

1998



TÜV IP65 METAL WALL MOUNTING ENCLOSURES

Electric equipment production





WALL MOUNTING STEEL ENCLOSURES 01-04
標準鐵製開關箱

WALL MOUNTING STEEL ENCLOSURES 05-07
With Transparent Security Glass Door
透明視窗開關箱

WALL MOUNTING STAINLESS STEEL ENCLOSURES 08-10
不鏽鋼開關箱

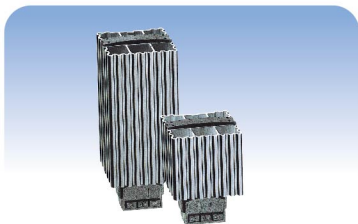
WALL MOUNTING STAINLESS STEEL ENCLOSURES 11-14
With Transparent Security Glass Door
透明視窗不鏽鋼開關箱



MINIATURE CIRCUIT BREAKERS 15-17
高分斷小型斷路器



THERMOSTAT 18-21
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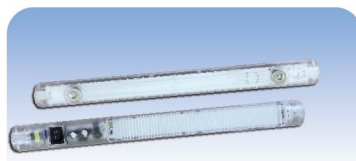
HEATER 22-25
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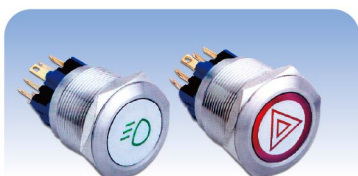
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LIGHT SLC-035 32
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CUSTOMIZATION



A flexible manufacturing system enables us to customise the cabinets according to the customer's requirements in terms of paint, colour, dimensions, machining and mounting of accessories and/or equipment.

一個靈活的製造系統，使我們能夠依照客戶之需求，如尺寸、顏色、塗料與附件來製作高品質開關箱。



At e-tan we want to help you do your job. To make things easier for you, we can adapt and assemble all the accessories and components you need in our enclosures under request (ask for special conditions).

在e-tan，我們幫您做您的工作。為了您，讓事情更簡單，我們可以在您的需求之下，裝配您所需的配件與零件於開關箱裡。



WALL MOUNTING STEEL ENCLOSURES SYSTEM IP-65 (IEC-60529)

Metal enclosures made from a continuous length of sheet steel double folded at the front, with back welded to the frame, Both externally and internally protected with polyester epoxy resin grey paint to RAL-7035 texturized.



- welded studs on the back for direct fixing of mounting plate or other accessories.
- perforated door reinforcement profiles allowing fixing of equipment.
- concealed and easily removable hinges allowing over 120° door opening.
- foamed-in polyurethane gasket and front rain gutter ensures high degree of protection.
- accessories not included as standard supply.

開關箱詳細規格


references and details of enclosures

external dimensions (mm) 外部尺寸			enclosures 開關箱				metal 底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量		
250	200	150	SP-252015	1	0	3.68	MM-2520	165x150
300	200	150	SP-302015	1	A	4.29	MM-3015	265x165
300	200	200	SP-302020	1	A	4.84	MM-3020	265x165
300	250	150	SP-302515	1	A	5.11	MM-3025	265x200
300	250	200	SP-302520	1	A	5.71	MM-3025	265x200
300	300	150	SP-303015	1	B	5.93	MM-3030	265x250
300	300	200	SP-303020	1	B	6.59	MM-3030	265x250
350	250	180	SP-352518	1	A	7.20	MM-3525	315x200
400	300	150	SP-403015	1	B	7.58	MM-4030	360x250

*Weight of enclosures with plain door. **Enclosures with three point locking system.


開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			enclosures 開關箱					metal 底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量			
400	300	200	SP-403020	1	B	8.35	MM-4030	360x250	
400	300	250	SP-403025	1	B	9.12	MM-4030	360x250	
400	400	150	SP-404015	1	B	9.67	MM-4040	360x350	
400	400	200	SP-404020	1	C	10.55	MM-4040	360x350	
400	400	250	SP-404025	1	C	11.43	MM-4040	360x350	
500	400	150	SP-504015	2	B	11.76	MM-5040	440x340	
500	400	200	SP-504020	2	C	12.75	MM-5040	440x340	
500	400	250	SP-504025	2	C	13.74	MM-5040	440x340	
500	500	150	SP-505015	2	B	14.29	MM-5050	440x440	
500	500	200	SP-505020	2	C	15.39	MM-5050	440x440	
500	500	250	SP-505025	2	D	16.49	MM-5050	440x440	
600	400	150	SP-604015	2	B	13.85	MM-6040	540x340	
600	400	200	SP-604020	2	C	14.95	MM-6040	540x340	
600	400	250	SP-604025	2	C	16.05	MM-6040	540x340	
600	500	150	SP-605015	2	B	19.22	MM-6050	540x440	
600	500	200	SP-605020	2	D	20.6	MM-6050	540x440	
600	500	250	SP-605025	2	D	21.98	MM-6050	540x440	
600	600	200	SP-606020	2	D	24.12	MM-6060	540x540	
600	600	250	SP-606025	2	D	25.62	MM-6060	540x540	
600	600	300	SP-606030	2	D	27.13	MM-6060	540x540	
700	500	200	SP-705020	2	D	23.61	MM-7050	640x440	
700	500	250	SP-705025	2	D	25.12	MM-7050	640x440	
700	500	300	SP-705030	2	D	26.63	MM-7050	640x440	

*Weight of enclosures with plain door. **Enclosures with three point locking system.

references and details of enclosures

external dimensions (mm) 外部尺寸			enclosures 開關箱				 metal 底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量		
700	600	200	SP-706020	2	D	27.63	MM-7060	640x540
700	600	250	SP-706025	2	D	29.26	MM-7060	640x540
700	600	300	SP-706030	2	D	30.90	MM-7060	640x540
800	600	200	SP-806020	2	D	35.04	MM-8060	740x540
800	600	250	SP-806025	2	D	37.02	MM-8060	740x540
800	600	300	SP-806030	2	D	39.00	MM-8060	740x540
800	800	200	SP-808020	2	E	45.22	MM-8080	740x740
800	800	250	SP-808025	2	E	47.48	MM-8080	740x740
800	800	300	SP-808030	2	E	49.74	MM-8080	740x740
1000	600	250	SP-1006025	2	D	50.24	MM-106	940x540
1000	600	300	SP-1006030	2	D	52.75	MM-106	940x540
1000	800	250	SP-1008025	2	E	64.37	MM-108	940x740
1000	800	300	SP-1008030	2	E	67.20	MM-108	940x740
1000	800	400	SP-1008040	2	E	60.29	MM-108	940x740
1000	1000	300	SP-10010030	4/3	E	81.64	MM-1010	940x940
1000	1000	400	SP-10010040	4/3	E	72.22	MM-1010	940x940
1200	800	300	SP-1208030	3	E	79.13	MM-128	1140x540
1200	800	400	SP-1208040	3	E	70.34	MM-128	1140x540
1200	1000	300	SP-12010030	4	E	96.08	MM-1210	1140x940
1200	1000	400	SP-12010040	4	E	84.15	MM-1210	1140x940
1400	800	300	SP-1408030	3	E	104.72	MM-148	1340x740
1400	800	400	SP-1408040	3	E	112.66	MM-148	1340x740

*Weight of enclosures with plain door. **Enclosures with three point locking system.



WALL MOUNTING STEEL ENCLOSURES With transparent security glass door SYSTEM IP-65 (IEC-60529)



- Series SP_KT with transparent security glass door.
- Adjustable internal door can be opened angle of 120°.
- Concealed and easily removable hinges allowing over 120° door opening.


開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent enclosures 透明視窗開關箱					metal 底板型號	
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)		
400	300	150	SP-403015KT	1	B	280x170	345x237	MM-4030	
400	300	200	SP-403020KT	1	B	280x170	345x237	MM-4030	
400	300	250	SP-403025KT	1	B	280x170	345x237	MM-4030	
400	400	150	SP-404015KT	1	B	280x270	345x337	MM-4040	
400	400	200	SP-404020KT	1	C	280x270	345x337	MM-4040	
400	400	250	SP-404025KT	1	C	280x270	345x337	MM-4040	
500	400	150	SP-504015KT	2	B	380x270	445x337	MM-5040	
500	400	200	SP-504020KT	2	C	380x270	445x337	MM-5040	
500	400	250	SP-504025KT	2	C	380x270	445x337	MM-5040	

*Weight of enclosures with plain door. **Enclosures with three point locking system.

references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent enclosures 透明視窗開關箱					 metal 底板型號
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)	
500	500	150	SP-505015KT	2	B	380X370	445x437	MM-5050
500	500	200	SP-505020KT	2	C	380x370	445x437	MM-5050
500	500	250	SP-505025KT	2	D	380x370	445x437	MM-5050
600	400	150	SP-604015KT	2	B	480x270	545x337	MM-6040
600	400	200	SP-604020KT	2	C	480x270	545x337	MM-6040
600	400	250	SP-604025KT	2	C	480x270	545x337	MM-6040
600	500	150	SP-605015KT	2	B	480x370	545x437	MM-6050
600	500	200	SP-605020KT	2	D	480x370	545x437	MM-6050
600	500	250	SP-605025KT	2	D	480x370	545x437	MM-6050
600	600	200	SP-606020KT	2	D	480x470	545x537	MM-6060
600	600	250	SP-606025KT	2	D	480x470	545x537	MM-6060
600	600	300	SP-606030KT	2	D	480x470	545x537	MM-6060
700	500	200	SP-705020KT	2	D	580x370	645x437	MM-7050
700	500	250	SP-705025KT	2	D	580x370	645x437	MM-7050
700	500	300	SP-705030KT	2	D	580x370	645x437	MM-7050
700	600	200	SP-706020KT	2	D	580x470	645x537	MM-7060
700	600	250	SP-706025KT	2	D	580x470	645x537	MM-7060
700	600	300	SP-706030KT	2	D	580x470	645x537	MM-7060
800	600	200	SP-806020KT	2	D	680x470	745x537	MM-8060
800	600	250	SP-806025KT	2	D	680x470	745x537	MM-8060
800	600	300	SP-806030KT	2	D	680x470	745x537	MM-8060
800	800	200	SP-808020KT	2	E	680x670	745x737	MM-8080
800	800	250	SP-808025KT	2	E	680x670	745x737	MM-8080

*Weight of enclosures with plain door. **Enclosures with three point locking system.

開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent enclosures 透明視窗開關箱					metal 底板型號	
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)		
800	800	300	SP-808030KT	2	E	680x670	745x737	MM-8080	
1000	600	250	SP-1006025KT	2	D	880x470	945x537	MM-106	
1000	600	300	SP-1006030KT	2	D	880x470	945x537	MM-106	
1000	800	250	SP-1008025KT	2	E	880x670	945x737	MM-108	
1000	800	300	SP-1008030KT	2	E	880x670	945x737	MM-108	
1000	800	400	SP-1008040KT	2	E	880x670	945x737	MM-108	
1000	1000	300	SP-10010030KT	4/3	E	880x870	945x937	MM-1010	
1000	1000	400	SP-10010040KT	4/3	E	880x870	945x937	MM-1010	
1200	800	300	SP-1208030KT	3	E	1080x470	1145x737	MM-128	
1200	800	400	SP-1208040KT	3	E	1080x470	1145x737	MM-128	
1200	1000	300	SP-12010030KT	4	E	1080x870	1145x937	MM-1210	
1200	1000	400	SP-12010040KT	4	E	1080x870	1145x937	MM-1210	
1400	800	300	SP-1408030KT	3	E	1280x670	1345x737	MM-148	
1400	800	400	SP-1408040KT	3	E	1280x670	1345x737	MM-148	

*Weight of enclosures with plain door. **Enclosures with three point locking system.



Spray paint / 噴漆
RAL7035



WALL MOUNTING STAINLESS STEEL ENCLOSURES SYSTEM IP-65 (IEC-60529)

The stainless steel e-tan enclosures are specially suitable for corrosive environments and installations where hygiene is essential. Also in chemical and food industries, etc.



- Stainless #304, thickness 1.2mm
- Concealed and easily removable hinges allowing over 120° door opening.

開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			stainless steel enclosures 不鏽鋼開關箱				zinc-coated mounting plate 鍍鋅底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量		
250	200	150	ST-252015	1	0	3.59	MZ-2520	165x150
300	200	150	ST-302015	1	A	4.16	MZ-3015	265x165
300	200	200	ST-302020	1	A	4.79	MZ-3020	265x165
300	250	150	ST-302515	1	A	4.91	MZ-3025	265x200
300	250	200	ST-302520	1	A	5.61	MZ-3025	265x200
300	300	150	ST-303015	1	B	5.67	MZ-3030	265x250
300	300	200	ST-303020	1	B	6.43	MZ-3030	265x250
350	250	180	ST-352518	1	A	4.95	MZ-3525	315x200
400	300	150	ST-403015	1	B	7.18	MZ-4030	360x250

*Weight of enclosures with plain door. **Enclosures with three point locking system.


