

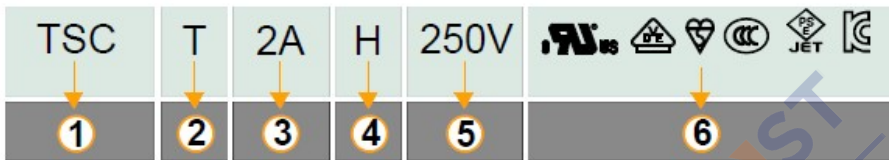
1. 適用範圍 / SCOPE

TSC 系列小型保險絲，適用於一般電子設備。

TSC series Miniature-Fuse，used in electronic equipment.

2. 產品型號 / TYPE

例「example」：



- ① 系列號 / Series Number
- ② 特性符號 / Characteristic Symbol
- ③ 額定電流 / Rated Current
- ④ 斷路容量符號 / Breaking Capacity Symbol
- ⑤ 額定電壓 / Rated Voltage
- ⑥ 認證符號 / Approved Symbol

3. 額定電流和額定電壓/ RATED CURRENT AND RATED VOLTAGE

額定電流 / Rated Current:

200mA~20A

額定電壓 / Rated Voltage:

250VAC

4. 標示 / MARKING

保險絲兩端銅帽上需有下列標示/The fuses cap shall have the following marking

①規 格：製造工廠的商標+額定電流+額定電壓

Specification : The Manufacture's Logo + Rated Current + Rated Voltage

200mA ~ 800mA:  T__mA H 250 V








1A ~ 12A:  T__A H 250 V

12.5A、16A:  __A 250 V

15A、20A:  T__A H 250 V

②商 標：系列號+認證符號

Trade mark : Part Number + Approved Symbol.

200mA~800mA(250V):	TSC	
1A ~ 6.3A(250V):	TSC	
8A、10A(250V):	TSC	
12.5A(250V):	TSC	
12A、15A(250V):	TSC	
16A (250V):	TSC	
20A(250V):	TSC	

注意 / Note:

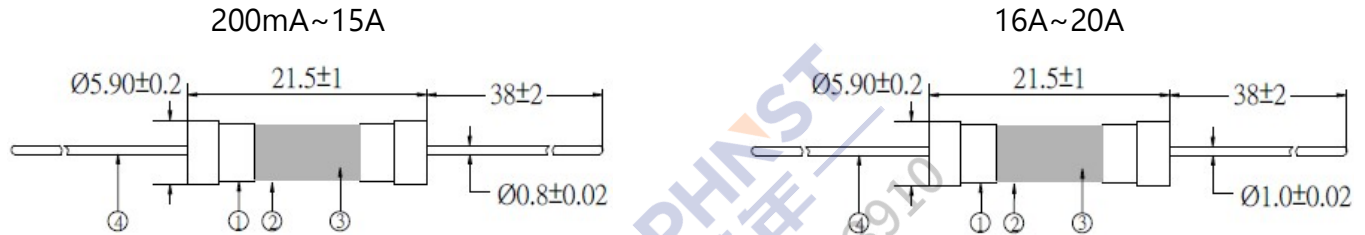
對標示的大小和位置沒有規定 / Size and position of the markings shall not be provided.

5. 外觀及形狀 / APPEARANCES AND CONFIGURATION

- 5-1 外觀：不應有破碎、明顯的汗斑/Appearances: There shall not be break up and any remarkable blotch.
- 5-2 形狀：帶腳的小型保險絲/Configuration : Axial Leaded Miniature-Fuse.

6. 工程圖和結構 / OUTLINE DRAWING AND STRUCTURE

6-1 工程圖 (單位：mm) / Outline Drawing and Dimensions (Unit: mm)



6-2 結構 / Structure

編號 No.	元件 Component	材質 Material	數量 Quantity
①	銅帽 Cap	黃銅鍍鎳 Brass with nickel plated	2
②	本體 Body	陶瓷管 Ceramic Tube	1
③	熔絲 Wire	合金 Alloy	1
④	引線 Lead	鍍錫銅線 Tinned Copper wire	2
⑤	填充物 Filler	石英砂 Quartz sand	

7. 產品特性 / PRODUCT CHARACTERISTICS

- 7-1 引腳拉力強度 / Lead Pull Strength
10牛頓 10±1 秒 / 10N for 10±1 Sec.
- 7-2 引腳推力強度 / Lead Thrust Strength
2牛頓 10±1 秒 / 2N for 10±1 Sec.
- 7-3 可焊性 / Solderability
波峰焊/Wave : 260°C · ≤3s;
烙鐵焊/Soldering Iron: 350±10°C · ≤3s.
- 7-4 耐焊接熱 / Soldering Heat Resistance
波峰焊/Wave : 260°C · 10s;
烙鐵焊/Soldering Iron: 350°C · 5s.

8. 電氣特性 / ELECTRICAL CHARACTERISTICS

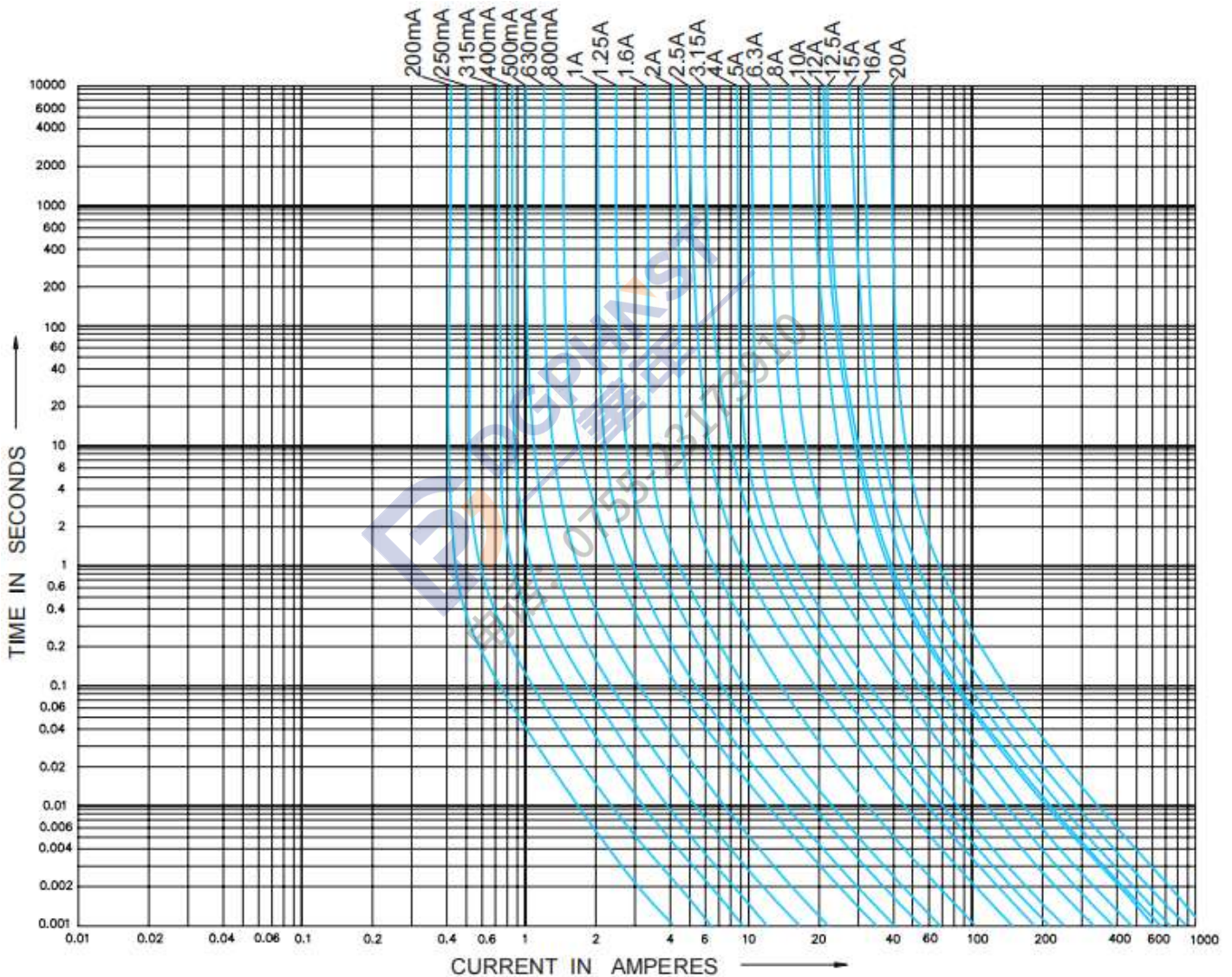
8-1 熔斷 / 電流特性 : Pre-Arcing Time / Current Characteristic (limits)

RATED CURRENT	2.1 In	2.75 In		4 In		10 In	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.
200mA to 800mA	30 min	250 ms	80 s	50ms	5 s	5 ms	150 ms
Above 800mA to 3.15A	30 min	750 ms	80 s	95 ms	5 s	10 ms	150 ms
Above 3.15A to 20A	30 min	750 ms	80 s	150 ms	5 s	10 ms	150 ms

8-2 產品規格/Specification

額定電流 Rated Current	冷電阻 Cold resistance	最大電壓降 Max Voltage Drop (mV)	最大功耗 Max Power Dissipation (mW)	I ² T 值 I ² T Value (A ² Sec@8ms)
200mA	6.600Ω	2100	1600	0.2
250mA	3.800Ω	1500	1600	0.405
315mA	2.605Ω	1100	1600	0.65
400mA	3.917Ω	1000	1600	0.712
500mA	0.344Ω	850	1600	0.238
630mA	0.257Ω	650	1600	0.52
800mA	0.165Ω	500	1600	0.96
1A	122.40mΩ	350	2500	2.05
1.25A	89.00mΩ	300	2500	3.61
1.6A	63.98mΩ	200	2500	7.49
2A	42.82mΩ	190	2500	12
2.5A	32.20mΩ	180	2500	21.5
3.15A	22.55mΩ	140	4000	39.8
4A	15.88mΩ	100	4000	96
5A	13.15mΩ	100	4000	70.8
6.3A	10.00mΩ	100	4000	127
8A	8.50mΩ	100	4000	174
10A	6.50mΩ	100	4000	317
12A	5.01mΩ	100	4000	553
12.5A	4.46mΩ	180	4000	568
15A	7.15mΩ	100	4000	660
16A	3.40mΩ	140	4000	748
20A	5.73mΩ	100	4000	1209

