CERTIFICATE OF COMPLIANCE

Certificate Number	20150318-E45171
Report Reference	E45171-20010414
Issue Date	2015-MARCH-18

Issued to: WAGO KONTAKTTECHNIK GMBH & CO KG
HANSASTRASSE 27
32423 MINDEN GERMANY

This is to certify that representative samples of COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

Male Connector, Series 733.
Female Connector, Series 733.
Header, Series 733.

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

Standard(s) for Safety: UL 1977, Component Connectors for Use in Data, Signal, Control and Power Applications.

Additional Information: See the UL Online Certifications Directory at 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.

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, Assistant Chief Engineer, Global Inspection and Field Services

UL LLC

File E45171
Project 02ME09971

April 14, 2001

REPORT

on

COMPONENT - CONNECTORS FOR USE IN DATA, SIGNAL, CONTROL AND POWER APPLICATIONS

WAGO Kontakttechnik GmbH
Minden, Germany

DESCRIPTION

PRODUCT COVERED:

USR, Component – Male Connector, Series 733. See nomenclature for additional suffixes.

USR, Component – Female Connector, Series 733. See nomenclature for additional suffixes.

USR, Component – Header, Series 733. See nomenclature for additional suffixes.

GENERAL:

*USR - Indicates investigation to United States Standards, UL 1977.

These devices are multipole connectors intended for factory assembly. These connectors consist of male and female connectors with “Cage Clamp” spring connections and headers.

ELECTRICAL RATINGS:

Series	No. of poles	Type Designation	Rating	Wire Range
733	2-12	1A	4 A, 250 V	28-20 AWG SOL/STR, Cu.

Nomenclature: 733 – 102
I II

I. Basic Cat. No. - 733

II. Construction Variations - Suffixes

Suffixes	Description
-102 thru -112	2 thru 12 poles, female connectors with "Cage Clamp", with coding fingers, light gray.
-202 thru -212	2 thru 12 poles, male connectors with "Cage Clamp", light gray.
-332 thru -342	2 thru 12 poles, closed end headers, mating direction perpendicular to PCB, solder pin 0.8 by 0.8 mm, light gray.
-332/100-000 thru –342/100-000	2 thru 12 poles, closed end headers, mating direction perpendicular to PCB, with press-in technique, light gray.
-362 thru -372	2 thru 12 poles, closed end headers, mating direction parallel to PCB, solder pin 0.8 by 0.8 mm, light gray.
Additional suffix nos. …/010-000	Gold contact for all Cat. Nos.
Additional suffix nos. …/…-304	Housing material V0 for all Cat. Nos., black.
Additional suffix nos. …/…-350	Housing material V0 for all Cat. Nos., White.
Additional suffix No. …/032-000	Strain relief plates for male and female connectors 6 mm wide.
Additional suffix No. …/033-000	Strain relief plates for male and female connectors 12.5 mm wide.
Additional suffix No. …/034-000	Strain relief plates for male and female connectors 25 mm wide.
Additional suffix No. …/035-000	Strain relief plates for male and female connectors 35 mm wide.
Additional suffix nos. …/105-604	Insulating material Cat. No. Stanyl ForTii T11 for pin headers series 733 only.
Additional suffix nos. …/105-604	Housing material black for Cat. Nos. 733-332 thru -342 and 733-362 thru -372 only.
-vvvv followed by optional suffix wwww-xxxx/ yyyy–zzzz	**v, w, x, y and z are any customer number or digit (including characters), given for specific end-use purpose.**

ENGINEERING CONSIDERATIONS (NOT FOR UL REPRESENTATIVE USE):

Use - For use only in complete equipment where the acceptability of the combination is determined by Underwriters Laboratories Inc.

Conditions of Acceptability - In order to be judged acceptable as a component of electrical equipment, the following conditions should be met.

1. These devices have not been tested for interrupting the flow of current by connecting or disconnecting the mating connector. If the devices will be routinely connected or disconnected under load in the end-use application, tests to evaluate the devices' ability to withstand the resulting electrical arc should be considered. The number of make-and-break cycles, the supply voltage and power factor, and the current carried by each pole of the device in the test are to be developed based upon the conditions that will be present in the end-use. The Overload, Temperature and Resistance to Arcing test sequence in UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications, is an example of a test program that can be used in such an evaluation.

2. These devices have been investigated for the currents tabulated under Electrical Ratings. During the tests each pole carried the current.

3. These devices may be used at potentials not exceeding 250 V based on Dielectric Voltage-Withstand testing conducted at 1500 V ac in accordance with UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications.

4. The placement of these devices within the equipment enclosure should be such that spacings between the live parts and the equipment are suitable for the particular application.

*5. The R/C insulating materials (QMFZ2) used in these devices comply with the requirements of UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications. Refer to Sec. Gen. and **Constructino Details** for manufacture and type.

6. The operating temperature of these devices shall not exceed the temperature, based upon the minimum thermal index ratings of the insulating materials, 65°C. Refer to Sec. Gen. and CoA no.6A for temperature rating. *

*6A. These devices employ insulating materials with properties as tabulated **in the table under CONSTRUCTION DETAILS.**

7. Mold Stress Relief testing was conducted at a temperature of 115°C, except 733 followed by /105-604 molded from R/C(QMFZ2) Cat. No. Stanyl ForTii T11.

8. These devices have been subjected to the Temperature test described in UL 1977, the Standard for Component Connectors for Use in Data, Signal, Control and Power Applications, with the rated currents and maximum temperature rise values tabulated below. The conductors terminated by the device and other associated components are to be reviewed in the end-use to determine whether the temperature rise from the connector exceeds their maximum operating temperature ratings.

Series	Current, A	Wire Size, AWG, Cu	Maximum Temperature Rise, °C
733	4	20, SOL/STR	28.8

9. These devices employ terminals, which are not suitable for field wiring.

10. The spring type Terminals have been evaluated for Mechanical Sequence test for solid conductors only (secureness and pullout) in according to Equipment Wiring Terminals for Use with Aluminum and/or Copper Conductors, UL 486E. The mechanical suitability of the wiring terminals shall be determined in the end-use.

11. Accessories: The manufacture may provide strain relief plates, etc. The suitability of which shall be determined in the end-use equipment.

12. These devices or their single modules may be combined to the strips designated as part number 0733-vvvv followed by optional suffix wwww-xxxx/ yyyy-zzzz where v, w, x, y and z are any customer number or digit (including characters), given for specific end-use purpose.