開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			stainless steel enclosures 不鏽鋼開關箱				zinc-coated mounting plate 鍍鋅底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量		
400	300	200	ST-403020	1	B	8.06	MZ-4030	360x250
400	300	250	ST-403025	1	B	8.95	MZ-4030	360x250
400	400	150	ST-404015	1	B	9.07	MZ-4040	360x350
400	400	200	ST-404020	1	C	10.58	MZ-4040	360x350
400	400	250	ST-404025	1	C	11.09	MZ-4040	360x350
500	400	150	ST-504015	2	B	10.96	MZ-5040	440x340
500	400	200	ST-504020	2	C	12.10	MZ-5040	440x340
500	400	250	ST-504025	2	C	13.23	MZ-5040	440x340
500	500	150	ST-505015	2	B	13.23	MZ-5050	440x440
500	500	200	ST-505020	2	C	14.49	MZ-5050	440x440
500	500	250	ST-505025	2	D	15.75	MZ-5050	440x440
600	400	150	ST-604015	2	B	12.85	MZ-6040	540x340
600	400	200	ST-604020	2	C	14.11	MZ-6040	540x340
600	400	250	ST-604025	2	C	15.37	MZ-6040	540x340
600	500	150	ST-605015	2	B	17.71	MZ-6050	540x440
600	500	200	ST-605020	2	D	19.30	MZ-6050	540x440
600	500	250	ST-605025	2	D	20.88	MZ-6050	540x440
600	600	200	ST-606020	2	D	22.46	MZ-6060	540x540
600	600	250	ST-606025	2	D	24.19	MZ-6060	540x540
600	600	300	ST-606030	2	D	25.92	MZ-6060	540x540
700	500	200	ST-705020	2	D	22.03	MZ-7050	640x440
700	500	250	ST-705025	2	D	23.76	MZ-7050	640x440
700	500	300	ST-705030	2	D	25.49	MZ-7050	640x440

*Weight of enclosures with plain door. **Enclosures with three point locking system.

references and details of enclosures

external dimensions (mm) 外部尺寸			stainless steel enclosures 不鏽鋼開關箱				 zinc-coated mounting plate 鍍鋅底板型號	dimensions 底板尺寸 (A)x(B) (mm)
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	weight* (kg) 重量		
700	600	200	ST-706020	2	D	25.63	MZ-7060	640x540
700	600	250	SPT-06025	2	D	27.50	MZ-7060	640x540
700	600	300	SPT-06030	2	D	29.38	MZ-7060	640x540
800	600	200	ST-806020	2	D	32.40	MZ-8060	740x540
800	600	250	ST-806025	2	D	34.67	MZ-8060	740x540
800	600	300	ST-806030	2	D	36.94	MZ-8060	740x540
800	800	200	ST-808020	2	E	41.47	MZ-8080	740x740
800	800	250	ST-808025	2	E	44.06	MZ-8080	740x740
800	800	300	ST-808030	2	E	46.66	MZ-8080	740x740
1000	600	250	ST-1006025	2	D	46.8	MZ-106	940x540
1000	600	300	ST-1006030	2	D	49.68	MZ-106	940x540
1000	800	250	ST-1008025	2	E	59.40	MZ-108	940x740
1000	800	300	ST-1008030	2	E	62.64	MZ-108	940x740
1000	800	400	ST-1008040	2	E	69.12	MZ-108	940x740
1000	1000	300	ST-10010030	4/3	E	75.60	MZ-1010	940x940
1000	1000	400	ST-10010040	4/3	E	82.80	MZ-1010	940x940
1200	800	300	ST-1208030	3	E	73.44	MZ-128	1140x540
1200	800	400	ST-1208040	3	E	80.64	MZ-128	1140x540
1200	1000	300	ST-12010030	4	E	88.56	MZ-1210	1140x940
1200	1000	400	ST-12010040	4	E	96.48	MZ-1210	1140x940

*Weight of enclosures with plain door. **Enclosures with three point locking system.



WALL MOUNTING STAINLESS STEEL ENCLOSURES

With transparent security glass door

SYSTEM IP-65 (IEC-60529)



- Series ST_KT with transparent security glass door.
- Adjustable internal door can be opened angle of 120°.
- Concealed and easily removable hinges allowing over 120° door opening.


開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent stainless steel enclosures 透明視窗不鏽鋼開關箱					zinc-coated mounting plate 鍍鋅底板型號
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)	
400	300	150	ST-403015KT	1	B	280x170	345x237	MZ-4030
400	300	200	ST-403020KT	1	B	280x170	345x237	MZ-4030
400	300	250	ST-403025KT	1	B	280x170	345x237	MZ-4040
400	400	150	ST-404015KT	1	B	280x270	345x337	MZ-4040
400	400	200	ST-404020KT	1	C	280x270	345x337	MZ-4040
400	400	250	ST-404025KT	1	C	280x270	345x337	MZ-5040
500	400	150	ST-504015KT	2	B	380x270	445x337	MZ-5040
500	400	200	ST-504020KT	2	C	380x270	445x337	MZ-5040
500	400	250	ST-504025KT	2	C	380x270	445x337	MZ-5050

*Weight of enclosures with plain door. **Enclosures with three point locking system.


references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent stainless steel enclosures 透明視窗不鏽鋼開關箱					 zinc-coated mounting plate 鍍鋅底板型號
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)	
500	500	150	ST-505015KT	2	B	380x370	445x437	MZ-5050
500	500	200	ST-505020KT	2	C	380x370	445x437	MZ-5050
500	500	250	ST-505025KT	2	D	380x370	445x437	MZ-6040
600	400	150	ST-604015KT	2	B	480x270	545x337	MZ-6040
600	400	200	ST-604020KT	2	C	480x270	545x337	MZ-6040
600	400	250	ST-604025KT	2	C	480x270	545x337	MZ-6050
600	500	150	ST-605015KT	2	B	480x370	545x437	MZ-6050
600	500	200	ST-605020KT	2	D	480x370	545x437	MZ-6050
600	500	250	ST-605025KT	2	D	480x370	545x437	MZ-6060
600	600	200	ST-606020KT	2	D	480x470	545x537	MZ-6060
600	600	250	ST-606025KT	2	D	480x470	545x537	MZ-6060
600	600	300	ST-606030KT	2	D	480x470	545x537	MZ-7050
700	500	200	ST-705020KT	2	D	580x370	645x437	MZ-7050
700	500	250	ST-705025KT	2	D	580x370	645x437	MZ-7050
700	500	300	ST-705030KT	2	D	580x370	645x437	MZ-7060
700	600	200	ST-706020KT	2	D	580x470	645x537	MZ-7060
700	600	250	ST-706025KT	2	D	580x470	645x537	MZ-7060
700	600	300	ST-706030KT	2	D	580x470	645x537	MZ-8060
800	600	200	ST-806020KT	2	D	680x470	745x537	MZ-8060
800	600	250	ST-806025KT	2	D	680x470	745x537	MZ-8060
800	600	300	ST-806030KT	2	D	680x470	745x537	MZ-8080
800	800	200	ST-808020KT	2	E	680x670	745x737	MZ-8080
800	800	250	ST-808025KT	2	E	680x670	745x737	MZ-8080

*Weight of enclosures with plain door. **Enclosures with three point locking system.

開關箱詳細規格

references and details of enclosures

external dimensions (mm) 外部尺寸			Transparent stainless steel enclosures 透明視窗不鏽鋼開關箱					 zinc-coated mounting plate 鍍鋅底板型號
height (A) 高度	width (B) 寬度	depth (C) 深度	reference 型號	fig. 圖號	flange opening type 底部開孔形式	transparent dimensions 透明視窗尺寸 (mm)	internal door dimensions 內門尺寸 (mm)	
800	800	300	ST-808030KT	2	E	680x670	745x737	MZ-106
1000	600	250	ST-1006025KT	2	D	880x470	945x537	MZ-106
1000	600	300	ST-1006030KT	2	D	880x470	945x537	MZ-108
1000	800	250	ST-1008025KT	2	E	880x670	945x737	MZ-108
1000	800	300	ST-1008030KT	2	E	880x670	945x737	MZ-108
1000	800	400	ST-1008040KT	2	E	880x670	945x737	MZ-1010
1000	1000	300	ST-10010030KT	4/3	E	880x870	945x937	MZ-1010
1000	1000	400	ST-10010040KT	4/3	E	880x870	945x937	MZ-128
1200	800	300	ST-1208030KT	3	E	1080x470	1145x737	MZ-128
1200	800	400	ST-1208040KT	3	E	1080x470	1145x737	MZ-1210
1200	1000	300	ST-12010030KT	4	E	1080x870	1145x937	MZ-1210
1200	1000	400	ST-12010040KT	4	E	1080x870	1145x937	MZ-148

*Weight of enclosures with plain door. **Enclosures with three point locking system.

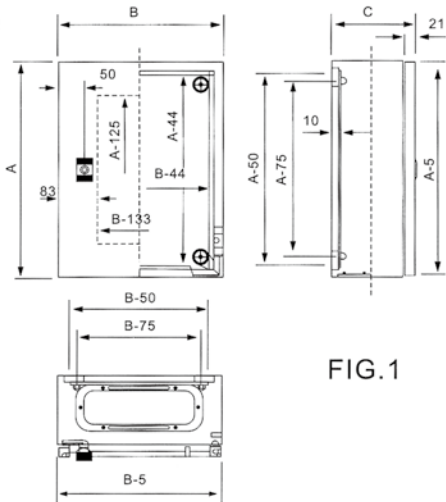


FIG.1

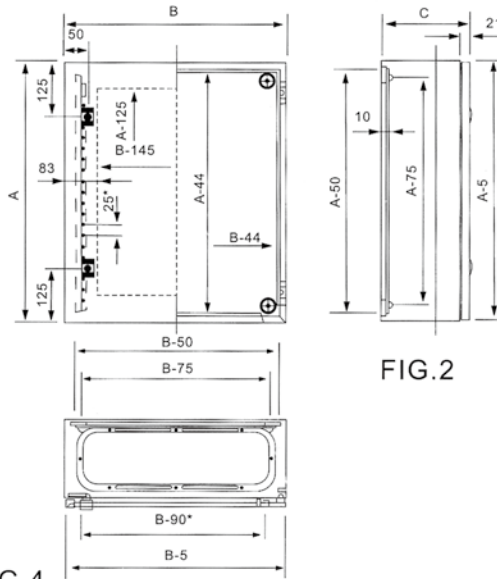


FIG.2

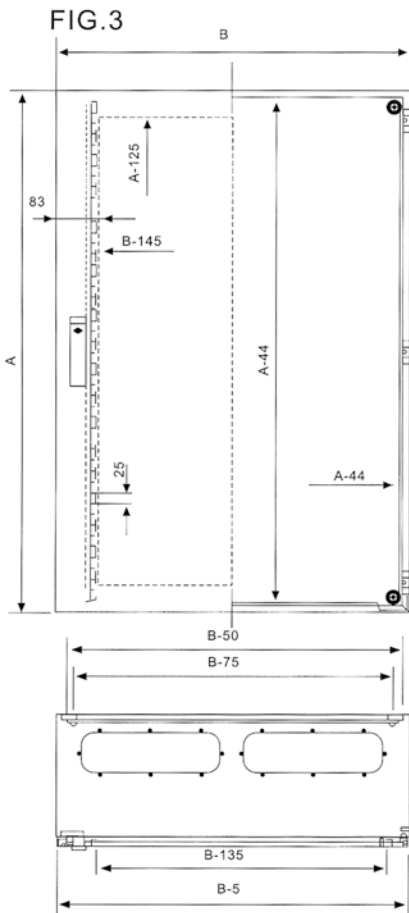


FIG.3

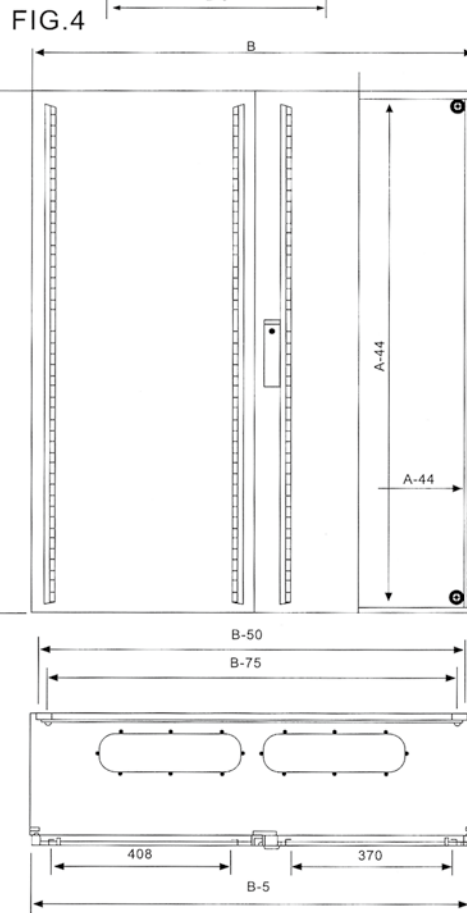
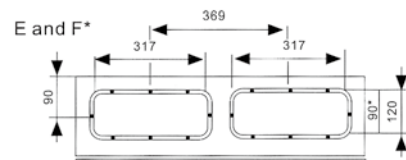
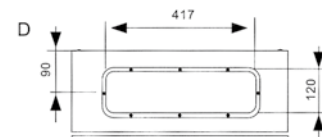
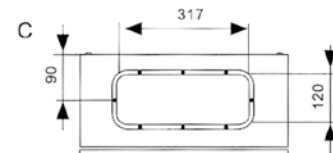
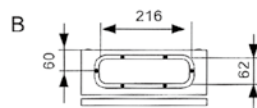
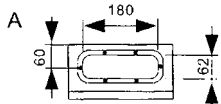
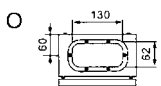


FIG.4



*All glazed door enclosures type KT are without door reinforcement profiles.

