



Test Report issued under the responsibility of:



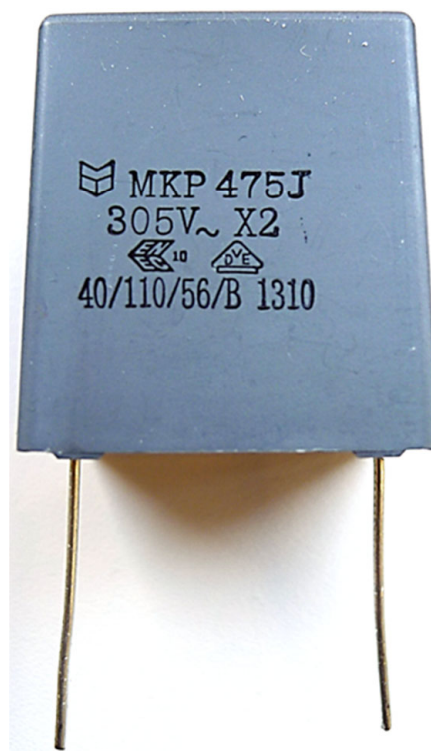
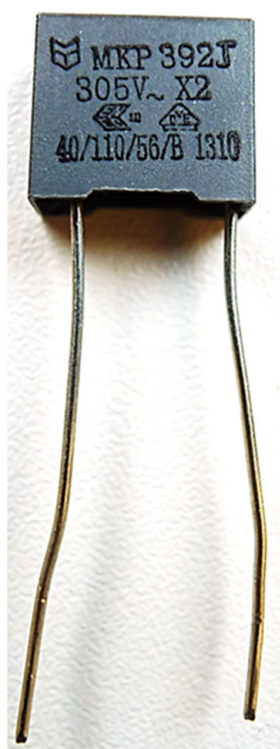
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <b>TEST REPORT</b><br><b>IEC 60384-14</b><br><b>Fixed capacitors for use in electronic equipment -</b><br><b>Part 14: Sectional specification: Fixed capacitors for electromagnetic interference suppression and connection to the supply mains</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                 |
| Report Reference No. ....:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 200474-CC2-1                                                                                    |
| Date of issue .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | 2014-10-15                                                                                      |
| Total number of pages .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 24                                                                                              |
| CB Testing Laboratory.....:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | VDE Prüf- und Zertifizierungsinstitut GmbH<br>VDE Testing and Certification Institute           |
| Address .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Merianstraße 28, 63069 Offenbach, Germany                                                       |
| Applicant's name .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Wuxi Jiyang Electron Co. Ltd.                                                                   |
| Address .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No.5 East Street Yangjian Town; 214107 Xishan, Wuxi City; China                                 |
| Manufacturer's name .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Wuxi Jiyang Electron Co. Ltd.                                                                   |
| Address .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | No.5 East Street Yangjian Town; 214107 Xishan, Wuxi City; China                                 |
| Test specification:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                 |
| Standard .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | IEC 60384-14:2005 (Third Edition)                                                               |
| Test procedure .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | CB Scheme                                                                                       |
| Non-standard test method .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | N/A                                                                                             |
| Test Report Form No. ....:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | IEC60384_14E                                                                                    |
| Test Report Form(s) Originator .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | SGS Fimko Ltd                                                                                   |
| Master TRF.....:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Dated 2011-08                                                                                   |
| <b>Copyright © 2011 Worldwide System for Conformity Testing and Certification of Electrotechnical Equipment and Components (IECEE), Geneva, Switzerland. All rights reserved.</b><br>This publication may be reproduced in whole or in part for non-commercial purposes as long as the IECEE is acknowledged as copyright owner and source of the material. IECEE takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.<br>If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.<br><b>This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.</b> |                                                                                                 |
| Test item description .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Fixed capacitor for electromagnetic interference suppression and connection to the supply mains |
| Trade Mark .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |              |
| Manufacturer.....:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Wuxi Jiyang Electron Co. Ltd.                                                                   |
| Model/Type reference .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | MKP                                                                                             |
| Ratings .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0,0039µF to 4,7µF; X2; AC 275; 300; 305 V; ±5%or ±10%or ±20%; 40/100/56/B or 40/110/56/B        |

