointing into the soldering flux. Welding temperature: 235±5℃ Steeping tin time: 2±0.5S Immersion depth no more than 1/2 thickness of P.C. Board	沾錫面積 ≥ 90% Contaminating tin area ≥ 90%	
5-5	耐焊接熱 Resistance to Soldering heat	端子插入 t1.6mm 印製板並浸助焊劑： 焊接溫度：260±5℃ 浸錫時間：2±1S Put the terminal into t1.6 mm P.C. board and soldering flux: Welding temperature: 260±5℃ Steeping tin time: 2±1S	不得有絕緣體的破損、變形、接觸無異常（初始值 ± 5%） No damage, deformation and abnormal touching of insulator (Initial insulation Pressure ± 5%) .	

SPECIFICATION

J/HH 001-2008

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	4 OF 5

6. 耐久性能 (Longevity)

序號 NO.	項目 Item	條件 Condition	要求 Requirement	備註 Remark
6-1	潮濕試驗 Humidity test	溫度 $40\pm 2^{\circ}\text{C}$ 、濕度 90~95% 的恒溫恒濕中放置 48 小時後，在常溫、常濕中放置 24 小時後測量 Put products into the constant temperature and humidity container which temperature is $40\pm 2^{\circ}\text{C}$, and humidity is 90~95% for 96 hours, test after 24 hours in the constant temperature and humidity.	絕緣電阻: $\geq 10\text{M}\Omega$; 耐壓: 1200VAC/min 3000VAC/min 接通壓力: 壓力值的 $\pm 15\%$ (誤差範圍) Insulating resistance $\geq 10\text{M}\Omega$ Withstand Voltage: 1200VAC、3000VAC Switch on force: Pressure value $\pm 15\%$	
6-2	鹽霧試驗 Salt mist test	在溫度為 $35\pm 2^{\circ}\text{C}$ 、氯化鈉溶液濃度為 $5\%\pm 0.1\%$ 的鹽霧箱中連續噴霧 24 小時，用清水洗淨後觀測 Put product in the salt mist box with temperature of $35\pm 2^{\circ}\text{C}$ and sodium chloride liquor $5\%\pm 0.1\%$ to spray for 24 hours, then clean by water to observe	零件表面無明顯的銹蝕 Surface of parts shall not obvious rust. severity	
6-3	高溫試驗 Heat test	溫度 $85\pm 2^{\circ}\text{C}$ 的恒溫箱中放置 48 小時，在常溫、常濕放置 24 小時測量。 Put product into the constant temperature container which temperature is $85\pm 2^{\circ}\text{C}$ for 48 hours, and test after 24 hours in the constant temperature and humidity.	絕緣電阻: $\geq 50\text{M}\Omega$; 耐壓: 1500VAC/min 4000VAC/min 接通壓力: 壓力值的 $\pm 15\%$ (誤差範圍) Insulating resistance: $\geq 50\text{M}\Omega$	
6-4	低溫試驗 Cold test	溫度 $-25\pm 2^{\circ}\text{C}$ 的恒溫箱中放置 48 小時，在常溫、常濕放置 24 小時測量。 Put products 48 hours into the constant temperature container which temperature is $-25\pm 2^{\circ}\text{C}$, and test after 24 hours in the constant temperature and humidity.	Withstand Voltage: 1500VAC/min 4000VAC/min Switch on force: Pressure value $\pm 15\%$	

SPECIFICATION

J/HH 001-2008

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	5 OF 5

序號 NO.	項 目 Item	條 件 Condition	要 求 Requirement	備註 Remark
6-5	振動試驗 Vibration test	振頻=10~55HZ，加速度為5g，振幅0.35mm，在X、Y、Z方向上各2小時。 Vibrational frequency=10~55HZ, acceleration is 50 m/S ² , amplitude is 0.35mm, test 2 hours at the direction of x、y、z.	接通壓力：壓力值的±15% (誤差範圍) Switch on pressure : Pressure value ±15%	
6-6	壽命試驗 Life test	在額定負荷條件下，開關動作10000次，6~10次/分鐘 On the condition of rated Load, switch action 10000 times, 6~10 times/min.	接觸電阻：≤200mΩ； 接通壓力：壓力值的±20% (誤差範圍) 耐壓：1200VAC/min、3000VAC/min Contact resistance : ≤200mΩ Switch on pressure : Pressure value ±20% Withstand Voltage: 1200VAC/min 3000VAC/min	

7. 注意事項 (Points for attention)

7-1 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。

Paper box and wood box which load products are allowed to use any way to transport, but should avoid rain and snow and dashing against of machine.

7-2 產品應存放在環境溫度為-10~+40℃，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。

Products should storage in the warehouse which air around it mustn't exist which the environmental temperature is -10~+40℃, relative humidity is no more than 80%, and no acid、alkali、sulphide、ozone、ammonia air and other poisonous gas.

Packing Criterion

NO:

產品名稱 PART NAME	AIR PRESSURE SWITCH	版本 REV	A	編制 COMPILED	
產品型號 PART NUMBER	KBQ-02C	頁碼 PAGE	1 OF 1	審核 VERIFIED	
				批准 APPROVAL	

一、 包裝說明 (Packing Instructions)

1. 內盒包裝 (Inner Box Packing):

(1) 將檢驗好的產品裝入泡沫盒並蓋好蓋子，每盒 50 只。

Put the parts after inspection to foam box and sealed, 50PCS each foam box.

(2) 在盒內放一合格證, 合格證上標明產品名稱、規格型號、產品數量、檢驗員蓋章、包裝日期等;

Place one qualified certificate in box, and show the part name, part NO., quantity, packing date, as well as stamper of checker on certificate;

2. 外箱包裝 (Outer Carton Packing):

(1) 每個紙箱裝 30 個泡沫盒, 分 15 層擺放, 共 3000 只。

20PCS box be packed in one carton, divide into 15 layer each carton, total 3000PCS.