**for 1200mm. width



ST20系列



Miniature circuit breakers Safemat
ST20 SERIES
高分斷小型斷路器
ST20系列

Miniature circuit breakers Safemat ST20 SERIES 高分斷小型斷路器 ST20系列

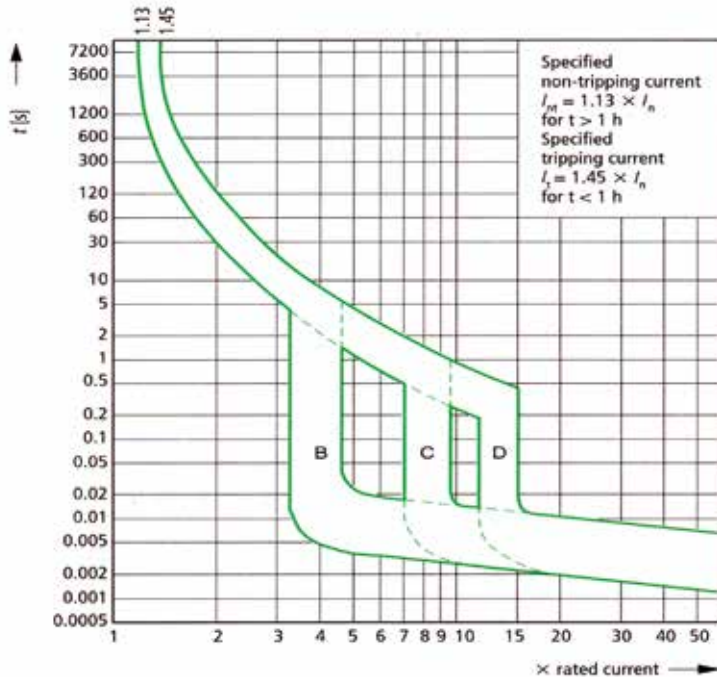


A0358057



ST20跳脫特性曲線

ST20 tripping characteristics at 30°C: B,C,D to IEC/EN 60 898



Technical data

技術參數

rated voltage U_e	額定電壓 U_e	240 / 415V
rated current I_n	額定電流 I_n	4 - 63A
rated frequency f_n	額定頻率 f_n	50 / 60HZ
rated impulse withstand voltage U_{imp}	額定耐衝擊電壓 U_{imp}	4000VAC
breaking capacity I_{cn}	分斷能力 I_{cn}	10KA
short-circuit capacity I_{cs}	運用短路容量 I_{cs}	7.5KA
breaking characteristics	分斷特性	B,C Type
isolating class	絕緣等級	class 3
ambient temperature	周溫	-5°C~ +40°C
IP-class	保護等級	IP20
cross-section of connecting lead	連接導線	input/進線 1-25mm ² output/出線 1-16mm ²
electric standards	電氣標準	IEC/EN 60898
product certifications	國際認證	Ⓢ, CE ⓄⓄ

ST20 SERIES

ST20系列



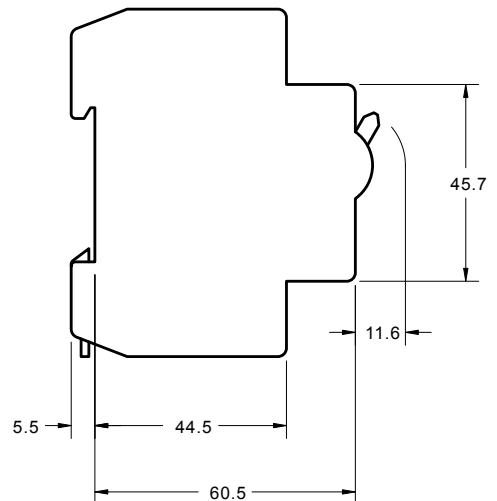
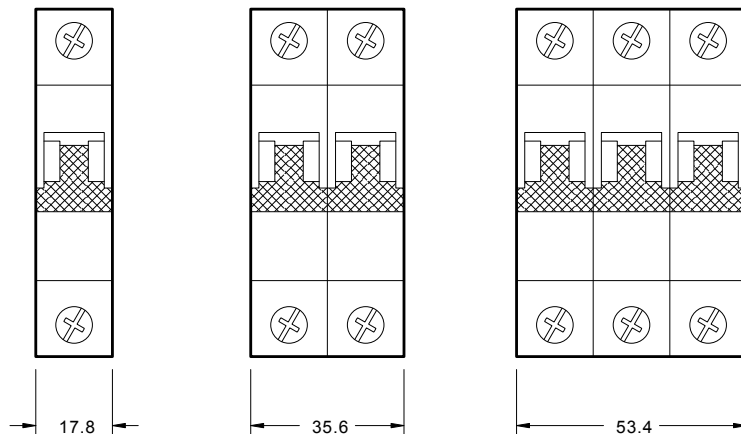
ST20 B type

rated current In 額定電流 In	1pole 1極	2poles 2極	3poles 3極
4A	ST20-B4	ST20-2-B4	ST20-3-B4
6A	ST20-B6	ST20-2-B6	ST20-3-B6
10A	ST20-B10	ST20-2-B10	ST20-3-B10
16A	ST20-B16	ST20-2-B16	ST20-3-B16
20A	ST20-B20	ST20-2-B20	ST20-3-B20
25A	ST20-B25	ST20-2-B25	ST20-3-B25
32A	ST20-B32	ST20-2-B32	ST20-3-B32
40A	ST20-B40	ST20-2-B40	ST20-3-B40
50A	ST20-B50	ST20-2-B50	ST20-3-B50
63A	ST20-B63	ST20-2-B63	ST20-3-B63



ST20 C type

rated current In 額定電流 In	1pole 1極	2poles 2極	3poles 3極
2A	ST20-C2	ST20-2-C2	ST20-3-C2
4A	ST20-C4	ST20-2-C4	ST20-3-C4
6A	ST20-C6	ST20-2-C6	ST20-3-C6
10A	ST20-C10	ST20-2-C10	ST20-3-C10
16A	ST20-C16	ST20-2-C16	ST20-3-C16
20A	ST20-C20	ST20-2-C20	ST20-3-C20
25A	ST20-C25	ST20-2-C25	ST20-3-C25
32A	ST20-C32	ST20-2-C32	ST20-3-C32
40A	ST20-C40	ST20-2-C40	ST20-3-C40
50A	ST20-C50	ST20-2-C50	ST20-3-C50
63A	ST20-C63	ST20-2-C63	ST20-3-C63



Small, compact Thermostat STH 01 / STF 01
Built-in into electrical cabinet

小型自動恆溫調節器

STH 01

STF 01



STH 01

STF 01

- 安裝簡易
- 體積小
- 使用壽命長
- Simple to mount
- Large setting range
- Small size

STH 01: 加熱恆溫調節器搭配電熱器使用

STF 01: 散熱恆溫調節器可搭配風扇和熱交換器或適用於溫度交界點傳遞信號控制

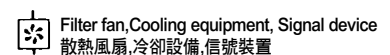
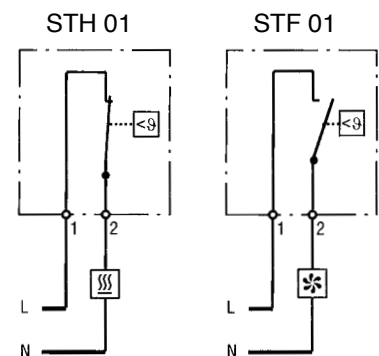
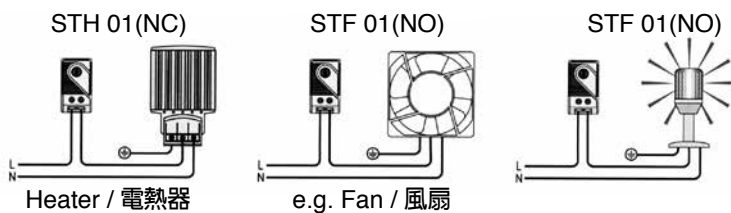
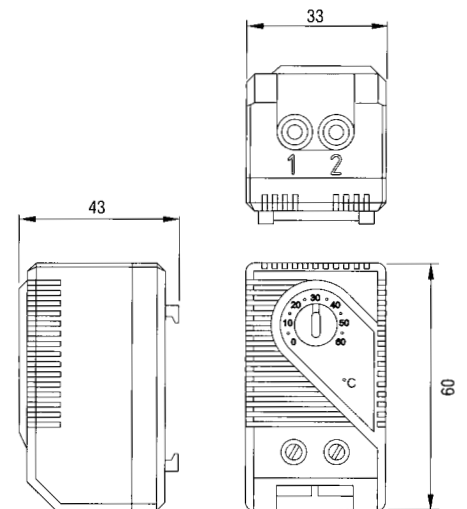
STH 01: Thermostat (normally closed) contact breaker for regulating heaters.

STF 01: Thermostat (normally open) contact maker for regulation of filter fans and heat exchangers or for switching signal transmitters when temperature limit has been exceeded.



Technical data 技術參數：

Sensor element 感應元件：	Thermostatic bimetal 雙金屬感溫材料
Switch temperature difference 切換溫度誤差：	7K (±4K tolerance/誤差)
Contact type 接點型態：	Snap-action contact 快速動作接點
Contact resistance 接點阻抗：	< 10mΩ
Service life 壽命：	100000 cycles / 次
Max. Switching capacity 最大切換容量：	10A 250VAC
Rated impulse voltage 額定脈衝電壓：	2500V
EMC：	(acc. to/依照) EN55014-1-2, EN61000-3-2, EN61000-3-3
Type 1 or Type 2 action 動作型態：	Type 1.C action
Control pollution degree 控制污染等級：	Pollution degree 2
Heat and fire resistance category 加熱防火等級：	Category D
Class II controls 防電極保護：	<input type="checkbox"/>
Connection 接線方式：	2 pole terminal 2.5mm ² 2極接線端子台2.5mm ²
Mounting 安裝固定方式：	Clip for 35mm DIN rail, EN 50022. DIN 軌道 EN50022
Casing 外殼材料：	Plastic 塑料, UL94 V0
Dimensions 外觀尺寸：	60X33X43 mm (H X W X D)
Weight 重量：	40g
Protection type 保護等級：	IP20
Circuit disconnection:	Micro-interruption



Setting range	Art. Ni. Contact Breaker (NC)	Art. No. Contact Marker (NO)
0 to +60°C	STH01.060	STF01.060
-10 to +50°C	STH01.050	STF01.050
+20 to +80°C	STH01.080	STF01.080
+32 to +140°F	STH01.140	STF01.140

DHF 011



- 具備加熱與散熱接點輸出
- 加熱與散熱之溫度分開調整
- 高電流切換能力
- 配線容易
- 固定採用軌道方式
- NO and NC in one casing
- Separate adjustable temperatures
- High switching capacity
- Terminals easily accessible
- Clip fixing

加熱與散熱兩種自動恆溫調節器裝在同一個盒子裡。

NC接點控制調節電熱器，NO接點控制調節散熱風扇與熱交換器、或切換信號裝置。當溫度上升到達所設定之溫度時，電熱器與散熱風扇可以被獨立控制。

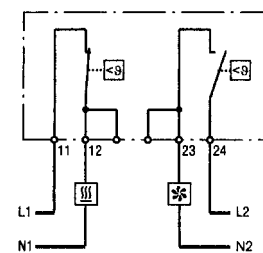
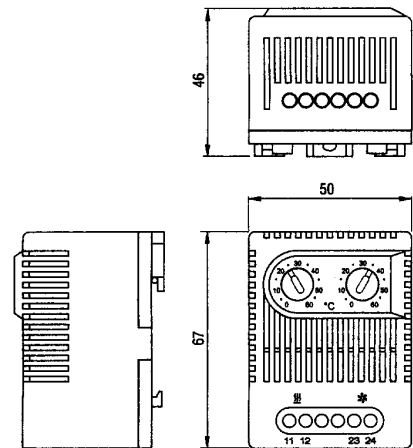
Thermostat (contact breaker, normally closed) for regulating heaters.

Thermostat (contact maker, normally open) for regulating filter fans and heat exchangers or switching signal devices when temperature limit has been exceeded.

Heaters and cooling equipment can be switched independently from each other with a temperature offset as opposed to the usual change-over contacts.

Technical data 技術參數：

Switch temperature difference 切換溫度誤差：	7K(±4K tolerance) 7K(±4K 誤差)
Sensor element 感應元件：	thermostatic bimetal 雙金屬感溫材料
Contact type 接點型態：	snap-action contact 快速動作接點
Contact resistance 接點阻抗：	< 10mΩ
Service life 壽命：	100,000 cycles 100,000 次
Max.Switching capacity 最大切換容量：	250VAC,10 (2) A 120VAC,15 (2) A DC 30W
EMC：	acc.to EN 55014-1-2, EN 61000-3-2, EN 61000-3-3 依照EN 55014-1-2, EN 61000-3-2, EN 61000-3-3
Connection 接點方式：	4-pole terminal, clamping torque 0.5Nm max.: rigid wire 2.5mm ² stranded wire (with wire end ferrule)1.5mm ² 4極接線台(夾緊力0.5Nm),最大2.5mm ²
Mounting 安裝固定方式：	clip for 35mm DIN rail, EN50022 35mm DIN軌道, EN50022
Casing 外殼材料：	plastic according to UL94 V-O, light grey 塑料, UL94VO
Dimensions 外觀尺寸：	67 x 50 x 46mm
Weight 重量：	approx. 90g 約90g
Fitting position 固定方向：	variable 沒有限制
Operating/Storage temperature 操作/儲存溫度：	-20 to+80°C(-4 to+176°F) -45 to+80°C(-49 to+176°F)
Protection type 1 保護等級：	IP20



Heater電熱器

Filter fan,Cooling equipment, Signal device
散熱風扇,冷卻設備,信號裝置

Art. No型號	Setting Range溫度範圍	Setting Range溫度範圍
011.060.060	contact breaker, normally closed 動作時打開(OFF), 動作時關閉(ON) 0 to + 60°C	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) 0 to + 60°C
011.140.140	contact breaker, normally closed 動作時打開(OFF), 動作時關閉(ON) + 32 to + 140°F	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) + 32 to + 140°F
011.050.080	contact breaker, normally closed 動作時打開(OFF), 動作時關閉(ON) - 10 to + 50°C	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) + 20 to + 80°C
011.122.176	contact breaker, normally closed 動作時打開(OFF), 動作時關閉(ON) + 14 to + 122°F	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) + 68 to + 176°F
111.060.060	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) 0 to + 60°C	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) 0 to + 60°C
111.140.140	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) + 32 to + 140°F	contact maker, normally open 動作時關閉(ON), 動作時打開(OFF) + 32 to + 140°F



機械式溼度調節器 MHR 1220 Mechanical Humidity Regulator

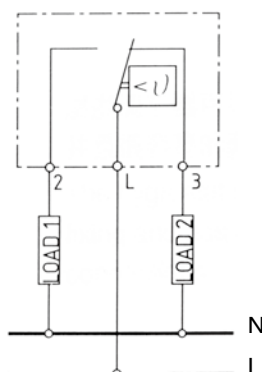


電子機械式溼度調節器是被設計用於控制電櫃裡的電熱器，因此當溼度超過65%時其水珠將會被排除，用這種方法可有效預防水滴與生鏽。

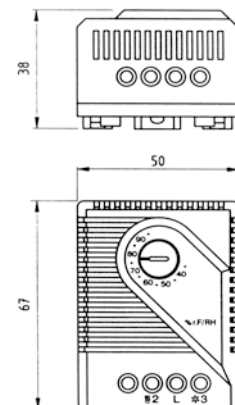
The electromechanical thermostat MHR 1220 is designed to control enclosure heaters so that the dew point is raised when a critical relative humidity of 65% is exceeded. In this way condensation and corrosion is effectively prevented.