8-3 時間電流曲線/Time-Current Curve



9.環境特性 / ENVIRONMENTAL CHARACTERISTIC

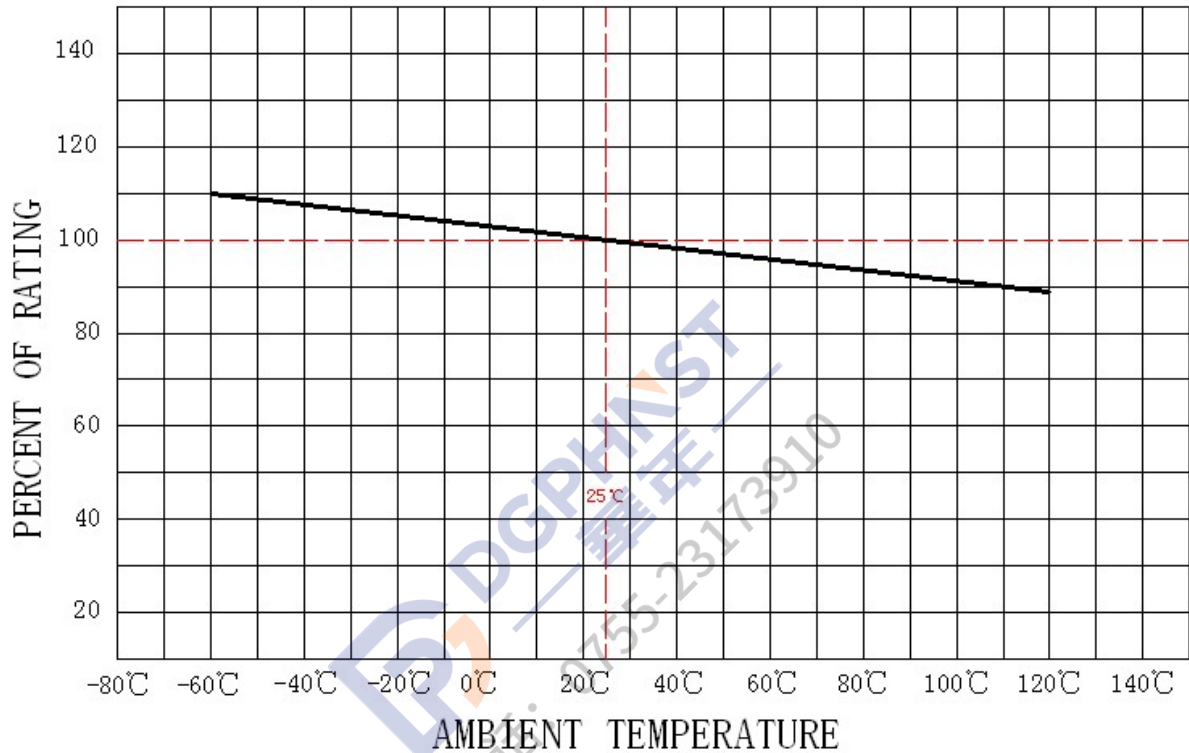
9-1 操作溫度範圍: -55°C ~ 125°C / Operating Temperature:-55°C ~ 125°C

若貴司操作環境溫度超出 $25 \pm 5^\circ\text{C}$ 範圍，在選用保險絲規格時，需考慮操作環境溫度對保險絲的影響。

請參照：溫度-電流曲線圖

When choosing the fuse's specification, if the operating environmental temperature beyond the scope from $20 \sim 30^\circ\text{C}$, you should consider the environmental temperature's affection to fuses.

Please refer:Temperature-Current curve



9-2 存儲條件 / Storage Conditions

在溫度+10°C ~ 60°C、相對濕度 $\leq 75\%$ 的密閉條件下可存放 3 年。

Under airtight in temperature +10°C ~ 60°C、relative humidity $\leq 75\%$ can store 3 years.

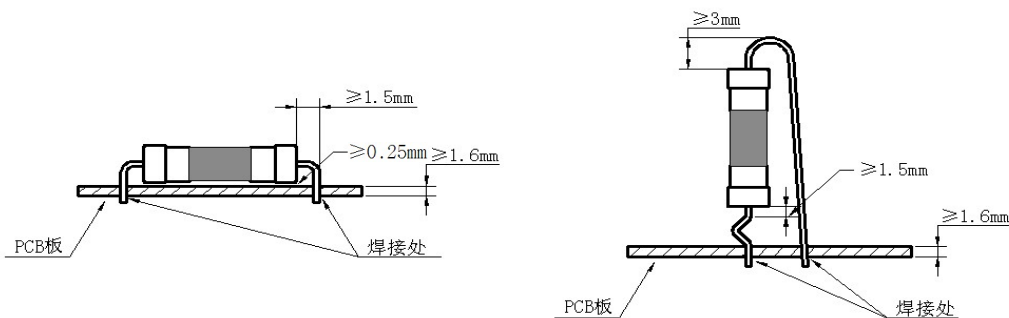
在溫度+10°C ~ 60°C、相對濕度為 95%的非露天下最多可存放 30 天。

Without dew in temperature +10°C ~ 60°C、relative humidity be 95% maximum value for 30days.

10. 安裝方式及條件 / INSTALLATION WAY AND PARAMETERS

10-1 建議如下圖安裝方式安裝，並滿足所要求的尺寸。

Propose that the following picture installation way is installed, and satisfied the required size.



10-2 建議客戶焊接參數 / Recommended Customer Soldering Parameters

波峰焊參數 / Wave Parameters

錫爐溫度 / Solder Pot Temperature: 260°C Max

焊接時間 / Solder Dwell Time: 2~5s

手工焊參數 / Hand-Solder Parameters

烙鐵溫度 / Solder Iron Temperature: 350±5°C

焊接時間 / Heating Time: 5s Max

11. 其他使用注意事項 / OTHER NOTICE IN USED

如果需在保險絲上加熱縮套管，烘烤溫度與時間需參照以下規定。

If need to add heat draws back the sleeve pipe on the fuse, it needs to consult the following regulation to toast temperature and time.

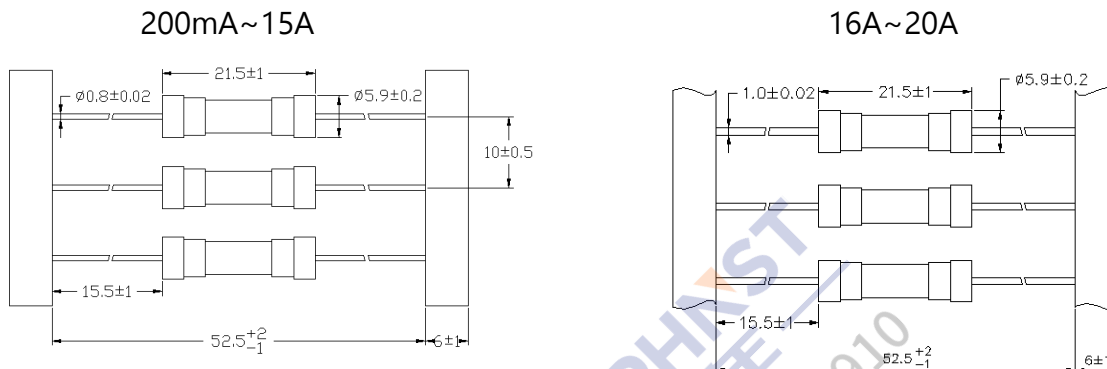
溫度 temperature	120°C	130°C	140°C	150°C	160°C	170°C	180°C
時間 time	Max 80s	Max 75s	Max 70s	Max 65s	Max 60s	Max 55s	Max 50s

12. 安全認證及編號 / STANDARDS AND APPROVALS

UL	E56092 (200mA~20A)	
VDE	40016670(200mA~10A 250V)	40026062(12A、15A 250V)
TUV	R50314175 (12.5A、16A、20A / 250V)	
BSI	KM70911(1A~6.3A 250V)	
CCC	2020970207000228 (1A~10A 250V)	
CQC	CQC10012041025 (12.5A、16A)	
PSE	JET2179-31003-2006 (1A~5A 250V)	JET2179-31003-2007(5.1A~15A 250V)
KC	SU05015-5002 A (1A~2.5A 250V)	SU05015-5001A (3.15A~6.3A 250V)

13. 包裝 / PACKING

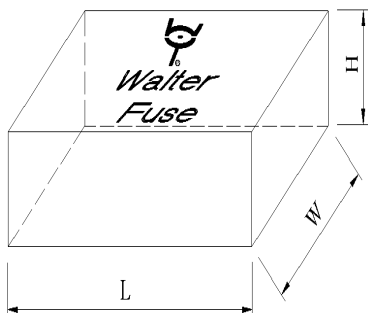
13-1 包裝尺寸圖/ Taping Configuration



13-2 包裝數量 / Packing Quantity

- A : 每內盒裝 1500 個保險絲 / 1500pcs per inner box .
- B : 每外箱裝 2 內盒保險絲 / 2 inner boxes per outer box .

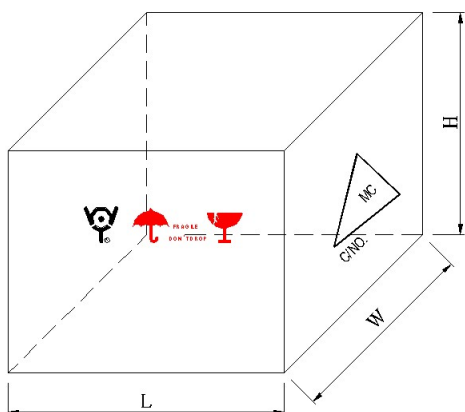
13-3 內包裝盒/Inner box of packing



單位/Unit : mm

L	W	H
360±3	360±3	85±3

13-4 外包裝箱/Outer box of packing



單位/Unit : mm

L	W	H
375±5	375±5	205±5

14.其他 / OTHERS

14-1 如果在使用中有超出本規格書的要求，必須經由雙方協商確認。

In the event that an impropriety is found beyond this specification, it shall be fixed by mutual agreement between the parties.

14-2 如果本規格書有不適當的情況，必須通過雙方協商並由本公司修改。

In the event that an impropriety is found in this specification, SUZHOU WALTER ELECTRONIC CO., LTD. shall amend it by mutual agreement between the parties.

DGPHNSI
電話: 0755-23173910

版次	製作	確認	審核
第9版	程正永 2021/12/13	饒紅 2021/12/13	Russel.Hsu 2021/12/13

JDYX2.E56092 - FUSES, SUPPLEMENTAL - COMPONENT

Fuses, Supplemental - Component

See General Information for Fuses, Supplemental - Component

SUZHOU WALTER ELECTRONIC CO LTD

NO.99 Xinli Road
Fenhu Technic Development Zone
Wujiang, Jiangsu 215211 CHINA

Supplemental fuses

E56092

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
MTG	6.35 x 31.75 (0.25 x 1.25)	10 - 20	250Vac	300

Supplemental fuses: cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FSD	5 x 20 (0.20 x 0.79)	0.2 - 3.15	250Vac	35
		4 - 15	250Vac	10x Ampere rating
		0.2 - 6.3	125Vdc	35
		0.2 - 6.3	125Vac	10000
MGF	6.35 x 31.5 (0.25 x 1.24)	0.125 - 10	125Vac	10000
		3.6 - 10	250Vac	200
SGF	5.2 x 20 (0.20 x 0.79)	0.25 - 0.8	125Vac	10000
		0.25 - 0.8	250Vac	35
		1 - 3.5	125Vac	10000
		1 - 3.5	250Vac	100
		4 - 7	125Vac	10000
TMD	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		0.1 - 6.3	125Vdc	35
		0.1 - 6.3	125Vac	10000

		3.6 - 6.3	250Vac	10x Ampere rating
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating
TME	5.2 x 20 (0.20 x 0.79)	0.1 - 16	250Vac	150
TSD	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		3.6 - 6.3	250Vac	10x Ampere rating
		0.1 - 6.3	125Vac	10000
		0.1 - 6.3	125Vdc	35

Supplemental fuses: filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
WM40 followed by ".", followed by 0.1 to 50, followed by P or blank.				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM55-XX XX represents rated current				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000

		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM55-XXP XX represents rated current				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM70 followed by 0.1-50 and may followed by suffix P				
	6.3 x 25.4 (0.25 x 1.00)	0.1 - 20	250Vac	10000
		0.1 - 20	400Vdc	2000
		0.1 - 30	400Vdc	300
		0.1 - 50	75Vdc	2500
WM70. xxxP (xxx will be 0.1-50)				
	6.3 x 25.4 (0.25 x 1.00)	0.1 - 20	250Vac	10000
		0.1 - 20	400Vdc	2000
		0.1 - 30	400Vdc	300
		0.1 - 50	75Vdc	2500
WN10	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000

		0.1 - 1	600Vac	1000
WN20	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000
WN30	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000

Supplemental fuses: filled-tube, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FHC	5.2 x 20 (0.20 x 0.79)	8 - 25	420Vac	300
		8 - 25	420Vdc	300
FSC	5 x 20 (0.20 x 0.79)	0.25 - 6.3	125Vac	10000
		0.25 - 15	250Vac	1500
		0.25 - 6.3	125Vdc	35
MHC followed by 0.1, 0.2, 0.25, 0.315, 0.4, 0.5, 0.6, 0.75, 0.8, 1, 1.5, 2, 2.5, 3, 4, 5, 6.3, 7, 8, 10, 12, 15, 20, 25 or 30				
	6.4 x 31.75 (0.25 x 1.25)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
MTC	6.35 x 31.75 (0.25 x 1.25)	15 - 20	250Vac	1500
		25 - 30	250Vac	500
TSC	5 x 20 (0.20 x 0.79)	0.2 - 6.3	250Vac	1500
		0.2 - 6.3	125Vac	10000
		0.2 - 6.3	125Vdc	35
		8 - 10	250Vac	1500
		12 - 20	250Vac	1500
WM45-XX XX represents rated current				

