

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20171012-E188913  
**Report Reference** E188913-20051104  
**Issue Date** 2017-OCTOBER-12

**Issued to:** TRACO ELECTRONIC AG  
Sihlbruggstrasse 111, CH-6340 Baar, SWITZERLAND

**This is to certify that  
representative samples of**


POWER SUPPLIES, INFORMATION TECHNOLOGY  
EQUIPMENT INCLUDING ELECTRICAL BUSINESS  
EQUIPMENT - COMPONENT  
See Addendum Page for Models

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** UL 60950-1 and CAN/CSA C22.2 No. 60950-1-07,  
Information Technology Equipment-Safety-Part 1: General  
Requirements

**Additional Information:** See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's  
Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog  
number, model number or other product designation as specified under "Marking" for the particular  
Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products  
that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:  
 may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is  
required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual  
recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance  
capabilities and are intended for use as components of complete equipment submitted for investigation rather  
than for direct separate installation in the field. The final acceptance of the component is dependent upon its  
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.,



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please  
contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>



# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20171012-E188913  
**Report Reference** E188913-20051104  
**Issue Date** 2017-OCTOBER-12

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

DC-DC Converter - TON 15-2410z1z1z1z1z1, TON 15-2411z1z1z1z1z1, TON 15-2412z1z1z1z1z1, TON 15-2413z1z1z1z1z1, TON 15-4810z1z1z1z1z1, TON 15-4811z1z1z1z1z1, TON 15-4812z1z1z1z1z1, TON 15-4813z1z1z1z1z1, TMR 0510, TMR 0511, TMR 0514, TMR 0512, TMR 0513, TMR 0521, TMR 0522, TMR 0523, TMR 1210, TMR 1211, TMR 1214, TMR 1212, TMR 1213, TMR 1221, TMR 1222, TMR 1223, TMR 2410, TMR 2411, TMR 2414, TMR 2412, TMR 2413, TMR 2421, TMR 2422, TMR 2423, TMR 4810, TMR 4811, TMR 4814, TMR 4812, TMR 4813, TMR 4821, TMR 4822, TMR 4823, TEN 40-2410WI, TEN 40-2411WI, TEN 40-2412WI, TEN 40-2413WI, TEN 40-2422WI, TEN 40-2423WI, TEN 40-4810WI, TEN 40-4811WI, TEN 40-4812WI, TEN 40-4813WI, TEN 40-4822WI, TEN 40-4823WI, TEN 60-2410, TEN 60-2411, TEN 60-2412, TEN 60-2413, TEN 60-4810, TEN 60-4811, TEN 60-4812, TEN 60-4813, TMR 3-0510-z1z1z1z1z1, TMR 3-0511-z1z1z1z1z1, TMR 3-0509-z1z1z1z1z1, TMR 3-0512-z1z1z1z1z1, TMR 3-0513-z1z1z1z1z1, TMR 3-0521-z1z1z1z1z1, TMR 3-0522-z1z1z1z1z1, TMR 3-0523-z1z1z1z1z1, TMR 3-1210-z1z1z1z1z1, TMR 3-1211-z1z1z1z1z1, TMR 3-1209-z1z1z1z1z1, TMR 3-1212-z1z1z1z1z1, TMR 3-1213-z1z1z1z1z1, TMR 3-1221-z1z1z1z1z1, TMR 3-1222-z1z1z1z1z1, TMR 3-1223-z1z1z1z1z1, TMR 3-2410-z1z1z1z1z1, TMR 3-2411-z1z1z1z1z1, TMR 3-2409-z1z1z1z1z1, TMR 3-2412-z1z1z1z1z1, TMR 3-2413-z1z1z1z1z1, TMR 3-2421-z1z1z1z1z1, TMR 3-2422-z1z1z1z1z1, TMR 3-2423-z1z1z1z1z1, TMR 3-4810-z1z1z1z1z1, TMR 3-4811-z1z1z1z1z1, TMR 3-4809-z1z1z1z1z1, TMR 3-4812-z1z1z1z1z1, TMR 3-4813-z1z1z1z1z1, TMR 3-4821-z1z1z1z1z1, TMR 3-4822-z1z1z1z1z1, TMR 3-4823-z1z1z1z1z1, TON 15-2410WI-z1z1z1z1z1, TON 15-2411WI-z1z1z1z1z1, TON 15-2412WI-z1z1z1z1z1, TON 15-2413WI-z1z1z1z1z1, TON 15-4810WI-z1z1z1z1z1, TON 15-4811WI-z1z1z1z1z1, TON 15-4812WI-z1z1z1z1z1, TON 15-4813WI-z1z1z1z1z1, THN 15-1210-z1z1z1z1z1, THN 15-1211-z1z1z1z1z1, THN 15-1212-z1z1z1z1z1, THN 15-1213-z1z1z1z1z1, THN 15-2410-z1z1z1z1z1, THN 15-2411-z1z1z1z1z1, THN 15-2412-z1z1z1z1z1, THN 15-2413-z1z1z1z1z1, THN 15-4810-z1z1z1z1z1, THN 15-4811-z1z1z1z1z1, THN 15-4812-z1z1z1z1z1, THN 15-4813-z1z1z1z1z1, THN 15-2410WI-z1z1z1z1z1, THN 15-2411WI-z1z1z1z1z1, THN 15-2412WI-z1z1z1z1z1, THN 15-2413WI-z1z1z1z1z1, THN 15-4810WI-z1z1z1z1z1, THN 15-4811WI-z1z1z1z1z1, THN 15-4812WI-z1z1z1z1z1, THN 15-4813WI-z1z1z1z1z1, TEN 20-2410WIN, TEN 20-2411WIN, TEN 20-2412WIN, TEN 20-2413WIN, TEN 20-2421WIN, TEN 20-2422WIN, TEN 20-2423WIN, TEN 20-4810WIN, TEN 20-4811WIN, TEN 20-4812WIN, TEN 20-4813WIN, TEN 20-4821WIN, TEN 20-4822WIN, TEN 20-4823WIN, TEN 30-1207-z1z1z1z1z1, TEN 30-1209-z1z1z1z1z1, TEN 30-1210-z1z1z1z1z1, TEN 30-1211-z1z1z1z1z1, TEN 30-1212-z1z1z1z1z1, TEN 30-1213-z1z1z1z1z1, TEN 30-1221-z1z1z1z1z1, TEN 30-1222-z1z1z1z1z1, TEN 30-1223-z1z1z1z1z1, TEN 30-2407-z1z1z1z1z1, TEN 30-2409-z1z1z1z1z1, TEN 30-2410-z1z1z1z1z1, TEN 30-2411-z1z1z1z1z1, TEN 30-2412-z1z1z1z1z1, TEN 30-2413-z1z1z1z1z1, TEN 30-2421-z1z1z1z1z1, TEN 30-2422-z1z1z1z1z1, TEN 30-2423-z1z1z1z1z1, TEN 30-4807-z1z1z1z1z1, TEN 30-4809-z1z1z1z1z1, TEN 30-4810-z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

DC-DC Converter – TEN 30-4811-z1z1z1z1z1z1, TEN 30-4812-z1z1z1z1z1z1, TEN 30-4813-z1z1z1z1z1z1, TEN 30-4821-z1z1z1z1z1z1, TEN 30-4822-z1z1z1z1z1z1, TEN 30-4823-z1z1z1z1z1z1, TEN 30-2407WIN-z1z1z1z1z1z1, TEN 30-2409WIN-z1z1z1z1z1z1, TEN 30-2410WIN-z1z1z1z1z1z1, TEN 30-2411WIN-z1z1z1z1z1z1, TEN 30-2412WIN-z1z1z1z1z1z1, TEN 30-2413WIN-z1z1z1z1z1z1, TEN 30-2421WIN-z1z1z1z1z1z1, TEN 30-2422WIN-z1z1z1z1z1z1, TEN 30-2423WIN-z1z1z1z1z1z1, TEN 30-2433WIN-z1z1z1z1z1z1, TEN 30-2434WIN-z1z1z1z1z1z1, TEN 30-2431WIN-z1z1z1z1z1z1, TEN 30-2432WIN-z1z1z1z1z1z1, TEN 30-4807WIN-z1z1z1z1z1z1, TEN 30-4809WIN-z1z1z1z1z1z1, TEN 30-4810WIN-z1z1z1z1z1z1, TEN 30-4811WIN-z1z1z1z1z1z1, TEN 30-4812WIN-z1z1z1z1z1z1, TEN 30-4813WIN-z1z1z1z1z1z1, TEN 30-4821WIN-z1z1z1z1z1z1, TEN 30-4822WIN-z1z1z1z1z1z1, TEN 30-4823WIN-z1z1z1z1z1z1, TEN 30-4833WIN-z1z1z1z1z1z1, TEN 30-4834WIN-z1z1z1z1z1z1, TEN 30-4831WIN-z1z1z1z1z1z1, TEN 30-4832WIN-z1z1z1z1z1z1, TEP 75-2410WI-z1z1z1z1z1z1z1z1, TEP 75-2411WI-z1z1z1z1z1z1z1z1, TEP 75-2412WI-z1z1z1z1z1z1z1z1, TEP 75-2413WI-z1z1z1z1z1z1z1z1, TEP 75-2415WI-z1z1z1z1z1z1z1z1, TEP 75-2416WI-z1z1z1z1z1z1z1z1, TEP 75-2418WI-z1z1z1z1z1z1z1z1, TEP 75-4810WI-z1z1z1z1z1z1z1z1, TEP 75-4811WI-z1z1z1z1z1z1z1z1, TEP 75-4812WI-z1z1z1z1z1z1z1z1, TEP 75-4813WI-z1z1z1z1z1z1z1z1, TEP 75-4815WI-z1z1z1z1z1z1z1z1, TEP 75-4816WI-z1z1z1z1z1z1z1z1, TEP 75-4818WI-z1z1z1z1z1z1z1z1, TEP 100-1210-z1z1z1z1z1z1z1z1z1, TEP 100-1211-z1z1z1z1z1z1z1z1z1, TEP 100-1212-z1z1z1z1z1z1z1z1z1, TEP 100-1213-z1z1z1z1z1z1z1z1z1, TEP 100-1215-z1z1z1z1z1z1z1z1z1, TEP 100-1216-z1z1z1z1z1z1z1z1z1, TEP 100-1218-z1z1z1z1z1z1z1z1z1, TEP 100-2410-z1z1z1z1z1z1z1z1z1, TEP 100-2411-z1z1z1z1z1z1z1z1z1, TEP 100-2412-z1z1z1z1z1z1z1z1z1, TEP 100-2413-z1z1z1z1z1z1z1z1z1, TEP 100-2415-z1z1z1z1z1z1z1z1z1, TEP 100-2416-z1z1z1z1z1z1z1z1z1, TEP 100-2418-z1z1z1z1z1z1z1z1z1, TEP 100-4810-z1z1z1z1z1z1z1z1z1, TEP 100-4811-z1z1z1z1z1z1z1z1z1, TEP 100-4812-z1z1z1z1z1z1z1z1z1, TEP 100-4813-z1z1z1z1z1z1z1z1z1, TEP 100-4815-z1z1z1z1z1z1z1z1z1, TEP 100-4816-z1z1z1z1z1z1z1z1z1, TEP 100-4818-z1z1z1z1z1z1z1z1z1, TEP 150-2412WIzzzzzzzz, TEP 150-2413WIzzzzzzzz, TEP 150-2415WIzzzzzzzz, TEP 150-2416WIzzzzzzzz, TEP 150-2418WIzzzzzzzz, TEP 150-4812WIzzzzzzzz, TEP 150-4813WIzzzzzzzz, TEP 150-4815WIzzzzzzzz, TEP 150-4816WIzzzzzzzz, TEP 150-4818WIzzzzzzzz, TEP 150-2412WI-Ozzzzzzzz, TEP 150-2413WI-Ozzzzzzzz, TEP 150-2415WI-Ozzzzzzzz, TEP 150-2416WI-Ozzzzzzzz, TEP 150-2418WI-Ozzzzzzzz, TEP 150-4812WI-Ozzzzzzzz, TEP 150-4813WI-Ozzzzzzzz, TEP 150-4815WI-Ozzzzzzzz, TEP 150-4816WI-Ozzzzzzzz, TEP 150-4818WI-Ozzzzzzzz, TDR 2-1210Wlz1z1z1z1z1z1, TDR 2-1211Wlz1z1z1z1z1z1, TDR 2-1219Wlz1z1z1z1z1z1, TDR 2-1212Wlz1z1z1z1z1z1, TDR 2-1213Wlz1z1z1z1z1z1, TDR 2-1221Wlz1z1z1z1z1z1, TDR 2-1222Wlz1z1z1z1z1z1, TDR 2-1223Wlz1z1z1z1z1z1, TDR 2-2410Wlz1z1z1z1z1z1, TDR 2-2411Wlz1z1z1z1z1z1, TDR 2-2419Wlz1z1z1z1z1z1, TDR 2-2412Wlz1z1z1z1z1z1, TDR 2-2413Wlz1z1z1z1z1z1, TDR 2-2421Wlz1z1z1z1z1z1, TDR 2-2422Wlz1z1z1z1z1z1, TDR 2-2423Wlz1z1z1z1z1z1, TDR 2-4810Wlz1z1z1z1z1z1, TDR 2-4811Wlz1z1z1z1z1z1, TDR 2-4819Wlz1z1z1z1z1z1, TDR 2-4812Wlz1z1z1z1z1z1, TDR 2-4813Wlz1z1z1z1z1z1, TDR 2-4821Wlz1z1z1z1z1z1, TDR 2-4822Wlz1z1z1z1z1z1, TDR 2-4823Wlz1z1z1z1z1z1, TDR 2-1211HIWlz1z1z1z1z1z1, TDR 2-1219HIWlz1z1z1z1z1z1, TDR 2-1212HIWlz1z1z1z1z1z1, TDR 2-1213HIWlz1z1z1z1z1z1, TDR 2-1221HIWlz1z1z1z1z1z1, TDR 2-1222HIWlz1z1z1z1z1z1, TDR 2-1223HIWlz1z1z1z1z1z1, TDR 2-2410HIWlz1z1z1z1z1z1, TDR 2-2411HIWlz1z1z1z1z1z1, TDR 2-2419HIWlz1z1z1z1z1z1,