Technical data 技術參數：MHR 1220

Measuring range 測定範圍：	35-95% relative humidity 35-95%相對溼度
Measurement accuracy 測定精度：	±3.0% relative humidity ±3.0%相對溼度
Switching difference at 50% relative humidity(microswitch) 50%相對溼度(微動開關)	APPROX. 4% relative humidity 接近.4%相對溼度
Peak voltage 最大電壓：	250V AC
Switching capacity,maximum load 切換容量，最大負載：	
Resistive load 電阻性負載：	5A 250V(service life 50,000 cycles) 5A 250V(50,000週期壽命)
Inductive load $\cos\phi = 0.8$ 電感性負載 $\cos\phi = 0.8$ ：	0.2A 250V AC
Inductive load L/R=3ms 電感性負載L/R=3ms：	1A-50V DC,0.5A-75V DC
Switching capacity,minimum load 切換容量，最小負載：	100mA,20V DC/AC
Contact type 接點型態：	Change-over contact 1組常閉/常開接點
Radio interference suppression level 防止干擾等級：	N(in compliance with VDE 0875)
Permissible ambient temperature 周圍溫度範圍：	0-60°C
Mean temperature coefficient 設定溫度係數：	-20% relative humidity/k at 20°C -20%相對溼度/K 在於20°C and 50% relative humidity 和50%相對溼度
Permissible air velocity 空氣可許速率：	15m/sec
Half value period Where V= 2m/sec 二分之一週期	1.2min
Mounting position 適用地方：	No constraints 不拘
Connection 接線方式：	Terminals in casing, 3 x 2.5mm ² , 3極 3 X 2.5mm ²
Casing 外殼材料：	Plastic 塑料 UL94 VO
Mounting 安裝固定方式：	Clip for 35mm DIN rail(EN 50022) 35mm DIN軌道(EN 50022)
Protection type保護等級：	IP20 (DIN40050)
Dimensions 外觀尺寸：	H X W X D 67X50X38mm
Weight 重量：	60g



LOAD 1 = Enclosure heater
LOAD 2 = Air humidifier





加熱散熱兩用型 自動調溫器



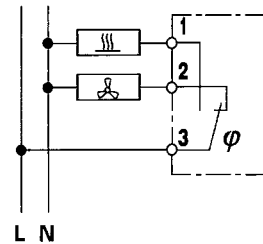
SHF 11 Thermostat SHF 11

機械式自動調溫器，可同時控制加熱器與冷卻扇或信號燈。自動調溫器調整周圍溫度，並且經由接點動作可以切換電阻性與電感性負載。

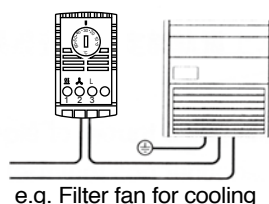
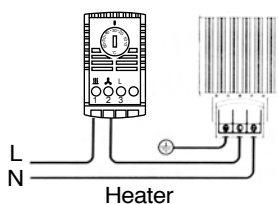
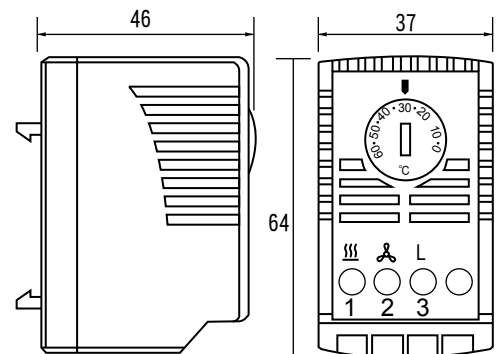
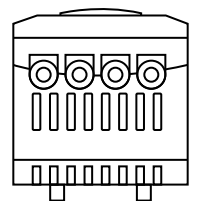
The mechanical thermostat is used for controlling heating and cooling equipment filter fans or signal lamps. The thermostat registers the surrounding air and can switch both inductive and resistive loads via snap-action contact.

Technical data 技術參數 : SHF 11

Sensor element 感應元件 :	Thermostatic bimetal 雙金屬感溫材料
Adjustment range 溫度範圍 :	0-60°C可調整 Switch temperature difference approx. 4K (*with thermal feedback approx. 0.5K)
Contact type 接點型態 :	Change-over snap-action contact 1組常閉接點/常開接點
Breaking/making capacity 接點容量 :	Break contact 10A(4)250V AC 常閉接點10A(4)250V AC Make contact 5A(2) 250V AC常開接點5A(2)250V AC
Radio interference	N(VDE 0875)
Connections 接線方式 :	Clip for 35mm DIN rail(EN50022)
Mounting 安裝固定方式 :	35mm DIN軌道(EN50022)
Dimensions 外觀尺寸 :	67 X 50 X38mm(H X W X D)
Casing 外殼材料 :	Plastic 塑料, UL94 V0
Weight 重量 :	65g
Protection class 保護等級 :	IP20



接線位置：
L+1=電熱器
L+2=冷卻器
Connections:
L+1=heating
L+2=cooling





小型晶片電熱器 SSH 55 Small Semiconductor Heater Series SSH 55



電熱器使用於電櫃內可預防產生水珠或預防溫度降至零下或預防溫度降至於最小需求值。
用此方法可避免生鏽甚至可獲得一個安全溫度

The heaters are used in enclosures where condensation is to be prevented or the temperature may not fall below a minimum value. In this way corrosion is avoided and an even temperature is ensured.

Technical data SSH 55 / 技術參數//SSH 55

	Art. No 型號	Heating capacity 瓦特數	max.current at make 連續電流	L 長度	Weight 重量	
Operating voltage 工作電壓 :	AC/DC 110-250V Max.265V	SSH55.10	10W	1.0A	50mm	0.1kg
Heating capacity 電熱器種類:	10W,20W,30W,55W	SSH55.20	20W	2.5A	60mm	0.2kg
Heating element 發熱元件 :	PTC resistor, self regulating PTC 發熱體	SSH55.30	30W	3.0A	70mm	0.2kg
Radiator 放熱體 :	Anodised extruded aluminium profile 阻極化處理鋁殼	SSH55.55	55W	2.8A	50X70X80mm	0.26kg
Protection class 保護安全等級 :	II					
Protection type 保護等級 :	IP54					
Connection cable 連接電纜線 :	2X0.75mm ² X300mm silicone cable 矽酮電纜線					
Mounting 安裝固定方式 :	Clip for 35mm DIN rail, EN 50022 35mm DIN軌道(EN 50022)					

* at room temperature 20°C / 在室溫20°C

Determination of heating capacity for switch cabinets

$$P=A \times \Delta T \times K$$

P= Required heating capacity(W)

A= Complete free-standing or heat losing surface of switch cabinet (m²)

ΔT = Temperature difference between the ambient temperature and the average desired internal temperature of the switch cabinet(k)

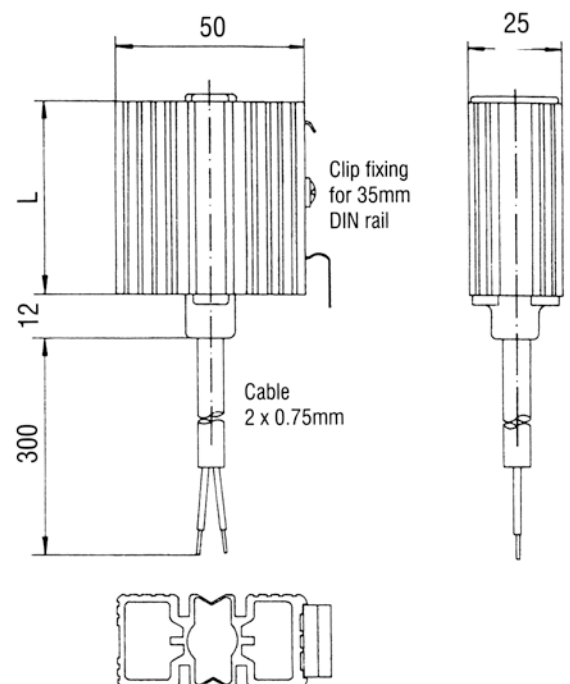
k= Heat transmission coefficient

Lacquered steel sheet~5.5W/m²k

Polyester ~ 3.5W/m²k

當使用於屋外時計算此電熱容量必須加倍。

When used outside:double the calculated heating capacity





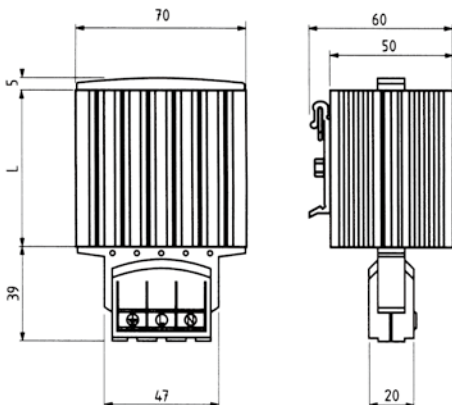
大型電櫃專用晶片電熱器 SEH 150



Semiconductor Enclosure Heater Series SEH 150

電熱器使用於電櫃內，可預防產生水珠或預防溫度降至零下或預防溫度降至於最小需求值。用此方法可避免生鏽，甚至可獲得一個安全溫度。

The heaters are used in enclosures where condensation is to be prevented or the temperature may not fall below a minimum value. In this way corrosion is avoided and an even temperature is ensured.



Technical data SEH 150 / 技術參數SEH 150

Operating voltage 工作電壓 :	AC/DC 110-250V max. 265V
Heating element 發熱元件 :	PTC resistor, self regulating PTC發熱體
Radiator 放熱體 :	Anodised extruded aluminium profile 陽極化處理鋁殼
Protection class 保護安全等級 :	I, test voltage 1600V I, 測試電壓1600V
Protection type 保護等級 :	IP20
Connection cable 連線方式 :	3xpressure clampos for stranded and rigid wire 0.5-2.5mm ²
Mounting 安裝固定方式 :	3級壓迫式端子台 電線範圍0.5-2.5mm ² Clip for 35mm DIN rail, EN50022 35mm DIN軌道(EN 50022)

Art. No型號	Heating capacity瓦特數	max.current at make連續電流	L長度	Weight重量
SEH150.015	15W	1.5A	65mm	0.3kg
SEH150.030	30W	3.0A	65mm	0.3kg
SEH150.045	45W	3.5A	65mm	0.3kg
SEH150.060	60W	2.5A	140mm	0.4kg
SEH150.075	75W	4.0A	140mm	0.5kg
SEH150.100	100W	4.5A	140mm	0.5kg
SEH150.150	150W	9.0A	220mm	0.7kg

* at room temperature 20°C / 在室溫20°C



CE

輕巧型風扇加熱器 SFH 400系列 Simple Fan Heater

SFH 400 Series

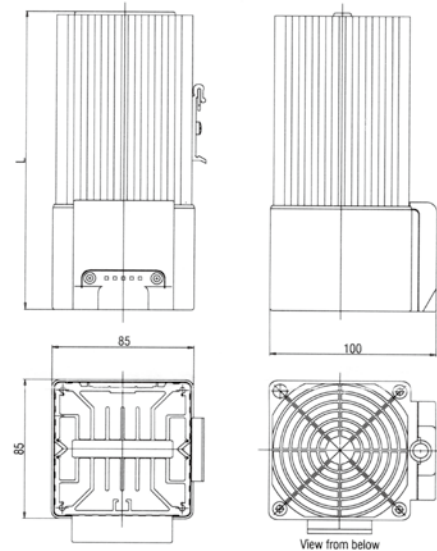
- 輕巧的設計
- Compact Design
- 內建溫度安全切斷開關
- Temperature safety cut-out
- 可簡單的固定於軌道
- Clip fixing
- 壽命長
- Long service life
- 免保養
- Maintenance free

輕巧型風扇加熱器，可預防水珠之形成。一體之軸流風扇提供強力空氣循環，使開關箱裡之溫度穩定，當風扇故障時，其加熱氣之內建安全切斷開關會停止加熱器繼續加熱。

This compact fan heater prevents the formation of condensation. The integrated axial fan provides forced air circulation and so guarantees an even temperature in enclosures. A built-in temperature safety cut-out switches the heater off, in the event of fan failure.