|                                                |                                  |                                                                                                     |
|------------------------------------------------|----------------------------------|-----------------------------------------------------------------------------------------------------|
| <b>Testing procedure and testing location:</b> |                                  |                                                                                                     |
| <input checked="" type="checkbox"/>            | <b>CB Testing Laboratory:</b>    | <b>VDE Prüf- und Zertifizierungsinstitut GmbH</b><br><i>VDE Testing and Certification Institute</i> |
| <b>Testing location/ address .....</b>         |                                  | Merianstraße 28, 63069 Offenbach, Germany                                                           |
| <input type="checkbox"/>                       | <b>Associated CB Laboratory:</b> |                                                                                                     |
| <b>Testing location/ address .....</b>         |                                  |                                                                                                     |
| <b>Tested by (name + signature) .....</b>      |                                  | Eberhard Schauer<br>(authorization of test report)                                                  |
| <b>Approved by (name + signature)....</b>      |                                  | Martin Kilian                                                                                       |
| <input type="checkbox"/>                       | <b>Testing procedure: TMP</b>    |                                                                                                     |
| <b>Testing location/ address .....</b>         |                                  |                                                                                                     |
| <b>Tested by (name + signature) .....</b>      |                                  |                                                                                                     |
| <b>Approved by (name + signature)....</b>      |                                  |                                                                                                     |
| <input type="checkbox"/>                       | <b>Testing procedure: WMT</b>    |                                                                                                     |
| <b>Testing location/ address .....</b>         |                                  |                                                                                                     |
| <b>Tested by (name + signature) .....</b>      |                                  |                                                                                                     |
| <b>Witnessed by (name + signature) ..</b>      |                                  |                                                                                                     |
| <b>Approved by (name + signature)....</b>      |                                  |                                                                                                     |
| <input type="checkbox"/>                       | <b>Testing procedure: SMT</b>    |                                                                                                     |
| <b>Testing location/ address .....</b>         |                                  |                                                                                                     |
| <b>Tested by (name + signature) .....</b>      |                                  |                                                                                                     |
| <b>Approved by (name + signature)....</b>      |                                  |                                                                                                     |
| <b>Supervised by (name + signature):</b>       |                                  |                                                                                                     |
| <input type="checkbox"/>                       | <b>Testing procedure: RMT</b>    |                                                                                                     |
| <b>Testing location/ address .....</b>         |                                  |                                                                                                     |
| <b>Tested by (name + signature) .....</b>      |                                  |                                                                                                     |
| <b>Approved by (name + signature)....</b>      |                                  |                                                                                                     |
| <b>Supervised by (name + signature):</b>       |                                  |                                                                                                     |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>List of Attachments (including a total number of pages in each attachment):</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                  |
| <b>Summary of testing:</b><br><br><p>The tests were performed according to complete schedule for safety requirements given in table 3 of IEC 60384-14:2005 (3rd Edition).</p> <p>The damp heat, steady state test in clause 4.12 was performed under the test conditions +40°C, 90 - 95% R.H.</p> <p>The tests were carried out on the capacitor series MKP, class X2 with a rated voltage AC 305 V. Because the tests for the rated voltage AC 305 V are more stringent than those for the lower rated voltage AC 275 V and AC 300 V the certification is also granted with the rated voltage AC 275 V and AC 300 V without additional tests.</p> <p>The tests were performed on a sample mix to cover different materials. Details are stated on page 20.</p> |                                                                                                                                                                  |
| <b>Tests performed (name of test and test clause):</b><br>4.1 Visual examination<br>4.2.1 Voltage proof<br>4.2.2 Capacitance<br>4.2.4 Resistance (if applicable)<br>4.2.5 Insulation resistance<br>4.1.1 Creepage distances and clearances<br>4.3 Robustness of terminations<br>4.4 Resistance of soldering heat<br>4.20 Solvent resistance of the marking<br>4.12 Damp heat, steady state<br>4.13 Impulse voltage<br>4.14 Endurance Class X and Y,<br>RC units, Lead-through (if applicable)<br>4.17 Passive flammability<br>4.18 Active flammability                                                                                                                                                                                                          | <b>Testing location:</b><br>VDE Prüf- und Zertifizierungsinstitut GmbH<br>VDE Testing and Certification Institute<br>Merianstraße 28 · 63069 Offenbach , Germany |
| <b>Summary of compliance with National Differences</b><br><b>List of countries addressed:</b><br><br><br><div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <input checked="" type="checkbox"/> The product fulfils the requirements of IEC 60384-14:2005 (Third Edition) </div>                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                  |