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

DC-DC Converter – TDR 2-2412HIWlz1z1z1z1z1, TDR 2-2413HIWlz1z1z1z1z1, TDR 2-2421HIWlz1z1z1z1z1, TDR 2-2422HIWlz1z1z1z1z1, TDR 2-2423HIWlz1z1z1z1z1, TDR 2-4810HIWlz1z1z1z1z1, TDR 2-4811HIWlz1z1z1z1z1, TDR 2-4819HIWlz1z1z1z1z1, TDR 2-4812HIWlz1z1z1z1z1, TDR 2-4813HIWlz1z1z1z1z1, TDR 2-4821HIWlz1z1z1z1z1, TDR 2-4822HIWlz1z1z1z1z1, TDR 2-0512z1z1z1z1z1z1, TDR 2-0513z1z1z1z1z1z1, TDR 2-0521z1z1z1z1z1z1, TDR 2-0522z1z1z1z1z1z1, TDR 2-0523z1z1z1z1z1z1, TDR 2-1210z1z1z1z1z1z1, TDR 2-1211z1z1z1z1z1z1, TDR 2-1219z1z1z1z1z1z1, TDR 2-1212z1z1z1z1z1z1, TDR 2-1213z1z1z1z1z1z1, TDR 2-1221z1z1z1z1z1z1, TDR 2-1222z1z1z1z1z1z1, TDR 2-1223z1z1z1z1z1z1, TDR 2-2410z1z1z1z1z1z1, TDR 2-2411z1z1z1z1z1z1, TDR 2-2419z1z1z1z1z1z1, TDR 2-2412z1z1z1z1z1z1, TDR 2-2413z1z1z1z1z1z1, TDR 2-2421z1z1z1z1z1z1, TDR 2-2422z1z1z1z1z1z1, TDR 2-2423z1z1z1z1z1z1, TDR 2-4810z1z1z1z1z1z1, TDR 2-4811z1z1z1z1z1z1, TDR 2-4819z1z1z1z1z1z1, TDR 2-4812z1z1z1z1z1z1, TDR 2-4813z1z1z1z1z1z1, TDR 2-4821z1z1z1z1z1z1, TDR 2-4822z1z1z1z1z1z1, TDR 2-4823z1z1z1z1z1z1, TDR 2-0511Hz1z1z1z1z1z1, TDR 2-0519Hz1z1z1z1z1z1, TDR 2-0512Hz1z1z1z1z1z1, TDR 2-0513Hz1z1z1z1z1z1, TDR 2-0521Hz1z1z1z1z1z1, TDR 2-0522Hz1z1z1z1z1z1, TDR 2-0523Hz1z1z1z1z1z1, TDR 2-1210Hz1z1z1z1z1z1, TDR 2-1211Hz1z1z1z1z1z1, TDR 2-1219Hz1z1z1z1z1z1, TDR 2-1212Hz1z1z1z1z1z1, TDR 2-1213Hz1z1z1z1z1z1, TDR 2-1221Hz1z1z1z1z1z1, TDR 2-1222Hz1z1z1z1z1z1, TDR 2-1223Hz1z1z1z1z1z1, TDR 2-2410Hz1z1z1z1z1z1, TDR 2-2411Hz1z1z1z1z1z1, TDR 2-2419Hz1z1z1z1z1z1, TDR 2-2412Hz1z1z1z1z1z1, TDR 2-2413Hz1z1z1z1z1z1, TDR 2-2421Hz1z1z1z1z1z1, TDR 2-2422Hz1z1z1z1z1z1, TDR 2-2423Hz1z1z1z1z1z1, TDR 2-4810Hz1z1z1z1z1z1, TDR 2-4811Hz1z1z1z1z1z1, TDR 2-4819Hz1z1z1z1z1z1, TDR 2-4812Hz1z1z1z1z1z1, TDR 2-4813Hz1z1z1z1z1z1, TDR 2-4821Hz1z1z1z1z1z1, TDR 2-4822Hz1z1z1z1z1z1, TDR 2-4823Hz1z1z1z1z1z1, TDR 2-1210WISMz1z1z1z1z1z1, TDR 2-1211WISMz1z1z1z1z1z1, TDR 2-1219WISMz1z1z1z1z1z1, TDR 2-1212WISMz1z1z1z1z1z1, TDR 2-1213WISMz1z1z1z1z1z1, TDR 2-1221WISMz1z1z1z1z1z1, TDR 2-1222WISMz1z1z1z1z1z1, TDR 2-1223WISMz1z1z1z1z1z1, TDR 2-2410WISMz1z1z1z1z1z1, TDR 2-2411WISMz1z1z1z1z1z1, TDR 2-2419WISMz1z1z1z1z1z1, TDR 2-2424WISMz1z1z1z1z1z1, TDR 2-2413WISMz1z1z1z1z1z1, TDR 2-2421WISMz1z1z1z1z1z1, TDR 2-2422WISMz1z1z1z1z1z1, TDR 2-2423WISMz1z1z1z1z1z1, TDR 2-4810WISMz1z1z1z1z1z1, TDR 2-4811WISMz1z1z1z1z1z1, TDR 2-4819WISMz1z1z1z1z1z1, TDR 2-4812WISMz1z1z1z1z1z1, TDR 2-4813WISMz1z1z1z1z1z1, TDR 2-4821WISMz1z1z1z1z1z1, TDR 2-4822WISMz1z1z1z1z1z1, TDR 2-4823WISMz1z1z1z1z1z1, TDR 2-1211HIWISMz1z1z1z1z1z1, TDR 2-1209HIWISMz1z1z1z1z1z1, TDR 2-1212HIWISMz1z1z1z1z1z1, TDR 2-1213HIWISMz1z1z1z1z1z1, TDR 2-1221HIWISMz1z1z1z1z1z1, TDR 2-1222HIWISMz1z1z1z1z1z1, TDR 2-1223HIWISMz1z1z1z1z1z1, TDR 2-2410HIWISMz1z1z1z1z1z1, TDR 2-2411HIWISMz1z1z1z1z1z1, TDR 2-2409HIWISMz1z1z1z1z1z1, TDR 2-2412HIWISMz1z1z1z1z1z1, TDR 2-2413HIWISMz1z1z1z1z1z1, TDR 2-2421HIWISMz1z1z1z1z1z1, TDR 2-2422HIWISMz1z1z1z1z1z1, TDR 2-2423HIWISMz1z1z1z1z1z1, TDR 2-4810HIWISMz1z1z1z1z1z1, TDR 2-4811HIWISMz1z1z1z1z1z1, TDR 2-4809HIWISMz1z1z1z1z1z1, TDR 2-4812HIWISMz1z1z1z1z1z1, TDR 2-4813HIWISMz1z1z1z1z1z1, TDR 2-4821HIWISMz1z1z1z1z1z1, TDR 2-4822HIWISMz1z1z1z1z1z1, TDR 2-4823HIWISMz1z1z1z1z1z1, TDR 2-0511SMz1z1z1z1z1z1, TDR 2-0519SMz1z1z1z1z1z1, TDR 2-0512SMz1z1z1z1z1z1, TDR 2-0513SMz1z1z1z1z1z1, TDR 2-0521SMz1z1z1z1z1z1, TDR 2-0522SMz1z1z1z1z1z1, TDR 2-0523SMz1z1z1z1z1z1, TDR 2-1210SMz1z1z1z1z1z1, TDR 2-1211SMz1z1z1z1z1z1, TDR 2-1219SMz1z1z1z1z1z1, TDR 2-1212SMz1z1z1z1z1z1, TDR 2-1213SMz1z1z1z1z1z1, TDR 2-1221SMz1z1z1z1z1z1, TDR 2-1222SMz1z1z1z1z1z1, TDR 2-1223SMz1z1z1z1z1z1, TDR 2-2410SMz1z1z1z1z1z1,



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

DC-DC Converter – TDR 2-2411SMz1z1z1z1z1, TDR 2-2419SMz1z1z1z1z1, TDR 2-2412SMz1z1z1z1z1, TDR 2-2413SMz1z1z1z1z1, TDR 2-2421SMz1z1z1z1z1, TDR 2-2422SMz1z1z1z1z1, TDR 2-2423SMz1z1z1z1z1, TDR 2-4810SMz1z1z1z1z1, TDR 2-4811SMz1z1z1z1z1, TDR 2-4819SMz1z1z1z1z1, TDR 2-4812SMz1z1z1z1z1, TDR 2-4813SMz1z1z1z1z1, TDR 2-4821SMz1z1z1z1z1, TDR 2-4822SMz1z1z1z1z1, TDR 2-4823SMz1z1z1z1z1, TDR 2-0511HISMz1z1z1z1z1, TDR 2-0519HISMz1z1z1z1z1, TDR 2-0512HISMz1z1z1z1z1, TDR 2-0513HISMz1z1z1z1z1, TDR 2-0521HISMz1z1z1z1z1, TDR 2-0522HISMz1z1z1z1z1, TDR 2-0523HISMz1z1z1z1z1, TDR 2-1210HISMz1z1z1z1z1, TDR 2-1211HISMz1z1z1z1z1, TDR 2-1219HISMz1z1z1z1z1, TDR 2-1212HISMz1z1z1z1z1, TDR 2-1213HISMz1z1z1z1z1, TDR 2-1221HISMz1z1z1z1z1, TDR 2-1222HISMz1z1z1z1z1, TDR 2-1223HISMz1z1z1z1z1, TDR 2-2410HISMz1z1z1z1z1, TDR 2-2411HISMz1z1z1z1z1, TDR 2-2419HISMz1z1z1z1z1, TDR 2-2412HISMz1z1z1z1z1, TDR 2-2413HISMz1z1z1z1z1, TDR 2-2421HISMz1z1z1z1z1, TDR 2-2422HISMz1z1z1z1z1, TDR 2-2423HISMz1z1z1z1z1, TDR 2-4810HISMz1z1z1z1z1, TDR 2-4811HISMz1z1z1z1z1, TDR 2-4819HISMz1z1z1z1z1, TDR 2-4812HISMz1z1z1z1z1, TDR 2-4813HISMz1z1z1z1z1, TDR 2-4821HISMz1z1z1z1z1, TDR 2-4822HISMz1z1z1z1z1, TDR 2-4823HISMz1z1z1z1z1, TDR 3-1210Wlz1z1z1z1z1, TDR 3-1211Wlz1z1z1z1z1, TDR 3-1219Wlz1z1z1z1z1, TDR 3-1212Wlz1z1z1z1z1, TDR 3-1213Wlz1z1z1z1z1, TDR 3-1221Wlz1z1z1z1z1, TDR 3-1222Wlz1z1z1z1z1, TDR 3-1223Wlz1z1z1z1z1, TDR 3-2410Wlz1z1z1z1z1, TDR 3-2411Wlz1z1z1z1z1, TDR 3-2419Wlz1z1z1z1z1, TDR 3-2412Wlz1z1z1z1z1, TDR 3-2413Wlz1z1z1z1z1, TDR 3-2421Wlz1z1z1z1z1, TDR 3-2422Wlz1z1z1z1z1, TDR 3-2423Wlz1z1z1z1z1, TDR 3-4810Wlz1z1z1z1z1, TDR 3-4811Wlz1z1z1z1z1, TDR 3-4819Wlz1z1z1z1z1, TDR 3-4812Wlz1z1z1z1z1, TDR 3-4813Wlz1z1z1z1z1, TDR 3-4821Wlz1z1z1z1z1, TDR 3-4822Wlz1z1z1z1z1, TDR 3-4823Wlz1z1z1z1z1, TDR 3-1211HIWlz1z1z1z1z1, TDR 3-1219HIWlz1z1z1z1z1, TDR 3-1212HIWlz1z1z1z1z1, TDR 3-1213HIWlz1z1z1z1z1, TDR 3-1221HIWlz1z1z1z1z1, TDR 3-1222HIWlz1z1z1z1z1, TDR 3-1223HIWlz1z1z1z1z1, TDR 3-2410HIWlz1z1z1z1z1, TDR 3-2411HIWlz1z1z1z1z1, TDR 3-2419HIWlz1z1z1z1z1, TDR 3-2412HIWlz1z1z1z1z1, TDR 3-2413HIWlz1z1z1z1z1, TDR 3-2421HIWlz1z1z1z1z1, TDR 3-2422HIWlz1z1z1z1z1, TDR 3-2423HIWlz1z1z1z1z1, TDR 3-4810HIWlz1z1z1z1z1, TDR 3-4811HIWlz1z1z1z1z1, TDR 3-4819HIWlz1z1z1z1z1, TDR 3-4812HIWlz1z1z1z1z1, TDR 3-4813HIWlz1z1z1z1z1, TDR 3-4821HIWlz1z1z1z1z1, TDR 3-4822HIWlz1z1z1z1z1, TDR 3-4823HIWlz1z1z1z1z1, TDR 3-0511z1z1z1z1z1, TDR 3-0519z1z1z1z1z1, TDR 3-0512z1z1z1z1z1, TDR 3-0513z1z1z1z1z1, TDR 3-0521z1z1z1z1z1, TDR 3-0522z1z1z1z1z1, TDR 3-0523z1z1z1z1z1, TDR 3-1210z1z1z1z1z1, TDR 3-1211z1z1z1z1z1, TDR 3-1219z1z1z1z1z1, TDR 3-1212z1z1z1z1z1, TDR 3-1213z1z1z1z1z1, TDR 3-1221z1z1z1z1z1, TDR 3-1222z1z1z1z1z1, TDR 3-1223z1z1z1z1z1, TDR 3-2410z1z1z1z1z1, TDR 3-2411z1z1z1z1z1, TDR 3-2419z1z1z1z1z1, TDR 3-2412z1z1z1z1z1, TDR 3-2413z1z1z1z1z1, TDR 3-2421z1z1z1z1z1, TDR 3-2422z1z1z1z1z1, TDR 3-2423z1z1z1z1z1, TDR 3-4810z1z1z1z1z1, TDR 3-4811z1z1z1z1z1, TDR 3-4819z1z1z1z1z1, TDR 3-4812z1z1z1z1z1, TDR 3-4813z1z1z1z1z1, TDR 3-4821z1z1z1z1z1, TDR 3-4822z1z1z1z1z1, TDR 3-4823z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