Technical Data/ 技術參數

Operating voltage / 使用電壓 :	AC 220-240V, 50-60Hz AC 110-120V, 50-60Hz DC 48V, DC 24V
Heating element / 加熱元理 :	resistance heater / 電阻性加熱器
Temperature safety cut-out / 溫度安全切斷	to protect against overheating in case of fan failure 風扇故障時，以保護加熱器過熱
Heater body / 加熱器本體:	extruded aluminium profile, anodised 鋁合金
Surface temperature / 表面溫度:	max. 75°C (400W) / 最高75°C (400W)
Connection / 連接方式:	3-pole clamp for 2.5mm ² / 3P夾式端子台，線徑2.5mm ²
Axial fan, ball bearing :	service life 50 000h at 25°C (77° F) 軸承式，壽命50 000h在25°C (77° F)
Air flow, free flow :	AC: 45m ³ /h(50HZ)and/or 54m ³ /h(60Hz) DC:54m ³ /h
Mounting / 固定方式 :	clip for 35mm DIN rail, EN 50022 固定於35mm DIN軌道上，EN 50022
Fitting position / 固定方向 :	preferably vertical / 最好是垂直方向
Operating/Storage temp 操作/儲存溫度:	-40 to + 70°C (-40 to + 158° F) -40 到 + 70°C (-40 到 +158° F)
Prot. type/Prot. class 保護等級 / 保護等級 :	IP20 / I (earthed) IP20 / I (接地)
Approvals / 認證 :	



Art. No.	Operating voltage	Heating capacity	Length (L)	Weight (approx.)
400.25.230	AC 230V, 50-60Hz	250W	182mm	1.1kg
400.40.230	AC 230V, 50-60Hz	400W	222mm	1.4kg
400.25.120	AC 120V, 50-60Hz	250W	182mm	1.1kg
400.40.120	AC 120V, 50-60Hz	400W	222mm	1.4kg
400.25.024	DC24V	250W	182mm	1.0kg
400.25.048	DC48V	250W	182mm	1.0kg
400.40.048	DC48V	400W	222mm	1.3kg

小型晶片風扇加熱器：

Compact semiconductor Fan Heater CSFH400

150W to 400W



Photo : Fan Heater CSFH400

- Small, compact design 輕巧型設計
- Quiet in operation 靜音
- Dynamic heating up 具有動力學的加熱方式
- Clip fixing 固定方式導軌安裝

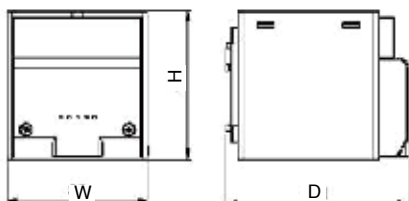
風扇加熱器展現小型化之結構，搭配使用控制元件可提供在開關箱內部之平均空氣溫度。接線連接採用端子台。CSFH400之小型化，使用在開關箱內可節大量空間而具備高附加價值。

Fan heater prevents formation of condensation and provides an evenly distributed interior air temperature in enclosures with electric/electronic components. The heater is connected using the internal terminal connectors. The small size of the CSFH400 makes it ideal for use in enclosures where space is at a premium.



Technical Data

Heating element	TPC發熱元件 PTC heating element
Surface temperature	150/250W:最高50°C (122°F) 最上面的風扇網除外 150W/250W : max. 50°C (122°F), except upper protective grille 400W:最高65°C (149°F) 最上面的風扇網除外 400W : max. 65°C (149°F), except upper protective grille 在周圍溫度20°C (68°F) 之下 at 20°C (68°F) ambient temperature
Axial fan, ball bearing	air flow, free flow: 空氣流動 45m³/h (230VAC), 54m³/h (120VAC) service life 40,000h at 40°C (104°F)
Connection	二極夾式，最大2.5mm² 2-pole clamp max. 2.5mm² 夾式扭矩最大0.8牛頓米 clamping screw torque 0.8Nm max.
Casing	黑色塑膠外殼符合UL94-0 plastic according to UL94-0, black
Mounting	卡式35mm DIN軌道 clip for 35mm DIN rail.
Fitting position	垂直(立式)，風扇網朝上。 vertical airflow (air outlet up)
Operating / Storage temperature	-45 to + 70°C (-49 to + 158°F)
Protection type / Protection class	IP20/II雙層絕緣 IP20/II (double insulated)
Note	若有需求，可供應其它的電壓 other voltages on request



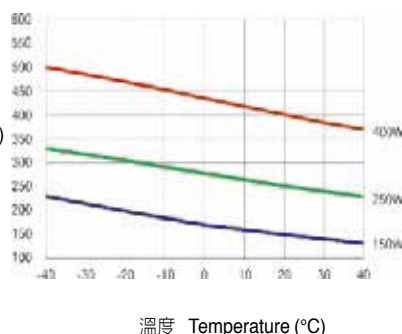
底下
View : back side



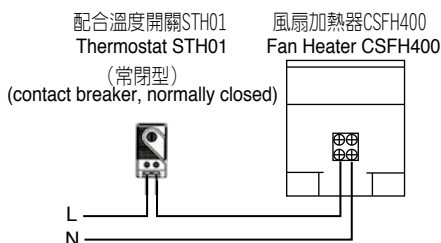
卡式固定
Clip fixing

加熱能力 / 環境溫度曲線圖

Heating capacity / Ambient temperature diagram



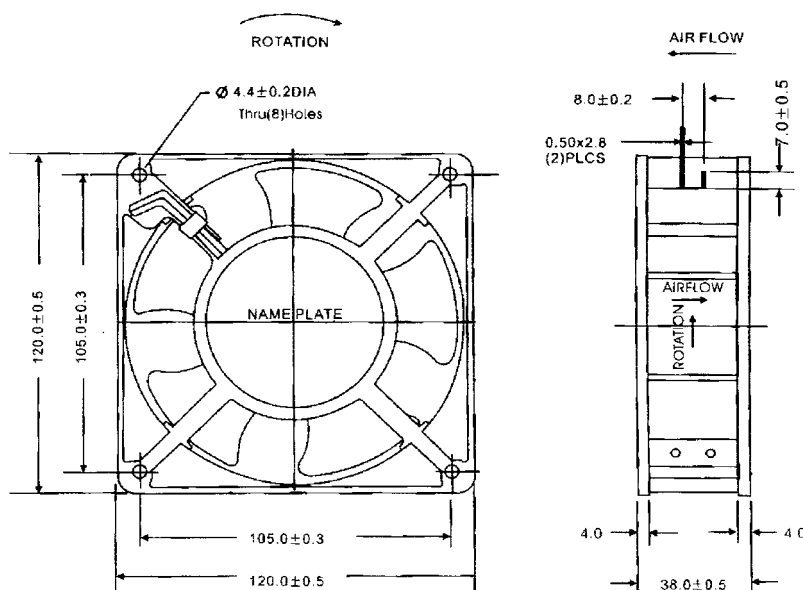
接線範例 Example of connection



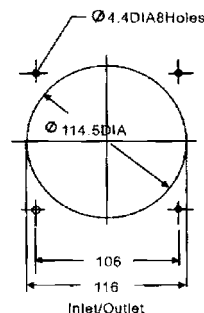
加熱能力
Heating capacity (W)

料號 夾式	操作電壓	加熱容量	瞬間電流	保險絲 (延遲型)	尺寸	重量
CSFH400.15.230	230VAC,50/60Hz	150W	12A	6.3A	75x65x90mm	0.3kg
CSFH400.25.230	230VAC,50/60Hz	250W	9A	6.3A	90x85x111mm	0.5kg
CSFH400.40.230	230VAC,50/60Hz	400W	15A	10A	90x85x111mm	0.5kg
CSFH400.15.120	120VAC,50/60Hz	150W	6A	6.3A	75x65x90mm	0.3kg
CSFH400.25.120	120VAC,50/60Hz	250W	6A	6.3A	95x85x111mm	0.5kg
CSFH400.40.120	120VAC,50/60Hz	400W	9A	6.3A	95x85x111mm	0.5kg

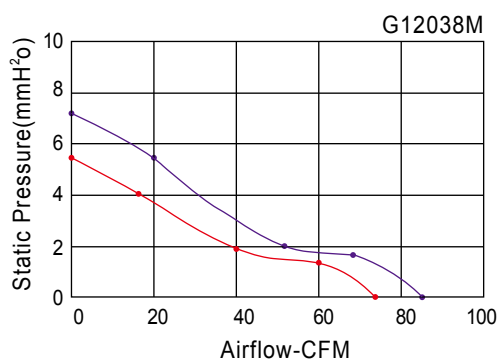
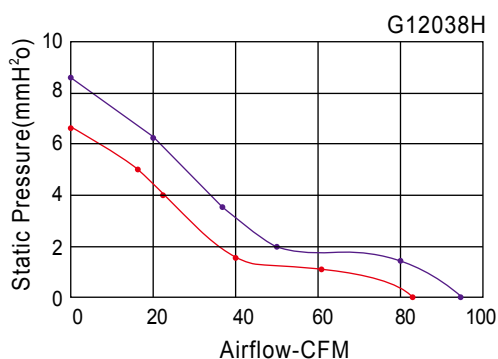
散熱風扇 Axial Ac Fan



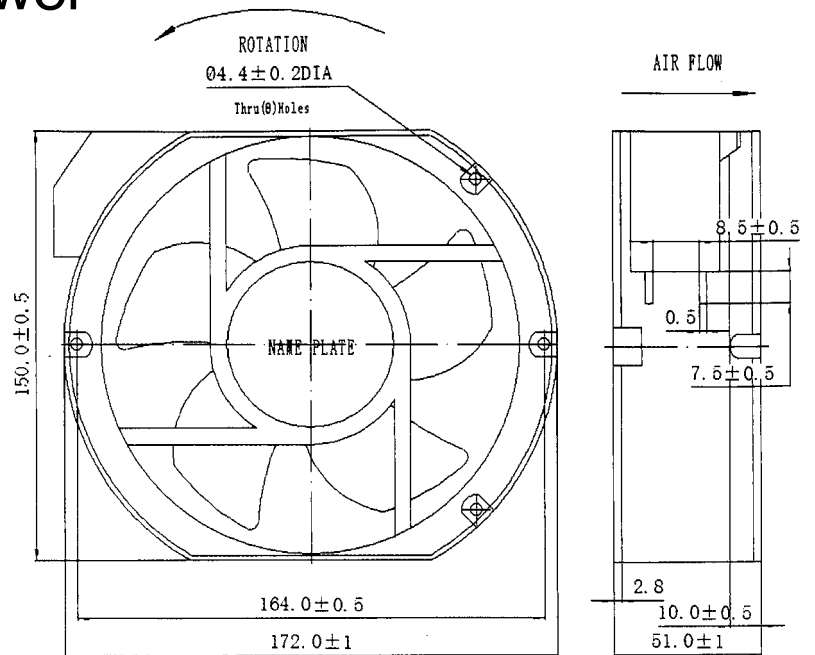
尺寸 Size:120mmx120mmx38mm
 風量 Airflow:122~162m3/hr
 72-95CFM
 重量 Weight:480g
 噪音 Noise:39~48dBA
 風葉 Impeller:PBT Thermoplastic Black,UL94-V0
 外框 Frame:Aluminum Alloy
 端子 Terminals:0.5mm
 引線 Lead Wire:AWG#22 UL 1007(Optional)
 馬達 Motor:Shaded Pole Induction Motor
 安規認證 Certification:UL > CUL > TUV > CE >
 溫度範圍 Operation Temperature:-10°C~+65°C



型號 Model	軸承型式 Bearing System	電壓 Voltage VAC	頻率 Freq. Hz	電流 Current A	功率 Power W	轉速 Speed RPM	噪音 Noise dBA	風量 Air Flow		相數 Phase	電容 Capacitor
								M3/hr	CFM		
G12038HA ₁ S	Sleeve	100~125	50/60	0.28	21	2600/3000	43/48	138/162	82/95	1	/
G12038HA ₂ S		200~240	50/60	0.14	21	2600/3000	43/48	138/162	82/95	1	/
G12038HA ₃ S		380~420	50/60	0.08	21	2600/3000	43/48	138/162	82/95	1	/
G12038HA ₁ B	Ball	100~125	50/60	0.28	21	2600/3000	43/48	138/162	82/95	1	/
G12038HA ₂ B		200~240	50/60	0.14	21	2600/3000	43/48	138/162	82/95	1	/
G12038HA ₃ B		380~420	50/60	0.18	21	2600/3000	43/48	138/162	82/95	1	/



AC軸風扇 & Blower Axial Ac Fan & Blower



尺寸 Size:172mmx150mmx51mm

風量 Airflow:272~336m3/hr

160-198CFM

重量 Weight:680g

噪音 Noise:49~59dBA

風葉 Impeller:PBT Thermoplastic Black,UL94-V0

外框 Frame:Aluminum Alloy

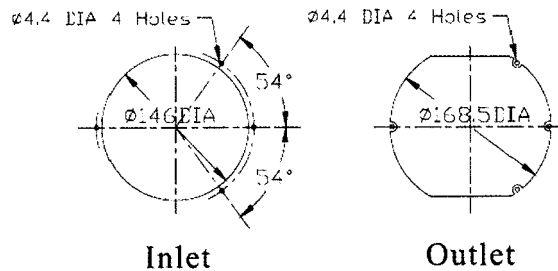
端子 Terminals:0.5mm

引線 Lead Wire:AWG#22 UL 1015(Optional)

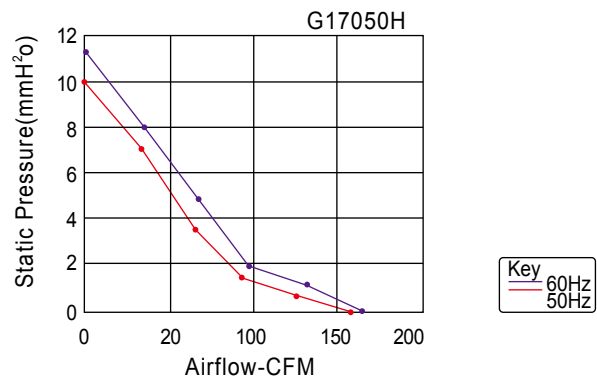
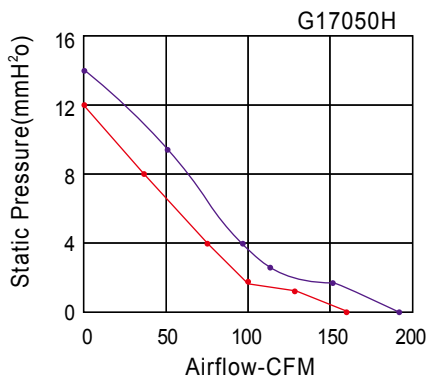
馬達 Motor:Shaded Pole Induction Motor

安規認證 Certification:UL > CUL > TUV > CE >

溫度範圍 Operation Temperature:-10°C~+65°C



型號 Model	軸承型式 Bearing System	電壓 Voltage VAC	頻率 Freq. Hz	電流 Current A	功率 Power W	轉速 Speed RPM	噪音 Noise dBA	風量 Air Flow		相數 Phase	電容 Capacitor
								M3/hr	CFM		
G17050HA ₁ S	Sleeve	100~125	50/60	0.4	38	2600/2900	54/59	299/336	176/198	1	/
G17050HA ₂ S		200~240	50/60	0.22	38	2600/2900	54/59	299/336	176/198	1	/
G17050HA ₃ S		380~420	50/60	0.12	38	2600/2900	54/59	299/336	176/198	1	/
G17050HA ₁ B	Ball	100~125	50/60	0.4	38	2600/2900	54/59	299/336	176/198	1	/
G17050HA ₂ B		200~240	50/60	0.22	38	2600/2900	54/59	299/336	176/198	1	/
G17050HA ₃ B		380~420	50/60	0.12	38	2600/2900	54/59	299/336	176/198	1	/



Airflow Monitor LCF 013 氣流檢測器 LCF 013



Mechanical switch contact	開關式接點
Versatile fields of application	可應用於多方面領域
Small size	輕巧
Easy to connect	容易安裝

氣流檢測器應用於檢測風扇或過濾網之流動空氣。當風扇故障或過濾網過髒，以致造成空氣沒流動，而氣流檢測器的開關便會動作。這種簡單的機械操作和複雜的電子檢測系統的選用，可以有另一種選擇使用方式。

The airflow monitor (NC/NO) is designed to indicate the loss of air movement of a fan or filter fan. The contact detects the loss of air movement caused by fan failure or blocked filter media regardless of direction of air. Its simple mechanical operation makes it a viable alternative to electronic monitoring systems.

