



Certificate of Compliance

Certificate: 2759179

Master Contract: 231746

Project: 2759179

Date Issued: October 01, 2014

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: 
Hades Lee

PRODUCTS

CLASS 5311 11 – POWER SUPPLIES - Component Type (For Canadian Certification)
CLASS 5311 91 – POWER SUPPLIES - Component Type (For US Certification)

DC to DC Converter, Models MIW03 Series, MIWI03 Series, MIWI10 Series, MJWI25 Series, MJWI25-HS Series. Ratings as follow:

For MIW03 Series					
Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
MIW03-05S033X	0B-MIW03-05S033-T1	Nominal: 5Vdc Range: 4.5-9Vdc	643	3.3	750
MIW03-05S05X	0B-MIW03-05S05-T1		750	5.0	600
MIW03-05S12X	0B-MIW03-05S12-T1		732	12.0	250
MIW03-05S15X	0B-MIW03-05S15-T1		732	15.0	200



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MIW03-05S24X	0B-MIW03-05S24-T1		741	24.0	125	
MIW03-05D05X	0B-MIW03-05D05-T1		625	±5.0	±250	
MIW03-05D12X	0B-MIW03-05D12-T1		732	±12.0	±125	
MIW03-05D15X	0B-MIW03-05D15-T1		732	±15.0	±100	
MIW03-12S033X	0B-MIW03-12S033-T1	Nominal: 12Vdc Range: 9-18Vdc	261	3.3	750	
MIW03-12S05X	0B-MIW03-12S05-T1		309	5.0	600	
MIW03-12S12X	0B-MIW03-12S12-T1		294	12.0	250	
MIW03-12S15X	0B-MIW03-12S15-T1		294	15.0	200	
MIW03-12S24X	0B-MIW03-12S24-T1		298	24.0	125	
MIW03-12D05X	0B-MIW03-12D05-T1		260	±5.0	±250	
MIW03-12D12X	0B-MIW03-12D12-T1		298	±12.0	±125	
MIW03-12D15X	0B-MIW03-12D15-T1		298	±15.0	±100	
MIW03-24S033X	0B-MIW03-24S033-T1		Nominal: 24Vdc Range: 18-36Vdc	131	3.3	750
MIW03-24S05X	0B-MIW03-24S05-T1			154	5.0	600
MIW03-24S12X	0B-MIW03-24S12-T1			147	12.0	250
MIW03-24S15X	0B-MIW03-24S15-T1	147		15.0	200	
MIW03-24S24X	0B-MIW03-24S24-T1	149		24.0	125	
MIW03-24D05X	0B-MIW03-24D05-T1	130		±5.0	±250	
MIW03-24D12X	0B-MIW03-24D12-T1	149		±12.0	±125	
MIW03-24D15X	0B-MIW03-24D15-T1	149		±15.0	±100	
MIW03-48S033X	0B-MIW03-48S033-T1	Nominal: 48Vdc Range: 36-75Vdc	65	3.3	750	
MIW03-48S05X	0B-MIW03-48S05-T1		77	5.0	600	
MIW03-	0B-MIW03-		74	12.0	250	



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48S12X	48S12-T1				
MIW03-48S15X	0B-MIW03-48S15-T1		74	15.0	200
MIW03-48S24X	0B-MIW03-48S24-T1		74	24.0	125
MIW03-48D05X	0B-MIW03-48D05-T1		65	±5.0	±250
MIW03-48D12X	0B-MIW03-48D12-T1		74	±12.0	±125
MIW03-48D15X	0B-MIW03-48D15-T1		74	±15.0	±100

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

For MIWI03 Series

Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
MIWI03-24S033X	0B-MIWI03-24S033-T1	Nominal: 24Vdc Range: 9-36Vdc	134	3.3	750
MIWI03-24S05X	0B-MIWI03-24S05-T1		158	5.0	600
MIWI03-24S12X	0B-MIWI03-24S12-T1		152	12.0	250
MIWI03-24S15X	0B-MIWI03-24S15-T1		151	15.0	200
MIWI03-24S24X	0B-MIWI03-24S24-T1		154	24.0	125
MIWI03-24D05X	0B-MIWI03-24D05-T1		130	±5.0	±250
MIWI03-24D12X	0B-MIWI03-24D12-T1		152	±12.0	±125
MIWI03-24D15X	0B-MIWI03-24D15-T1		152	±15.0	±100
MIWI03-48S033X	0B-MIWI03-48S033-T1		Nominal: 48Vdc Range: 18-75Vdc	67	3.3
MIWI03-48S05X	0B-MIWI03-48S05-T1	78		5.0	600
MIWI03-48S12X	0B-MIWI03-48S12-T1	75		12.0	250
MIWI03-48S15X	0B-MIWI03-48S15-T1	74		15.0	200
MIWI03-48S24X	0B-MIWI03-48S24-T1	76		24.0	125
MIWI03-48D05X	0B-MIWI03-48D05-T1	65		±5.0	±250



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MIWI03-48D12X	0B-MIWI03-48D12-T1		76	±12.0	±125
MIWI03-48D15X	0B-MIWI03-48D15-T1		76	±15.0	±100

