



Certificate of Compliance

Certificate: 70048835

Master Contract: 226037

Project: 70048835

Date Issued: 2015-11-04

Issued to: **TRACO Electronic AG**
Sihlbruggstrasse 111
Baar 6340
SWITZERLAND
Attention: **Mr. Andreas Flühler**

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:

Neil Lin.
Neil Lin

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: TMV 2HI Series, THD 10N Series, THL 10 Series, THL 10-RC Series, THL 10-HS Series, THL 10-RCHS Series. See below for detailed models & ratings:

Models and ratings:

TMV 2HI Series					
Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
TMV 2-0503SHI	0B- MAEU02-05S033HI-T1	Nominal: 5Vdc Range: 4.5 – 5.5Vdc	446	3.3	500
TMV 2-0505SHI	0B- MAEU02-05S05HI-T1		500	5.0	400
TMV 2-0509SHI	0B- MAEU02-05S09HI-T1		493	9.0	222
TMV 2-0512SHI	0B- MAEU02-05S12HI-T1		492	12.0	168



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TMV 2-0515SHI	0B- MAEU02-05S15HI-T1		501	15.0	132	
TMV 2-0505DHI	0B- MAEU02-05D05HI-T1		513	±5.0	±200	
TMV 2-0509DHI	0B- MAEU02-05D09HI-T1		504	±9.0	±112	
TMV 2-0512DHI	0B- MAEU02-05D12HI-T1		504	±12.0	±84	
TMV 2-0515DHI	0B- MAEU02-05D15HI-T1		501	±15.0	±66	
TMV 2-05159HI	0B- MAEU02-05A1509HI-T1		495	15.0 -9.0	66 -110	
TMV 2-1203SHI	0B- MAEU02-12S033HI-T1	Nominal: 12Vdc Range: 10.8 – 13.2Vdc	181	3.3	500	
TMV 2-1205SHI	0B- MAEU02-12S05HI-T1		211	5.0	400	
TMV 2-1209SHI	0B- MAEU02-12S09HI-T1		206	9.0	222	
TMV 2-1212SHI	0B- MAEU02-12S12HI-T1		202	12.0	168	
TMV 2-1215SHI	0B- MAEU02-12S15HI-T1		201	15.0	132	
TMV 2-1205DHI	0B- MAEU02-12D05HI-T1		211	±5.0	±200	
TMV 2-1209DHI	0B- MAEU02-12D09HI-T1		207	±9.0	±112	
TMV 2-1212DHI	0B- MAEU02-12D12HI-T1		205	±12.0	±84	
TMV 2-1215DHI	0B- MAEU02-12D15HI-T1		199	±15.0	±66	
TMV 2-12159HI	0B- MAEU02-12A1509HI-T1		204	15.0 -9.0	66 -110	
TMV 2-1503SHI	0B- MAEU02-15S033HI-T1		Nominal: 15Vdc Range: 13.5 – 16.5Vdc	143	3.3	500
TMV 2-1505SHI	0B- MAEU02-15S05HI-T1			169	5.0	400
TMV 2-1509SHI	0B- MAEU02-15S09HI-T1	160		9.0	222	
TMV 2-1512SHI	0B- MAEU02-15S12HI-T1	162		12.0	168	
TMV 2-1515SHI	0B- MAEU02-15S15HI-T1	155		15.0	132	
TMV 2-1505DHI	0B- MAEU02-15D05HI-T1	165		±5.0	±200	
TMV 2-1509DHI	0B- MAEU02-	160		±9.0	±112	



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	15D09HI-T1					
TMV 2-1512DHI	0B- MAEU02-15D12HI-T1		164	±12.0	±84	
TMV 2-1515DHI	0B- MAEU02-15D15HI-T1		161	±15.0	±66	
TMV 2-15159HI	0B- MAEU02-15A1509HI-T1		159	15.0 -9.0	66 -110	
TMV 2-2403SHI	0B- MAEU02-24S033HI-T1	Nominal: 24Vdc Range: 21.6 – 26.4Vdc	90	3.3	500	
TMV 2-2405SHI	0B- MAEU02-24S05HI-T1		108	5.0	400	
TMV 2-2409SHI	0B- MAEU02-24S09HI-T1		103	9.0	222	
TMV 2-2412SHI	0B- MAEU02-24S12HI-T1		102	12.0	168	
TMV 2-2415SHI	0B- MAEU02-24S15HI-T1		101	15.0	132	
TMV 2-2405DHI	0B- MAEU02-24D05HI-T1		108	±5.0	±200	
TMV 2-2409DHI	0B- MAEU02-24D09HI-T1		104	±9.0	±112	
TMV 2-2412DHI	0B- MAEU02-24D12HI-T1		104	±12.0	±84	
TMV 2-2415DHI	0B- MAEU02-24D15HI-T1		103	±15.0	±66	
TMV 2-24159HI	0B- MAEU02-24A1509HI-T1		102	15.0 -9.0	66 -110	
THD 10N Series						
Model Number	Transformer Number		Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
THD 10-1210N	0B- MIW10-12S033-T1	Nominal: 12Vdc Range: 9 – 18Vdc	863	3.3	2700	
THD 10-1211N	0B- MIW10-12S051-T1		1000	5.1	2000	
THD 10-1212N	0B- MIW10-12S12-T1		947	12.0	833	
THD 10-1213N	0B- MIW10-12S15-T1		935	15.0	666	
THD 10-1222N	0B- MIW10-12D12-T1		945	±12.0	±416	
THD 10-1223N	0B- MIW10-12D15-T1		935	±15.0	±333	