DC-DC Converter – TDR 3-0511Hz1z1z1z1z1, TDR 3-0519Hz1z1z1z1z1, TDR 3-0512Hz1z1z1z1z1, TDR 3-0513Hz1z1z1z1z1, TDR 3-0521Hz1z1z1z1z1, TDR 3-0522Hz1z1z1z1z1, TDR 3-0523Hz1z1z1z1z1, TDR 3-1210Hz1z1z1z1z1, TDR 3-1211Hz1z1z1z1z1, TDR 3-1219Hz1z1z1z1z1, TDR 3-1212Hz1z1z1z1z1, TDR 3-1213Hz1z1z1z1z1, TDR 3-1221Hz1z1z1z1z1, TDR 3-1222Hz1z1z1z1z1, TDR 3-1223Hz1z1z1z1z1, TDR 3-2410Hz1z1z1z1z1, TDR 3-2411Hz1z1z1z1z1, TDR 3-2419Hz1z1z1z1z1, TDR 3-2412Hz1z1z1z1z1, TDR 3-2413Hz1z1z1z1z1, TDR 3-2421Hz1z1z1z1z1, TDR 3-2422Hz1z1z1z1z1, TDR 3-2423Hz1z1z1z1z1, TDR 3-4810Hz1z1z1z1z1, TDR 3-4811Hz1z1z1z1z1, TDR 3-4819Hz1z1z1z1z1, TDR 3-4812Hz1z1z1z1z1, TDR 3-4813Hz1z1z1z1z1, TDR 3-4821Hz1z1z1z1z1, TDR 3-4822Hz1z1z1z1z1, TDR 3-4823Hz1z1z1z1z1, TDR 3-1210WISMz1z1z1z1z1, TDR 3-1211WISMz1z1z1z1z1, TDR 3-1219WISMz1z1z1z1z1, TDR 3-1212WISMz1z1z1z1z1, TDR 3-1213WISMz1z1z1z1z1, TDR 3-1221WISMz1z1z1z1z1, TDR 3-1222WISMz1z1z1z1z1, TDR 3-1223WISMz1z1z1z1z1, TDR 3-2410WISMz1z1z1z1z1, TDR 3-2411WISMz1z1z1z1z1, TDR 3-2419WISMz1z1z1z1z1, TDR 3-2424WISMz1z1z1z1z1, TDR 3-2413WISMz1z1z1z1z1, TDR 3-2421WISMz1z1z1z1z1, TDR 3-2422WISMz1z1z1z1z1, TDR 3-2423WISMz1z1z1z1z1, TDR 3-4810WISMz1z1z1z1z1, TDR 3-4811WISMz1z1z1z1z1, TDR 3-4819WISMz1z1z1z1z1, TDR 3-4812WISMz1z1z1z1z1, TDR 3-4813WISMz1z1z1z1z1, TDR 3-4821WISMz1z1z1z1z1, TDR 3-4822WISMz1z1z1z1z1, TDR 3-4823WISMz1z1z1z1z1, TDR 3-1211HIWISMz1z1z1z1z1, TDR 3-1209HIWISMz1z1z1z1z1, TDR 3-1212HIWISMz1z1z1z1z1, TDR 3-1213HIWISMz1z1z1z1z1, TDR 3-1221HIWISMz1z1z1z1z1, TDR 3-1222HIWISMz1z1z1z1z1, TDR 3-1223HIWISMz1z1z1z1z1, TDR 3-2410HIWISMz1z1z1z1z1, TDR 3-2411HIWISMz1z1z1z1z1, TDR 3-2409HIWISMz1z1z1z1z1, TDR 3-2412HIWISMz1z1z1z1z1, TDR 3-2413HIWISMz1z1z1z1z1, TDR 3-2421HIWISMz1z1z1z1z1, TDR 3-2422HIWISMz1z1z1z1z1, TDR 3-2423HIWISMz1z1z1z1z1, TDR 3-4810HIWISMz1z1z1z1z1, TDR 3-4811HIWISMz1z1z1z1z1, TDR 3-4809HIWISMz1z1z1z1z1, TDR 3-4812HIWISMz1z1z1z1z1, TDR 3-4813HIWISMz1z1z1z1z1, TDR 3-4821HIWISMz1z1z1z1z1, TDR 3-4822HIWISMz1z1z1z1z1, TDR 3-4823HIWISMz1z1z1z1z1, TDR 3-0511SMz1z1z1z1z1, TDR 3-0519SMz1z1z1z1z1, TDR 3-0512SMz1z1z1z1z1, TDR 3-0513SMz1z1z1z1z1, TDR 3-0521SMz1z1z1z1z1, TDR 3-0522SMz1z1z1z1z1, TDR 3-0523SMz1z1z1z1z1, TDR 3-1210SMz1z1z1z1z1, TDR 3-1211SMz1z1z1z1z1, TDR 3-1219SMz1z1z1z1z1, TDR 3-1212SMz1z1z1z1z1, TDR 3-1213SMz1z1z1z1z1, TDR 3-1221SMz1z1z1z1z1, TDR 3-1222SMz1z1z1z1z1, TDR 3-1223SMz1z1z1z1z1, TDR 3-2410SMz1z1z1z1z1, TDR 3-2411SMz1z1z1z1z1, TDR 3-2419SMz1z1z1z1z1, TDR 3-2412SMz1z1z1z1z1, TDR 3-2413SMz1z1z1z1z1, TDR 3-2421SMz1z1z1z1z1, TDR 3-2422SMz1z1z1z1z1, TDR 3-2423SMz1z1z1z1z1, TDR 3-4810SMz1z1z1z1z1, TDR 3-4811SMz1z1z1z1z1, TDR 3-4819SMz1z1z1z1z1, TDR 3-4812SMz1z1z1z1z1, TDR 3-4813SMz1z1z1z1z1, TDR 3-4821SMz1z1z1z1z1, TDR 3-4822SMz1z1z1z1z1, TDR 3-4823SMz1z1z1z1z1, TDR 3-0511HISMz1z1z1z1z1, TDR 3-0519HISMz1z1z1z1z1, TDR 3-0512HISMz1z1z1z1z1, TDR 3-0513HISMz1z1z1z1z1, TDR 3-0521HISMz1z1z1z1z1, TDR 3-0522HISMz1z1z1z1z1, TDR 3-0523HISMz1z1z1z1z1, TDR 3-1210HISMz1z1z1z1z1, TDR 3-1211HISMz1z1z1z1z1, TDR 3-1219HISMz1z1z1z1z1, TDR 3-1212HISMz1z1z1z1z1, TDR 3-1213HISMz1z1z1z1z1, TDR 3-1221HISMz1z1z1z1z1, TDR 3-1222HISMz1z1z1z1z1, TDR 3-1223HISMz1z1z1z1z1, TDR 3-2410HISMz1z1z1z1z1, TDR 3-2411HISMz1z1z1z1z1, TDR 3-2419HISMz1z1z1z1z1, TDR 3-2412HISMz1z1z1z1z1, TDR 3-2413HISMz1z1z1z1z1, TDR 3-2421HISMz1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

DC-DC Converter – TDR 3-2422HISMz1z1z1z1z1, TDR 3-2423HISMz1z1z1z1z1, TDR 3-4810HISMz1z1z1z1z1, TDR 3-4811HISMz1z1z1z1z1, TDR 3-4819HISMz1z1z1z1z1, TDR 3-4812HISMz1z1z1z1z1, TDR 3-4813HISMz1z1z1z1z1, TDR 3-4821HISMz1z1z1z1z1, TDR 3-4822HISMz1z1z1z1z1, TDR 3-4823HISMz1z1z1z1z1, TMR 3-1210Wlz1z1z1z1z1, TMR 3-1211Wlz1z1z1z1z1, TMR 3-1219Wlz1z1z1z1z1, TMR 3-1212Wlz1z1z1z1z1, TMR 3-1213Wlz1z1z1z1z1, TMR 3-1221Wlz1z1z1z1z1, TMR 3-1222Wlz1z1z1z1z1, TMR 3-1223Wlz1z1z1z1z1, TMR 3-2410Wlz1z1z1z1z1, TMR 3-2411Wlz1z1z1z1z1, TMR 3-2419Wlz1z1z1z1z1, TMR 3-2412Wlz1z1z1z1z1, TMR 3-2413Wlz1z1z1z1z1, TMR 3-2421Wlz1z1z1z1z1, TMR 3-2422Wlz1z1z1z1z1, TMR 3-2423Wlz1z1z1z1z1, TMR 3-4810Wlz1z1z1z1z1, TMR 3-4811Wlz1z1z1z1z1, TMR 3-4819Wlz1z1z1z1z1, TMR 3-4812Wlz1z1z1z1z1, TMR 3-4813Wlz1z1z1z1z1, TMR 3-4821Wlz1z1z1z1z1, TMR 3-4822Wlz1z1z1z1z1, TMR 3-4823Wlz1z1z1z1z1, TMR 3-0510Hlz1z1z1z1z1, TMR 3-0511Hlz1z1z1z1z1, TMR 3-0519Hlz1z1z1z1z1, TMR 3-0512Hlz1z1z1z1z1, TMR 3-0513Hlz1z1z1z1z1, TMR 3-0521Hlz1z1z1z1z1, TMR 3-0522Hlz1z1z1z1z1, TMR 3-0523Hlz1z1z1z1z1, TMR 3-1210Hlz1z1z1z1z1, TMR 3-1211Hlz1z1z1z1z1, TMR 3-1219Hlz1z1z1z1z1, TMR 3-1212Hlz1z1z1z1z1, TMR 3-1213Hlz1z1z1z1z1, TMR 3-1221Hlz1z1z1z1z1, TMR 3-1222Hlz1z1z1z1z1, TMR 3-1223Hlz1z1z1z1z1, TMR 3-2410Hlz1z1z1z1z1, TMR 3-2411Hlz1z1z1z1z1, TMR 3-2419Hlz1z1z1z1z1, TMR 3-2412Hlz1z1z1z1z1, TMR 3-2413Hlz1z1z1z1z1, TMR 3-2421Hlz1z1z1z1z1, TMR 3-2422Hlz1z1z1z1z1, TMR 3-2423Hlz1z1z1z1z1, TMR 3-4810Hlz1z1z1z1z1, TMR 3-4811Hlz1z1z1z1z1, TMR 3-4819Hlz1z1z1z1z1, TMR 3-4812Hlz1z1z1z1z1, TMR 3-4813Hlz1z1z1z1z1, TMR 3-4821Hlz1z1z1z1z1, TMR 3-4822Hlz1z1z1z1z1, TMR 3-4823Hlz1z1z1z1z1, TEP 160-1210zzzzzzzz, TEP 160-1211zzzzzzzz, TEP 160-2410zzzzzzzz, TEP 160-2411zzzzzzzz, TEP 160-4810zzzzzzzz, TEP 160-4811zzzzzzzz, TEP 160-2410WIRzzzzzzzz, TEP 160-2411WIRzzzzzzzz, TEP 160-4810WIRzzzzzzzz, TEP 160-4811WIRzzzzzzzz, TEP 160-7210WIRzzzzzzzz, TEP 160-7211WIRzzzzzzzz, TEP 200-1210zzzzzzzz, TEP 200-1211zzzzzzzz, TEP 200-2410zzzzzzzz, TEP 200-2411zzzzzzzz, TEP 200-4810zzzzzzzz, TEP 200-4811zzzzzzzz, TEP 200-2410WIRzzzzzzzz, TEP 200-2411WIRzzzzzzzz, TEP 200-4810WIRzzzzzzzz, TEP 200-4811WIRzzzzzzzz, TEP 200-7210WIRzzzzzzzz, TEP 200-7211WIRzzzzzzzz, TEP 160-1212zzzzzzzz, TEP 160-1213zzzzzzzz, TEP 160-1215zzzzzzzz, TEP 160-1216zzzzzzzz, TEP 160-2412zzzzzzzz, TEP 160-2413zzzzzzzz, TEP 160-2415zzzzzzzz, TEP 160-2416zzzzzzzz, TEP 160-4812zzzzzzzz, TEP 160-4813zzzzzzzz, TEP 160-4815zzzzzzzz, TEP 160-4816zzzzzzzz, TEP 160-2412WIRzzzzzzzz, TEP 160-2413WIRzzzzzzzz, TEP 160-2415WIRzzzzzzzz, TEP 160-2416WIRzzzzzzzz, TEP 160-4812WIRzzzzzzzz, TEP 160-4813WIRzzzzzzzz, TEP 160-4815WIRzzzzzzzz, TEP 160-4816WIRzzzzzzzz, TEP 160-7212WIRzzzzzzzz, TEP 160-7213WIRzzzzzzzz, TEP 160-7215WIRzzzzzzzz, TEP 160-7216WIRzzzzzzzz, TEP 200-1212zzzzzzzz, TEP 200-1213zzzzzzzz, TEP 200-1215zzzzzzzz, TEP 200-1216zzzzzzzz, TEP 200-2412zzzzzzzz, TEP 200-2413zzzzzzzz, TEP 200-2415zzzzzzzz, TEP 200-2416zzzzzzzz, TEP 200-2412WIRzzzzzzzz, TEP 200-2413WIRzzzzzzzz, TEP 200-2415WIRzzzzzzzz, TEP 200-2416WIRzzzzzzzz, TEP 160-1218zzzzzzzz, TEP 160-2418zzzzzzzz, TEP 160-4818zzzzzzzz, TEP 160-48153zzzzzzzz, TEP 160-2418WIRzzzzzzzz, TEP 160-4818WIRzzzzzzzz, TEP 160-7218WIRzzzzzzzz, TEP 200-1218zzzzzzzz, TEP 200-2418zzzzzzzz, TEP 200-4818zzzzzzzz, TEP 200-48153zzzzzzzz