**Copy of marking plate / copy of markings:**

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



|                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Test item particulars .....                                                                                                                                                                                                                                                                                                                             |                                                                                                                                       |
| Classification of installation and use .....                                                                                                                                                                                                                                                                                                            | N/A                                                                                                                                   |
| Supply Connection .....                                                                                                                                                                                                                                                                                                                                 | N/A                                                                                                                                   |
| .....                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                       |
| Possible test case verdicts:                                                                                                                                                                                                                                                                                                                            |                                                                                                                                       |
| - test case does not apply to the test object .....: N/A or N                                                                                                                                                                                                                                                                                           |                                                                                                                                       |
| - test object does meet the requirement.....: P (Pass)                                                                                                                                                                                                                                                                                                  |                                                                                                                                       |
| - test object does not meet the requirement.....: F (Fail)                                                                                                                                                                                                                                                                                              |                                                                                                                                       |
| Testing .....                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                       |
| Date of receipt of test item .....                                                                                                                                                                                                                                                                                                                      | 2013-11-07 and 2014-08-01                                                                                                             |
| Date (s) of performance of tests .....                                                                                                                                                                                                                                                                                                                  | 2014-01-13 to 2014-10-14                                                                                                              |
| General remarks:                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                       |
| The test results presented in this report relate only to the object tested.<br>This report shall not be reproduced, except in full, without the written approval of the Issuing testing laboratory.<br>"(see Enclosure #)" refers to additional information appended to the report.<br>"(see appended table)" refers to a table appended to the report. |                                                                                                                                       |
| Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.                                                                                                                                                                                                                   |                                                                                                                                       |
| The product fulfills the requirements of DIN EN 60384-14 (VDE 0565-1-1):2006-04.                                                                                                                                                                                                                                                                        |                                                                                                                                       |
| Manufacturer's Declaration per sub-clause 6.2.5 of IEC 60384-14:                                                                                                                                                                                                                                                                                        |                                                                                                                                       |
| The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided .....                                                                               | <input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> Not applicable                                                    |
| When differences exist; they shall be identified in the General product information section.                                                                                                                                                                                                                                                            |                                                                                                                                       |
| Name and address of factory (ies) .....                                                                                                                                                                                                                                                                                                                 | Wuxi Jiyang Electron Co. Ltd., No.5 East Street<br>Yangjian Town, 214107 XISHAN, WUXI<br>CITY, Jiangsu, CN China / Reference 30012898 |
| General product information:                                                                                                                                                                                                                                                                                                                            |                                                                                                                                       |
| see page 21-24                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                       |