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THD 10-2410N	0B- MIW10-24S033-T1	Nominal: 24Vdc Range: 18 – 36Vdc	432	3.3	2700
THD 10-2411N	0B- MIW10-24S051-T1		500	5.1	2000
THD 10-2412N	0B- MIW10-24S12-T1		468	12.0	833
THD 10-2413N	0B- MIW10-24S15-T1		468	15.0	666
THD 10-2422N	0B- MIW10-24D12-T1		473	±12.0	±416
THD 10-2423N	0B- MIW10-24D15-T1		468	±15.0	±333
THD 10-4810N	0B- MIW10-48S033-T1	Nominal: 48Vdc Range: 36 – 75Vdc	216	3.3	2700
THD 10-4811N	0B- MIW10-48S051-T1		250	5.1	2000
THD 10-4812N	0B- MIW10-48S12-T1		239	12.0	833
THD 10-4813N	0B- MIW10-48S15-T1		237	15.0	666
THD 10-4822N	0B- MIW10-48D12-T1		244	±12.0	±416
THD 10-4823N	0B- MIW10-48D15-T1		237	±15.0	±333

THL 10 Series, THL 10-HS Series, THL 10-RC Series, THL 10-RCHS Series

Model Number	Transformer Number	Input Voltage Range	Rated Input Current (mA)	Output Voltage (V dc)	Output Current (mA)
THL 10-1210, THL 10-1210-HS, THL 10-1210-RC, THL 10-1210-RCHS	0B- MJW10-12S033-T1	Nominal: 12Vdc Range: 9 – 18Vdc	838	3.3	2500
THL 10-1211, THL 10-1211-HS, THL 10-1211-RC, THL 10-1211-RCHS	0B- MJW10-12S051-T1		1000	5.1	2000
THL 10-1212, THL 10-1212-HS, THL 10-1212-RC, THL 10-1212-RCHS	0B- MJW10-12S12-T1		954	12.0	830
THL 10-1213, THL 10-1213-HS, THL 10-1213-RC, THL 10-1213-RCHS	0B- MJW10-12S15-T1		952	15.0	670
THL 10-1221,	0B- MJW10-		992	±5.0	±1000



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THL 10-1221-HS, THL 10-1221-RC, THL 10-1221-RCHS	12D05-T1					
THL 10-1222, THL 10-1222-HS, THL 10-1222-RC, THL 10-1222-RCHS	0B- MJW10- 12D12-T1		956	±12.0	±416	
THL 10-1223, THL 10-1223-HS, THL 10-1223-RC, THL 10-1223-RCHS	0B- MJW10- 12D15-T1		957	±15.0	±333	
THL 10-2410, THL 10-2410-HS, THL 10-2410-RC, THL 10-2410-RCHS	0B- MJW10- 24S033-T1	Nominal: 24Vdc Range: 18 – 36Vdc	414	3.3	2500	
THL 10-2411, THL 10-2411-HS, THL 10-2411-RC, THL 10-2411-RCHS	0B- MJW10- 24S051-T1		500	5.1	2000	
THL 10-2412, THL 10-2412-HS, THL 10-2412-RC, THL 10-2412-RCHS	0B- MJW10- 24S12-T1		472	12.0	830	
THL 10-2413, THL 10-2413-HS, THL 10-2413-RC, THL 10-2413-RCHS	0B- MJW10- 24S15-T1		471	15.0	670	
THL 10-2421, THL 10-2421-HS, THL 10-2421-RC, THL 10-2421-RCHS	0B- MJW10- 24D05-T1		490	±5.0	±1000	
THL 10-2422, THL 10-2422-HS, THL 10-2422-RC, THL 10-2422-RCHS	0B- MJW10- 24D12-T1		473	±12.0	±416	
THL 10-2423, THL 10-2423-HS, THL 10-2423-RC, THL 10-2423-RCHS	0B- MJW10- 24D15-T1		468	±15.0	±333	
THL 10-4810, THL 10-4810-HS, THL 10-4810-RC, THL 10-4810-RCHS	0B- MJW10- 48S033-T1		Nominal: 48Vdc Range: 36 – 75Vdc	207	3.3	2500
THL 10-4811, THL 10-4811-HS,	0B- MJW10- 48S051-T1			250	5.1	2000



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THL 10-4811-RC, THL 10-4811-RCHS					
THL 10-4812, THL 10-4812-HS, THL 10-4812-RC, THL 10-4812-RCHS	0B- MJW10- 48S12-T1		233	12.0	830
THL 10-4813, THL 10-4813-HS, THL 10-4813-RC, THL 10-4813-RCHS	0B- MJW10- 48S15-T1		235	15.0	670
THL 10-4821, THL 10-4821-HS, THL 10-4821-RC, THL 10-4821-RCHS	0B- MJW10- 48D05-T1		242	±5.0	±1000
THL 10-4822, THL 10-4822-HS, THL 10-4822-RC, THL 10-4822-RCHS	0B- MJW10- 48D12-T1		239	±12.0	±416
THL 10-4823, THL 10-4823-HS, THL 10-4823-RC, THL 10-4823-RCHS	0B- MJW10- 48D15-T1		237	±15.0	±333
<p>Note:</p> <p>1) The suffix "-HS" meaning is the converter with heat-sink.</p> <p>2) The suffix "-RC" meaning is the converter with remote control function.</p> <p>3) The suffix "-RCHS" meaning is the converter with remote control function and heat-sink.</p>					

For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No 60950-1-07, - Information Technology Equipment - Safety - Part 1: General Requirements
2nd Ed. Incl. AM1 (2011)+AM2
(2014)

ANSI/UL Std No 60950-1, 2nd - Information Technology Equipment - Safety - Part 1: General Requirements
Ed. Incl. AM1 (2011)+AM2
(2014)



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
70048835	2015-11-04	Original Certification.