應用：

LCF 013 是使用一個接點來檢測風扇或含有過濾網之風扇，安裝於開關裡，可以直接連接於檢測系統作遠方控制或直接切換警報設備，例如LED或信號燈。若負載超過接點容量則需透過繼電器來推動氣流檢測器使用 NC 接點，當風扇故障時則接點閉合。若使用 NO 接點則當接點閉合時表示風扇正常。

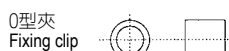
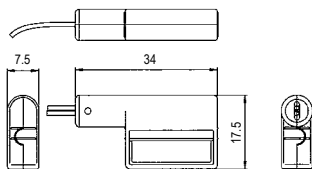
Application:

The LC 013 is used as a signal contact to monitor fans or filter fans in stationary, self-contained Protection Class I enclosures. It can be connected to monitoring systems with remote control or can directly switch alarm devices, such as LED's or signal lamps. Loads with capacities exceeding the indicated switching capacity must be switched via a relay, e.g. our electronic relay SM 010. The airflow monitor with NC contact closes upon loss of air movement, i.e. it indicates fan failure (e.g. red signal lamp). The NO contact closes when fan is in operation and serves as optical function display (e.g. green signal lamp).

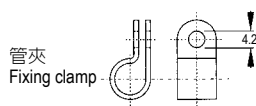
氣流檢測器與柵欄板組合在一起
Airflow monitor integrated in protective grille



120x120



O型夾
Fixing clip



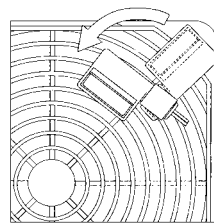
管夾
Fixing clamp



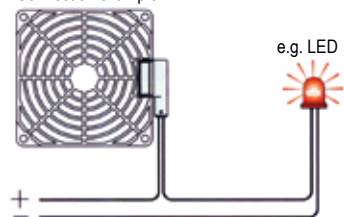
Technical Data 技術規格：

Contact type 接點型式	reed / magnet contact (磁簧 / 磁鐵接點)
Normally Closed (NC) 常閉 (NC)	switch contact open when air is flowing 當空氣流通時接點是打開的
Normally Open (NO) 常開 (NO)	switch contact closed when air is flowing 當空氣流通時接點是閉合的
Max. switching voltage 最大切換電壓	NC: 240VDC (UL), 240V AC/DC (VDE) / NO: 60VDC
Max. switching current 最大切換電流	NC: DC 500mA / NO: DC 170mA
Max. switching capacity 最大切換功率	10W (resistive load) (電阻性負載)
Switching threshold of airflow velocity 最小氣流速度	> 2.5m/s (hysteresis 滯後: > 1m/s)
Max. airflow velocity 最大氣流速度	50m/s
Contact resistance 接點電阻	< 370m Ω (with wire) (含電線)
Max. air humidity 最大空氣濕度	70% RH (not precipitating)
Service life 壽命	>100,000 cycles
Mounting 安裝	alternatively integrated in protective grille (see table), mounting clamp or mounting clip 安裝於柵網或使用塑料管夾及O型夾固定
Casing 外殼	plastic according to UL94-HB, black 塑料符合 UL94-HB，黑色
Fitting position 安裝位置	bidirectional tab perpendicular to airflow
Operating / Storage temperature 操作 / 儲存溫度	-20 to +50°C (-4 to +122 F) / -20 to +80°C (-4 to +176 F)
Protection type 保護等級	IP20

Note: The product of switching voltage and switching current must not exceed 10W. The max. voltage and max. current must not be exceeded, not even short-term (voltage/current peaks). The resulting voltage and current peaks of inductive or capacitive loads must be restricted by a contact protection circuit.



直接連接到LED
Connection example



Description	Art. No. (NC)	Art. No. (NO)	Dimensions	Weight
Air monitor integrated in protective grille (plastic) LCF 013 安裝於塑料網上	LCF 013000	LCF 013001	120 x 120 X 10mm	36g

PATENT NO. M318877(Taiwan , 台灣)
 專利權號 M321490(Taiwan , 台灣)
 ZL2007200059640(China , 中國)

RWL系列LED警示燈

RWL SERIES_LED INTEGRATED FLASHING LIGHT

特色 Features

- * 採用LED發光，具有壽命長、省能之特點。
- * 寬廣輸入電壓AC85~265V，DC12~48V
- * 可自行設定閃爍與否功能。
- * 蜂鳴器功能。
- * 可輕易地更換LED發光板，便可改變顏色。
- * 防水、防塵，IP65
- * LED used as light source, ending problem of burned out bulbs.
- * Longer life, power saved.
- * Wide power ranges, AC type : 85~265V, DC type : 12~48V.
- * Choose flashing or continuous light self.
- * It's easy to change LED lighting board so that change lighting color.
- * protected degree IP65.



點亮前 Before



透明原色 ORIGINAL

點亮後 After



參數說明 Specifications

型號 Model	RWL-100-B-A	RWL-100-B-D	RWL-100-HB-A	RWL-100-HB-D
電源電壓 Rated Voltage	AC85~265V	AC/DC12~48V	AC85~265V	AC/DC12~48V
消耗電力 Power Consumption	2.36VA	1.51W	3.3VA	1.8W
額定頻率 Operation Frequency	47~63Hz	47~63Hz	47~63Hz	47~63Hz
閃爍次數/分 Flash/min.	104 ± 5	104 ± 5	104 ± 5	104 ± 5
操作溫度 Operation Temperature	-25~55°C	-25~55°C	-25~55°C	-25~55°C
操作溼度 Operation Humidity	45~85% RH	45~85% RH	45~85% RH	45~85% RH
保護等級 Protected Degree	IP65	IP65	IP65	IP65
重量 Weight	280g	280g	280g	280g

高亮度LED警示燈和超高亮度LED警示燈 HIGH LIGHT AND SUPER LIGHT



參數說明 Specifications

型號 Model	RWL-100-H-HB-B-A	RWL-100-H-HB-D	RWL-100-S-HB-A	RWL-100-S-HB-D
電源電壓 Rated Voltage	AC85~265V	AC/DC12~48V	AC85~265V	AC/DC12~48V
消耗電力 Power Consumption	3.3VA	1.8W	R:7.85VA Y:7.75VA G:7.92VA BU:8.4VA W:7.06VA	2.68W
額定頻率 Operation Frequency	47~63Hz	47~63Hz	47~63Hz	47~63Hz
閃爍次數/分 Flash/min.	104±5	104±5	104±5	104±5
操作溫度 Operation Temperature	-25~55°C	-25~55°C	-25~55°C	-25~55°C
操作溼度 Operation Humidity	45~85% RH	45~85% RH	45~85% RH	45~85% RH
保護等級 Protected Degree	IP65	IP65	IP65	IP65
重量 Weight	280g	280g	415g	415g

HOW TO ORDER : RWL-100-B-A-R 如何訂購警示燈

RWL-100 -  -  -  - 

光源亮度 LIGHTING

空白 : LED
H : 高亮度LED
S : 超亮度LED

SPACE : GENERAL LED
H : HIGH LIGHT LED
S : SUPER LIGHT LED

蜂鳴器 BUZZER

空白 : 無蜂鳴器
B : 80dB
HB : 100dB

SPACE : WITHOUT BUZZER
B : 80dB
HB : 100dB

電源 POWER VOLT

A : AC85~265V
D : DC12~48V

顏色 COLOR

R : 紅色 G : 綠色
A : 黃色 W : 白色
B : 藍色

R : RED G : GREEN
A : AMBER W : WHITE
B : BLUE

HOW TO ORDER LED LIGHTING BOARD

如何訂購LED發光板 :

RWL -  - 

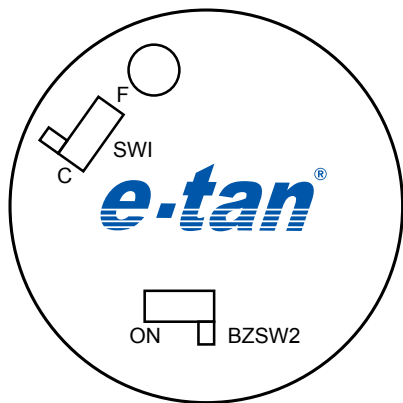
光源亮度 LIGHTING

L : 一般LED L : GENERAL LED
H : 高亮度LED H : HIGH LIGHT LED
S : 超亮度LED S : SUPER LIGHT LED

顏色 COLOR

R : 紅色 G : 綠色 A : 黃色 W : 白色 B : 藍色
R : RED G : GREEN A : AMBER W : WHITE B : BLUE

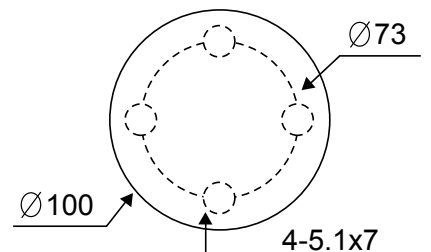
切換開關功能 Switch Function



SW1 : 切換開關 Switch
F : 閃爍 Flashing
C : 常亮 Continuous Lighting

BZSW2 : 切換開關 Buzzer Switch
ON : 蜂鳴器響 Buzzer Working

尺寸圖 Dimension



配線圖 Wired

A TYPE

No.	顏色 Color	功能 Function
1	紅色 Red	L(+)-電源 L(+)-Power
2	黑色 Black	N(-)-電源 N(-)-Power
3	黃綠色 Yellow-Green	地線 Earth

D TYPE

No.	顏色 Color	功能 Function
1	紅色 Red	+ -電源 + -Power
2	黑色 Black	- -電源 - -Power
3	黃綠色 Yellow-Green	地線 Earth

LIGHT SLC-035 LED燈泡

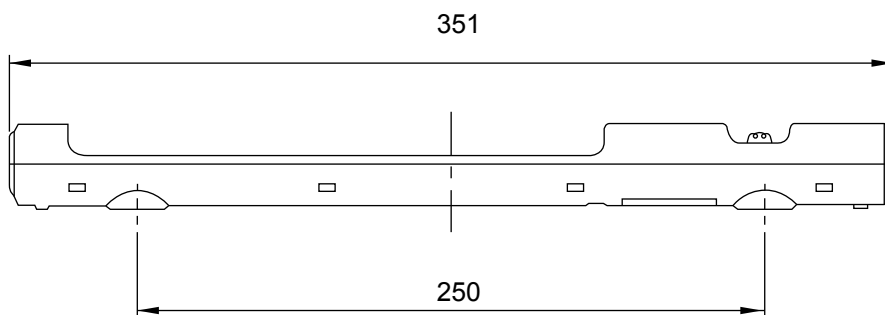


TECHNICAL DATA

Power consumption	max. 5 W (~75 W incandescent bulb)
Luminosity	400 Lm at 120 ° (1,200 Lm at 360 ° or equivalent 95W light bulb)
Lamp type	LED, 120 ° angle of radiation Light color- daylight, color temperature-6,000 to 7,000 K
Service life	60,000 hrs. at 68°F (20°C)
Connection	2-pole plug with snap lock; AC: max. 2.5A / AC 240V. white connector
Housing	plastic, transparent
Mounting	magnet
Operating / Storage temperature	-22 to +140°F (-30 to +60°C) / -40 to +185°F (-40 to +85°C)
Operating / Storage humidity	max. 90 %RH (non-condensing)
Protection type / Protection class	IP20 / II (double insulated)

技術資料

消耗功率	最大5W (約75W白熱燈泡)
照度	400流明在120 ° (120 ° 流明在360 ° 或同等的95W燈泡)
燈泡種類	LED, 發光角度120 ° 白光, 色溫6000~7000K
壽命	60,000小時在 68°F (20°C)
連接方式	2P夾式母插頭, 最大2.5A / AC 240V, 白色插頭
外殼	塑料, 透明
安裝方式	電磁吸鐵
操作 / 儲存方式	-22 ~ 140°F (-30 ~ 60°C) -40 ~ 185°F (-40 ~ 85°C)
操作 / 儲存溫度	最高90 %RH (無凝結)
防護種類 / 防護等級	IP20 / II (雙絕緣)