	6.4 x 31.75 (0.25 x 1.25)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
		0.1 - 30	420Vac	1000
		0.1 - 30	420Vdc	1000
		0.1 - 30	420Vac	30k
		0.1 - 30	420Vdc	20k
		0.1 - 30	300Vdc	20k

Supplemental fuses: pigtail leads

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2040	12 x 9.5 x 6.5 (0.47 x 0.37 x 0.26)	0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
TNP	3.3 x 8.5 (0.13 x 0.33)	0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50

		6.3	250Vac	63
		6.3	250Vac	63
		6.3	250Vac	63
		6.3	250Vac	63

Supplemental fuses: pigtail leads, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FDP	3.6 x 10 (0.14 x 0.39)	0.5 - 3.15	250Vac	35
		4	250Vac	40
		5	250Vac	50
		6.3	250Vac	63
FSD+P	5 x 20 (0.20 x 0.79)	0.2 - 3.15	250Vac	35
		4 - 6.3	250Vac	10x Ampere rating
		0.2 - 6.3	125Vdc	35
		0.2 - 0.8	125Vac	10000
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating
		1 - 6.3	125Vac	10000
MFP	6.35 x 31.5 (0.25 x 1.24)	0.125 - 10	125Vac	10000
		3.6 - 10	250Vac	200
SFP	5.2 x 20 (0.20 x 0.79)	0.25 - 0.8	125Vac	10000
		0.25 - 0.8	250Vac	35
		1 - 3.5	125Vac	10000
		1 - 3.5	250Vac	100
		4 - 7	125Vac	10000
TMD+P	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		0.1 - 6.3	125Vdc	35
		0.1 - 6.3	125Vac	10000
		3.6 - 6.3	250Vac	10x Ampere rating
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating

TME+P	6 x 24 (0.24 x 0.94)	0.1 - 16	250Vac	150
TSD+P	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		3.6 - 6.3	250Vac	10x Ampere rating
		0.1 - 6.3	125Vac	10000
		0.1 - 6.3	125Vdc	35

Supplemental fuses: pigtail leads, filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
MTPP	6.76 x 32.8 (0.27 x 1.29)	40 - 50	250Vac	1000
		40 - 50	250Vac	300
WM10 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM20 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000

		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM30 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM40 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM50 followed by 0.1 to 50, followed by P				

	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WN10.XXXP (!), WN20.XXXP (!), WN30.XXXP (!)				
	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000

Supplemental fuses: pigtail leads, filled-tube, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FHP	5.9 x 21.5 (0.23 x 0.85)	8 - 25	420Vac	300
		8 - 25	420Vdc	300
FSC+P	5 x 20 (0.20 x 0.79)	0.25 - 6.3	125Vac	10000
		0.25 - 15	250Vac	1500
		0.25 - 6.3	125Vdc	35
MHP followed by 0.1, 0.2, 0.25, 0.315, 0.4, 0.5, 0.6, 0.75, 0.8, 1, 1.5, 2, 2.5, 3, 4, 5, 6.3, 7, 8, 10, 12, 15, 20, 25 or 30				
	6.76 x 32.8 (0.27 x 1.29)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K

MTP	6.35 x 31.75 (0.25 x 1.25)	15 - 20	250Vac	1500
		25 - 30	250Vac	500
TSC+P	5 x 20 (0.20 x 0.79)	0.2 - 6.3	250Vac	1500
		0.2 - 6.3	125Vac	10000
		0.2 - 6.3	125Vdc	35
		8 - 10	250Vac	1500
		12 - 20	250Vac	1500
TSS+P	5.6 x 19.5 (0.22 x 0.77)	3.15	125Vac	10000
		4	125Vac	10000
		3.15	250Vac	1500
		4	250Vac	1500
		3.15	125Vdc	35
		4	125Vdc	35
WM45-XXP XX represents rated current				
	6.76 x 32.8 (0.27 x 1.29)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
		0.1 - 30	420Vac	1000
		0.1 - 30	420Vdc	1000
		0.1 - 30	420Vac	30k
		0.1 - 30	420Vdc	20K
		0.1 - 30	300Vdc	20K
WN40-XX XX represents rated current				
	5.54 x 21.1 (0.22 x 0.83)	0.1 - 10	300Vac	3000
		0.1 - 10	300Vdc	3000
		0.1 - 30	300Vdc	300
		0.1 - 30	300Vac	300
WN40-XXP XX represents rated current				
	5.54 x 21.1 (0.22 x 0.83)	0.1 - 10	300Vac	3000

		0.1 - 10	300Vdc	3000
		0.1 - 30	300Vdc	300
		0.1 - 30	300Vac	300

Supplemental fuses: surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1032SF, 1032SS	10.3 x 3.2 x 3.2 (0.41 x 0.13 x 0.13)	20 - 60	250Vac	100
		20 - 60	65Vac	300
		40 - 60	72Vdc	180
		40 - 60	60Vdc	600
		20 - 30	100Vdc	300
		20 - 30	72Vdc	500
		20 - 30	32Vdc	1000
1032ST	10.07 x 3.15 x 3.15 (0.40 x 0.12 x 0.12)	0.5 - 4	250Vac	50
		5	250Vac	50

Supplemental micro fuses

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1206SF	3.1 x 1.55 x 0.55 (0.12 x 0.06 x 0.02)	1	63Vdc	50
		1.5	63Vdc	50
1206SF(#) # is blank	0.64 (0.03)	20 - 30	32Vdc	300
		20 - 30	48Vdc	200
1206SF(*) * is blank	3.1 x 1.55 x 0.55 (0.12 x 0.06 x 0.02)	10.1 - 15	32Vdc	150
		8 - 10	32Vdc	150
2410F (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.2 - 0.75	250Vac	35
		0.2 - 0.75	125Vdc	50
2410F(@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	1.0 - 5.0	250Vac	50
		1.0 - 5.0	125Vdc	50
2410H (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	1.0 - 5.0	250Vac	50

		1.0 - 5.0	125Vdc	50
2410H (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.2 - 0.75	250Vac	35
		0.2 - 0.75	125Vdc	50
6125SF (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	12 - 20	65Vac	50
		12 - 20	65Vdc	50
6125SF (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.4 - 10	125Vac	50
		0.4 - 10	160Vdc	50
		0.4 - 10	125Vdc	50
6125SF(@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.75 - 6.0	125Vac	50
		0.75 - 6.0	160Vdc	50
		0.75 - 6.0	125Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	12 - 20	65Vac	50
		12 - 20	65Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.75 - 6.0	125Vac	50
		0.75 - 6.0	160Vdc	50
		0.75 - 6.0	125Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.4 - 10	125Vac	50
		0.4 - 10	160Vdc	50
		0.4 - 10	125Vdc	50
F92, 1206T	3.2 x 1.6 (0.13 x 0.06)	0.8	63Vdc	50
		1	63Vdc	50
		1.25 - 1.75	63Vdc	50
		2 - 6	63Vdc	50
		6.3 - 10	63Vdc	50
		0.8	24Vdc	50
		0.8	32Vdc	50
		1	24Vdc	50
		1	32Vdc	50
		1.25 - 1.75	24Vdc	50

		1.25 - 1.75	32Vdc	50
		2 - 6	24Vdc	50
		2 - 6	32Vdc	50
		6.3 - 10	24Vdc	50
		6.3 - 10	32Vdc	50
F93, 1206F	3.2 x 1.6 x 0.6 (0.13 x 0.06 x 0.02)	0.5 - 0.8	125Vdc	50
		1 - 10	63Vdc	50
		1 - 10	24Vdc	50
		1 - 10	32Vdc	50
		0.5 - 0.8	24Vdc	50
		0.5 - 0.8	32Vdc	50
		0.5 - 0.8	63Vdc	50
J92, 0603T	1.6 x 0.8 x 0.6 (0.06 x 0.03 x 0.02)	1	32Vdc	50
		1.25 - 1.6	32Vdc	50
		1.75	32Vdc	50
		2 - 2.5	32Vdc	50
		3 - 3.5	32Vdc	50
		4 - 6	32Vdc	50
		1	24Vdc	50
		1.25 - 1.6	24Vdc	50
		1.75	24Vdc	50
		2 - 2.5	24Vdc	50
		3 - 3.5	24Vdc	50
		4 - 6	24Vdc	50
J93, 0603F	1.6 x 0.8 x 0.6 (0.06 x 0.03 x 0.02)	0.5 - 0.8	125Vdc	50
		1 - 6	63Vdc	50
		1 - 6	24Vdc	50
		1 - 6	32Vdc	50
		0.5 - 0.8	24Vdc	50
		0.5 - 0.8	32Vdc	50
		0.5 - 0.8	63Vdc	50

TSM	6.8 x 4 x 2.8 (0.27 x 0.16 x 0.11)	1 - 5	63Vdc	50
		1 - 5	125Vac	50

Supplemental micro fuses: filled-tube, surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1032HB	10.25 x 3.38 x 3.38 (0.40 x 0.13 x 0.13)	1.25	250Vac	200

Supplemental micro fuses: pigtail leads

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2010	8.4 x 4.1 x 8.4 (0.33 x 0.16 x 0.33)	0.1 - 10	250Vac	130
		0.1 - 6.3	300Vac	50
		8 - 10	300Vac	100
FEP	3.7 x 8 (0.15 x 0.31)	0.25 - 2.5	250Vac	50
		3.15 - 6.3	250Vac	50
TBP	3.6 x 9.5 (0.14 x 0.37)	0.25 - 3.15	250Vac	35
		0.25 - 3.15	63Vdc	35
		4 - 6.3	250Vac	10x Ampere rating
		4 - 6.3	63Vdc	10x Ampere rating
TDP	3.6 x 9.5 (0.14 x 0.37)	0.25 - 3.15	250Vac	35
		4 - 6.3	250Vac	10xAmpere rating
TEP	3.7 x 8 (0.15 x 0.31)	0.25 - 3.15	250Vac	35
		4 - 6.3	250Vac	10 x Ampere Rating

Supplemental micro fuses: pigtail leads, filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2000	8.3 x 7.8 (0.33 x 0.31)	0.1 - 6.3	250Vac	100
		0.1 - 6.3	300Vac	100
2020	8.4 x 4.1 x 5.3 (0.33 x 0.16 x 0.21)	0.1 - 6.3	250Vac	160
		0.1 - 6.3	300Vac	130

		0.1 - 6.3	400Vac	50
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Supplemental micro fuses: surface mount





Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
0402F	1.1 x 0.5 x 0.4 (0.04 x 0.02 x 0.02)	0.1 - 4	32Vdc	35

Supplemental micro fuses: surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2410LT	6.4 x 2.6 x 2.6 (0.25 x 0.10 x 0.10)	0.5 - 6.3	250Vac	50
		0.5 - 6.3	125Vdc	80

(!) - ("XXX" represents current rating, i.e. 0.1 - 20)

(@) - followed by A,G,S or blank, and followed by F or blank.