| IEC 60384-14 |                                                              |                                                                                     |         |
|--------------|--------------------------------------------------------------|-------------------------------------------------------------------------------------|---------|
| Clause       | Requirement + Test                                           | Result - Remark                                                                     | Verdict |
| <b>1.</b>    | <b>GENERAL</b>                                               |                                                                                     |         |
| <b>1.6</b>   | <b>Marking</b>                                               |                                                                                     |         |
|              | a) manufacturer's name or trademark..... :                   |  | P       |
|              | b) type .....                                                | MKP                                                                                 | P       |
|              | c) capacitor class and subclass .....                        | X2                                                                                  | P       |
|              | d) recognized approval mark .....                            | ENEC10 VDE                                                                          | P       |
|              | e) rated capacitance(s) / rated resistance(s) .....          | 475                                                                                 | P       |
|              | f) rated voltage and nature of supply..... :                 | 305V~                                                                               | P       |
|              | g) method of connection .....                                | --                                                                                  | N/A     |
|              | h) rated current .....                                       | --                                                                                  | N/A     |
|              | i) tolerance .....                                           | J (±5%)                                                                             | P       |
|              | j) climatic category and passive flammability category ..... | 40/110/56/B                                                                         | P       |
|              | k) rated temperature .....                                   | --                                                                                  | N/A     |
|              | l) year and month / week of manufacture .....                | 1407                                                                                | P       |
|              | m) reference to detail specification..... :                  | --                                                                                  | N/A     |
| 1.6.1        | Clear identification                                         |                                                                                     | P       |
| 1.6.2        | Package markings                                             |                                                                                     | N/A     |
| 1.6.3        | Additional marking                                           |                                                                                     | N/A     |

|              |                                  |                   |   |
|--------------|----------------------------------|-------------------|---|
| <b>3.4.3</b> | <b>QUALIFICATION APPROVAL</b>    |                   |   |
|              | IEC 60384-14 Table 3 and Table 6 | Safety tests only | P |

|     |                         |                          |     |
|-----|-------------------------|--------------------------|-----|
|     | <b>TEST FOR GROUP 0</b> |                          |     |
| 4.1 | Visual inspection ..... | No visible damage        | P   |
|     | Capacitance             | (See Groups 1A, 2 and 3) | P   |
|     | Resistance              | (See Groups 1A, 2 and 3) | N/A |
|     | Voltage proof           | (See Groups 1A, 2 and 3) | P   |
|     | Insulation resistance   | (See Groups 1A, 2 and 3) | P   |
|     | Dimensions              |                          | P   |

| Rated capacitance (F) | Specified dimensions (mm) | Measured dimensions (mm) | — |
|-----------------------|---------------------------|--------------------------|---|
| 3,9nF                 | 10,5 x 4,0 x 9,0 mm       | 10,5 x 3,9 x 9,0 mm      | — |
| 4,7µF                 | 32 x 22 x 37 mm           | 32,0 x 21,9 x 37,0 mm    | — |

VDE File No 5001252-4670-0001/200474

TRF No. IEC60384\_14E

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|               |                                                               |            |   |
|---------------|---------------------------------------------------------------|------------|---|
|               | <b>TEST FOR GROUP 1A</b>                                      |            |   |
| 4.2.1 + 4.2.5 | Initial measurement: Voltage proof and insulation resistance: |            | P |
|               | - test temperature (°C) .....                                 | 15-35°C    | — |
|               | - insulation resistance test voltage (V) .....                | 100 V d.c. | — |

| No.                       | X-capacitors  |           |               |           | Y-capacitors  |           |               |           |
|---------------------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
|                           | Test A        |           | Test B or C   |           | Test A        |           | Test B or C   |           |
|                           | U<br>(V d.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) |
| 101                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 102                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 103                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 104                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 105                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 106                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| Supplementary information |               |           |               |           |               |           |               |           |