Part-number Description 型號說明 >>>

LAS2	GQ	★	—	□	■	◇	/	△	/	▲	/	◎	/	☆
Code of series 系列型號	Code name 代號	The front shape 頭部形狀	Contact structure: 接點組合:	Operation mode: 操作類型:	Lamp type 燈部類型	Lamp color and colored button: 帶燈顏色或按鈕顏色:	Lamp voltage: 燈部電壓:	The crust material: 外殼材質:	IP degree: 防護等級:					
		F Flat Round 平圓形 H High Round 高平圓形 C Concave Round 凹圓形 G High Concave Round 高凹圓形	11 1NO1NC 22 2NO2NC	Z Latching type 自鎖按鈕 No letter means momentary 無字母代表自復按鈕	D Dot 單點 E Ring 環形	R Red 紅 G Green 綠 Y Yellow 黃 O Orange 橙 B Blue 藍 W White 白	AC/DC 6V AC/DC 12V AC/DC 24V AC/DC 110V AC/DC 220V Note: Other voltage can be made to order 其他電壓等級可定做	N Nickel-plated Brass 黃銅鍍鎳外殼 S Stainless steel 不銹鋼外殼	FP IP67 No letter means IP40 無字母代表IP40					

Note 注: Pls read the catalog carefully, and choose the right part-number according to the sign. 請仔細閱讀產品具體說明後，根據不同符號在該表中選取相應代號。

Lamp Ratings 燈泡規格 >>>

Lamp Type 燈泡類型	LED lamp (AC/DC) 雙向LED燈泡 (交直流通用)			Lamp Circuit Diagram 燈泡特效電路
LED Color 發光顏色	R G Y O B W			
Life 壽命	40000 hours (Reference) 40000小時 (參考值)			
Rated Voltage 額定電壓	AC/DC6V AC/DC24V	AC/DC12V AC/DC36V	AC/DC110V AC/DC220V	
Rated Current 額定電流	About 約 15mA		About 約 3mA	
Dropping Way 降壓方式	Inner resistance 內置電阻	Outer resistance when using 6V lamp 採用6V燈泡需外接電阻		

● Using AC/DC LED lamp, the terminals have no difference of anode and cathode.
 採用交直流通用的LED燈泡，接線端子無正負極區分
 ● Using inner resistance for the lamp below 60V. Using 6V lamp when the lamp voltage is above 60V, and need connect outer dropping resistance.
 60V以下燈泡已內置保護電阻；60V以上時燈電壓採用6V燈泡，需外接降壓電阻

Note 注: DC LED and other voltage can be made to order. 如需單向直流LED燈泡可定做；其他電壓規格可按要求定做。

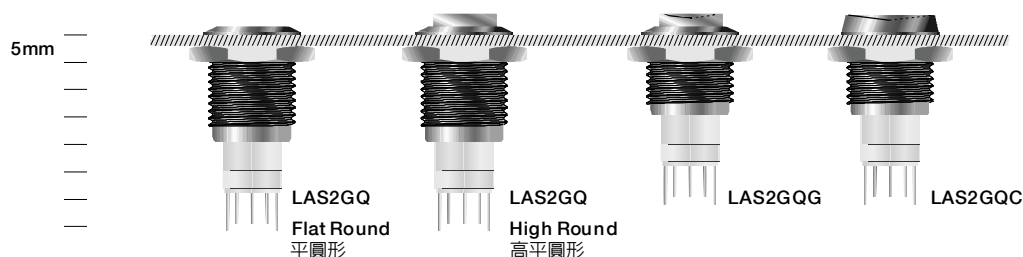
Switching Operation 開關結構說明 >>>

TYPE 型式	C
Diagram 示意圖	
Sign 符號	
Explanation 說明	Using three terminals, single-break and fast-motion changeover contact. 具有三個端子的單斷點快動轉換觸頭開關

Terminal Description 引腳說明 >>>

Can use two sets at most.
C1, NO1, NC1 and C2, NO2, NC2 are one set respectively.
C is common used, NO is normal opened, NC is normal closed;
+, - are lamp terminals, the standard LED have no difference of anode and cathode;
The lamp and switch are relatively independent and can use switch or peripheral circuit to control the lamp state.
最多可配置兩組接點。
C1, NO1, NC1和C2, NO2, NC2分別為一組接點；
C腳為公用腳，NO腳為常開腳，NC腳為常閉腳；
+，-腳為燈泡引腳，常規燈泡配置無正負極區分；
燈泡與接點相對獨立，可通過接點或外圍電路控制燈泡狀況。

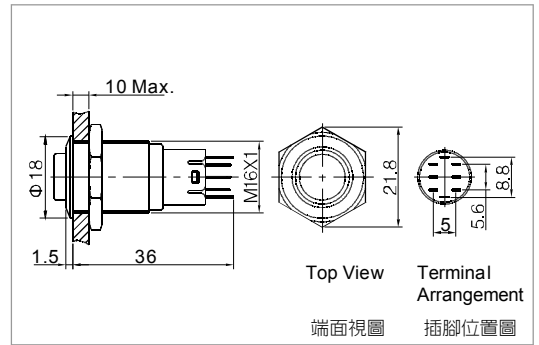
Installation Effect 安裝效果預覽 >>>



Metal ring illuminated push button 金屬環形帶燈按鈕開關



- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: High Round
頭部形狀: 高平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍銀
- Ring Illuminated (LED)
環形帶燈 (LED)
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09

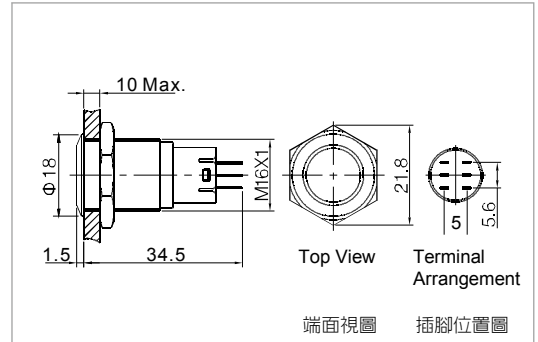


Specification 產品規格	LAS2GQF- <input type="checkbox"/> ■/◎/☆ LAS2GQH- <input type="checkbox"/> ■/◎/☆	LAS2GQF- <input type="checkbox"/> ■D/△/▲/◎/☆ LAS2GQH- <input type="checkbox"/> ■D/△/▲/◎/☆	LAS2GQF- <input type="checkbox"/> ■E/△/▲/◎/☆ LAS2GQH- <input type="checkbox"/> ■E/△/▲/◎/☆
The Front Shape 頭部形狀	Flat Round 平圓形 High Round 高平圓形	Flat Round 平圓形 High Round 高平圓形	Flat Round 平圓形 High Round 高平圓形
Terminal Type 接線端子配置	Pin Terminal (1.8x0.4mm) 接線端子(1.8x0.4mm)	Pin Terminal (1.8x0.4mm) 接線端子(1.8x0.4mm)	Pin Terminal (1.8x0.4mm) 接線端子(1.8x0.4mm)
Switching 開關形式	C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)	C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)	C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)
Max. Switch Rating 開關規格	Ith:3A Ui:250VAC	Ith:3A Ui:250VAC	Ith:3A Ui:250VAC
Contact Resistance 接觸電阻	$\leq 50\text{m}\Omega$	$\leq 50\text{m}\Omega$	$\leq 50\text{m}\Omega$
Insulation Resistance 絕緣電阻	$\geq 1000\text{M}\Omega$	$\geq 1000\text{M}\Omega$	$\geq 1000\text{M}\Omega$
Dielectric Intensity 絕緣強度	2000VAC	2000VAC	2000VAC
Operating Temp 環境溫度	-20°C~+55°C	-20°C~+55°C	-20°C~+55°C
Mechanical Life 機械壽命	200,000 cycles	200,000 cycles	200,000 cycles
Electrical Life 電器壽命	50,000 cycles	50,000 cycles	50,000 cycles
Panel Thickness 面板厚度	1~10mm	1~10mm	1~10mm
Torque 螺母扭矩	5~14Nm	5~14Nm	5~14Nm
Operation Pressure 操作壓力	2.5~4N	2.5~4N	2.5~4N
Operation Travel 操作行程	About 2.8mm	About 2.8mm	About 2.8mm
IP Degree 防護等級	IP40/ IP67, IK09	IP40/ IP67, IK09	IP40/ IP67, IK09
Material 材料	Contact 接點	Silver Alloy 銀合金	Silver Alloy 銀合金
	Button 按鍵	Stainless Steel/ Nickel Plated Brass 不銹鋼/ 黃銅鍍銀	Stainless Steel/ Nickel Plated Brass 不銹鋼/ 黃銅鍍銀
	Body 外殼	Stainless Steel/ Nickel Plated Brass 不銹鋼/ 黃銅鍍銀	Stainless Steel/ Nickel Plated Brass 不銹鋼/ 黃銅鍍銀
	Base 基座	PBT	PBT
	RoHS	Made to order 可定制	Made to order 可定制
LED Spec. 帶燈 部份 參數	Type 帶燈類型	Without Lamp 不帶燈	Dot Illuminated (LED) 單點帶燈 (LED)
	Rated Voltage 額定電壓	—	6V/12V/24V/110V/220V
	Color 燈泡顏色	—	R G Y O B W
	Life 燈泡壽命	—	40000 hours
			Ring Illuminated (LED) 環形帶燈 (LED)
			6V/12V/24V/110V/220V
			R G Y O B W
			40000 hours

Metal push button 金屬按鈕開關



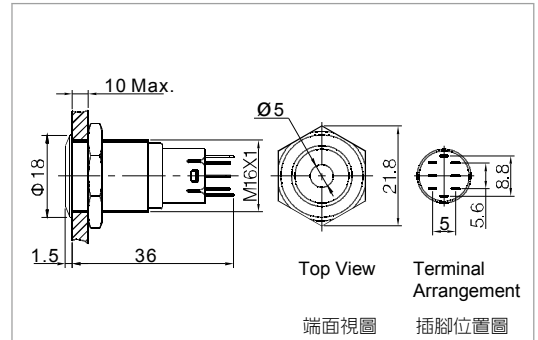
- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: Flat Round
頭部形狀: 平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍鎳
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09



Metal dot illuminated push button 金屬單點帶燈按鈕開關



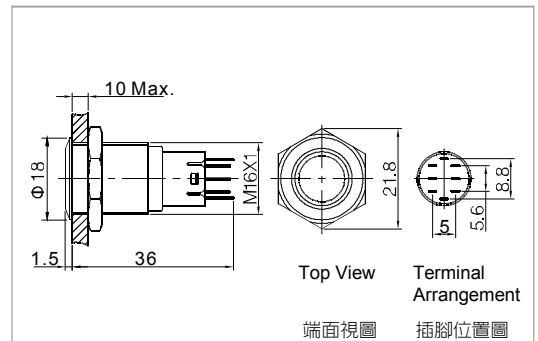
- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: Flat Round
頭部形狀: 平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍鎳
- Dot Illuminated
帶燈方式: 單點
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09



Metal ring illuminated push button 金屬環形帶燈按鈕開關



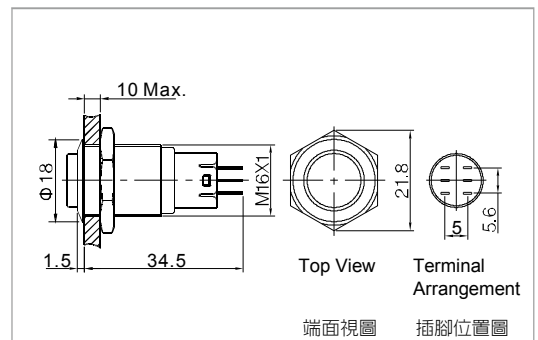
- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: Flat Round
頭部形狀: 平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍鎳
- Ring Illuminated (LED)
環形帶燈 (LED)
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09



Metal push button 金屬按鈕開關



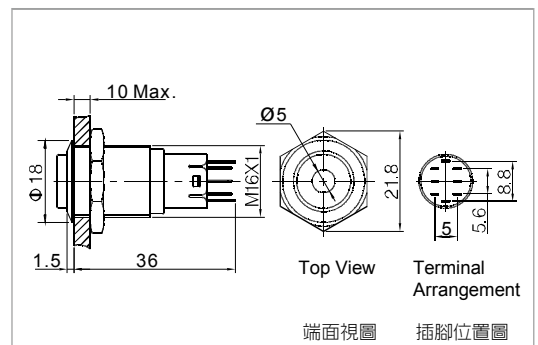
- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: High Round
頭部形狀: 高平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍鎳
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09



Metal dot illuminated push button 金屬單點帶燈按鈕開關



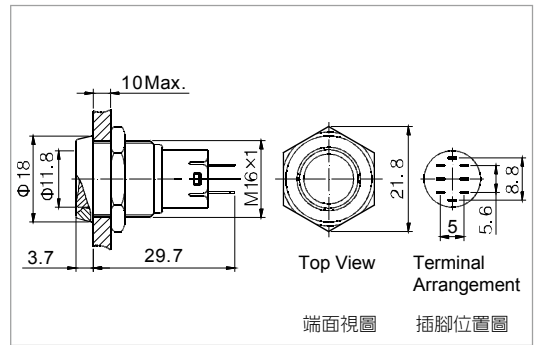
- \varnothing 16mm Diameter
安裝孔尺寸: \varnothing 16mm
- Switch Rating: 3A/250VAC
開關額定值: 3A/250VAC
- Contact Configuration: 1NO1NC/ 2NO2NC
接點組合: 1NO1NC/ 2NO2NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Front Shape: High Round
頭部形狀: 高平圓形
- The Crust Material: Stainless Steel/
Nickel Plated Brass
外殼材質: 不銹鋼/黃銅鍍鎳
- Dot Illuminated
帶燈方式: 單點
- IP Degree: IP40/ IP67, IK09
防護等級: IP40/ IP67, IK09