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

TEP 200-2418WIRzzzzzzzz, TEP 200-4818WIRzzzzzzzz, TEP 200-7218WIRzzzzzzzz,  
TMR 6-0510Z1Z1Z1Z1Z1, TMR 6-0511Z1Z1Z1Z1Z1, TMR 6-0519Z1Z1Z1Z1Z1,  
TMR 6-0512Z1Z1Z1Z1Z1, TMR 6-0513Z1Z1Z1Z1Z1, TMR 6-0515Z1Z1Z1Z1Z1,  
TMR 6-0521Z1Z1Z1Z1Z1, TMR 6-0522Z1Z1Z1Z1Z1, TMR 6-0523Z1Z1Z1Z1Z1,  
TMR 6-1210Z1Z1Z1Z1Z1, TMR 6-1211Z1Z1Z1Z1Z1, TMR 6-1219Z1Z1Z1Z1Z1,  
TMR 6-1212Z1Z1Z1Z1Z1, TMR 6-1213Z1Z1Z1Z1Z1, TMR 6-1215Z1Z1Z1Z1Z1,  
TMR 6-1221Z1Z1Z1Z1Z1, TMR 6-1222Z1Z1Z1Z1Z1, TMR 6-1223Z1Z1Z1Z1Z1,  
TMR 6-2410Z1Z1Z1Z1Z1, TMR 6-2411Z1Z1Z1Z1Z1, TMR 6-2419Z1Z1Z1Z1Z1,  
TMR 6-2412Z1Z1Z1Z1Z1, TMR 6-2413Z1Z1Z1Z1Z1, TMR 6-2415Z1Z1Z1Z1Z1,  
TMR 6-2421Z1Z1Z1Z1Z1, TMR 6-2422Z1Z1Z1Z1Z1, TMR 6-2423Z1Z1Z1Z1Z1,  
TMR 6-4810Z1Z1Z1Z1Z1, TMR 6-4811Z1Z1Z1Z1Z1, TMR 6-4819Z1Z1Z1Z1Z1,  
TMR 6-4812Z1Z1Z1Z1Z1, TMR 6-4813Z1Z1Z1Z1Z1, TMR 6-4815Z1Z1Z1Z1Z1,  
TMR 6-4821Z1Z1Z1Z1Z1, TMR 6-4822Z1Z1Z1Z1Z1, TMR 6-4823Z1Z1Z1Z1Z1, THN 30-1210aaaaaaaa,  
THN 30-1211aaaaaaaa, THN 30-1212aaaaaaaa, THN 30-1213aaaaaaaa, THN 30-1215aaaaaaaa,  
THN 30-1222aaaaaaaa, THN 30-1223aaaaaaaa, THN 30-1225aaaaaaaa, THN 30-2410aaaaaaaa,  
THN 30-2411aaaaaaaa, THN 30-2412aaaaaaaa, THN 30-2413aaaaaaaa, THN 30-2415aaaaaaaa,  
THN 30-2422aaaaaaaa, THN 30-2423aaaaaaaa, THN 30-2425aaaaaaaa, THN 30-4810aaaaaaaa,  
THN 30-4811aaaaaaaa, THN 30-4812aaaaaaaa, THN 30-4813aaaaaaaa, THN 30-4815aaaaaaaa,  
THN 30-4822aaaaaaaa, THN 30-4823aaaaaaaa, THN 30-4825aaaaaaaa, THN 30-2410Wlaaaaaaaa,  
THN 30-2411Wlaaaaaaaa, THN 30-2412Wlaaaaaaaa, THN 30-2413Wlaaaaaaaa, THN 30-2415Wlaaaaaaaa,  
THN 30-2422Wlaaaaaaaa, THN 30-2423Wlaaaaaaaa, THN 30-2425Wlaaaaaaaa, THN 30-4810Wlaaaaaaaa,  
THN 30-4811Wlaaaaaaaa, THN 30-4812Wlaaaaaaaa, THN 30-4813Wlaaaaaaaa, THN 30-4815Wlaaaaaaaa,  
THN 30-4822Wlaaaaaaaa, THN 30-4823Wlaaaaaaaa, THN 30-4825Wlaaaaaaaa, TEN 15-1210, TEN 15-1211,  
TEN 15-1212, TEN 15-1213, TEN 15-1221, TEN 15-1222, TEN 15-1223, TEN 15-2410, TEN 15-2411,  
TEN 15-2412, TEN 15-2413, TEN 15-2421, TEN 15-2422, TEN 15-2423, TEN 15-4810, TEN 15-4811,  
TEN 15-4812, TEN 15-4813, TEN 15-4821, TEN 15-4822, TEN 15-4823, TEN 20-1210, TEN 20-1211,  
TEN 20-1212, TEN 20-1213, TEN 20-1221, TEN 20-1222, TEN 20-1223, TEN 20-2410, TEN 20-2411,  
TEN 20-2412, TEN 20-2413, TEN 20-2421, TEN 20-2422, TEN 20-2423, TEN 20-4810, TEN 20-4811,  
TEN 20-4812, TEN 20-4813, TEN 20-4821, TEN 20-4822, TEN 20-4823, TEN 20-4833, TEN 20-4834,  
TEN 20-4831, TEN 20-4832, TEN 20-2411WI, TEN 20-2412WI, TEN 20-2413WI, TEN 20-2421WI,  
TEN 20-2422WI, TEN 20-2423WI, TEN 20-4811WI, TEN 20-4812WI, TEN 20-4813WI, TEN 20-4821WI,  
TEN 20-4822WI, TEN 20-4823WI, TEN 30-2407WI, TEN 30-2408WI, TEN 30-2409WI, TEN 30-2410WI,  
TEN 30-2411WI, TEN 30-2412WI, TEN 30-2413WI, TEN 30-2422WI, TEN 30-2423WI, TEN 30-4807WI,  
TEN 30-4808WI, TEN 30-4809WI, TEN 30-4810WI, TEN 30-4811WI, TEN 30-4812WI, TEN 30-4813WI,  
TEN 30-4822WI, TEN 30-4823WI, TPP150-112Azzzzzzzz, TPP150-115Azzzzzzzz, TPP150-124Azzzzzzzz,  
TPP150-128Azzzzzzzz, TPP150-136Azzzzzzzz, TPP150-148Azzzzzzzz, TPP150-112Uzzzzzzzz,  
TPP150-115Uzzzzzzzz, TPP150-124Uzzzzzzzz, TPP150-128Uzzzzzzzz, TPP150-136Uzzzzzzzz,  
TPP150-148Uzzzzzzzz, TPP150-112zzzzzzzz, TPP150-115zzzzzzzz, TPP150-124zzzzzzzz,  
TPP150-128zzzzzzzz, TPP150-136zzzzzzzz, TPP150-148zzzzzzzz, TPP150-112Dzzzzzzzz,  
TPP150-115Dzzzzzzzz, TPP150-124Dzzzzzzzz, TPP150-128Dzzzzzzzz, TPP150-136Dzzzzzzzz



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

TPP150-148Dzzzzzzzz, TPP150-112BAzzzzzzzz, TPP150-115BAzzzzzzzz, TPP150-124BAzzzzzzzz,  
TPP150-128BAzzzzzzzz, TPP150-136BAzzzzzzzz, TPP150-148BAzzzzzzzz, TPP150-112BUzzzzzzzz,  
TPP150-115BUzzzzzzzz, TPP150-124BUzzzzzzzz, TPP150-128BUzzzzzzzz, TPP150-136BUzzzzzzzz,  
TPP150-148BUzzzzzzzz, TPP150-112Bzzzzzzzz, TPP150-115Bzzzzzzzz, TPP150-124Bzzzzzzzz,  
TPP150-128Bzzzzzzzz, TPP150-136Bzzzzzzzz, TPP150-148Bzzzzzzzz, TPP150-112BDzzzzzzzz,  
TPP150-115BDzzzzzzzz, TPP150-124BDzzzzzzzz, TPP150-128BDzzzzzzzz, TPP150-136BDzzzzzzzz,  
TPP150-148BDzzzzzzzz, TPP150-112Azzzzzzzz, TPP100-115Azzzzzzzz, TPP100-124Azzzzzzzz,  
TPP100-128Azzzzzzzz, TPP100-136Azzzzzzzz, TPP100-148Azzzzzzzz, TPP100-112Uzzzzzzzz,  
TPP100-115Uzzzzzzzz, TPP100-124Uzzzzzzzz, TPP100-128Uzzzzzzzz, TPP100-136Uzzzzzzzz,  
TPP100-148Uzzzzzzzz, TPP100-112zzzzzzzz, TPP100-115zzzzzzzz, TPP100-124zzzzzzzz,  
TPP100-128zzzzzzzz, TPP100-136zzzzzzzz, TPP100-148zzzzzzzz, TPP100-112Dzzzzzzzz,  
TPP100-115Dzzzzzzzz, TPP100-124Dzzzzzzzz, TPP100-128Dzzzzzzzz, TPP100-136Dzzzzzzzz,  
TPP100-148Dzzzzzzzz, TPP100-112BAzzzzzzzz, TPP100-115BAzzzzzzzz, TPP100-124BAzzzzzzzz,  
TPP100-128BAzzzzzzzz, TPP100-136BAzzzzzzzz, TPP100-148BAzzzzzzzz, TPP100-112BUzzzzzzzz,  
TPP100-115BUzzzzzzzz, TPP100-124BUzzzzzzzz, TPP100-128BUzzzzzzzz, TPP100-136BUzzzzzzzz,  
TPP100-148BUzzzzzzzz, TPP100-112Bzzzzzzzz, TPP100-115Bzzzzzzzz, TPP100-124Bzzzzzzzz,  
TPP100-128Bzzzzzzzz, TPP100-136Bzzzzzzzz, TPP100-148Bzzzzzzzz, TPP100-112BDzzzzzzzz,  
TPP100-115BDzzzzzzzz, TPP100-124BDzzzzzzzz, TPP100-128BDzzzzzzzz, TPP100-136BDzzzzzzzz,  
TPP100-148BDzzzzzzzz, THD 15-2410WINaaaaaaaa, THD 15-2411WINaaaaaaaa, THD 15-2412WINaaaaaaaa,  
THD 15-2413WINaaaaaaaa, THD 15-2421WINaaaaaaaa, THD 15-2422WINaaaaaaaa, THD 15-2423WINaaaaaaaa,  
THD 15-4810WINaaaaaaaa, THD 15-4811WINaaaaaaaa, THD 15-4812WINaaaaaaaa, THD 15-4813WINaaaaaaaa,  
THD 15-4821WINaaaaaaaa, THD 15-4822WINaaaaaaaa, THD 15-4823WINaaaaaaaa, THD 15-1210Naaaaaaaa, THD 15-1211Naaaaaaaa,  
THD 15-1212Naaaaaaaa, THD 15-1213Naaaaaaaa, THD 15-1221Naaaaaaaa, THD 15-1222Naaaaaaaa,  
THN 20-1213aaaaaaaa, THN 20-1222aaaaaaaa, THN 20-1223aaaaaaaa, THN 20-2410aaaaaaaa, THN 20-2411aaaaaaaa,  
THN 20-2412aaaaaaaa, THN 20-2413aaaaaaaa, THN 20-2422Wlaaaaaaaaa, THN 20-2423Wlaaaaaaaaa, THN 20-2410Wlaaaaaaaaa,  
THN 20-2411Wlaaaaaaaaa, THN 20-2412Wlaaaaaaaaa, THN 20-2413Wlaaaaaaaaa, THN 20-2422Wlaaaaaaaaa, THN 20-2423Wlaaaaaaaaa,  
THN 20-4810Wlaaaaaaaaa, THN 20-4811Wlaaaaaaaaa, THN 20-4812Wlaaaaaaaaa, THN 20-4813Wlaaaaaaaaa, THN 20-4822Wlaaaaaaaaa,  
THN 20-4823Wlaaaaaaaaa, THN 20-1210aaaaaaaa, THN 20-1211aaaaaaaa, THN 20-1212aaaaaaaa, THN 20-2411aaaaaaaa, THN 20-2412aaaaaaaa,  
THN 20-2413aaaaaaaa, THN 20-2422aaaaaaaa, THN 20-2423aaaaaaaa, THN 20-4810aaaaaaaa, THN 20-4811aaaaaaaa, THN 20-4812aaaaaaaa,  
THN 20-4813aaaaaaaa, THN 20-4822WIRaaaaaaaa, THN 20-4823WIRaaaaaaaa, THN 20-7210WIRaaaaaaaa, THN 20-7211WIRaaaaaaaa,  
THN 20-7212WIRaaaaaaaa, THN 20-7213WIRaaaaaaaa, THN 20-7221WIRaaaaaaaa, THN 20-7222WIRaaaaaaaa, THN 20-7223WIRaaaaaaaa,