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JDYX8.E56092 - FUSES, SUPPLEMENTAL CERTIFIED FOR CANADA - COMPONENT

Fuses, Supplemental Certified for Canada - Component

See General Information for Fuses, Supplemental Certified for Canada - Component

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E56092

Supplemental fuses

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
MTG	6.35 x 31.75 (0.25 x 1.25)	10 - 20	250Vac	300

Supplemental fuses: cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FSD	5 x 20 (0.20 x 0.79)	0.2 - 3.15	250Vac	35
		4 - 15	250Vac	10x Ampere rating
		0.2 - 6.3	125Vdc	35
		0.2 - 6.3	125Vac	10000
MGF	6.35 x 31.5 (0.25 x 1.24)	0.125 - 10	125Vac	10000
		3.6 - 10	250Vac	200
SGF	5.2 x 20 (0.20 x 0.79)	0.25 - 0.8	125Vac	10000
		0.25 - 0.8	250Vac	35
		1 - 3.5	125Vac	10000
		1 - 3.5	250Vac	100
		4 - 7	125Vac	10000
TMD	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		0.1 - 6.3	125Vdc	35
		0.1 - 6.3	125Vac	10000

		3.6 - 6.3	250Vac	10x Ampere rating
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating
TME	5.2 x 20 (0.20 x 0.79)	0.1 - 16	250Vac	150
TSD	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		3.6 - 6.3	250Vac	10x Ampere rating
		0.1 - 6.3	125Vac	10000
		0.1 - 6.3	125Vdc	35

Supplemental fuses: filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
WM40 followed by ".", followed by 0.1 to 50, followed by P or blank.				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM55-XX XX represents rated current				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000

		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM55-XXP XX represents rated current				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM70 followed by 0.1-50 and may followed by suffix P				
	6.3 x 25.4 (0.25 x 1.00)	0.1 - 20	250Vac	10000
		0.1 - 20	400Vdc	2000
		0.1 - 30	400Vdc	300
		0.1 - 50	75Vdc	2500
WM70. xxxP (xxx will be 0.1-50)				
	6.3 x 25.4 (0.25 x 1.00)	0.1 - 20	250Vac	10000
		0.1 - 20	400Vdc	2000
		0.1 - 30	400Vdc	300
		0.1 - 50	75Vdc	2500
WN10	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000

		0.1 - 1	600Vac	1000
WN20	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000
WN30	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000

Supplemental fuses: filled-tube, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FHC	5.2 x 20 (0.20 x 0.79)	8 - 25	420Vac	300
		8 - 25	420Vdc	300
FSC	5 x 20 (0.20 x 0.79)	0.25 - 6.3	125Vac	10000
		0.25 - 15	250Vac	1500
		0.25 - 6.3	125Vdc	35
MHC followed by 0.1, 0.2, 0.25, 0.315, 0.4, 0.5, 0.6, 0.75, 0.8, 1, 1.5, 2, 2.5, 3, 4, 5, 6.3, 7, 8, 10, 12, 15, 20, 25 or 30				
	6.4 x 31.75 (0.25 x 1.25)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
MTC	6.35 x 31.75 (0.25 x 1.25)	15 - 20	250Vac	1500
		25 - 30	250Vac	500
TSC	5 x 20 (0.20 x 0.79)	0.2 - 6.3	250Vac	1500
		0.2 - 6.3	125Vac	10000
		0.2 - 6.3	125Vdc	35
		8 - 10	250Vac	1500
		12 - 20	250Vac	1500
WM45-XX XX represents rated current				

	6.4 x 31.75 (0.25 x 1.25)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
		0.1 - 30	420Vac	1000
		0.1 - 30	420Vdc	1000
		0.1 - 30	420Vac	30k
		0.1 - 30	420Vdc	20k
		0.1 - 30	300Vdc	20k

Supplemental fuses: pigtail leads

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2040	12 x 9.5 x 6.5 (0.47 x 0.37 x 0.26)	0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
		0.8 - 4	250Vac	150
		0.8 - 4	300Vac	100
		5 - 6.3	250Vac	150
		5 - 6.3	300Vac	100
TNP	3.3 x 8.5 (0.13 x 0.33)	0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50
		0.25 - 5	250Vac	50

		6.3	250Vac	63
		6.3	250Vac	63
		6.3	250Vac	63
		6.3	250Vac	63

Supplemental fuses: pigtail leads, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FDP	3.6 x 10 (0.14 x 0.39)	0.5 - 3.15	250Vac	35
		4	250Vac	40
		5	250Vac	50
		6.3	250Vac	63
FSD+P	5 x 20 (0.20 x 0.79)	0.2 - 3.15	250Vac	35
		4 - 6.3	250Vac	10x Ampere rating
		0.2 - 6.3	125Vdc	35
		0.2 - 0.8	125Vac	10000
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating
		1 - 6.3	125Vac	10000
MFP	6.35 x 31.5 (0.25 x 1.24)	0.125 - 10	125Vac	10000
		3.6 - 10	250Vac	200
SFP	5.2 x 20 (0.20 x 0.79)	0.25 - 0.8	125Vac	10000
		0.25 - 0.8	250Vac	35
		1 - 3.5	125Vac	10000
		1 - 3.5	250Vac	100
		4 - 7	125Vac	10000
TMD+P	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		0.1 - 6.3	125Vdc	35
		0.1 - 6.3	125Vac	10000
		3.6 - 6.3	250Vac	10x Ampere rating
		8 - 15	125Vac	10x Ampere rating
		8 - 15	250Vac	10x Ampere rating

TME+P	6 x 24 (0.24 x 0.94)	0.1 - 16	250Vac	150
TSD+P	5 x 20 (0.20 x 0.79)	0.1 - 3.5	250Vac	35
		3.6 - 6.3	250Vac	10x Ampere rating
		0.1 - 6.3	125Vac	10000
		0.1 - 6.3	125Vdc	35

Supplemental fuses: pigtail leads, filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
MTPP	6.76 x 32.8 (0.27 x 1.29)	40 - 50	250Vac	1000
		40 - 50	250Vac	300
WM10 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM20 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000

		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM30 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM40 followed by 0.1 to 50, followed by P				
	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WM50 followed by 0.1 to 50, followed by P				

	6.3 x 31.75 (0.25 x 1.25)	0.1 - 50	250Vac	1000
		0.1 - 30	660Vac	1000
		0.1 - 30	660Vdc	1000
		0.1 - 12	600Vdc	10000
		0.1 - 12	1000Vdc	10000
		0.1 - 50	150Vdc	1000
		0.1 - 12	600Vac	10000
		0.1 - 12	1000Vac	10000
		0.1 - 30	400Vac	1000
		0.1 - 30	400Vdc	1000
		0.1 - 12	300Vac	10000
		0.1 - 12	300Vdc	10000
WN10.XXXP (!), WN20.XXXP (!), WN30.XXXP (!)				
	-	0.1 - 20	600Vac	200
		0.1 - 20	500Vdc	300
		0.1 - 10	400Vdc	2000
		0.1 - 1	600Vac	1000

Supplemental fuses: pigtail leads, filled-tube, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
FHP	5.9 x 21.5 (0.23 x 0.85)	8 - 25	420Vac	300
		8 - 25	420Vdc	300
FSC+P	5 x 20 (0.20 x 0.79)	0.25 - 6.3	125Vac	10000
		0.25 - 15	250Vac	1500
		0.25 - 6.3	125Vdc	35
MHP followed by 0.1, 0.2, 0.25, 0.315, 0.4, 0.5, 0.6, 0.75, 0.8, 1, 1.5, 2, 2.5, 3, 4, 5, 6.3, 7, 8, 10, 12, 15, 20, 25 or 30				
	6.76 x 32.8 (0.27 x 1.29)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K

MTP	6.35 x 31.75 (0.25 x 1.25)	15 - 20	250Vac	1500
		25 - 30	250Vac	500
TSC+P	5 x 20 (0.20 x 0.79)	0.2 - 6.3	250Vac	1500
		0.2 - 6.3	125Vac	10000
		0.2 - 6.3	125Vdc	35
		8 - 10	250Vac	1500
		12 - 20	250Vac	1500
TSS+P	5.6 x 19.5 (0.22 x 0.77)	3.15	125Vac	10000
		4	125Vac	10000
		3.15	250Vac	1500
		4	250Vac	1500
		3.15	125Vdc	35
		4	125Vdc	35
WM45-XXP XX represents rated current				
	6.76 x 32.8 (0.27 x 1.29)	0.1 - 30	500Vac	1000
		0.1 - 30	500Vdc	1000
		0.1 - 30	500Vac	30K
		0.1 - 30	500Vdc	20K
		0.1 - 30	420Vac	1000
		0.1 - 30	420Vdc	1000
		0.1 - 30	420Vac	30k
		0.1 - 30	420Vdc	20K
		0.1 - 30	300Vdc	20K
WN40-XX XX represents rated current				
	5.54 x 21.1 (0.22 x 0.83)	0.1 - 10	300Vac	3000
		0.1 - 10	300Vdc	3000
		0.1 - 30	300Vdc	300
		0.1 - 30	300Vac	300
WN40-XXP XX represents rated current				
	5.54 x 21.1 (0.22 x 0.83)	0.1 - 10	300Vac	3000

		0.1 - 10	300Vdc	3000
		0.1 - 30	300Vdc	300
		0.1 - 30	300Vac	300

Supplemental fuses: surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1032SF, 1032SS	10.3 x 3.2 x 3.2 (0.41 x 0.13 x 0.13)	20 - 60	250Vac	100
		20 - 60	65Vac	300
		40 - 60	72Vdc	180
		40 - 60	60Vdc	600
		20 - 30	100Vdc	300
		20 - 30	72Vdc	500
		20 - 30	32Vdc	1000
1032ST	10.07 x 3.15 x 3.15 (0.40 x 0.12 x 0.12)	0.5 - 4	250Vac	50
		5	250Vac	50

Supplemental micro fuses

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1206SF	3.1 x 1.55 x 0.55 (0.12 x 0.06 x 0.02)	1	63Vdc	50
		1.5	63Vdc	50
1206SF(#) # is blank	0.64 (0.03)	20 - 30	32Vdc	300
		20 - 30	48Vdc	200
1206SF(*) * is blank	3.1 x 1.55 x 0.55 (0.12 x 0.06 x 0.02)	10.1 - 15	32Vdc	150
		8 - 10	32Vdc	150
2410F (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.2 - 0.75	250Vac	35
		0.2 - 0.75	125Vdc	50
2410F(@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	1.0 - 5.0	250Vac	50
		1.0 - 5.0	125Vdc	50
2410H (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	1.0 - 5.0	250Vac	50

		1.0 - 5.0	125Vdc	50
2410H (@)	6.1 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.2 - 0.75	250Vac	35
		0.2 - 0.75	125Vdc	50
6125SF (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	12 - 20	65Vac	50
		12 - 20	65Vdc	50
6125SF (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.4 - 10	125Vac	50
		0.4 - 10	160Vdc	50
		0.4 - 10	125Vdc	50
6125SF(@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.75 - 6.0	125Vac	50
		0.75 - 6.0	160Vdc	50
		0.75 - 6.0	125Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	12 - 20	65Vac	50
		12 - 20	65Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.75 - 6.0	125Vac	50
		0.75 - 6.0	160Vdc	50
		0.75 - 6.0	125Vdc	50
6125SH (@)	6.0 x 2.5 x 2.5 (0.24 x 0.10 x 0.10)	0.4 - 10	125Vac	50
		0.4 - 10	160Vdc	50
		0.4 - 10	125Vdc	50
F92, 1206T	3.2 x 1.6 (0.13 x 0.06)	0.8	63Vdc	50
		1	63Vdc	50
		1.25 - 1.75	63Vdc	50
		2 - 6	63Vdc	50
		6.3 - 10	63Vdc	50
		0.8	24Vdc	50
		0.8	32Vdc	50
		1	24Vdc	50
		1	32Vdc	50
		1.25 - 1.75	24Vdc	50