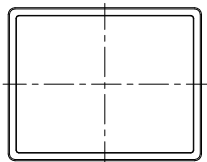
(2) 用膠帶紙封口, 打包帶捆紮, 外貼一裝箱單;

Seal the box and strap carton, stick the packing list on surface of carton;

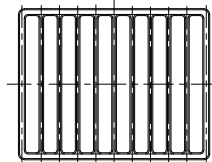
(3) 在裝箱單上標明產品名稱、產品型號、產品數量、包裝日期等。

Show the part name, part number, quantity and packing date on packing list

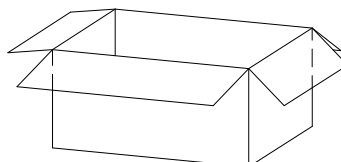
二、 簡圖 (Brief Diagram)



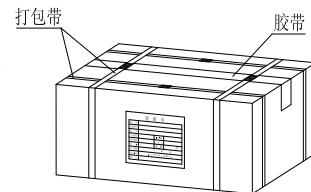
(泡沫盒蓋)

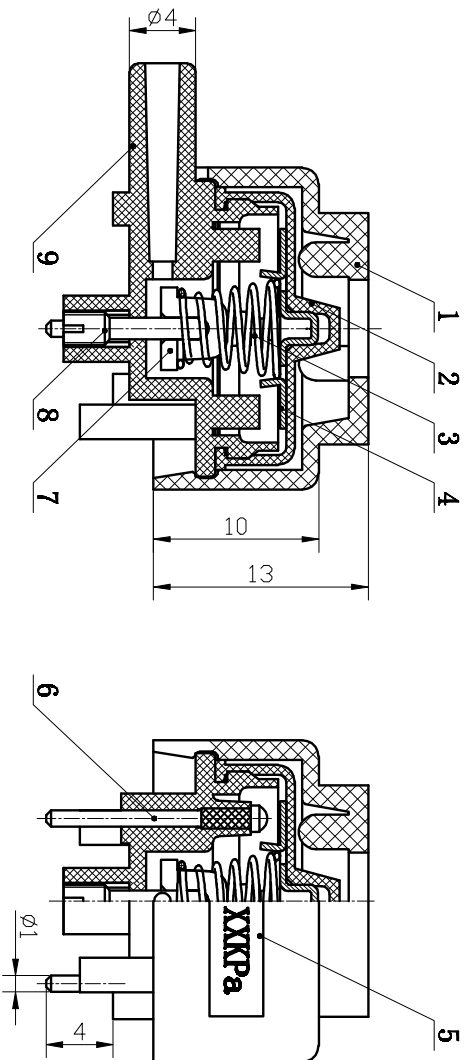


(泡沫盒體)

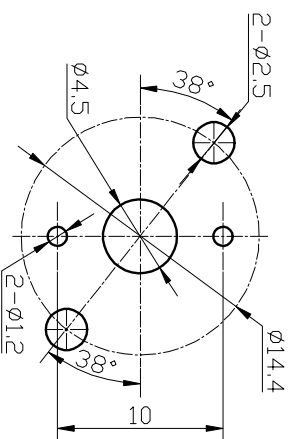


(外紙箱)

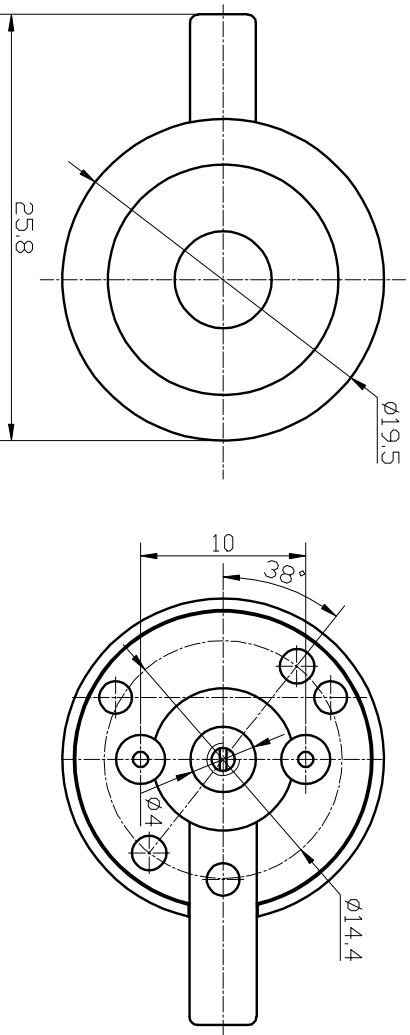
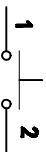




PCB安装孔图



电源理图



旧版图号

规格号

日期 版本

公差尺寸		
≤6	≤10	>10
±0.1	±0.2	±0.3

技术要求

1. 动作压力: 可定制5-35KPa;
2. 电参数: 20mA/250V AC。

序号	名称	压力代码	数量	材质	备注
9	盖		1	PC(透明)	
8	调节螺丝		1	A3	D.MI
7	塑料帽		1	PC(本色)	
6	插销针		2	黄铜H62	D.4g
5	导电极		1	PVC不干胶	
4	弹环		1	H65 N t0.4	D.4g
3	密封圈		1	T9A	D.2a
2	密封盖		1	硅胶(半透明)	
1	盖		1	PC(透明)	

Q/JL3. 606. 003. 1W

等级	标志	质量	规格
第 1 类			5 : 1

数量	更改单号	姓名	日期

数量	名称	规格