|       |                                                                                                                                                                                                              |                                                  |     |
|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------|-----|
| 4.1.1 | Creepage distances and clearances between:                                                                                                                                                                   |                                                  |     |
|       | - live parts of different polarity (terminal-terminal of X-capacitors); measured minimum distance (mm), requirement (mm) .....                                                                               | requirement: > 4,0mm<br>measured: > 6,0mm / 25mm | P   |
|       | - live parts and other metal parts over basic insulation (terminal-case of X-capacitors, terminal-terminal or terminal-case of Y2-, Y3-, Y4-capacitors); measured minimum distance (mm), requirement (mm) .. |                                                  | N/A |
|       | - live parts and other metal parts over reinforced insulation (terminal-terminal of Y1-capacitors); measured minimum distance (mm), requirement (mm) .....                                                   |                                                  | N/A |
| 4.3   | Robustness of termination:                                                                                                                                                                                   |                                                  |     |
|       | - test Ua1 – tensile, wire terminations: wire diameter (mm); wire cross-sectional area (mm <sup>2</sup> ); force (N) .....                                                                                   | 0,6/1,0mm<br>10/20N                              | P   |
|       | - test Ua1 – tensile, other than wire terminations: force 20 N                                                                                                                                               |                                                  | N/A |
|       | - test Ub – bending (2 x 90° bends), wire diameter (mm); force (N) .....                                                                                                                                     | 0,6/1,0mm<br>5/10N                               | P   |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|      |                                                                   |           |     |
|------|-------------------------------------------------------------------|-----------|-----|
|      | - test Uc – torsion (2 x 180° rotations in opposite direction)    |           | N/A |
|      | - test Ud – torque: screw diameter (mm); torque (Nm) :<br>..... : |           | N/A |
|      | Visual examination                                                |           | P   |
| 4.4  | Resistance to soldering heat:                                     |           | P   |
|      | - method :<br>..... :                                             | 1A        | —   |
|      | - test temperature (°C); immersion time (s) :<br>..... :          | 260°C; 5s | —   |
| 4.20 | Solvent resistance of the marking (method 1)                      |           | P   |

|  |                                                                                       |               |   |
|--|---------------------------------------------------------------------------------------|---------------|---|
|  | Final inspection: visual examination                                                  |               | P |
|  | Initial / final measurements: Capacitance and resistance:                             |               | P |
|  | - rated capacitance X-capacitors:<br>lowest value (F), highest value (F) :<br>..... : | 3,9nF / 4,7µF | — |
|  | - rated capacitance Y-capacitors:<br>lowest value (F), highest value (F) :<br>..... : | --            | — |
|  | - test temperature (°C) :<br>..... :                                                  | 23±2°C        | — |

| No.                       | Capacitance, X-capacitors                                                                                                                                             |           | Capacitance, Y-capacitors |                        | Resistance, RC-units |           |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------|------------------------|----------------------|-----------|
|                           | initial (F)                                                                                                                                                           | final (F) | initial (F)               | final (F)              | initial (Ω)          | final (Ω) |
| 101                       | 3,789 nF                                                                                                                                                              | 3,788 nF  | -                         | -                      | -                    | -         |
| 102                       | 3,781 nF                                                                                                                                                              | 3,780 nF  | -                         | -                      | -                    | -         |
| 103                       | 3,780 nF                                                                                                                                                              | 3,780 nF  | -                         | -                      | -                    | -         |
| 104                       | 4,709 μF                                                                                                                                                              | 4,708 μF  | -                         | -                      | -                    | -         |
| 105                       | 4,679 μF                                                                                                                                                              | 4,679 μF  | -                         | -                      | -                    | -         |
| 106                       | 4,652 μF                                                                                                                                                              | 4,651 μF  | -                         | -                      | -                    | -         |
|                           | - initial capacitance (Group 0) within tolerance given in detail specification or printed on capacitor .. :                                                           |           |                           | Maximum difference: 5% |                      | P         |
|                           | - .. the difference between the capacitance value measured finally and in Group 0 not exceeding 5 %, for ceramic capacitors the difference not exceeding 10 % ..... : |           |                           | Maximum difference: 5% |                      | P         |
|                           | - ... difference of resistance shall not exceed 5 % ..... :                                                                                                           |           |                           | Maximum difference: %  |                      | N/A       |
| Supplementary information |                                                                                                                                                                       |           |                           |                        |                      |           |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|               |                                                               |            |   |
|---------------|---------------------------------------------------------------|------------|---|
|               | <b>TEST FOR GROUP 2</b>                                       |            |   |
| 4.2.1 + 4.2.5 | Initial measurement: Voltage proof and insulation resistance: |            | P |
|               | - test temperature (°C) .....                                 | 15-35°C    | — |
|               | - insulation resistance test voltage (V) .....                | 100 V d.c. | — |