		1.25 - 1.75	32Vdc	50
		2 - 6	24Vdc	50
		2 - 6	32Vdc	50
		6.3 - 10	24Vdc	50
		6.3 - 10	32Vdc	50
F93, 1206F	3.2 x 1.6 x 0.6 (0.13 x 0.06 x 0.02)	0.5 - 0.8	125Vdc	50
		1 - 10	63Vdc	50
		1 - 10	24Vdc	50
		1 - 10	32Vdc	50
		0.5 - 0.8	24Vdc	50
		0.5 - 0.8	32Vdc	50
		0.5 - 0.8	63Vdc	50
J92, 0603T	1.6 x 0.8 x 0.6 (0.06 x 0.03 x 0.02)	1	32Vdc	50
		1.25 - 1.6	32Vdc	50
		1.75	32Vdc	50
		2 - 2.5	32Vdc	50
		3 - 3.5	32Vdc	50
		4 - 6	32Vdc	50
		1	24Vdc	50
		1.25 - 1.6	24Vdc	50
		1.75	24Vdc	50
		2 - 2.5	24Vdc	50
		3 - 3.5	24Vdc	50
		4 - 6	24Vdc	50
J93, 0603F	1.6 x 0.8 x 0.6 (0.06 x 0.03 x 0.02)	0.5 - 0.8	125Vdc	50
		1 - 6	63Vdc	50
		1 - 6	24Vdc	50
		1 - 6	32Vdc	50
		0.5 - 0.8	24Vdc	50
		0.5 - 0.8	32Vdc	50
		0.5 - 0.8	63Vdc	50

TSM	6.8 x 4 x 2.8 (0.27 x 0.16 x 0.11)	1 - 5	63Vdc	50
		1 - 5	125Vac	50

Supplemental micro fuses: filled-tube, surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
1032HB	10.25 x 3.38 x 3.38 (0.40 x 0.13 x 0.13)	1.25	250Vac	200

Supplemental micro fuses: pigtail leads

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2010	8.4 x 4.1 x 8.4 (0.33 x 0.16 x 0.33)	0.1 - 10	250Vac	130
		0.1 - 6.3	300Vac	50
		8 - 10	300Vac	100
FEP	3.7 x 8 (0.15 x 0.31)	0.25 - 2.5	250Vac	50
		3.15 - 6.3	250Vac	50
TBP	3.6 x 9.5 (0.14 x 0.37)	0.25 - 3.15	250Vac	35
		0.25 - 3.15	63Vdc	35
		4 - 6.3	250Vac	10x Ampere rating
		4 - 6.3	63Vdc	10x Ampere rating
TDP	3.6 x 9.5 (0.14 x 0.37)	0.25 - 3.15	250Vac	35
		4 - 6.3	250Vac	10xAmpere rating
TEP	3.7 x 8 (0.15 x 0.31)	0.25 - 3.15	250Vac	35
		4 - 6.3	250Vac	10 x Ampere Rating

Supplemental micro fuses: pigtail leads, filled-tube

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2000	8.3 x 7.8 (0.33 x 0.31)	0.1 - 6.3	250Vac	100
		0.1 - 6.3	300Vac	100
2020	8.4 x 4.1 x 5.3 (0.33 x 0.16 x 0.21)	0.1 - 6.3	250Vac	160
		0.1 - 6.3	300Vac	130

		0.1 - 6.3	400Vac	50
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Supplemental micro fuses: surface mount

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
0402F	1.1 x 0.5 x 0.4 (0.04 x 0.02 x 0.02)	0.1 - 4	32Vdc	35


Supplemental micro fuses: surface mount, cartridge enclosed

Cat. No.	Size mm(in)	Amps (A)	Volts (V)	Interrupting Rating (A)
2410LT	6.4 x 2.6 x 2.6 (0.25 x 0.10 x 0.10)	0.5 - 6.3	250Vac	50
		0.5 - 6.3	125Vdc	80

(!) - ("XXX" represents current rating, i.e. 0.1 - 20)

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Geräteschutzsicherung
Miniature fuse

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DIN EN 60127-2 (VDE 0820-2):2015-07; EN 60127-2:2014
IEC 60127-1:2006
IEC 60127-1:2006/AMD1:2011
IEC 60127-1:2006/AMD2:2015
IEC 60127-2:2014

Aktenzeichen: 5000410-1170-0036 / 274200

File ref.:

Ausweis-Nr. 40016670

Blatt 1

Certificate No.

Page

Weitere Bedingungen siehe Rückseite und Folgeblätter /
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Offenbach, 2006-01-30

(letzte Änderung / updated 2020-07-16)

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2020-07-16

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Geräteschutzsicherung

Miniature fuse

Typ(en) / Type(s)

TSC

TSC+P

Bemessungsspannung
Rated voltage

AC 250 V

Bemessungsstrom
Rated current

200 mA; 250 mA; 315 mA; 400 mA; 500 mA;
630 mA; 800 mA; 1 A; 1,25 A; 1,6 A; 2 A;
2,5 A; 3,15 A; 4 A; 5 A; 6,3 A; 8 A; 10 A

Normblatt
Standard sheet

5

Kennzeichnung der Charakteristik
Characteristic symbol

T

Maße in mm
Dimension in mm

5 x 20

Kennzeichnung des Ausschaltvermögens
Breaking capacity symbol

H

Bemessungsausschaltvermögen
Rated breaking capacity

1500 A

Zeit/Strom-Charakteristik
Time/current-characteristic

träge
time-lag

Anmerkung

wahlweise mit Drahtanschlüssen:

Version mit doppelter Endkappe
(alle Bemessungsströme)

Version mit einfacher Endkappe
(1 A; 1,25 A; 1,6 A; 2 A; 2,5 A; 3,15 A; 4A; 5 A; 6,3 A)

Remark

optional with lead wires (pigtails):

Version with double-endcap
(all rated currents)

Version with single-endcap
(1 A; 1,25 A; 1,6 A; 2 A; 2,5 A; 3,15 A; 4A; 5 A; 6,3 A)

Fortsetzung siehe Blatt 3 /
continued on page 3

VDE Prüf- und Zertifizierungsinstitut Zeichengenehmigung

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Certificate No. / Page
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2006-01-30

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*This Marks Approval is a basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and proves the conformity with the essential safety requirements of the **EC Low-Voltage Directive 2014/35/EU**.*

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Geräteschutzsicherung

Miniature fuse

Fertigungsstätte(n)

Place(s) of manufacture

Referenz/*Reference*

30011941

Suzhou Walter Electronic

Co. Ltd.

Fenu Technic Development Zone

215211 LUXU TOWN, WUJIANG CITY

Jiangsu

CHINA

VDE Prüf- und Zertifizierungsinstitut GmbH

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DIN EN 60127-2 (VDE 0820-2):2015-07; EN 60127-2:2014
IEC 60127-1:2006
IEC 60127-1:2006/AMD1:2011
IEC 60127-1:2006/AMD2:2015
IEC 60127-2:2014



Aktenzeichen: 5000410-1170-0022 / 274200

File ref.:

Ausweis-Nr. 40026062

Blatt 1

Certificate No.

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Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Suzhou Walter Electronic Co. Ltd., Fenu Technic Development Zone, 215211 LUXU TOWN, WUJIANG CITY,
Jiangsu, CHINA

Aktenzeichen / *File ref.*

5000410-1170-0022 / 274200 / TL3 / EUL

letzte Änderung / *updated*

2020-07-16

Datum / *Date*

2008-12-05

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Gutachtens mit Fertigungsüberwachung Nr. 40026062.

This supplement is only valid in conjunction with page 1 of the Certificate of Conformity with factory surveillance No. 40026062.

G-Sicherungseinsatz Cartridge fuse-link

Typ(en) / *Type(s)*

TSC-Serie(s)

Bemessungsspannung
Rated voltage

AC 250 V

Bemessungsstrom
Rated current

12 A; 15 A

Normblatt
Standard sheet

5

Kennzeichnung der Charakteristik
Characteristic symbol

T

Maße in mm
Dimension in mm

5 x 20

Kennzeichnung des Ausschaltvermögens
Breaking capacity symbol

H

Bemessungsausschaltvermögen
Rated breaking capacity

1500 A

Zeit/Strom-Charakteristik
Time/current-characteristic

träge
time-lag

Fortsetzung siehe Blatt 3 /
continued on page 3

VDE Prüf- und Zertifizierungsinstitut Gutachten mit Fertigungsüberwachung

Ausweis-Nr. / Blatt /
Certificate No. / Page
40026062 3

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Suzhou Walter Electronic Co. Ltd., Fenu Technic Development Zone, 215211 LUXU TOWN, WUJIANG CITY,
Jiangsu, CHINA

Aktenzeichen / *File ref.*

5000410-1170-0022 / 274200 / TL3 / EUL

letzte Änderung / *updated*

2020-07-16

Datum / *Date*

2008-12-05

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Gutachtens mit Fertigungsüberwachung Nr. 40026062.

This supplement is only valid in conjunction with page 1 of the Certificate of Conformity with factory surveillance No. 40026062.

Anmerkung

Die Prüfspannung in Abschnitt 9.2 war DC 125 V.
Wahlweise mit Drahtanschlüssen.
Die Anforderungen für 12 A und 15 A waren die gleichen
wie für 10 A (höchster Bemessungsstrom des Normblatts).

Remark

*The test voltage in clause 9.2 was DC 125 V.
Optional with lead wires (pigtailed).
The requirements for 12 A and 15 A were the same
as for 10 A (highest rating in standard sheet).*

Dieser Zeichengenehmigungs-Ausweis bildet eine Grundlage für die EG-Konformitätserklärung und CE-Kennzeichnung durch den Hersteller oder dessen Bevollmächtigten und bescheinigt die Konformität mit den grundlegenden Schutzanforderungen der **EG-Niederspannungsrichtlinie 2014/35/EU**.

*This Marks Approval is a basis for the EC Declaration of Conformity and the CE Marking by the manufacturer or his agent and proves the conformity with the essential safety requirements of the **EC Low-Voltage Directive 2014/35/EU**.*

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet TL3
Section TL3

VDE Prüf- und Zertifizierungsinstitut Gutachten mit Fertigungsüberwachung

Ausweis-Nr. / Beiblatt /
Certificate No. Supplement
40026062

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

Suzhou Walter Electronic Co. Ltd., Fenu Technic Development Zone, 215211 LUXU TOWN, WUJIANG CITY,
Jiangsu, CHINA

Aktenzeichen / *File ref.*

5000410-1170-0022 / 274200 / TL3 / EUL

letzte Änderung / *updated*

2020-07-16

Datum / *Date*

2008-12-05

Dieses Beiblatt ist Bestandteil des Gutachtens mit Fertigungsüberwachung Nr. 40026062.

This supplement is part of the Certificate of Conformity with factory surveillance No. 40026062.

G-Sicherungseinsatz

Cartridge fuse-link

Fertigungsstätte(n)

Place(s) of manufacture

Referenz/*Reference*

30011941

Suzhou Walter Electronic

Co. Ltd.

Fenu Technic Development Zone

215211 LUXU TOWN, WUJIANG CITY

Jiangsu

CHINA

VDE Prüf- und Zertifizierungsinstitut GmbH

VDE Testing and Certification Institute

Fachgebiet TL3

Section TL3

VDE Prüf- und Zertifizierungsinstitut Gutachten mit Fertigungsüberwachung

Ausweis-Nr. / Infoblatt /
Certificate No. / Info sheet
40026062

Name und Sitz des Genehmigungs-Inhabers / Name and registered seat of the Certificate holder

Suzhou Walter Electronic Co. Ltd., Fenuh Technic Development Zone, 215211 LUXU TOWN, WUJIANG CITY,
Jiangsu, CHINA

Aktenzeichen / File ref.

5000410-1170-0022 / 274200 / TL3 / EUL

letzte Änderung / updated

2020-07-16

Datum / Date

2008-12-05

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Gutachtens mit Fertigungsüberwachung Nr. 40026062.

This supplement is only valid in conjunction with page 1 of the Certificate of Conformity with factory surveillance No. 40026062.

Genehmigung zum Benutzen des auf Seite 1 abgebildeten markenrechtlich geschützten Zeichens des VDE:

Grundlage für die Benutzung sind die Allgemeinen Geschäftsbedingungen (AGB) der VDE Prüf- und Zertifizierungsinstitut GmbH (www.vde.com\AGB-Institut). Das Recht zur Benutzung erstreckt sich nur auf die bezeichnete Firma mit den genannten Fertigungsstätten und die oben aufgeführten Produkte mit den zugeordneten Bezeichnungen. Die Fertigungsstätte muss so eingerichtet sein, dass eine gleichmäßige Herstellung der geprüften und zertifizierten Ausführung gewährleistet ist.

