

# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20181018-E328445  
**Report Reference** E328445-20131107  
**Issue Date** 2018-OCTOBER-18

**Issued to:** ES&S SOLUTIONS GMBH  
GEWERBERING 2  
41751 VIERSEN, GERMANY


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

WIRING, PRINTED - COMPONENT  
Multilayer printed wiring boards, STM-1, JJ-02, STM-2,  
STM-3  
Single layer printed wiring boards, STD-1, JJ-03, STD-2, JJ-  
01

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

**Standard(s) for Safety:** UL 796, Printed-Wiring Boards  
**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

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# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20181018-E328445  
**Report Reference** E328445-20090901  
**Issue Date** 2018-OCTOBER-18


**Issued to:** ES&S SOLUTIONS GMBH  
GEWERBERING 2  
41751 VIERSEN, GERMANY

**This is to certify that representative samples of** Wiring, Printed - Component  
Single layer printed wiring boards, FY-2  
Multilayer printed wiring boards, FY-4

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


**Standard(s) for Safety:** UL 796, Printed-Wiring Boards  
**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

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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.

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Bruce Mahrenholz, Director North American Certification Program

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# CERTIFICATE OF COMPLIANCE

**Certificate Number** 20181018-E328445  
**Report Reference** E328445-20090608  
**Issue Date** 2018-OCTOBER-18

**Issued to:** ES&S SOLUTIONS GMBH  
GEWERBERING 2  
41751 VIERSEN, GERMANY


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

Wiring, Printed - Component  
Single layer printed wiring boards, XML-2  
Mass laminated (multilayered) printed wiring boards,  
flammability only Recognition, XML-4

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

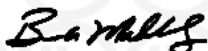
**Standard(s) for Safety:** UL 796, Printed Wiring Boards  
**Additional Information:** See the UL Online Certifications Directory at  
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