| No.                       | X-capacitors  |           |               |           | Y-capacitors  |           |               |           |
|---------------------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
|                           | Test A        |           | Test B or C   |           | Test A        |           | Test B or C   |           |
|                           | U<br>(V d.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) |
| 201                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 202                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 203                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 204                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 205                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 206                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 207                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 208                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 209                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 210                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 211                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 212                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| Supplementary information |               |           |               |           |               |           |               |           |

|     |                                                                  |  |     |
|-----|------------------------------------------------------------------|--|-----|
| 4.3 | Robustness of terminations (SMD):                                |  | N/A |
|     | - Shear (adhesion) test: force (N), time (s) .....               |  | N/A |
|     | - Substrate bending test: deflection (mm), number of bends ..... |  | N/A |
|     | - visual inspection                                              |  | N/A |

|      |                                                                 |                                  |   |
|------|-----------------------------------------------------------------|----------------------------------|---|
| 4.12 | Damp heat, steady state:                                        |                                  | P |
|      | - Test Ca: duration (days); beginning; end .....                | 56d;<br>2014-01-20 to 2014-03-17 | — |
|      | - Endurance test for ceramic capacitors: test voltage (V) ..... | --                               | — |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|                           |                           |                                                                                                                                                                          |                           |           |                        |           |     |
|---------------------------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-----------|------------------------|-----------|-----|
|                           |                           | Final inspection: visual examination                                                                                                                                     |                           |           |                        |           | P   |
|                           |                           | Initial / final measurements: capacitance and resistance:                                                                                                                |                           |           |                        |           | P   |
|                           |                           | - rated capacitance X-capacitors:<br>lowest value (F), highest value (F) ..... :                                                                                         |                           |           | 3,9nF / 4,7µF          |           | —   |
|                           |                           | - rated capacitance Y-capacitors:<br>lowest value (F), highest value (F) ..... :                                                                                         |                           |           | --                     |           | —   |
|                           |                           | - Test temperature (°C) ..... :                                                                                                                                          |                           |           | 23±2°C                 |           | —   |
| No.                       | Capacitance, X-capacitors |                                                                                                                                                                          | Capacitance, Y-capacitors |           | Resistance, RC-units   |           |     |
|                           | initial (F)               | final (F)                                                                                                                                                                | initial (F)               | final (F) | initial (Ω)            | final (Ω) |     |
| 201                       | 3,810 nF                  | 3,816 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 202                       | 3,886 nF                  | 3,889 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 203                       | 3,758 nF                  | 3,759 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 204                       | 3,769 nF                  | 3,768 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 205                       | 3,752 nF                  | 3,761 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 206                       | 3,819 nF                  | 3,818 nF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 207                       | 4,680 µF                  | 4,680 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 208                       | 4,647 µF                  | 4,647 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 209                       | 4,714 µF                  | 4,714 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 210                       | 4,696 µF                  | 4,697 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 211                       | 4,676 µF                  | 4,676 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
| 212                       | 4,648 µF                  | 4,648 µF                                                                                                                                                                 | -                         | -         | -                      | -         |     |
|                           |                           | - Initial capacitance (Group 0) within tolerance given in detail specification or printed on capacitor :                                                                 |                           |           | Maximum difference: 5% |           | P   |
|                           |                           | - The difference between the capacitance value measured finally and in Group 0 shall not exceed 5 %, for ceramic capacitors the difference shall not exceed 15 % ..... : |                           |           | Maximum difference: 5% |           | P   |
|                           |                           | - Difference of resistance shall not exceed 5 % . :                                                                                                                      |                           |           | Maximum difference: %  |           | N/A |
| Supplementary information |                           |                                                                                                                                                                          |                           |           |                        |           |     |