Anti-vandal metal push button 高強度金屬按鈕開關



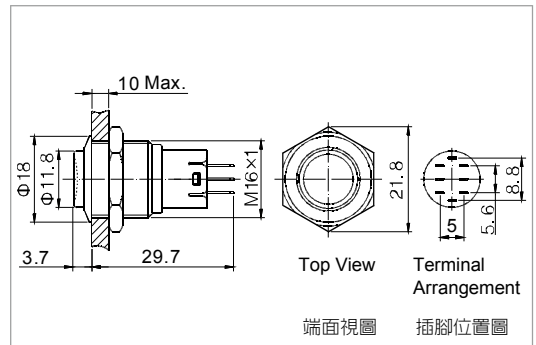
- **Ø 16mm Diameter**
安裝孔尺寸: Ø 16mm
- **Switch Rating: 3A/250VAC**
開關額定值: 3A/250VAC
- **Contact Configuration: 1NO1NC/ 2NO2NC**
接點組合: 1NO1NC/ 2NO2NC
- **Operation Type: Momentary/Latching**
操作類型: 自復式/自鎖式
- **The Front Shape: Concave Round**
頭部形狀: 凹圓形
- **The Crust Material: Stainless Steel/
Nickel Plated Brass**
外殼材質: 不銹鋼/黃銅鍍鎳
- **IP Degree: IP40/ IP67, IK10**
防護等級: IP40/ IP67, IK10



Anti-vandal metal push button 高強度金屬彩色按鈕開關



- **Ø 16mm Diameter**
安裝孔尺寸: Ø 16mm
- **Switch Rating: 3A/250VAC**
開關額定值: 3A/250VAC
- **Contact Configuration: 1NO1NC/ 2NO2NC**
接點組合: 1NO1NC/ 2NO2NC
- **Operation Type: Momentary/Latching**
操作類型: 自復式/自鎖式
- **The Front Shape: Concave Round**
頭部形狀: 凹圓形
- **The Crust Material: Stainless Steel/
Nickel Plated Brass**
外殼材質: 不銹鋼/黃銅鍍鎳
- **IP Degree: IP40/ IP67, IK09**
防護等級: IP40/ IP67, IK09
- **Head Color: R/G/Y/O/B/W/N**
頭部顏色: 紅/綠/黃/橙/藍/白/黑

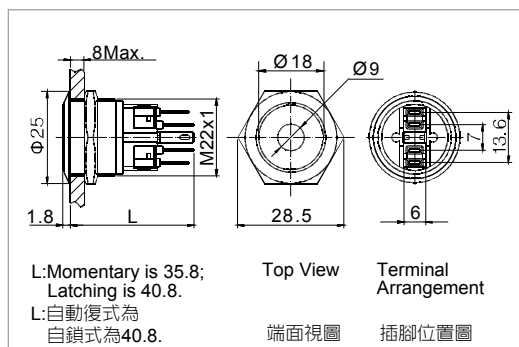


Specification 產品規格	LAS2GQC-□■/◎/☆	LAS2GQG-□■/△/◎/☆
The Front Shape 頭部形狀	Concave Round 凹圓形	High Concave Round 高凹圓形
Terminal Type 接點端子配置	Pin Terminal (1.8x0.4mm) 接線端子(1.8x0.4mm)	Pin Terminal (1.8x0.4mm) 接線端子(1.8x0.4mm)
Switching 開關形式	C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)	C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)
Max. Switch Rating 開關規格	Ith:3A Ui:250VAC	Ith:3A Ui:250VAC
Contact Resistance 接觸電阻	≤ 50mΩ	≤ 50mΩ
Insulation Resistance 絕緣電阻	≥ 1000MΩ	≥ 1000MΩ
Dielectric Intensity 絕緣強度	2000VAC	2000VAC
Operating Temp 環境溫度	-20°C~+55°C	-20°C~+55°C
Mechanical Life 機械壽命	200,000 cycles	200,000 cycles
Electrical Life 電器壽命	50,000 cycles	50,000 cycles
Panel Thickness 面板厚度	1~10mm	1~10mm
Torque 螺母扭矩	5~14Nm	5~14Nm
Operation Pressure 操作壓力	2.5~4N	2.5~4N
Operation Travel 操作行程	About 2.8mm	About 2.8mm
IP Degree 防護等級	IP40/ IP67, IK10	IP40/ IP67, IK09
Head color 頭部顏色	Machine brushed 本色	R G Y O B W N
Material 材料	Contact 接點	Silver Alloy 銀合金
	Button 按鍵	Stainless Steel/ Nickel Plated Brass 不銹鋼 / 黃銅鍍鎳
	Body 外殼	Stainless Steel/ Nickel Plated Brass 不銹鋼 / 黃銅鍍鎳
	Base 基座	PBT
	RoHS	Made to order 可定制
		Made to order 可定制

Anti-vandal dot illuminated push button 高強度抗破壞單點帶燈按鈕開關



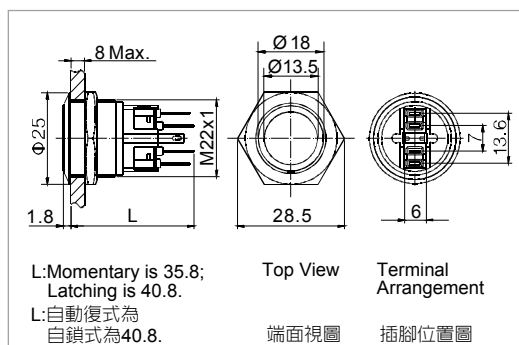
- Ø 22mm Diameter
安裝孔尺寸: Ø 22mm
- Switch Rating: 5A/250VAC
開關額定值: 5A/250VAC
- Contact Configuration: 1NO1NC
接點組合: 1NO1NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Crust Material: Stainless Steel
外殼材質: 不銹鋼
- Dot Illuminated
帶燈方式: 單點
- IP Degree: IP65, IK10
防護等級: IP65, IK10



Anti-vandal ring illuminated push button 高強度抗破壞單點帶燈按鈕開關



- Ø 22mm Diameter
安裝孔尺寸: Ø 22mm
- Switch Rating: 5A/250VAC
開關額定值: 5A/250VAC
- Contact Configuration: 1NO1NC
接點組合: 1NO1NC
- Operation Type: Momentary/Latching
操作類型: 自復式/自鎖式
- The Crust Material: Stainless Steel
外殼材質: 不銹鋼
- Ring Illuminated
帶燈方式: 環形
- IP Degree: IP65, IK10
防護等級: IP65, IK10

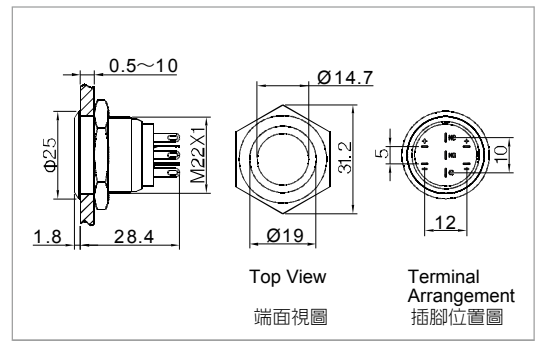


Specification 產品規格		GQ22-11-■D/△/▲	GQ22-11-■E/△/▲
The Front Shape 頭部形狀		Fiat Round 平圓形	Fiat Round 平圓形
Terminal Type 尾部配置		Pin Terminal (2.8x0.5mm) 接線插片(2.8x0.5mm)	Pin Terminal (2.8x0.5mm) 接線插片(2.8x0.5mm)
Switching 開關形式		Za(double-break fast-motion changeover contact) Za (雙斷點快動轉換接點)	Za(double-break fast-motion changeover contact) Za (雙斷點快動轉換接點)
Max. Switch Rating 開關規格		Ith:5A Ui:250VAC	Ith:5A Ui:250VAC
Contact Resistance 接觸電阻		≤ 50mΩ	≤ 50mΩ
Insulation Resistance 絕緣電阻		≥ 1000MΩ	≥ 1000MΩ
Dielectric Intensity 絕緣強度		2000VAC	2000VAC
Operating Temp 環境溫度		-20°C~+55°C	-20°C~+55°C
Mechanical Life 機械壽命		100,000 cycles	100,000 cycles
Electrical Life 電器壽命		50,000 cycles	50,000 cycles
Panel Thickness 面板厚度		1~8mm	1~8mm
Torque 螺母扭矩		5~14Nm	5~14Nm
Operation Pressure 操作壓力		About 5.5N	About 5.5N
Operation Travel 操作行程		About 2.5mm	About 2.5mm
IP Degree 防護等級		IP65, IK10	IP65, IK10
Material 材料	Contact 觸點	Silver Alloy 銀合金	Silver Alloy 銀合金
	Button 按鍵	Stainless Steel 不銹鋼	Stainless Steel 不銹鋼
	Body 外殼	Stainless Steel 不銹鋼	Stainless Steel 不銹鋼
	Base 基座	PA	PA
	RoHS	Made to order 可定制	Made to order 可定制
LED Spec.	Type 帶燈類型	Dot Illuminated (LED) 單點帶燈 (LED)	Ring Illuminated(LED) 環形帶燈 (LED)
	Rated Voltage 額定電壓	6V/12V/24V/110V/220V	6V/12V/24V/110V/220V
帶燈部份參數	Color 燈泡顏色	R G Y O B W	R G Y O B W
	Life 燈泡壽命	40000 hours	40000 hours

Anti-vandal micro-travel push button 高強度微行程按鈕開關



- Ø 22mm Diameter 安裝孔尺寸: Ø 22mm
- Switch Rating: 5A/250VAC
開關額定值: 5A/250VAC
- Contact Configuration: 1NO1NC
接點組合: 1NO1NC
- Operation Type: Momentary
操作類型: 自復式
- The Crust Material: Stainless Steel
外殼材質: 不銹鋼
- Ring Illuminated 帶燈方式: 環形
- Travel: 0.5mm 行程: 0.5mm
- IP Degree: IP67 防護等級: IP67

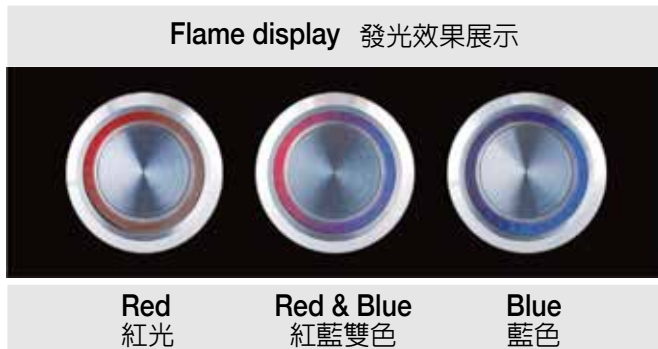


Feature:

- Whole sealing structure, strong waterproof;
- Micro- travel, nice operating hand feeling;
- Using inner switch module, reliable and sensitive connection;
- Using two lamps; have many LED color to recognize different signal.
The same color flame in crescent ring, the different color can generate third mixed flame color at the blending place.
- Used for low-current circuit to control the on-off signal of electronic logic circuit.

特點:

- 全密封結構，防水功能強；
- 行程小，操作手感好；
- 內置開關模塊，觸點多重保護不易污染，接觸可靠靈敏；
- 使用雙燈泡光源；可配置不同顏色的燈泡，達到識別信號多樣化的功能。同種顏色燈光呈月牙狀亮環，不同顏色燈在交融處能產生第三種混合色燈光；
- 適用於小電流電路，多用於控制電子邏輯電路的通斷信號。



Specification 產品規格		GQ22-11WE-△△/▲
The Front Shape 頭部形狀		Fiat Round 平圓形
Terminal Type 接線端子配置		Pin Terminal (2.4x0.3mm) 接線端子(2.4x0.3mm)
Switching 開關形式		C(single-break fast-motion changeover contact) C (單斷點快動轉換接點)
Max. Switch Rating 開關規格		0.5A / 250VAC
Contact Resistance 接觸電阻		≤ 30mΩ
Insulation Resistance 絕緣電阻		≥ 1000MΩ
Dielectric Intensity 絕緣強度		2000VAC
Operating Temp 環境溫度		-20°C~+55°C
Mechanical Life 機械壽命		1,000,000 cycles
Electrical Life 電器壽命		300,000 cycles
Panel Thickness 面板厚度		0.5~10mm
Torque 螺母扭矩		5~14Nm
Operation Pressure 操作壓力		About 3~6N
Operation Travel 操作行程		About 0.5mm
IP Degree 防護等級		IP67
Material 材料	Contact 觸點	Silver Alloy 銀合金
	Button 按鍵	Stainless Steel 不銹鋼
	Body 外殼	Stainless Steel 不銹鋼
	Base 基座	PA
	RoHS	Made to order 可定制
LED Spec.	Type 帶燈類型	Dot Color Ring Illuminated (LED) 雙色環形帶燈 (LED)
	Rated Voltage 額定電壓	6V/12V/24V/110V/220V
帶燈部份參數	Color 燈泡顏色	R G Y O B W
	Life 燈泡壽命	40000 hours

Symbol List 符號列表

<p>Character 文字標識</p>	<p>1 2 3 4 5 6 7 8 9 10</p>
<p>Number and Sign 數字及符號</p>	<p>11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30</p>
<p>ISO Sign ISO符號</p>	<p>31 Straight-line move 直線移動 32 turn 轉動 33 start 啟動 34 stop 停止 35 start/stop 啟動 / 停止 36 point move 點動 37 pump 泵 38 cooling pump 冷動泵 39 lubricant pump 潤滑泵 40 hydraulic pump 液壓泵 41 automatic or semiautomatic cycle 自動或半自動循環 42 spacing straightline move 限位直線移動</p>
<p>Special Sign 特殊符號</p>	<p>43 44 45 46 47 48</p>

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