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

TEP 150-7212WIzzzzzzzz, TEP 150-7213WIzzzzzzzz, TEP 150-7215WIzzzzzzzz, TEP 150-7216WIzzzzzzzz,  
TEP 150-7218WIzzzzzzzz, TEP 150-7212WI-Ozzzzzzzz, TEP 150-7213WI-Ozzzzzzzz,  
TEP 150-7215WI-Ozzzzzzzz, TEP 150-7216WI-Ozzzzzzzz, TEP 150-7218WI-Ozzzzzzzz,  
TEP 150-7212WI-Fzzzzzzzz, TEP 150-7213WI-Fzzzzzzzz, TEP 150-7215WI-Fzzzzzzzz,  
TEP 150-7216WI-Fzzzzzzzz, TEP 150-7218WI-Fzzzzzzzz, TEP 100-2410WIRzzzzzzzz,  
TEP 100-2411WIRzzzzzzzz, TEP 100-2412WIRzzzzzzzz, TEP 100-2413WIRzzzzzzzz,  
TEP 100-2415WIRzzzzzzzz, TEP 100-2416WIRzzzzzzzz, TEP 100-2418WIRzzzzzzzz,  
TEP 100-4810WIRzzzzzzzz, TEP 100-4811WIRzzzzzzzz, TEP 100-4812WIRzzzzzzzz,  
TEP 100-4813WIRzzzzzzzz, TEP 100-4815WIRzzzzzzzz, TEP 100-4816WIRzzzzzzzz,  
TEP 100-4818WIRzzzzzzzz, THM 3-0510Wlz1z1z1z1z1z1z1, THM 3-0511Wlz1z1z1z1z1z1z1,  
THM 3-0512Wlz1z1z1z1z1z1z1, THM 3-0513Wlz1z1z1z1z1z1z1, THM 3-0515Wlz1z1z1z1z1z1z1,  
THM 3-0521Wlz1z1z1z1z1z1z1, THM 3-0522Wlz1z1z1z1z1z1z1, THM 3-0523Wlz1z1z1z1z1z1z1,  
THM 3-2410Wlz1z1z1z1z1z1z1, THM 3-2411Wlz1z1z1z1z1z1z1, THM 3-2412Wlz1z1z1z1z1z1z1,  
THM 3-2413Wlz1z1z1z1z1z1z1, THM 3-2415Wlz1z1z1z1z1z1z1, THM 3-2421Wlz1z1z1z1z1z1z1,  
THM 3-2422Wlz1z1z1z1z1z1z1, THM 3-2423Wlz1z1z1z1z1z1z1, THM 3-4810Wlz1z1z1z1z1z1z1,  
THM 3-4811Wlz1z1z1z1z1z1z1, THM 3-4812Wlz1z1z1z1z1z1z1, THM 3-4813Wlz1z1z1z1z1z1z1,  
THM 3-4815Wlz1z1z1z1z1z1z1, THM 3-4821Wlz1z1z1z1z1z1z1, THM 3-4822Wlz1z1z1z1z1z1z1,  
THM 3-4823Wlz1z1z1z1z1z1z1, THM 3-0512WIAz1z1z1z1z1z1z1, THM 3-0513WIAz1z1z1z1z1z1z1,  
THM 3-0515WIAz1z1z1z1z1z1z1, THM 3-0521WIAz1z1z1z1z1z1z1, THM 3-0522WIAz1z1z1z1z1z1z1,  
THM 3-0523WIAz1z1z1z1z1z1z1, THM 3-2410WIAz1z1z1z1z1z1z1, THM 3-2411WIAz1z1z1z1z1z1z1,  
THM 3-2412WIAz1z1z1z1z1z1z1, THM 3-2413WIAz1z1z1z1z1z1z1, THM 3-2415WIAz1z1z1z1z1z1z1,  
THM 3-2421WIAz1z1z1z1z1z1z1, THM 3-2422WIAz1z1z1z1z1z1z1, THM 3-2423WIAz1z1z1z1z1z1z1,  
THM 3-4810WIAz1z1z1z1z1z1z1, THM 3-4811WIAz1z1z1z1z1z1z1, THM 3-4812WIAz1z1z1z1z1z1z1,  
THM 3-4813WIAz1z1z1z1z1z1z1, THM 3-4815WIAz1z1z1z1z1z1z1, THM 3-4821WIAz1z1z1z1z1z1z1,  
THM 3-4822WIAz1z1z1z1z1z1z1, THM 3-4823WIAz1z1z1z1z1z1z1, THM 3-1210z1z1z1z1z1z1z1,  
THM 3-1211z1z1z1z1z1z1z1, THM 3-1212z1z1z1z1z1z1z1, THM 3-1213z1z1z1z1z1z1z1,  
THM 3-1215z1z1z1z1z1z1z1, THM 3-1221z1z1z1z1z1z1z1, THM 3-1222z1z1z1z1z1z1z1,  
THM 3-1223z1z1z1z1z1z1z1, THM 3-2410z1z1z1z1z1z1z1, THM 3-2411z1z1z1z1z1z1z1,  
THM 3-2412z1z1z1z1z1z1z1, THM 3-2413z1z1z1z1z1z1z1, THM 3-2415z1z1z1z1z1z1z1,  
THM 3-2421z1z1z1z1z1z1z1, THM 3-2422z1z1z1z1z1z1z1, THM 3-2423z1z1z1z1z1z1z1,  
THM 3-4810z1z1z1z1z1z1z1, THM 3-4811z1z1z1z1z1z1z1, THM 3-4812z1z1z1z1z1z1z1,  
THM 3-4813z1z1z1z1z1z1z1, THM 3-4815z1z1z1z1z1z1z1, THM 3-4821z1z1z1z1z1z1z1,  
THM 3-4822z1z1z1z1z1z1z1, THM 3-4823z1z1z1z1z1z1z1, THM 3-1210Az1z1z1z1z1z1z1,  
THM 3-1211Az1z1z1z1z1z1z1, THM 3-1212Az1z1z1z1z1z1z1, THM 3-1213Az1z1z1z1z1z1z1,  
THM 3-1215Az1z1z1z1z1z1z1, THM 3-1221Az1z1z1z1z1z1z1, THM 3-1222Az1z1z1z1z1z1z1,  
THM 3-1223Az1z1z1z1z1z1z1, THM 3-2410Az1z1z1z1z1z1z1, THM 3-2411Az1z1z1z1z1z1z1,  
THM 3-2412Az1z1z1z1z1z1z1, THM 3-2413Az1z1z1z1z1z1z1, THM 3-2415Az1z1z1z1z1z1z1,  
THM 3-2421Az1z1z1z1z1z1z1, THM 3-2422Az1z1z1z1z1z1z1, THM 3-2423Az1z1z1z1z1z1z1,  
THM 3-4810Az1z1z1z1z1z1z1, THM 3-4811Az1z1z1z1z1z1z1, THM 3-4812Az1z1z1z1z1z1z1,  
THM 3-4813Az1z1z1z1z1z1z1, THM 3-4815Az1z1z1z1z1z1z1, THM 3-4821Az1z1z1z1z1z1z1,  
THM 3-4822Az1z1z1z1z1z1z1, THM 3-4823Az1z1z1z1z1z1z1, THM 3-0510WIOz1z1z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THM 3-0511WIOz1z1z1z1z1z1z1, THM 3-0512WIOz1z1z1z1z1z1z1, THM 3-0513WIOz1z1z1z1z1z1z1,  
THM 3-0515WIOz1z1z1z1z1z1z1, THM 3-0521WIOz1z1z1z1z1z1z1, THM 3-0522WIOz1z1z1z1z1z1z1,  
THM 3-0523WIOz1z1z1z1z1z1z1, THM 3-2410WIOz1z1z1z1z1z1z1, THM 3-2411WIOz1z1z1z1z1z1z1,  
THM 3-2412WIOz1z1z1z1z1z1z1, THM 3-2413WIOz1z1z1z1z1z1z1, THM 3-2415WIOz1z1z1z1z1z1z1,  
THM 3-2421WIOz1z1z1z1z1z1z1, THM 3-2422WIOz1z1z1z1z1z1z1, THM 3-2423WIOz1z1z1z1z1z1z1,  
THM 3-4810WIOz1z1z1z1z1z1z1, THM 3-4811WIOz1z1z1z1z1z1z1, THM 3-4812WIOz1z1z1z1z1z1z1,  
THM 3-4813WIOz1z1z1z1z1z1z1, THM 3-0510WIAz1z1z1z1z1z1z1, THM 3-0511WIAz1z1z1z1z1z1z1,  
THM 3-4815WIOz1z1z1z1z1z1z1, THM 3-4821WIOz1z1z1z1z1z1z1, THM 3-4822WIOz1z1z1z1z1z1z1,  
THM 3-4823WIOz1z1z1z1z1z1z1, THM 3-0510WIOAz1z1z1z1z1z1z1, THM 3-0511WIOAz1z1z1z1z1z1z1,  
THM 3-0512WIOAz1z1z1z1z1z1z1, THM 3-0513WIOAz1z1z1z1z1z1z1,  
THM 3-0515WIOAz1z1z1z1z1z1z1, THM 3-0521WIOAz1z1z1z1z1z1z1,  
THM 3-0522WIOAz1z1z1z1z1z1z1, THM 3-0523WIOAz1z1z1z1z1z1z1,  
THM 3-2410WIOAz1z1z1z1z1z1z1, THM 3-2411WIOAz1z1z1z1z1z1z1,  
THM 3-2412WIOAz1z1z1z1z1z1z1, THM 3-2413WIOAz1z1z1z1z1z1z1,  
THM 3-2415WIOAz1z1z1z1z1z1z1, THM 3-2421WIOAz1z1z1z1z1z1z1,  
THM 3-2422WIOAz1z1z1z1z1z1z1, THM 3-2423WIOAz1z1z1z1z1z1z1,  
THM 3-4810WIOAz1z1z1z1z1z1z1, THM 3-4811WIOAz1z1z1z1z1z1z1,  
THM 3-4812WIOAz1z1z1z1z1z1z1, THM 3-4813WIOAz1z1z1z1z1z1z1,  
THM 3-4815WIOAz1z1z1z1z1z1z1, THM 3-4821WIOAz1z1z1z1z1z1z1,  
THM 3-4822WIOAz1z1z1z1z1z1z1, THM 3-4823WIOAz1z1z1z1z1z1z1, THM 3-1210Oz1z1z1z1z1z1z1,  
THM 3-1211Oz1z1z1z1z1z1z1, THM 3-1212Oz1z1z1z1z1z1z1, THM 3-1213Oz1z1z1z1z1z1z1,  
THM 3-1215Oz1z1z1z1z1z1z1, THM 3-1221Oz1z1z1z1z1z1z1, THM 3-1222Oz1z1z1z1z1z1z1,  
THM 3-1223Oz1z1z1z1z1z1z1, THM 3-2410Oz1z1z1z1z1z1z1, THM 3-2411Oz1z1z1z1z1z1z1,  
THM 3-2412Oz1z1z1z1z1z1z1, THM 3-2413Oz1z1z1z1z1z1z1, THM 3-2415Oz1z1z1z1z1z1z1,  
THM 3-2421Oz1z1z1z1z1z1z1, THM 3-2422Oz1z1z1z1z1z1z1, THM 3-2423Oz1z1z1z1z1z1z1,  
THM 3-4810Oz1z1z1z1z1z1z1, THM 3-4811Oz1z1z1z1z1z1z1, THM 3-4812Oz1z1z1z1z1z1z1,  
THM 3-4813Oz1z1z1z1z1z1z1, THM 3-4815Oz1z1z1z1z1z1z1, THM 3-4821Oz1z1z1z1z1z1z1,  
THM 3-4822Oz1z1z1z1z1z1z1, THM 3-4823Oz1z1z1z1z1z1z1, THM 3-1210OAz1z1z1z1z1z1z1,  
THM 3-1211OAz1z1z1z1z1z1z1, THM 3-1212OAz1z1z1z1z1z1z1, THM 3-1213OAz1z1z1z1z1z1z1,  
THM 3-1215OAz1z1z1z1z1z1z1, THM 3-1221OAz1z1z1z1z1z1z1, THM 3-1222OAz1z1z1z1z1z1z1,  
THM 3-1223OAz1z1z1z1z1z1z1, THM 3-2410OAz1z1z1z1z1z1z1, THM 3-2411OAz1z1z1z1z1z1z1,  
THM 3-2412OAz1z1z1z1z1z1z1, THM 3-2413OAz1z1z1z1z1z1z1, THM 3-2415OAz1z1z1z1z1z1z1,  
THM 3-2421OAz1z1z1z1z1z1z1, THM 3-2422OAz1z1z1z1z1z1z1, THM 3-2423OAz1z1z1z1z1z1z1,  
THM 3-4810OAz1z1z1z1z1z1z1, THM 3-4811OAz1z1z1z1z1z1z1, THM 3-4812OAz1z1z1z1z1z1z1,  
THM 3-4813OAz1z1z1z1z1z1z1, THM 3-4815OAz1z1z1z1z1z1z1, THM 3-4821OAz1z1z1z1z1z1z1,  
THM 3-4822OAz1z1z1z1z1z1z1, THM 3-4823OAz1z1z1z1z1z1z1, THM 6-0510Wlz1z1z1z1z1z1z1,  
THM 6-0511Wlz1z1z1z1z1z1z1, THM 6-0512Wlz1z1z1z1z1z1z1, THM 6-0513Wlz1z1z1z1z1z1z1,  
THM 6-0515Wlz1z1z1z1z1z1z1, THM 6-0521Wlz1z1z1z1z1z1z1, THM 6-0522Wlz1z1z1z1z1z1z1,  
THM 6-0523Wlz1z1z1z1z1z1z1, THM 6-2410Wlz1z1z1z1z1z1z1, THM 6-2411Wlz1z1z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THM 6-2412WlZ1z1z1z1z1z1z1, THM 6-2413WlZ1z1z1z1z1z1z1, THM 6-2415WlZ1z1z1z1z1z1z1,  
