



# Certificate of Compliance

Certificate: 2643510

Master Contract: 231746

Project: 2643510

Date Issued: September 16, 2013

Issued to: **MINMAX Technology Co., Ltd.**  
18 Sin-Sin Road  
An-Ping Industrial District  
Tainan, 702  
TAIWAN  
Attention: Mr. Lester Fang

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only*



Issued by:  Jupiter Huang

## PRODUCTS

CLASS 5311 11 – POWER SUPPLIES - Component Type (For Canadian Certification)

CLASS 5311 91 – POWER SUPPLIES - Component Type (For US Certification)

Component type DC/DC Converter, Models MA03 Series, MIW06 Series and MIWI06 Series. Ratings as follow:

<b>For MA03 Series</b>				
Model Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (Vdc)	Output Current (mA)
MA03-05S05	Nominal: 5.0 Vdc	723	5.0	600
MA03-05S09	Range: 4.5-5.5 Vdc	689	9.0	333
MA03-05S12	Input Fuse: 2000 mA	701	12.0	250
MA03-05S15		686	15.0	200
MA03-12S05	Nominal: 12.0 Vdc	298	5.0	600
MA03-12S09	Range: 10.8-13.2 Vdc	285	9.0	333
MA03-12S12	Input Fuse: 1000 mA	284	12.0	250
MA03-12S15		281	15.0	200



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MA03-24S05	Nominal: 24.0 Vdc	152	5.0	600
MA03-24S09	Range: 21.6-26.4	147	9.0	333
MA03-24S12	Vdc	148	12.0	250
MA03-24S15	Input Fuse: 500 mA	147	15.0	200

**For MIW06 Series**

Model Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (Vdc)	Output Current (mA)
MIW06-12S033X	Nominal: 12.0 Vdc	440	3.3	1200
MIW06-12S05X	Range: 9.0-18.0	641	5.0	1200
MIW06-12S12X	Vdc	609	12.0	500
MIW06-12S15X	Input Fuse: 1500	609	15.0	400
MIW06-12S24X	mA	595	24.0	250
MIW06-12D05X		534	±5.0	±500
MIW06-12D12X		609	±12.0	±250
MIW06-12D15X		609	±15.0	±200
MIW06-24S033X	Nominal: 24.0 Vdc	214	3.3	1200
MIW06-24S05X	Range: 18.0-36.0	313	5.0	1200
MIW06-24S12X	Vdc	298	12.0	500
MIW06-24S15X	Input Fuse: 700 mA	298	15.0	400
MIW06-24S24X		298	24.0	250
MIW06-24D05X		260	±5.0	±500
MIW06-24D12X		298	±12.0	±250
MIW06-24D15X		298	±15.0	±200
MIW06-48S033X	Nominal: 48.0 Vdc	107	3.3	1200
MIW06-48S05X	Range: 36.0-75.0	156	5.0	1200
MIW06-48S12X	Vdc	149	12.0	500
MIW06-48S15X	Input Fuse: 350 mA	149	15.0	400
MIW06-48S24X		149	24.0	250
MIW06-48D05X		130	±5.0	±500
MIW06-48D12X		149	±12.0	±250
MIW06-48D15X		149	±15.0	±200

Note: X can be "H" or blank for marketing purpose.

**For MIWI06 Series**

Model Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (Vdc)	Output Current (mA)
MIWI06-24S033X	Nominal: 24.0 Vdc	214	3.3	1200
MIWI06-24S05X	Range: 9.0-36.0	313	5.0	1200
MIWI06-24S12X	Vdc	298	12.0	500
MIWI06-24S15X	Input Fuse: 1500	298	15.0	400
MIWI06-24S24X	mA	298	24.0	250
MIWI06-24D05X		260	±5.0	±500
MIWI06-24D12X		298	±12.0	±250



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MIWI06-24D15X		298	±15.0	±200
MIWI06-48S033X	Nominal: 48.0 Vdc Range: 18.0-75.0 Vdc Input Fuse: 800 mA	107	3.3	1200
MIWI06-48S05X		156	5.0	1200
MIWI06-48S12X		149	12.0	500
MIWI06-48S15X		149	15.0	400
MIWI06-48S24X		149	24.0	250
MIWI06-48D05X		130	±5.0	±500
MIWI06-48D12X		149	±12.0	±250
MIWI06-48D15X		149	±15.0	±200

Note: X can be "H" or blank for marketing purpose.

Note:

- (1) The above models are intended for use with Information Technology Equipment, where the suitability of the combination is determined by CSA Group.
- (2) Maximum operating ambient:

For MIW06 Series and MIWI06 Series:

Power Derating Curve 100%, full load:

Maximum ambient (Tma) for 3.3 & 5V output models: +60°C

Maximum ambient (Tma) for other output models: +70°C

Power Derating Curve 50%, full load:

Maximum ambient (Tma) for 3.3 & 5V output models: +80°C

Maximum ambient (Tma) for other output models: +85°C

For MIW03 Series:

Maximum ambient (Tma): +85°C (Power Derating Curve 100%, full load)

**APPLICABLE REQUIREMENTS**

CAN/CSA-C22.2 No 60950-1-07 - Information Technology Equipment - Safety - Part 1: General  
Incl. AM1 (2011) Requirements

ANSI/UL Std No 60950-1, 2nd - Information Technology Equipment - Safety - Part 1: General  
Ed. Incl. AM1 (2011) Requirements



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

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<b>Project</b>	<b>Date</b>	<b>Description</b>
2643510	September 16, 2013	Original Certification.