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

For MIWI10 Series

Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
MIWI10-24S033	0B-MIWI10-24S033-T1	Nominal: 24Vdc Range: 9-36Vdc	432	3.3	2700
MIWI10-24S05	0B-MIWI10-24S05-T1		490	5.0	2000
MIWI10-24S12	0B-MIWI10-24S12-T1		500	5.1	2000
MIWI10-24S15	0B-MIWI10-24S15-T1		479	12.0	833
MIWI10-24S24	0B-MIWI10-24S24-T1		478	15.0	666
MIWI10-24D05	0B-MIWI10-24D05-T1		478	24.0	416
MIWI10-24D12	0B-MIWI10-24D12-T1		478	±12.0	±416
MIWI10-24D15	0B-MIWI10-24D15-T1		478	±15.0	±333
MIWI10-48S033	0B-MIWI10-48S033-T1		Nominal: 48Vdc Range: 18-75Vdc	216	3.3
MIWI10-48S05	0B-MIWI10-48S05-T1	245		5.0	2000
MIWI10-48S12	0B-MIWI10-48S12-T1	250		12.0	2000
MIWI10-48S15	0B-MIWI10-48S15-T1	239		15.0	833
MIWI10-48S24	0B-MIWI10-48S24-T1	236		24.0	666
MIWI10-48D05	0B-MIWI10-48D05-T1	244		±5.0	416
MIWI10-48D12	0B-MIWI10-48D12-T1	244		±12.0	±416
MIWI10-48D15	0B-MIWI10-48D15-T1	244		±15.0	±333

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

For MJWI25 Series and MJWI25-HS Series



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Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
MJWI25-24S033 MJWI25-24S033-HS	MJWI25-24S033 (PWB type)	Nominal: 24Vdc Range: 9-36Vdc	950	3.3	6000
MJWI25-24S05 MJWI25-24S05-HS	MJWI25-24S05 (PWB type)		1170	5.0	5000
MJWI25-24S12 MJWI25-24S12-HS	MJWI25-24S12 (PWB type)		1175	12.0	2090
MJWI25-24S15 MJWI25-24S15-HS	MJWI25-24S15 (PWB type)		1160	15.0	1670
MJWI25-24D12 MJWI25-24D12-HS	MJWI25-24D12 (PWB type)		1170	±12.0	±1040
MJWI25-24D15 MJWI25-24D15-HS	MJWI25-24D15 (PWB type)		1180	±15.0	±840
MJWI25-48S033 MJWI25-48S033-HS	MJWI25-48S033 (PWB type)		Nominal: 48Vdc Range: 18-75Vdc	470	3.3
MJWI25-48S05 MJWI25-48S05-HS	MJWI25-48S05 (PWB type)	580		5.0	5000
MJWI25-48S12 MJWI25-48S12-HS	MJWI25-48S12 (PWB type)	580		12.0	2090
MJWI25-48S15 MJWI25-48S15-HS	MJWI25-48S15 (PWB type)	580		15.0	1670
MJWI25-48D12 MJWI25-48D12-HS	MJWI25-48D12 (PWB type)	585		±12.0	±1040
MJWI25-48D15 MJWI25-48D15-HS	MJWI25-48D15 (PWB type)	590		±15.0	±840

Note: The suffix “-HS” meaning is the converter with heat-sink



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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 MIW03 Series, MIWI03 Series, MIWI10 Series:
Maximum ambient (Tma): +85°C (Power Derating Curve 100%, full load)

For MJWI25 Series:
Power Derating Curve 100%, full load:
Maximum ambient (Tma) for MJWI25-24S033: +53°C
Maximum ambient (Tma) for MJWI25-48S033: +57°C
Maximum ambient (Tma) for MJWI25-24S15, MJWI25-48S05, MJWI25-48S12, MJWI25-48S15: +56°C
Maximum ambient (Tma) for MJWI25-24S05, MJWI25-24S12, MJWI25-24D12, MJWI25-24D15, MJWI25-48D12, MJWI25-48D15: +50°C

For MJW25-HS Series: Power Derating Curve 100%, full load:
Maximum ambient (Tma) for MJWI25-24S033-HS: +61°C
Maximum ambient (Tma) for MJWI25-48S033-HS: +65°C
Maximum ambient (Tma) for MJWI25-24S15-HS, MJWI25-48S05-HS, MJWI25-48S12-HS, MJWI25-48S15-HS: +64°C
Maximum ambient (Tma) for MJWI25-24S05-HS, MJWI25-24S12-HS, MJWI25-24D12-HS, MJWI25-24D15-HS, MJWI25-48D12-HS, MJWI25-48D15-HS: +59°C

APPLICABLE REQUIREMENTS

- | | | |
|---|---|--|
| CAN/CSA-C22.2 No 60950-1-07
Incl. AM1 (2011) | - | Information Technology Equipment - Safety - Part 1: General Requirements |
| ANSI/UL Std No 60950-1, 2nd
Ed. Incl. AM1 (2011) | - | Information Technology Equipment - Safety - Part 1: General 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

Project	Date	Description
2759179	October 01, 2014	Original Certification.