THM 6-2421WlZ1z1z1z1z1z1z1, THM 6-2422WlZ1z1z1z1z1z1z1, THM 6-2423WlZ1z1z1z1z1z1z1,  
THM 6-4810WlZ1z1z1z1z1z1z1, THM 6-4811WlZ1z1z1z1z1z1z1, THM 6-4812WlZ1z1z1z1z1z1z1,  
THM 6-4813WlZ1z1z1z1z1z1z1, THM 6-4815WlZ1z1z1z1z1z1z1, THM 6-4821WlZ1z1z1z1z1z1z1,  
THM 6-4822WlZ1z1z1z1z1z1z1, THM 6-4823WlZ1z1z1z1z1z1z1, THM 6-0510WlAZ1z1z1z1z1z1z1,  
THM 6-0511WlAZ1z1z1z1z1z1z1, THM 6-0512WlAZ1z1z1z1z1z1z1, THM 6-0513WlAZ1z1z1z1z1z1z1,  
THM 6-0515WlAZ1z1z1z1z1z1z1, THM 6-0521WlAZ1z1z1z1z1z1z1, THM 6-0522WlAZ1z1z1z1z1z1z1,  
THM 6-0523WlAZ1z1z1z1z1z1z1, THM 6-2410WlAZ1z1z1z1z1z1z1, THM 6-2411WlAZ1z1z1z1z1z1z1,  
THM 6-2412WlAZ1z1z1z1z1z1z1, THM 6-2413WlAZ1z1z1z1z1z1z1, THM 6-2415WlAZ1z1z1z1z1z1z1,  
THM 6-2421WlAZ1z1z1z1z1z1z1, THM 6-2422WlAZ1z1z1z1z1z1z1, THM 6-2423WlAZ1z1z1z1z1z1z1,  
THM 6-4810WlAZ1z1z1z1z1z1z1, THM 6-4811WlAZ1z1z1z1z1z1z1, THM 6-4812WlAZ1z1z1z1z1z1z1,  
THM 6-4813WlAZ1z1z1z1z1z1z1, THM 6-4815WlAZ1z1z1z1z1z1z1, THM 6-4821WlAZ1z1z1z1z1z1z1,  
THM 6-4822WlAZ1z1z1z1z1z1z1, THM 6-4823WlAZ1z1z1z1z1z1z1, THM 6-1210z1z1z1z1z1z1z1,  
THM 6-1211z1z1z1z1z1z1z1, THM 6-1212z1z1z1z1z1z1z1, THM 6-1213z1z1z1z1z1z1z1,  
THM 6-1215z1z1z1z1z1z1z1, THM 6-1221z1z1z1z1z1z1z1, THM 6-1222z1z1z1z1z1z1z1,  
THM 6-1223z1z1z1z1z1z1z1, THM 6-2410z1z1z1z1z1z1z1, THM 6-2411z1z1z1z1z1z1z1,  
THM 6-2412z1z1z1z1z1z1z1, THM 6-2413z1z1z1z1z1z1z1, THM 6-2415z1z1z1z1z1z1z1,  
THM 6-2421z1z1z1z1z1z1z1, THM 6-2422z1z1z1z1z1z1z1, THM 6-2423z1z1z1z1z1z1z1,  
THM 6-4810z1z1z1z1z1z1z1, THM 6-4811z1z1z1z1z1z1z1, THM 6-4812z1z1z1z1z1z1z1,  
THM 6-4813z1z1z1z1z1z1z1, THM 6-4815z1z1z1z1z1z1z1, THM 6-4821z1z1z1z1z1z1z1,  
THM 6-4822z1z1z1z1z1z1z1, THM 6-4823z1z1z1z1z1z1z1, THM 6-1210Az1z1z1z1z1z1z1,  
THM 6-1211Az1z1z1z1z1z1z1, THM 6-1212Az1z1z1z1z1z1z1, THM 6-1213Az1z1z1z1z1z1z1,  
THM 6-1215Az1z1z1z1z1z1z1, THM 6-1221Az1z1z1z1z1z1z1, THM 6-1222Az1z1z1z1z1z1z1,  
THM 6-1223Az1z1z1z1z1z1z1, THM 6-2410Az1z1z1z1z1z1z1, THM 6-2411Az1z1z1z1z1z1z1,  
THM 6-2412Az1z1z1z1z1z1z1, THM 6-2413Az1z1z1z1z1z1z1, THM 6-2415Az1z1z1z1z1z1z1,  
THM 6-2421Az1z1z1z1z1z1z1, THM 6-2422Az1z1z1z1z1z1z1, THM 6-2423Az1z1z1z1z1z1z1,  
THM 6-4810Az1z1z1z1z1z1z1, THM 6-4811Az1z1z1z1z1z1z1, THM 6-4812Az1z1z1z1z1z1z1,  
THM 6-4813Az1z1z1z1z1z1z1, THM 6-4815Az1z1z1z1z1z1z1, THM 6-4821Az1z1z1z1z1z1z1,  
THM 6-4822Az1z1z1z1z1z1z1, THM 6-4823Az1z1z1z1z1z1z1, THM 6-0510WlOz1z1z1z1z1z1z1,  
THM 6-0511WlOz1z1z1z1z1z1z1, THM 6-0512WlOz1z1z1z1z1z1z1, THM 6-0513WlOz1z1z1z1z1z1z1,  
THM 6-0515WlOz1z1z1z1z1z1z1, THM 6-0521WlOz1z1z1z1z1z1z1, THM 6-0522WlOz1z1z1z1z1z1z1,  
THM 6-0523WlOz1z1z1z1z1z1z1, THM 6-2410WlOz1z1z1z1z1z1z1, THM 6-2411WlOz1z1z1z1z1z1z1,  
THM 6-2412WlOz1z1z1z1z1z1z1, THM 6-2413WlOz1z1z1z1z1z1z1, THM 6-2415WlOz1z1z1z1z1z1z1,  
THM 6-2421WlOz1z1z1z1z1z1z1, THM 6-2422WlOz1z1z1z1z1z1z1, THM 6-2423WlOz1z1z1z1z1z1z1,  
THM 6-4810WlOz1z1z1z1z1z1z1, THM 6-4811WlOz1z1z1z1z1z1z1, THM 6-4812WlOz1z1z1z1z1z1z1,  
THM 6-4813WlOz1z1z1z1z1z1z1, THM 6-4815WlOz1z1z1z1z1z1z1, THM 6-4821WlOz1z1z1z1z1z1z1,  
THM 6-4822WlOz1z1z1z1z1z1z1, THM 6-4823WlOz1z1z1z1z1z1z1, THM 6-0510WlOAz1z1z1z1z1z1z1,  
THM 6-0511WlOAz1z1z1z1z1z1z1, THM 6-0512WlOAz1z1z1z1z1z1z1, THM 6-0513WlOAz1z1z1z1z1z1z1,  
THM 6-0515WlOAz1z1z1z1z1z1z1, THM 6-0521WlOAz1z1z1z1z1z1z1, THM 6-0522WlOAz1z1z1z1z1z1z1,  
THM 6-0523WlOAz1z1z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THM 6-2410WIOAz1z1z1z1z1z1z1, THM 6-2411WIOAz1z1z1z1z1z1z1,  
THM 6-2412WIOAz1z1z1z1z1z1z1, THM 6-2413WIOAz1z1z1z1z1z1z1,  
THM 6-2415WIOAz1z1z1z1z1z1z1, THM 6-2421WIOAz1z1z1z1z1z1z1,  
THM 6-2422WIOAz1z1z1z1z1z1z1, THM 6-2423WIOAz1z1z1z1z1z1z1,  
THM 6-4810WIOAz1z1z1z1z1z1z1, THM 6-4811WIOAz1z1z1z1z1z1z1,  
THM 6-4812WIOAz1z1z1z1z1z1z1, THM 6-4813WIOAz1z1z1z1z1z1z1,  
THM 6-4815WIOAz1z1z1z1z1z1z1, THM 6-4821WIOAz1z1z1z1z1z1z1,  
THM 6-4822WIOAz1z1z1z1z1z1z1, THM 6-4823WIOAz1z1z1z1z1z1z1, THM 6-1210Oz1z1z1z1z1z1z1,  
THM 6-1211Oz1z1z1z1z1z1z1, THM 6-1212Oz1z1z1z1z1z1z1, THM 6-1213Oz1z1z1z1z1z1z1,  
THM 6-1215Oz1z1z1z1z1z1z1, THM 6-1221Oz1z1z1z1z1z1z1, THM 6-1222Oz1z1z1z1z1z1z1,  
THM 6-1223Oz1z1z1z1z1z1z1, THM 6-2410Oz1z1z1z1z1z1z1, THM 6-2411Oz1z1z1z1z1z1z1,  
THM 6-2412Oz1z1z1z1z1z1z1, THM 6-2413Oz1z1z1z1z1z1z1, THM 6-2415Oz1z1z1z1z1z1z1,  
THM 6-2421Oz1z1z1z1z1z1z1, THM 6-2422Oz1z1z1z1z1z1z1, THM 6-2423Oz1z1z1z1z1z1z1,  
THM 6-4810Oz1z1z1z1z1z1z1, THM 6-4811Oz1z1z1z1z1z1z1, THM 6-4812Oz1z1z1z1z1z1z1,  
THM 6-4813Oz1z1z1z1z1z1z1, THM 6-4815Oz1z1z1z1z1z1z1, THM 6-4821Oz1z1z1z1z1z1z1,  
THM 6-4822Oz1z1z1z1z1z1z1, THM 6-4823Oz1z1z1z1z1z1z1, THM 6-1210OAz1z1z1z1z1z1z1,  
THM 6-1211OAz1z1z1z1z1z1z1, THM 6-1212OAz1z1z1z1z1z1z1, THM 6-1213OAz1z1z1z1z1z1z1,  
THM 6-1215OAz1z1z1z1z1z1z1, THM 6-1221OAz1z1z1z1z1z1z1, THM 6-1222OAz1z1z1z1z1z1z1,  
THM 6-1223OAz1z1z1z1z1z1z1, THM 6-2410OAz1z1z1z1z1z1z1, THM 6-2411OAz1z1z1z1z1z1z1,  
THM 6-2412OAz1z1z1z1z1z1z1, THM 6-2413OAz1z1z1z1z1z1z1, THM 6-2415OAz1z1z1z1z1z1z1,  
THM 6-2421OAz1z1z1z1z1z1z1, THM 6-2422OAz1z1z1z1z1z1z1, THM 6-2423OAz1z1z1z1z1z1z1,  
THM 6-4810OAz1z1z1z1z1z1z1, THM 6-4811OAz1z1z1z1z1z1z1, THM 6-4812OAz1z1z1z1z1z1z1,  
THM 6-4813OAz1z1z1z1z1z1z1, THM 6-4815OAz1z1z1z1z1z1z1, THM 6-4821OAz1z1z1z1z1z1z1,  
THM 6-4822OAz1z1z1z1z1z1z1, THM 6-4823OAz1z1z1z1z1z1z1, THM 10-2411Wlz1z1z1z1z1z1z1,  
THM 10-2412Wlz1z1z1z1z1z1z1, THM 10-2413Wlz1z1z1z1z1z1z1, THM 10-2415Wlz1z1z1z1z1z1z1,  
THM 10-2421Wlz1z1z1z1z1z1z1, THM 10-2422Wlz1z1z1z1z1z1z1, THM 10-2423Wlz1z1z1z1z1z1z1,  
THM 10-4810Wlz1z1z1z1z1z1z1, THM 10-4811Wlz1z1z1z1z1z1z1, THM 10-4812Wlz1z1z1z1z1z1z1,  
THM 10-4813Wlz1z1z1z1z1z1z1, THM 10-4815Wlz1z1z1z1z1z1z1, THM 10-4821Wlz1z1z1z1z1z1z1,  
THM 10-4822Wlz1z1z1z1z1z1z1, THM 10-4823Wlz1z1z1z1z1z1z1, THM 10-0510WIAz1z1z1z1z1z1z1,  
THM 10-0511WIAz1z1z1z1z1z1z1, THM 10-0512WIAz1z1z1z1z1z1z1, THM 10-0513WIAz1z1z1z1z1z1z1,  
THM 10-0515WIAz1z1z1z1z1z1z1, THM 10-0521WIAz1z1z1z1z1z1z1, THM 10-0522WIAz1z1z1z1z1z1z1,  
THM 10-0523WIAz1z1z1z1z1z1z1, THM 10-2410WIAz1z1z1z1z1z1z1, THM 10-2411WIAz1z1z1z1z1z1z1,  
THM 10-2412WIAz1z1z1z1z1z1z1, THM 10-2413WIAz1z1z1z1z1z1z1, THM 10-2415WIAz1z1z1z1z1z1z1,  
THM 10-2421WIAz1z1z1z1z1z1z1, THM 10-2422WIAz1z1z1z1z1z1z1, THM 10-2423WIAz1z1z1z1z1z1z1,  
THM 10-4810WIAz1z1z1z1z1z1z1, THM 10-4811WIAz1z1z1z1z1z1z1, THM 10-4812WIAz1z1z1z1z1z1z1,  
THM 10-4813WIAz1z1z1z1z1z1z1, THM 10-4815WIAz1z1z1z1z1z1z1, THM 10-4821WIAz1z1z1z1z1z1z1,  
THM 10-4822WIAz1z1z1z1z1z1z1, THM 10-4823WIAz1z1z1z1z1z1z1, THM 10-2411z1z1z1z1z1z1z1,  
THM 10-2412z1z1z1z1z1z1z1, THM 10-2413z1z1z1z1z1z1z1, THM 10-2415z1z1z1z1z1z1z1,  
THM 10-2421z1z1z1z1z1z1z1, THM 10-2422z1z1z1z1z1z1z1, THM 10-2423z1z1z1z1z1z1z1,  
THM 10-4810z1z1z1z1z1z1z1, THM 10-4811z1z1z1z1z1z1z1, THM 10-4812z1z1z1z1z1z1z1,