Die Genehmigung ist so lange gültig wie die VDE-Bestimmungen gelten, die der Zertifizierung zugrunde gelegen haben, sofern sie nicht auf Grund anderer Bedingungen aus der VDE Prüf- und Zertifizierungsordnung (PM102) zurückgezogen werden muss.

Der Gültigkeitszeitraum einer VDE-GS-Zeichengenehmigung kann auf Antrag verlängert werden. Bei gesetzlichen und / oder normativen Änderungen kann die VDE-GS-Zeichengenehmigung ihre Gültigkeit zu einem früheren als dem angegebenen Datum verlieren.

Produkte, die das Biozid Dimethylfumarat (DMF) enthalten, dürfen gemäß der Kommissionsentscheidung 2009/251/EG nicht mehr in den Verkehr gebracht oder auf dem Markt bereitgestellt werden.

Der VDE-Zeichengenehmigungsausweis wird ausschließlich auf der ersten Seite unterzeichnet.

Approval to use the legally protected Mark of the VDE as shown on the first page:

Basis for the use are the general terms and conditions of the VDE Testing and Certification Institute (www.vde.com\terms-institute). The right to use the mark is granted only to the mentioned company with the named places of manufacture and the listed products with the related type references. The place of manufacture shall be equipped in a way that a constant manufacturing of the certified construction is assured.

The approval is valid as long as the VDE specifications are in force, on which the certification is based on, unless it is withdrawn according to the VDE Testing and Certification Procedure (PM102E).

The validity period of a VDE-GS-Mark Approval may be prolonged on request. In case of changes in legal and / or normative requirements, the validity period of a VDE-GS-Mark Approval may be shortened.

Products containing the biocide dimethylfumarate (DMF) may not be marketed or made available on the EC market according to the Commission Decision 2009/251/EC.

The approval is solely signed on the first page.

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50314175

Blatt *Page*
0001

Ihr Zeichen *Client Reference*

Unser Zeichen *Our Reference*

Ausstellungsdatum

Date of Issue
(day/mo/yr)

05-YFC- 16069077 001

26.06.2015

Genehmigungsinhaber *License Holder*

Walter Electronic Co., Ltd.
2nd FL. 97 Chung King N RD., Sec. 4
Taipei
Taiwan

Fertigungsstätte *Manufacturing Plant*

Dongguan Walter Electric Co., Ltd.
Yantian Village, Fenggang Town
Dongguan, Guangdong 523702
P.R. China

Prüfzeichen *Test Mark*



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 2000000000

Geprüft nach *Tested acc. to*

EN 60127-1:2006+A1

EN 60127-7:2013

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Fuse Link (Miniature fuse-links)

Type Designation : TSC
Trademark : Walter(Logo) Walter
Rated Voltage : AC 250V
Rated Current : 12,5A
T/I Characteristic : t2=30min; t3=750ms; t4=80s;
t5=95ms; t6=5s; t7=10ms; t8=150ms
Rated Breaking Capacity : 1500A

5

Remark : The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA. The installation has to be carried out according to installation instruction accompanying the products.

5

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht. This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.



TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com

Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety

G. Yin

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50314175

Blatt *Page*
0002

Ihr Zeichen *Client Reference*

Unser Zeichen *Our Reference*

Ausstellungsdatum
01.06.2016

Date of Issue
(day/mo/yr)

05-YFC- 16069077 002

Genehmigungsinhaber *License Holder*

Walter Electronic Co., Ltd.
2nd FL. 97 Chung King N RD., Sec. 4
Taipei
Taiwan

Fertigungsstätte *Manufacturing Plant*

Suzhou Walter Electronic Co., Ltd.
Fenhu Technic Development Zone, Luxu
Wujiang City, Jiangsu
P.R. China

Prüfzeichen *Test Mark*

Geprüft nach *Tested acc. to*

EN 60127-1:2006+A1
EN 60127-7:2013



Zertifiziertes Produkt *(Geräteidentifikation)*
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Fuse Link (Miniature fuse-links)

as page 0001

Addition

Name of the Factory : see above
Address of the Factory : see above

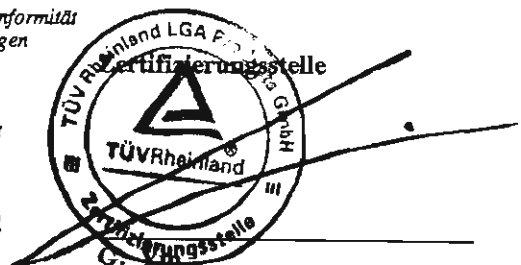
Remark :

- 1) Adding a construction (details see appendix 1.1).
- 2) The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.
- 3) The installation has to be carried out according to installation instruction accompanying the products.

ANLAGE (Appendix): 1.1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety



Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50314175

Blatt *Page*
0003

<i>Ihr Zeichen Client Reference</i>	<i>Unser Zeichen Our Reference</i>	<i>Ausstellungsdatum</i>	<i>Date of Issue (day/mo/yr)</i>
	05-YFC- 16069077 003	22.06.2017	

Genehmigungsinhaber License Holder
Walter Electronic Co., Ltd.
2nd FL. 97 Chung King N RD., Sec. 4
Taipei
Taiwan

Fertigungsstätte Manufacturing Plant
Dongguan Walter Electric Co., Ltd.
Yantian Village, Fenggang Town
Dongguan, Guangdong 523702
P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to
EN 60127-1:2006+A1+A2
EN 60127-7:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Fuse Link (Miniature fuse-links)

as page 0001-0002

Change

Test Requirement : see above

Remark :

- 1) The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.
- 2) The installation has to be carried out according to installation instruction accompanying the products.

*Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.*

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@de.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety



Zertifikat Certificate



Zertifikat Nr. Certificate No.
R 50314175

Blatt Page
0004

Ihr Zeichen Client Reference	Unser Zeichen Our Reference	Ausstellungsdatum Date of Issue (day/mo/yr)
	05-YFC- 16069077 004	17.07.2018

Genehmigungsinhaber License Holder	Fertigungsstätte Manufacturing Plant
Suzhou Walter Electronic Co., Ltd. Fenhu Technic Development Zone, Luxu Wujiang City, Jiangsu P. R. China	Suzhou Walter Electronic Co., Ltd. Fenhu Technic Development Zone, Luxu Wujiang City, Jiangsu P. R. China

Prüfzeichen Test Mark



Geprüft nach Tested acc. to
EN 60127-1:2006+A1+A2
EN 60127-7:2016

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Fuse Link (Miniature fuse-links)

as pages 0001-0003

Change

Name and Address of License Holder : see above

Remark :

- 1) The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the ERA.
- 2) The installation has to be carried out according to installation instruction accompanying the products.

ANLAGE (Appendix): 1.2

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht. This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221) 8 06 - 13 71 e-mail: cen-validity@de.tuv.com
Fax: (+49/221) 8 06 - 39 35 http://www.tuv.com/safety



Zertifikat Certificate



Zertifikat Nr. *Certificate No.*
R 50314175

Blatt *Page*
0005

Ihr Zeichen *Client Reference*

Unser Zeichen *Our Reference*

Ausstellungsdatum

Date of Issue
(day/month/yr)

05-YFC- 16069077 005

08.11.2018

Genehmigungsinhaber *License Holder*

Suzhou Walter Electronic Co., Ltd.
Fenhu Technic Development Zone, Luxu
Wujiang City, Jiangsu
P. R. China

Herstellungsstätte *Manufacturing Plant*

Dongguan Walter Electric Co., Ltd.
Yantian Village, Fenggang Town
Dongguan, Guangdong 523702
P. R. China

Prüfzeichen *Test Mark*



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 2000000000

Geprüft nach *Tested acc. to*

EN 60127-1:2006+A1+A2
EN 60127-7:2016

Zertifiziertes Produkt (*Geräteidentifikation*)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Fuse Link (Miniature fuse-links)

as pages 0001-0004

Addition

Rated Current : 16A, 20A

Change

T/I Characteristic : t5=150ms (see appendix 1.3)

Remark :

- 1) The labelling requirements acc. to EU Directive 2001/95 have to be observed for distribution within the EEA.
- 2) The installation has to be carried out according to installation instruction accompanying the products.

ANLAGE (Appendix): 1.3

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg
Tel.: (+49/221)8 06 - 13 71 e-mail: cert-validity@dc.tuv.com
Fax: (+49/221)8 06 - 39 35 http://www.tuv.com/safety



Kitemark™ Certificate

This is to certify that:

Suzhou Walter Electronic Co., Ltd
Fenhu Technic Development Zone
Wujiang
Jiang Su Province
China

Holds Certificate Number:

KM 70911

In respect of:

BS EN 60127
Cartridge fuse-links

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.

For and on behalf of BSI:

Chris Lewis - Certification Director, Product Certification

First Issued: 2003-02-21
Latest Issue: 2020-10-20

Effective Date: 2020-10-20
Expiry Date: 2023-11-01

Page: 1 of 6



...making excellence a habit.™

Kitemark™ Certificate

No. KM 70911

BS EN 60127-2:2014 (BS EN 60127-1:2006 + A2:2015) Standard Sheet 5 Fuse-links

Type: TSC Time-lag, high breaking capacity		
Type Ref	Rating	Reference Report
TSC	T 1.00 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 1.25 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 1.60 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 2.00 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 2.50 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 3.15 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 4.00 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 5.00 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565
TSC	T 6.30 A H 250 V	0150176/01 (SE-20052), 2003-0025 & 1979600-1170-0011/166565

First Issued: 2003-02-21
Latest Issue: 2020-10-20

Effective Date: 2020-10-20
Expiry Date: 2023-11-01

Page: 6 of 6

This certificate has been issued by and remains the property of BSI Assurance UK Ltd, Kitemark Court, Davy Avenue, Knowlhill, Milton Keynes MK5 8PP, United Kingdom and should be returned immediately upon request.
To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

適合同等証明書

Statement of Conformity Assessment

電気用品安全法第8条第1項に規定する技術基準及び同法第9条第2項の経済産業省令で定める基準（法第9条第1項第2号に係る検査に係るものに限る）に適合していることを証明します

I hereby certify that the product mentioned below complies with the technical requirements stipulated in Paragraph 1 of Article 8 of Electrical Appliances and Materials Safety Act (here under referred to as the Act) and the requirements defined by the ordinance of the Ministry of Economy, Trade and Industry based on Paragraph 2 of Article 9 of the Act (limited to Item 2 of Paragraph 1 of Article 9 for Inspection of the Act).

1. 証明書番号: JET2179-31003-2006
Statement Number
2. 交付年月日: 平成29年1月5日
Effective Date January 5, 2017
3. 有効年月日: 平成36年1月4日
Date of Validity January 4, 2024
4. 申込者名: (Applicant)
住所: FENHU TECHNIC DEVELOPMENT ZONE WUJIANG, JIANGSU PROVINCE, CHINA
Address
- 氏名又は名称: SUZHOU WALTER ELECTRONIC CO., LTD.
Name
5. 特定電気用品名: 管形ヒューズ
Name of Product Cartridge fuses
6. 型式の区分: 別紙のとおり
Type Classification See attached "Type Classification"
7. 製造工場名: (Manufacturer)
住所: FENHU TECHNIC DEVELOPMENT ZONE WUJIANG, JIANGSU PROVINCE, CHINA
Address
- 氏名又は名称: SUZHOU WALTER ELECTRONIC CO., LTD.
Name
8. 適用試験規格: 電気用品の技術上の基準を定める省令の解釈
Applied Standard for Testing Description of the technical requirements by the METI Ordinance
別表第十二 J60127-1 (H26) 及び J60127-2 (H26)
Appendix 12 J60127-1 (H26) and J60127-2 (H26)
9. 適合性検査の方法: (Testing Method for Conformity Assessment)
 - 1) 試験用の特定電気用品については、電気用品の技術上の基準を定める省令の解釈に定める方法
With respect to testing for Category A products, the testing method is based on the technical requirements of the description of Electrical Appliances and Materials stipulated in the METI Ordinance.
 - 2) 当該特定電気用品に係る届出事業者又は事業場における検査設備については、電気用品安全法施行規則別表第四の検査設備の欄に掲げる検査設備ごとにそれぞれ同表の技術上の基準の欄に掲げる方法
With respect to inspection facilities required for Category A products at the factory, Testing Method described in the column of the technical requirements for each inspection facilities in the column of inspection facilities is shown in the Appendix 4 of Enforcement Regulations of the Act.