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THM 10-4813z1z1z1z1z1z1z1, THM 10-4815z1z1z1z1z1z1z1, THM 10-4821z1z1z1z1z1z1z1,  
THM 10-4822z1z1z1z1z1z1z1, THM 10-4823z1z1z1z1z1z1z1, THM 10-1210Az1z1z1z1z1z1z1,  
THM 10-1211Az1z1z1z1z1z1z1, THM 10-1212Az1z1z1z1z1z1z1, THM 10-1213Az1z1z1z1z1z1z1,  
THM 10-1215Az1z1z1z1z1z1z1, THM 10-1221Az1z1z1z1z1z1z1, THM 10-1222Az1z1z1z1z1z1z1,  
THM 10-1223Az1z1z1z1z1z1z1, THM 10-2410Az1z1z1z1z1z1z1, THM 10-2411Az1z1z1z1z1z1z1,  
THM 10-2412Az1z1z1z1z1z1z1, THM 10-2413Az1z1z1z1z1z1z1, THM 10-2415Az1z1z1z1z1z1z1,  
THM 10-2421Az1z1z1z1z1z1z1, THM 10-2422Az1z1z1z1z1z1z1, THM 10-2423Az1z1z1z1z1z1z1,  
THM 10-4810Az1z1z1z1z1z1z1, THM 10-4811Az1z1z1z1z1z1z1, THM 10-4812Az1z1z1z1z1z1z1,  
THM 10-4813Az1z1z1z1z1z1z1, THM 10-4815Az1z1z1z1z1z1z1, THM 10-4821Az1z1z1z1z1z1z1,  
THM 10-4822Az1z1z1z1z1z1z1, THM 10-4823Az1z1z1z1z1z1z1, THM 10-2411WIOz1z1z1z1z1z1z1,  
THM 10-2412WIOz1z1z1z1z1z1z1, THM 10-2413WIOz1z1z1z1z1z1z1,  
THM 10-2415WIOz1z1z1z1z1z1z1, THM 10-2421WIOz1z1z1z1z1z1z1,  
THM 10-2422WIOz1z1z1z1z1z1z1, THM 10-2423WIOz1z1z1z1z1z1z1,  
THM 10-4810WIOz1z1z1z1z1z1z1, THM 10-4811WIOz1z1z1z1z1z1z1,  
THM 10-4812WIOz1z1z1z1z1z1z1, THM 10-4813WIOz1z1z1z1z1z1z1,  
THM 10-4815WIOz1z1z1z1z1z1z1, THM 10-4821WIOz1z1z1z1z1z1z1,  
THM 10-4822WIOz1z1z1z1z1z1z1, THM 10-4823WIOz1z1z1z1z1z1z1,  
THM 10-0510WIOAz1z1z1z1z1z1z1, THM 10-0511WIOAz1z1z1z1z1z1z1,  
THM 10-0512WIOAz1z1z1z1z1z1z1, THM 10-0513WIOAz1z1z1z1z1z1z1,  
THM 10-0515WIOAz1z1z1z1z1z1z1, THM 10-0521WIOAz1z1z1z1z1z1z1,  
THM 10-0522WIOAz1z1z1z1z1z1z1, THM 10-0523WIOAz1z1z1z1z1z1z1,  
THM 10-2410WIOAz1z1z1z1z1z1z1, THM 10-2411WIOAz1z1z1z1z1z1z1,  
THM 10-2412WIOAz1z1z1z1z1z1z1, THM 10-2413WIOAz1z1z1z1z1z1z1,  
THM 10-2415WIOAz1z1z1z1z1z1z1, THM 10-2421WIOAz1z1z1z1z1z1z1,  
THM 10-2422WIOAz1z1z1z1z1z1z1, THM 10-2423WIOAz1z1z1z1z1z1z1,  
THM 10-4810WIOAz1z1z1z1z1z1z1, THM 10-4811WIOAz1z1z1z1z1z1z1,  
THM 10-4812WIOAz1z1z1z1z1z1z1, THM 10-4813WIOAz1z1z1z1z1z1z1,  
THM 10-4815WIOAz1z1z1z1z1z1z1, THM 10-4821WIOAz1z1z1z1z1z1z1,  
THM 10-4822WIOAz1z1z1z1z1z1z1, THM 10-4823WIOAz1z1z1z1z1z1z1,  
THM 10-2411Oz1z1z1z1z1z1z1, THM 10-2412Oz1z1z1z1z1z1z1, THM 10-2413Oz1z1z1z1z1z1z1,  
THM 10-2415Oz1z1z1z1z1z1z1, THM 10-2421Oz1z1z1z1z1z1z1, THM 10-2422Oz1z1z1z1z1z1z1,  
THM 10-2423Oz1z1z1z1z1z1z1, THM 10-4810Oz1z1z1z1z1z1z1, THM 10-4811Oz1z1z1z1z1z1z1,  
THM 10-4812Oz1z1z1z1z1z1z1, THM 10-4813Oz1z1z1z1z1z1z1, THM 10-4815Oz1z1z1z1z1z1z1,  
THM 10-4821Oz1z1z1z1z1z1z1, THM 10-4822Oz1z1z1z1z1z1z1, THM 10-4823Oz1z1z1z1z1z1z1,  
THM 10-1210OAz1z1z1z1z1z1z1, THM 10-1211OAz1z1z1z1z1z1z1, THM 10-1212OAz1z1z1z1z1z1z1,  
THM 10-1213OAz1z1z1z1z1z1z1, THM 10-1215OAz1z1z1z1z1z1z1, THM 10-1221OAz1z1z1z1z1z1z1,  
THM 10-1222OAz1z1z1z1z1z1z1, THM 10-1223OAz1z1z1z1z1z1z1, THM 10-2410OAz1z1z1z1z1z1z1,  
THM 10-2411OAz1z1z1z1z1z1z1, THM 10-2412OAz1z1z1z1z1z1z1, THM 10-2413OAz1z1z1z1z1z1z1,  
THM 10-2415OAz1z1z1z1z1z1z1, THM 10-2421OAz1z1z1z1z1z1z1, THM 10-2422OAz1z1z1z1z1z1z1,  
THM 10-2423OAz1z1z1z1z1z1z1, THM 10-4810OAz1z1z1z1z1z1z1, THM 10-4811OAz1z1z1z1z1z1z1,  
THM 10-4812OAz1z1z1z1z1z1z1, THM 10-4813OAz1z1z1z1z1z1z1, THM 10-4815OAz1z1z1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THM 10-4821OAz1z1z1z1z1z1z1, THM 10-4822OAz1z1z1z1z1z1z1, THM 10-4823OAz1z1z1z1z1z1z1,  
TPI150-112Azzzzzzzz, TPI150-115Azzzzzzzz, TPI150-124Azzzzzzzz, TPI150-128Azzzzzzzz,  
TPI150-136Azzzzzzzz, TPI150-148Azzzzzzzz, TPI150-112Uzzzzzzzz, TPI150-115Uzzzzzzzz,  
TPI150-124Uzzzzzzzz, TPI150-128Uzzzzzzzz, TPI150-136Uzzzzzzzz, TPI150-148Uzzzzzzzz,  
TPI150-112zzzzzzzz, TPI150-115zzzzzzzz, TPI150-124zzzzzzzz, TPI150-128zzzzzzzz, TPI150-136zzzzzzzz,  
TPI150-148zzzzzzzz, TPI150-112Dzzzzzzzz, TPI150-115Dzzzzzzzz, TPI150-124Dzzzzzzzz,  
TPI150-128Dzzzzzzzz, TPI150-136Dzzzzzzzz, TPI150-148Dzzzzzzzz, TPI150-112BAzzzzzzzz,  
TPI150-115BAzzzzzzzz, TPI150-124BAzzzzzzzz, TPI150-128BAzzzzzzzz, TPI150-136BAzzzzzzzz,  
TPI150-148BAzzzzzzzz, TPI150-112BUzzzzzzzz, TPI150-115BUzzzzzzzz, TPI150-124BUzzzzzzzz,  
TPI150-128BUzzzzzzzz, TPI150-136BUzzzzzzzz, TPI150-148BUzzzzzzzz, TPI150-112Bzzzzzzzz,  
TPI150-115Bzzzzzzzz, TPI150-124Bzzzzzzzz, TPI150-128Bzzzzzzzz, TPI150-136Bzzzzzzzz,  
TPI150-148Bzzzzzzzz, TPI150-112BDzzzzzzzz, TPI150-115BDzzzzzzzz, TPI150-124BDzzzzzzzz,  
TPI150-128BDzzzzzzzz, TPI150-136BDzzzzzzzz, TPI150-148BDzzzzzzzz, TPI100-112Azzzzzzzz,  
TPI100-115Azzzzzzzz, TPI100-124Azzzzzzzz, TPI100-128Azzzzzzzz, TPI100-136Azzzzzzzz,  
TPI100-148Azzzzzzzz, TPI100-112Uzzzzzzzz, TPI100-115Uzzzzzzzz, TPI100-124Uzzzzzzzz,  
TPI100-128Uzzzzzzzz, TPI100-136Uzzzzzzzz, TPI100-148Uzzzzzzzz, TPI100-112zzzzzzzz, TPI100-115zzzzzzzz,  
TPI100-124zzzzzzzz, TPI100-128zzzzzzzz, TPI100-136zzzzzzzz, TPI100-148zzzzzzzz, TPI100-112Dzzzzzzzz,  
TPI100-115Dzzzzzzzz, TPI100-124Dzzzzzzzz, TPI100-128Dzzzzzzzz, TPI100-136Dzzzzzzzz,  
TPI100-148Dzzzzzzzz, TPI100-112BAzzzzzzzz, TPI100-115BAzzzzzzzz, TPI100-124BAzzzzzzzz,  
TPI100-128BAzzzzzzzz, TPI100-136BAzzzzzzzz, TPI100-148BAzzzzzzzz, TPI100-112BUzzzzzzzz,  
TPI100-115BUzzzzzzzz, TPI100-124BUzzzzzzzz, TPI100-128BUzzzzzzzz, TPI100-136BUzzzzzzzz,  
TPI100-148BUzzzzzzzz, TPI100-112Bzzzzzzzz, TPI100-115Bzzzzzzzz, TPI100-124Bzzzzzzzz,  
TPI100-128Bzzzzzzzz, TPI100-136Bzzzzzzzz, TPI100-148Bzzzzzzzz, TPI100-112BDzzzzzzzz,  
TPI100-115BDzzzzzzzz, TPI100-124BDzzzzzzzz, TPI100-128BDzzzzzzzz, TPI100-136BDzzzzzzzz,  
TPI100-148BDzzzzzzzz, TEP 75-7210Wlaaaaaaaa, TEP 75-7211Wlaaaaaaaa, TEP 75-2712Wlaaaaaaaa,  
TEP 75-7213Wlaaaaaaaa, TEP 75-7215Wlaaaaaaaa, TEP 75-7216Wlaaaaaaaa, TEP 75-7218Wlaaaaaaaa,  
TEP 100-7210WIRaaaaaaaa, TEP 100-7211WIRaaaaaaaa, TEP 100-2712WIRaaaaaaaa,  
TEP 100-7213WIRaaaaaaaa, TEP 100-7215WIRaaaaaaaa, TEP 100-7216WIRaaaaaaaa,  
TEP 100-7218WIRaaaaaaaa, TMR 3-1210WIHz1z1z1z1z1, TMR 3-1211WIHz1z1z1z1z1,  
TMR 3-1219WIHz1z1z1z1z1, TMR 3-1212WIHz1z1z1z1z1, TMR 3-1213WIHz1z1z1z1z1,  
TMR 3-1221WIHz1z1z1z1z1, TMR 3-1222WIHz1z1z1z1z1, TMR 3-1223WIHz1z1z1z1z1,  
TMR 3-2410WIHz1z1z1z1z1, TMR 3-2411WIHz1z1z1z1z1, TMR 3-2419WIHz1z1z1z1z1,  
TMR 3-2412WIHz1z1z1z1z1, TMR 3-2413WIHz1z1z1z1z1, TMR 3-2421WIHz1z1z1z1z1,  
TMR 3-2422WIHz1z1z1z1z1, TMR 3-2423WIHz1z1z1z1z1, TMR 3-4810WIHz1z1z1z1z1,  
TMR 3-4811WIHz1z1z1z1z1, TMR 3-4819WIHz1z1z1z1z1, TMR 3-4812WIHz1z1z1z1z1,  
TMR 3-4813WIHz1z1z1z1z1, TMR 3-4821WIHz1z1z1z1z1, TMR 3-4822WIHz1z1z1z1z1,  
TMR 3-4823WIHz1z1z1z1z1, TMR 6-0510HIz1z1z1z1z1, TMR 6-0511HIz1z1z1z1z1, TMR 6-0519HIz1z1z1z1z1,  
TMR 6-0512HIz1z1z1z1z1, TMR 6-0513HIz1z1z1z1z1, TMR 6-0515HIz1z1z1z1z1, TMR 6-0521HIz1z1z1z1z1,  
TMR 6-0522HIz1z1z1z1z1, TMR 6-0523HIz1z1z1z1z1, TMR 6-1210HIz1z1z1z1z1, TMR 6-1211HIz1z1z1z1z1,  
TMR 6-1219HIz1z1z1z1z1, TMR 6-1212HIz1z1z1z1z1, TMR 6-1213HIz1z1z1z1z1, TMR 6-1215HIz1z1z1z1z1,  
TMR 6-1221HIz1z1z1z1z1, TMR 6-1222HIz1z1z1z1z1