10. 注意事項

- 1) この適合同等証明書は、提出された試験用の電気用品に関して評価を行った上で交付したものであり、同一の型式の区分にある電気用品について電気用品安全法第8条1項に規定する技術基準適合確認の義務を履行したことを示すものではありません。

This Statement of Conformity Assessment, which is issued on the evaluation of the submitted test-use Electrical Appliances and Materials, does not signify that the Obligation to Comply with Requirements, which is prescribed at Paragraph 1 of Article 8 of the Act, is fulfilled on Electrical Appliances and Materials in the same Type Classification.

- 2) この適合同等証明書は、別紙に記載されている型式の区分の範囲内及び区分の組み合わせについてのみ有効です。

This Statement of Conformity Assessment is valid only for Electrical Appliances and Materials within the Type Classifications and their combination as stated in the attached "Type Classification".

 DGP HNS
電話: 0755-23173910

一般財団法人 電気安全環境研究所
Japan Electrical Safety & Environment technology Laboratories (JET)

理事長 薦田 康久
President Yasuhisa Komoda

東京都渋谷区代々木5-14-12
(5-14-12, Yoyogi, Shibuya-ku, Tokyo, Japan)

証明書番号: J E T 2 1 7 9 - 3 1 0 0 3 - 2 0 0 6

適合同等証明書別紙

Statement of Conformity Assessment

型式の区分

Type Classification

要素 Factor	区分 Classification
定格電圧 Rated voltage	(2) 125Vを超えるもの Exceeding 125V
定格電流（定格電流表示のあるものの場合に限る。） Rated current (limited to those with rated current markings)	(1) 5 A以下のもの 5A or less
適用電動機の定格容量（定格電流表示のないものの場合に限る。） Rated capacity of applicable motor (limited to those without rated current markings)	
可溶体の主材料 Fuse element materials	(6) その他のもの Others
可溶体の数 Number of fuse elements	(1) 1のもの One
再使用（管形ヒューズを除く。） Reusability (excluding cartridge fuses)	—
内部充てん物 Filler materials	(1) あるもの With filler materials
筒（内筒を除く。）の材料 Outer cartridge materials	(3) 磁器のもの又はガラスのもの Ceramic or glass
端子 Terminals	(4) リード線付きのもの Lead terminal
排気孔 Exhausting opening	(2) ないもの Without exhausting opening
溶断の表示 Blowout fuse indicator	(2) ないもの Without blowout fuse indicator
用途 Application	(2) 電子機器用のもの For use in electric appliances
定格遮断電流 Rated breaking capacity	(5) 1,000Aを超え1,500A以下のもの Exceeding 1,000A, and less than or equal to 1,500A

証明書番号：JET2179-31003-2006

適合同等証明書

Statement of Conformity Assessment

電気用品安全法第8条第1項に規定する技術基準及び同法第9条第2項の経済産業省令で定める基準（法第9条第1項第2号に係る検査に係るものに限る）に適合していることを証明します

I hereby certify that the product mentioned below complies with the technical requirements stipulated in Paragraph 1 of Article 8 of Electrical Appliances and Materials Safety Act (here under referred to as the Act) and the requirements defined by the ordinance of the Ministry of Economy, Trade and Industry based on Paragraph 2 of Article 9 of the Act (limited to Item 2 of Paragraph 1 of Article 9 for Inspection of the Act).

1. 証明書番号: JET2179-31003-2007
Statement Number
2. 交付年月日: 平成29年1月5日
Effective Date January 5, 2017
3. 有効年月日: 平成36年1月4日
Date of Validity January 4, 2024
4. 申込者名 (Applicant)
住所: FENHU TECHNIC DEVELOPMENT ZONE WUJIANG, JIANGSU PROVINCE, CHINA
Address

- 氏名又は名称: SUZHOU WALTER ELECTRONIC CO., LTD.
Name
5. 特定電気用品名: 管形ヒューズ
Name of Product Cartridge fuses
6. 型式の区分: 別紙のとおり
Type Classification See attached "Type Classification"
7. 製造工場名 (Manufacturer)
住所: FENHU TECHNIC DEVELOPMENT ZONE WUJIANG, JIANGSU PROVINCE, CHINA
Address

- 氏名又は名称: SUZHOU WALTER ELECTRONIC CO., LTD.
Name
8. 適用試験規格: 電気用品の技術上の基準を定める省令の解釈
Applied Standard for Testing Description of the technical requirements by the METI Ordinance
別表第十二 J60127-1 (H26) 及び J60127-2 (H26)
Appendix 12 J60127-1 (H26) and J60127-2 (H26)
9. 適合性検査の方法: (Testing Method for Conformity Assessment)
 - 1) 試験用の特定電気用品については、電気用品の技術上の基準を定める省令の解釈に定める方法
With respect to testing for Category A products, the testing method is based on the technical requirements of the description of Electrical Appliances and Materials stipulated in the METI Ordinance.
 - 2) 当該特定電気用品に係る届出事業者又は事業場における検査設備については、電気用品安全法施行規則別表第四の検査設備の欄に掲げる検査設備ごとにそれぞれ同表の技術上の基準の欄に掲げる方法
With respect to inspection facilities required for Category A products at the factory, Testing Method described in the column of the technical requirements for each inspection facilities in the column of inspection facilities is shown in the Appendix 4 of Enforcement Regulations of the Act.

10. 注意事項

- 1) この適合同等証明書は、提出された試験用の電気用品に関して評価を行った上で交付したものであり、同一の型式の区分にある電気用品について電気用品安全法第8条1項に規定する技術基準適合確認の義務を履行したことを示すものではありません。

This Statement of Conformity Assessment, which is issued on the evaluation of the submitted test-use Electrical Appliances and Materials, does not signify that the Obligation to Comply with Requirements, which is prescribed at Paragraph 1 of Article 8 of the Act, is fulfilled on Electrical Appliances and Materials in the same Type Classification.

- 2) この適合同等証明書は、別紙に記載されている型式の区分の範囲内及び区分の組み合わせについてのみ有効です。

This Statement of Conformity Assessment is valid only for Electrical Appliances and Materials within the Type Classifications and their combination as stated in the attached "Type Classification".

DGPHNST
電話: 0755-23173910

一般財団法人 電気安全環境研究所
Japan Electrical Safety & Environment Technology Laboratories (JET)

理事長 薦田 康久
President Yasuhisa Komoda

東京都渋谷区代々木5-14-12
(5-14-12, Yoyogi, Shibuya-ku, Tokyo, Japan)

証明書番号: JET2179-31003-2007

適合同等証明書別紙

Statement of Conformity Assessment

型式の区分

Type Classification

要素 Factor	区分 Classification
定格電圧 Rated voltage	(2) 125Vを超えるもの Exceeding 125V
定格電流（定格電流表示のあるものの場合に限る。） Rated current (limited to those with rated current markings)	(2) 5Aを超え15A以下のもの Exceeding 5A, and less than or equal to 15A
適用電動機の定格容量（定格電流表示のないものの場合に限る。） Rated capacity of applicable motor (limited to those without rated current markings)	
可溶体の主材料 Fuse element materials	(6) その他のもの Others
可溶体の数 Number of fuse elements	(1) 1のもの One
再使用（管形ヒューズを除く。） Reusability (excluding cartridge fuses)	—
内部充てん物 Filler materials	(1) あるもの With filler materials
筒（内筒を除く。）の材料 Outer cartridge materials	(3) 磁器のもの又はガラスのもの Ceramic or glass
端子 Terminals	(4) リード線付きのもの Lead terminal
排気孔 Exhausting opening	(2) ないもの Without exhausting opening
溶断の表示 Blowout fuse indicator	(2) ないもの Without blowout fuse indicator
用途 Application	(2) 電子機器用のもの For use in electric appliances
定格遮断電流 Rated breaking capacity	(5) 1,000Aを超え1,500A以下のもの Exceeding 1,000A, and less than or equal to 1,500A

証明書番号：JET 2179-31003-2007

접수번호 : 19-021204-02-1
(Receipt No.)



안전인증서

Safety Certificate

안전인증번호 : SU05015-5001A
(Certificate No.)

제조사/수입업자명 : Suzhou Walter Electronic Co., Ltd.
(Manufacturer/importer)

주소 : Fenu, Technic Development Zone, Luxu Wu Jiang, Jiangsu, China
(Address)

제품명 : 퓨즈 (Cartridge fuse link)
(Product)

기본모델명 : TSC 6.3A
(Basic Model)

파생모델명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 250 V 6.3 A
(Rating)

시험기준 : K60127-2(2011-12), K60127-1(2011-12)
(Standard)

본 인증서는 제조국명 : 중국
제조사명 : Suzhou Walter Electronic Co., Ltd.
제조공장의 주소 : Fenu, Technic Development Zone, Luxu Wu Jiang, Jiangsu, China
의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제9조제2항, 제4항, 제10조제2항 또는 제15조제2항에 따라 안전인증서를 발급합니다.
We Issue This Safety Certificate for the above appliances in accordance with the Article 9(2),9(4),10(2) or 15(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2019 년 04 월 15 일
Year month day

한국산업기술시험원장

KOREA TESTING LABORATORY



* 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증·허가 등을 받아야 합니다.

첨부서류	1. 전기용품의 안전관리부품 및 재질목록(List of Critical Components) 2. 기본모델·파생모델의 내용 (Descriptions of the basic and series model) 3. 안전인증의 변경 현황 (Revisions Status)
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첨부 1 : 전기용품의 안전관리부품 및 재질목록
List of Critical Components

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Not applicable				
<p><input type="checkbox"/> 유의사항 (Attention) :</p> <p>1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등재를 원하시는 경우는 안전인증기관에 인증변경신청을 하여야 합니다.</p> <p><i>As the "Critical components" are parts in directly related with safety, these components shall be checked during a factory inspection by the certification body. In case of applying multiful listing or changing the items above, the certification revision shall be applied.</i></p> <p>2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.</p> <p><i>The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.</i></p>				

FP511-04

□ **첨부 2 : 기본모델 · 파생모델의 내용**
Description of the basic and series model

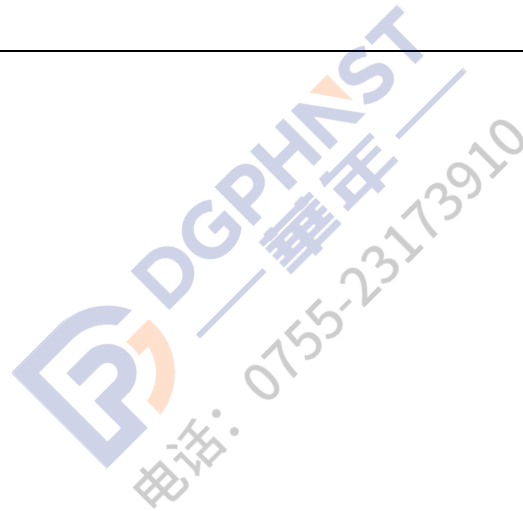
파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
TSC 3.15A	A rated current is different from the basic model.
TSC 4A	A rated current is different from the basic model.
TSC 5A	A rated current is different from the basic model.
TSC 3.15A+P	A rated current is different from the basic model and adhere lead wire.
TSC 4A+P	A rated current is different from the basic model and adhere lead wire.
TSC 5A+P	A rated current is different from the basic model and adhere lead wire.
TSC 6.3A+P	adhere lead wire.
TSC+P 3.15A	Rated current (3.15 A) and lead wire type
TSC+P 4A	Rated current (4 A) and lead wire type
TSC+P 5A	Rated current (5 A) and lead wire type
TSC+P 6.3A	Lead wire type
제품특기사항 및 시험조건 Remarks & Test conditions	
<p>1. Review Report. No.: 05-1920-3185 (2005. 07. 29.)</p> <p>2. Product Description</p> <ul style="list-style-type: none"> - AC 250 V, 6.3 A - Rated Breaking capacity : 1500 A - Standard sheet 5 	
<p>□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다. 검토 담당자 : BK 전략본부 인증관리센터 신 중욱 / 02-8601-1437</p> <p>□ <i>If you have any question on product review, please contact the person below :</i> <i>Job holder: BK Strategy Division, Certification Management Center, J.U.Shin / +82 2 860-1437</i></p>	

FP511-05

첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions
1 st Rev.) Addition of derivative models (19-021204-02-2 : 2019.04.12.) - TSC+P 3.15A and 3 models

FP511-06



접 수 번 호 : 19-021204-01-1
(Receipt No.)