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

TMR 6-1223Hlz1z1z1z1z1, TMR 6-2410Hlz1z1z1z1z1, TMR 6-2411Hlz1z1z1z1z1, TMR 6-2419Hlz1z1z1z1z1,  
TMR 6-2412Hlz1z1z1z1z1, TMR 6-2413Hlz1z1z1z1z1, TMR 6-2415Hlz1z1z1z1z1, TMR 6-2421Hlz1z1z1z1z1,  
TMR 6-2422Hlz1z1z1z1z1, TMR 6-2423Hlz1z1z1z1z1, TMR 6-4810Hlz1z1z1z1z1, TMR 6-4811Hlz1z1z1z1z1,  
TMR 6-4819Hlz1z1z1z1z1, TMR 6-4812Hlz1z1z1z1z1, TMR 6-4813Hlz1z1z1z1z1, TMR 6-4815Hlz1z1z1z1z1,  
TMR 6-4821Hlz1z1z1z1z1, TMR 6-4822Hlz1z1z1z1z1, TMR 6-4823Hlz1z1z1z1z1, TMR 6-2410Wlzzzzzzzz,  
TMR 6-2411Wlzzzzzzzz, TMR 6-2419Wlzzzzzzzz, TMR 6-2412Wlzzzzzzzz, TMR 6-2413Wlzzzzzzzz,  
TMR 6-2415Wlzzzzzzzz, TMR 6-2421Wlzzzzzzzz, TMR 6-2422Wlzzzzzzzz, TMR 6-2423Wlzzzzzzzz,  
TMR 6-4810Wlzzzzzzzz, TMR 6-4811Wlzzzzzzzz, TMR 6-4819Wlzzzzzzzz, TMR 6-4812Wlzzzzzzzz,  
TMR 6-4813Wlzzzzzzzz, TMR 6-4815Wlzzzzzzzz, TMR 6-4821Wlzzzzzzzz, TMR 6-4822Wlzzzzzzzz,  
TMR 6-4823Wlzzzzzzzz, TMR 6-2410WIHlzzzzzzzz, TMR 6-2411WIHlzzzzzzzz, TMR 6-2419WIHlzzzzzzzz,  
TMR 6-2412WIHlzzzzzzzz, TMR 6-2413WIHlzzzzzzzz, TMR 6-2415WIHlzzzzzzzz, TMR 6-2421WIHlzzzzzzzz,  
TMR 6-2422WIHlzzzzzzzz, TMR 6-2423WIHlzzzzzzzz, TMR 6-4810WIHlzzzzzzzz, TMR 6-4811WIHlzzzzzzzz,  
TMR 6-4819WIHlzzzzzzzz, TMR 6-4812WIHlzzzzzzzz, TMR 6-4813WIHlzzzzzzzz, TMR 6-4815WIHlzzzzzzzz,  
TMR 6-4821WIHlzzzzzzzz, TMR 6-4822WIHlzzzzzzzz, TMR 6-4823WIHlzzzzzzzz, THN 15-1221aaaaa,  
THN 15-1222aaaaa, THN 15-1223aaaaa, TEQ75-2412WIRaaaaaaa, TEQ75-2415WIRaaaaaaa,  
TEQ75-2416WIRaaaaaaa, TEQ75-2418WIRaaaaaaa, TEQ75-4812WIRaaaaaaa, TEQ75-4815WIRaaaaaaa,  
TEQ75-4816WIRaaaaaaa, TEQ75-4818WIRaaaaaaa, TEQ75-7212WIRaaaaaaa, TEQ75-7215WIRaaaaaaa,  
TEQ75-7216WIRaaaaaaa, TEQ75-7218WIRaaaaaaa, TEQ100-2412WIRaaaaaaa,  
TEQ100-2415WIRaaaaaaa, TEQ100-2416WIRaaaaaaa, TEQ100-2418WIRaaaaaaa,  
TEQ100-4812WIRaaaaaaa, TEQ100-4815WIRaaaaaaa, TEQ100-4816WIRaaaaaaa,  
TEQ100-4818WIRaaaaaaa, TEQ100-7212WIRaaaaaaa, TEQ100-7215WIRaaaaaaa,  
TEQ100-7216WIRaaaaaaa, TEQ100-7218WIRaaaaaaa, TEQ160-4812WIRaaaaaaa,  
TEQ160-4815WIRaaaaaaa, TEQ160-4816WIRaaaaaaa, TEQ160-4818WIRaaaaaaa,  
TEQ160-7212WIRaaaaaaa, TEQ160-7215WIRaaaaaaa, TEQ160-7216WIRaaaaaaa,  
TEQ160-7218WIRaaaaaaa, TEQ200-4812WIRaaaaaaa, TEQ200-4815WIRaaaaaaa,  
TEQ200-4816WIRaaaaaaa, TEQ200-4818WIRaaaaaaa, TEQ200-7212WIRaaaaaaa,  
TEQ200-7215WIRaaaaaaa, TEQ200-7216WIRaaaaaaa, TEQ200-7218WIRaaaaaaa, TMR 9-2410Wlzzzzzzzz,  
TMR 9-2411Wlzzzzzzzz, TMR 9-2419Wlzzzzzzzz, TMR 9-2412Wlzzzzzzzz, TMR 9-2413Wlzzzzzzzz,  
TMR 9-2415Wlzzzzzzzz, TMR 9-2421Wlzzzzzzzz, TMR 9-2422Wlzzzzzzzz, TMR 9-2423Wlzzzzzzzz,  
TMR 9-4810Wlzzzzzzzz, TMR 9-4811Wlzzzzzzzz, TMR 9-4819Wlzzzzzzzz, TMR 9-4812Wlzzzzzzzz,  
TMR 9-4813Wlzzzzzzzz, TMR 9-4815Wlzzzzzzzz, TMR 9-4821Wlzzzzzzzz, TMR 9-4822Wlzzzzzzzz,  
TMR 9-4823Wlzzzzzzzz, TMR 9-1210zzzzzzzz, TMR 9-1211zzzzzzzz, TMR 9-1219zzzzzzzz,  
TMR 9-1212zzzzzzzz, TMR 9-1213zzzzzzzz, TMR 9-1215zzzzzzzz, TMR 9-1221zzzzzzzz, TMR 9-1222zzzzzzzz,  
TMR 9-1223zzzzzzzz, TMR 9-2410zzzzzzzz, TMR 9-2411zzzzzzzz, TMR 9-2419zzzzzzzz, TMR 9-2412zzzzzzzz,  
TMR 9-2413zzzzzzzz, TMR 9-2415zzzzzzzz, TMR 9-2421zzzzzzzz, TMR 9-2422zzzzzzzz, TMR 9-2423zzzzzzzz,  
TMR 9-4810zzzzzzzz, TMR 9-4811zzzzzzzz, TMR 9-4819zzzzzzzz, TMR 9-4812zzzzzzzz, TMR 9-4813zzzzzzzz,  
TMR 9-4815zzzzzzzz, TMR 9-4821zzzzzzzz, TMR 9-4822zzzzzzzz, TMR 9-4823zzzzzzzz,  
THN 15-1215aaaaaaa, THN 15-1225aaaaaaa, THN 15-2415aaaaaaa, THN 15-2425aaaaaaa,  
THN 15-4815aaaaaaa, THN 15-4825aaaaaaa, THN 15-2415Wlaaaaaaa, THN 15-2425Wlaaaaaaa,  
THN 15-4815Wlaaaaaaa, THN 15-4825Wlaaaaaaa, THN 20-1215aaaaaaa, THN 20-1225aaaaaaa,  
THN 20-2415aaaaaaa, THN 20-2425aaaaaaa, THN 20-4815aaaaaaa, THN 20-4825aaaaaaa,  
THN 20-2415Wlaaaaaaa, THN 20-2425Wlaaaaaaa, THN 20-4815Wlaaaaaaa, THN 20-4825Wlaaaaaaa



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

Certificate Number 20171012-E188913  
Report Reference E188913-20051104  
Issue Date 2017-OCTOBER-12

THN 15-1210aaaaaa, THN 15-1211aaaaaa, THN 15-1212aaaaaa, THN 15-1213aaaaaa, THN 15-1221aaaaaa,  
THN 15-1222aaaaaa, THN 15-1223aaaaaa, THN 15-2410aaaaaa, THN 15-2411aaaaaa, THN 15-2412aaaaaa,  
THN 15-2413aaaaaa, THN 15-2421aaaaaa, THN 15-2422aaaaaa, THN 15-2423aaaaaa, THN 15-4810aaaaaa,  
THN 15-4811aaaaaa, THN 15-4812aaaaaa, THN 15-4813aaaaaa, THN 15-4821aaaaaa, THN 15-4822aaaaaa,  
THN 15-4823aaaaaa, THN 15-2410Wlaaaaaa, THN 15-2411Wlaaaaaa, THN 15-2412Wlaaaaaa,  
THN 15-2413Wlaaaaaa, THN 15-2421Wlaaaaaa, THN 15-2422Wlaaaaaa, THN 15-2423Wlaaaaaa,  
THN 15-4810Wlaaaaaa, THN 15-4811Wlaaaaaa, THN 15-4812Wlaaaaaa, THN 15-4813Wlaaaaaa,  
THN 15-4821Wlaaaaaa, THN 15-4822Wlaaaaaa, THN 15-4823Wlaaaaaa, TEN 40-2410WIRaaaaaa,  
TEN 40-2411WIRaaaaaa, TEN 40-2412WIRaaaaaa, TEN 40-2413WIRaaaaaa,  
TEN 40-2415WIRaaaaaa, TEN 40-2422WIRaaaaaa, TEN 40-2423WIRaaaaaa,  
TEN 40-2425WIRaaaaaa, TEN 40-4810WIRaaaaaa, TEN 40-4811WIRaaaaaa,  
TEN 40-4812WIRaaaaaa, TEN 40-4813WIRaaaaaa, TEN 40-4815WIRaaaaaa,  
TEN 40-4822WIRaaaaaa, TEN 40-4823WIRaaaaaa, TEN 40-4825WIRaaaaaa,  
TEN 40-7210WIRaaaaaa, TEN 40-7211WIRaaaaaa, TEN 40-7212WIRaaaaaa,  
TEN 40-7213WIRaaaaaa, TEN 40-7215WIRaaaaaa, TEN 40-7222WIRaaaaaa,  
TEN 40-7223WIRaaaaaa, TEN 40-7225WIRaaaaaa, TEN 60-1210Naaaaaaa, TEN 60-1211Naaaaaaa,  
TEN 60-1212Naaaaaaa, TEN 60-1213Naaaaaaa, TEN 60-1215Naaaaaaa, TEN 60-1222Naaaaaaa,  
TEN 60-1223Naaaaaaa, TEN 60-1225Naaaaaaa, TEN 60-2410Naaaaaaa, TEN 60-2411Naaaaaaa,  
TEN 60-2412Naaaaaaa, TEN 60-2413Naaaaaaa, TEN 60-2415Naaaaaaa, TEN 60-2422Naaaaaaa,  
TEN 60-2423Naaaaaaa, TEN 60-2425Naaaaaaa, TEN 60-4810Naaaaaaa, TEN 60-4811Naaaaaaa,  
TEN 60-4812Naaaaaaa, TEN 60-4813Naaaaaaa, TEN 60-4815Naaaaaaa, TEN 60-4822Naaaaaaa,  
TEN 60-4823Naaaaaaa, TMR 3-0519z1z1z1z1z1, TMR 3-1219z1z1z1z1z1, TMR 3-2419z1z1z1z1z1,  
TMR 3-4819z1z1z1z1z1, TEN 60-2410WINaaaaaaa, TEN 60-2411WINaaaaaaa,  
TEN 60-2412WINaaaaaaa, TEN 60-2413WINaaaaaaa, TEN 60-2415WINaaaaaaa,  
TEN 60-2422WINaaaaaaa, TEN 60-2423WINaaaaaaa, TEN 60-2425WINaaaaaaa,  
TEN 60-4810WINaaaaaaa, TEN 60-4811WINaaaaaaa, TEN 60-4812WINaaaaaaa,  
TEN 60-4813WINaaaaaaa, TEN 60-4815WINaaaaaaa, TEN 60-4822WINaaaaaaa,  
TEN 60-4823WINaaaaaaa, TEN 60-4825WINaaaaaaa, TEN 40-1234, TEQ 300-4812WIRaaaaaa,  
TEQ 300-4813WIRaaaaaa, TEQ 300-4815WIRaaaaaa, TEQ 300-4816WIRaaaaaa,  
TEQ 300-4818WIRaaaaaa, TEQ 300-7212WIRaaaaaa, TEQ 300-7213WIRaaaaaa,  
TEQ 300-7215WIRaaaaaa, TEQ 300-7216WIRaaaaaa, TEQ 300-7218WIRaaaaaa,  
THN 15-2410WIRzzzzz, THN 15-2411WIRzzzzz, THN 15-2412WIRzzzzz, THN 15-2413WIRzzzzz,  
THN 15-2415WIRzzzzz, THN 15-2421WIRzzzzz, THN 15-2422WIRzzzzz, THN 15-2423WIRzzzzz,  
THN 15-2425WIRzzzzz, THN 15-4810WIRzzzzz, THN 15-4811WIRzzzzz, THN 15-4812WIRzzzzz,  
THN 15-4813WIRzzzzz, THN 15-4815WIRzzzzz, THN 15-4821WIRzzzzz, THN 15-4822WIRzzzzz,  
THN 15-4823WIRzzzzz, THN 15-4825WIRzzzzz, THN 15-7210WIRzzzzz, THN 15-7211WIRzzzzz,  
THN 15-7212WIRzzzzz, THN 15-7213WIRzzzzz, THN 15-7215WIRzzzzz, THN 15-7221WIRzzzzz,  
THN 15-7222WIRzzzzz, THN 15-7223WIRzzzzz, THN 15-7225WIRzzzzz, TEQ 20-2411WIRaaaaaa,  
TEQ 20-2412WIRaaaaaa, TEQ 20-2413WIRaaaaaa, TEQ 20-2415WIRaaaaaa



Bruce Mahrenholz, Director North American Certification Program

UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>





# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20171012-E188913  
**Report Reference** E188913-20051104  
**Issue Date** 2017-OCTOBER-12

TEQ 20-4811WIRaaaaaaaa, TEQ 20-4812WIRaaaaaaaa, TEQ 20-4813WIRaaaaaaaa,  
TEQ 20-4815WIRaaaaaaaa, TEQ 20-7211WIRaaaaaaaa, TEQ 20-7212WIRaaaaaaaa,  
TEQ 20-7213WIRaaaaaaaa, TEQ 20-7215WIRaaaaaaaa, TEQ 40-2411WIRaaaaaaaa,  
TEQ 40-2412WIRaaaaaaaa, TEQ 40-2413WIRaaaaaaaa, TEQ 40-2415WIRaaaaaaaa,  
TEQ 40-4811WIRaaaaaaaa, TEQ 40-4812WIRaaaaaaaa, TEQ 40-4813WIRaaaaaaaa,  
TEQ 40-4815WIRaaaaaaaa, TEQ 40-7211WIRaaaaaaaa, TEQ 40-7212WIRaaaaaaaa,  
TEQ 40-7213WIRaaaaaaaa, TEQ 40-7215WIRaaaaaaaa, THN 15-1210Nzzzzzzzzzz, THN 15-1211Nzzzzzzzzzz,  
THN 15-1212Nzzzzzzzzzz, THN 15-1213Nzzzzzzzzzz, THN 15-1215Nzzzzzzzzzz, THN 15-1221Nzzzzzzzzzz,  
THN 15-1222Nzzzzzzzzzz, THN 15-1223Nzzzzzzzzzz, THN 15-1225Nzzzzzzzzzz, THN 15-2410Nzzzzzzzzzz,  
THN 15-2411Nzzzzzzzzzz, THN 15-2412Nzzzzzzzzzz, THN 15-2413Nzzzzzzzzzz, THN 15-2415Nzzzzzzzzzz,  
THN 15-2421Nzzzzzzzzzz, THN 15-2422Nzzzzzzzzzz, THN 15-2423Nzzzzzzzzzz, THN 15-2425Nzzzzzzzzzz,  
THN 15-4810Nzzzzzzzzzz, THN 15-4811Nzzzzzzzzzz, THN 15-4812Nzzzzzzzzzz, THN 15-4813Nzzzzzzzzzz,  
THN 15-4815Nzzzzzzzzzz, THN 15-4821Nzzzzzzzzzz, THN 15-4822Nzzzzzzzzzz, THN 15-4823Nzzzzzzzzzz,  
THN 15-4825Nzzzzzzzzzz

Note: Where "z1" - can be any alphanumeric character, "-" or blank for market purpose.  
Note: Where "z" may be any alphanumeric character, "-" or blank for market purpose.  
Note: Where "a" may be any alphanumeric character, "-" or blank for market purpose.



Bruce Mahrenholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/aboutul/locations/>