안전인증서

Safety Certificate

안전인증번호 : SU05015-5002A
(Certificate No.)

제조업자/수입업자명 : Suzhou Walter Electronic Co., Ltd.
(Manufacturer/importer)

주소 : Fenu, Technic Development Zone, Luxu Wu Jiang, Jiangsu, China
(Address)

제품명 : 퓨즈 (Cartridge fuse link)
(Product)

기본모델명 : TSC 2.5A
(Basic Model)

파생모델명 : See the attachment 2
(Series Model)

정격/안전기준상의 모델구분 : AC 250 V, 2.5 A
(Rating)

시험기준 : K60127-2(2011-12), K60127-1(2011-12)
(Standard)

본 인증서는 제조국명 : 중국
 제조업자명 : Suzhou Walter Electronic Co., Ltd.
 제조공장의 주소 : Fenu, Technic Development Zone, Luxu Wu Jiang, Jiangsu, China
 의 제품에만 해당함

「전기용품 및 생활용품 안전관리법 시행규칙」 제9조제2항, 제4항, 제10조제2항 또는 제15조제2항에 따라 안전인증서를 발급합니다.
 We Issue This Safety Certificate for the above appliances in accordance with the Article 9(2),9(4),10(2) or 15(2) of the Enforcement Rule of the Electrical Appliances and Consumer Products Safety Control Act.

2019 년 04 월 15 일
 Year month day

한국산업기술시험원장
 KOREA TESTING LABORATORY



* 이 인증서는 「전기용품 및 생활용품 안전관리법 시행규칙」에 따른 제품의 안전성 확인에 한정된 것이며, 그 밖의 다른 법률이 적용되는 제품의 경우에는 해당 법률에 따라 추가로 인증·허가 등을 받아야 합니다.

첨부서류	1. 전기용품의 안전관리부품 및 재질목록(List of Critical Components) 2. 기본모델·파생모델의 내용 (Descriptions of the basic and series model) 3. 안전인증의 변경 현황 (Revisions Status)
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첨부 1 : 전기용품의 안전관리부품 및 재질목록
List of Critical Components

부품명(회로기호) Component(Part no.)	제조사(상표명) Manufacturer(Brand)	모델명(형식) Model(Type)	정격 또는 특성 Rating or Characteristics	인증마크 Tested by
Not applicable				
<p><input type="checkbox"/> 유의사항 (Attention) :</p> <p>1. 안전관리부품은 전기적인 안전에 직접적인 영향을 주는 부품으로서 안전인증기관이 정기공장검사 시 확인 관리 하는 사항입니다. 따라서 상기목록에 기재된 사항을 변경하거나 또는 복수등재를 원하시는 경우는 안전인증기관에 인증변경신청을 하여야 합니다.</p> <p><i>As the "Critical components" are parts in directly related with safety, these components shall be checked during a factory inspection by the certification body. In case of applying multiful listing or changing the items above, the certification revision shall be applied.</i></p> <p>2. 인증변경신청 없이 임의로 변경하는 경우는, 전기용품 및 생활용품 안전관리법 시행규칙 제 21 조제 1 항 또는 제 38 조제 1 항 규정에 의한 안전인증 취소 혹은 안전확인신고 효력상실 사유가 됨을 유의하시기 바랍니다.</p> <p><i>The Safety Certification will be cancelled under the Article 21(1), 38(1) of the Enforcement Rule of the Electrical appliances and Consumer Products Safety Control Act if the contents of the Certification is altered without our authorization.</i></p>				

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□ **첨부 2 : 기본모델 · 파생모델의 내용**
Description of the basic and series model

파생모델명 Derivative model	기본모델과의 차이점 Differences between the basic and derivative model(s)
TSC 1A	A rated current is different from the basic model.
TSC 1.25A	A rated current is different from the basic model.
TSC 1.6A	A rated current is different from the basic model.
TSC 2.0A	A rated current is different from the basic model.
TSC 1A+P	A rated current is different from the basic model and adhere lead wire.
TSC 1.25A+P	A rated current is different from the basic model and adhere lead wire.
TSC 1.6A+P	A rated current is different from the basic model and adhere lead wire.
TSC 2.0A+P	A rated current is different from the basic model and adhere lead wire.
TSC 2.5A+P	adhere lead wire.
TSC+P 1A	Rated current (1 A) and lead wire type
TSC+P 1.25A	Rated current (1.25 A) and lead wire type
TSC+P 2A	Rated current (2 A) and lead wire type
TSC+P 2.5A	Lead wire type
제품특기사항 및 시험조건 Remarks & Test conditions	
<p>1. Review Report. No.: 05-1920-3186 (2005. 07. 29.)</p> <p>2. Product Description</p> <ul style="list-style-type: none"> - AC 250 V, 2.5 A - Rated Breaking capacity : 1500 A - Standard sheet 5 	
<p>□ 본 제품의 검토내용에 관하여 의문사항이 있으시면 아래 연락처로 문의하시기 바랍니다. 검토 담당자 : BK 전략본부 인증관리센터 신 종욱 / 02-8601-1437</p> <p>□ <i>If you have any question on product review, please contact the person below :</i> <i>Job holder: BK Strategy Division, Certification Management Center, J.U.Shin / +82 2 860-1437</i></p>	

FP511-05

첨부 3 : 안전인증의 변경 현황
Revisions Status

변경발급 내용 Contents of Certificate Revisions
1 st Rev.) Addition of derivative models (19-021204-01-2 : 2019.04.12.) - TSC+P 1A and 3 models

FP511-06



强制性认证产品符合性自我声明



自我声明编号: 2020970207000228

苏州华德电子有限公司(生产者) 确认知晓《强制性产品认证自我声明实施规则》以及相关产品强制性认证实施规则的要求, 对本声明承担全部法律责任。

苏州华德电子有限公司(生产者) 声明以下产品已按照《强制性产品认证自我声明实施规则》以及相关产品强制性认证实施规则的要求进行检测, 符合相关标准要求; 自本声明签署之日起, 生产和销售的产品持续符合以下标准与实施规则的要求; 保存本声明涉及的技术文档至少10年; 正确使用强制性产品认证标志; 如产品或其符合性信息发生变更, 将及时更新技术文档并报送产品变更信息。

生产者名称: 苏州华德电子有限公司
生产者地址: 江苏省苏州市吴江区汾湖经济技术开发区(芦墟)
依据的强制性产品认证规则: CNCA-00C-008: 2019 强制性产品认证实施规则自我声明
产品名称: 管状熔断体;带引线管状熔断体
产品系列、型号、规格: (见附页)
依据的标准: GB/T9364.1-2015;GB/T9364.2-2018
生产企业名称: 苏州华德电子有限公司
生产企业地址: 江苏省吴江汾湖经济开发区新黎路99号

联系人: 杜技伟
电话: 0769-87772561 (分机: 134)
电子邮箱: td.chiang@walterfuse.com
指定签字人: 杜技伟

自我声明时间: 2020-08-31
自我声明地点: 苏州

生产者签章: 程斌



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强制性认证产品符合性自我声明(附页)



自我声明编号: 2020970207000228

产品系列、型号、规格:

TSC T1AH250V, TSC T1.25AH250V, TSC T1.6AH250V, TSC T2AH250V, TSC T2.5AH250V, TSC T3.15AH250V, TSC T4AH250V, TSC T5AH250V, TSC T6.3AH250V, TSC T8AH250V, TSC T10AH250V; TSC T1AH250V, TSC T1.25AH250V, TSC T1.6AH250V, TSC T2AH250V, TSC T2.5AH250V, TSC T3.15AH250V, TSC T4AH250V, TSC T5AH250V, TSC T6.3AH250V, TSC T8AH250V, TSC T10AH250V

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电子邮箱: td.chiang@walterfuse.com
指定签字人:

杜技伟

自我声明时间: 2020-08-31

自我声明地点: 苏州

生产者签章:



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产品认证证书

证书编号：CQC10012041025

申请人名称及地址

苏州华德电子有限公司
江苏省吴江市汾湖经济技术开发区(芦墟)

制造商名称及地址

苏州华德电子有限公司
江苏省吴江市汾湖经济技术开发区(芦墟)

生产企业名称及地址

苏州华德电子有限公司(V005437)
江苏省吴江汾湖经济开发区新黎路99号

产品名称和系列、规格、型号

特殊应用的小型熔断体(管状);特殊应用的小型熔断体(带引线管状)

TSC 12.5A a.c. 250V; TSC 12.5A a.c. 250V、TSC 16A a.c. 250V(额定分断能力: 1500A, 主要尺寸:Φ5.2mm×20mm)

产品标准和技术要求

GB/T 9364.1-2015;GB/T 9364.7-2016

认证模式

产品型式试验+初次工厂检查+获证后监督

上述产品符合 CQC11-462125-2018 认证规则的要求, 特发此证。

发证日期: 2020年08月27日 有效期至: 2025年08月27日

证书有效期内本证书的有效性依据发证机构的定期监督获得保持。

本证书为变更证书, 证书首次颁发日期: 2010年01月20日

主任: _____

陆梅



中国质量认证中心

中国·北京·南四环西路188号9区100070

<http://www.cqc.com.cn>

C 0372312



PRODUCT CERTIFICATE

CERTIFICATE NO.: CQC10012041025

NAME AND ADDRESS OF THE APPLICANT

Suzhou Walter Electronic Co., Ltd.
Fenhu Technic Development Zone, Luxu, Wujiang City, Jiangsu

NAME AND ADDRESS OF THE MANUFACTURER

Suzhou Walter Electronic Co., Ltd.
Fenhu Technic Development Zone, Luxu, Wujiang City, Jiangsu

NAME AND ADDRESS OF THE FACTORY

Suzhou Walter Electronic Co., Ltd. (V005437)
South of Xinli Road, Fenhu Technic Development Zone, Luxu, Wujiang City, Jiangsu

PRODUCT NAME, MODEL AND SPECIFICATION

Cartridge Fuse-link; Cartridge fuse-links with wire terminations
TSC 12.5A a.c. 250V; TSC 12.5A a.c. 250V、TSC 16A a.c. 250V(额定分断能力: 1500A, 主要尺寸: $\Phi 5.2\text{mm} \times 20\text{mm}$)

THE STANDARDS AND TECHNICAL REQUIREMENTS FOR THE PRODUCTS

GB/T 9364.1-2015; GB/T 9364.7-2016

TYPE OF CERTIFICATION SCHEMES

Type Testing of Product + Initial Factory Inspection + Follow up Factory Inspection

This is to certify that the above mentioned product(s) complies with the requirements of certification rules of CQC11-462125-2018.

Valid from: Aug.27,2020

Valid until: Aug.27,2025

The validity of the certificate is subject to positive result of the regular follow up inspection by issuing certification body until the expiry date.

Date of original issued: Jan.20,2010

President: _____

Lu Mei



CHINA QUALITY CERTIFICATION CENTRE

Section 9, No.188, Nansihuan Xilu, Beijing 100070 P.R.China

<http://www.cqc.com.cn>

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