|  |                                                              |            |   |
|--|--------------------------------------------------------------|------------|---|
|  | Final measurements: Voltage proof and insulation resistance: |            |   |
|  | - test temperature (°C) .....                                | 15-35°C    | — |
|  | - insulation resistance test voltage (V) .....               | 100 V d.c. | — |

| IEC 60384-14              |                    |           |               |           |                 |           |               |           |
|---------------------------|--------------------|-----------|---------------|-----------|-----------------|-----------|---------------|-----------|
| Clause                    | Requirement + Test |           |               |           | Result - Remark |           |               | Verdict   |
| No.                       | X-capacitors       |           |               |           | Y-capacitors    |           |               |           |
|                           | Test A             |           | Test B or C   |           | Test A          |           | Test B or C   |           |
|                           | U<br>(V d.c.)      | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.)   | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) |
| 201                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 202                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 203                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 204                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 205                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 206                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 207                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 208                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 209                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 210                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 211                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 212                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| Supplementary information |                    |           |               |           |                 |           |               |           |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|               |                                                               |            |   |
|---------------|---------------------------------------------------------------|------------|---|
|               | <b>TEST FOR GROUP 3</b>                                       |            |   |
| 4.2.1 + 4.2.5 | Initial measurement: Voltage proof and insulation resistance: |            | P |
|               | - test temperature (°C) .....                                 | 15-35°C    | — |
|               | - insulation resistance test voltage (V) .....                | 100 V d.c. | — |

| No.                       | X-capacitors  |           |               |           | Y-capacitors  |           |               |           |
|---------------------------|---------------|-----------|---------------|-----------|---------------|-----------|---------------|-----------|
|                           | Test A        |           | Test B or C   |           | Test A        |           | Test B or C   |           |
|                           | U<br>(V d.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) |
| 301                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 302                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 303                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 304                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 305                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 306                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 307                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 308                       | 1311          | > 6000    | 2110          | > 6000    | -             | -         | -             | -         |
| 309                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 310                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 311                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 312                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 313                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 314                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 315                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| 316                       | 1311          | > 425     | 2110          | > 6000    | -             | -         | -             | -         |
| Supplementary information |               |           |               |           |               |           |               |           |

|     |                                                                  |  |     |
|-----|------------------------------------------------------------------|--|-----|
| 4.3 | Robustness of terminations (SMD):                                |  | N/A |
|     | - Shear (adhesion) test: force (N), time (s) .....               |  | N/A |
|     | - Substrate bending test: deflection (mm), number of bends ..... |  | N/A |
|     | - visual inspection                                              |  | N/A |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

|        |                                                                                |               |   |
|--------|--------------------------------------------------------------------------------|---------------|---|
| 4.13.2 | Pulse test for Class X-capacitors:                                             |               | P |
|        | - rated capacitance X-capacitors:<br>lowest value (F), highest value (F) ..... | 3,9nF / 4,7μF | — |
|        | - Test temperature (°C) .....                                                  | 23±2°C        | — |

| No.                       | Capacitance | Pulse voltage (kV) | Applied pulses | Result |
|---------------------------|-------------|--------------------|----------------|--------|
| 301                       | Lowest      | 2,5                | 3              | P      |
| 302                       | Lowest      | 2,5                | 3              | P      |
| 303                       | Lowest      | 2,5                | 3              | P      |
| 304                       | Lowest      | 2,5                | 3              | P      |
| 305                       | Lowest      | 2,5                | 3              | P      |
| 306                       | Lowest      | 2,5                | 3              | P      |
| 307                       | Lowest      | 2,5                | 3              | P      |
| 308                       | Lowest      | 2,5                | 3              | P      |
| 309                       | Highest     | 1,153              | 3              | P      |
| 310                       | Highest     | 1,153              | 3              | P      |
| 311                       | Highest     | 1,153              | 3              | P      |
| 312                       | Highest     | 1,153              | 3              | P      |
| 313                       | Highest     | 1,153              | 3              | P      |
| 314                       | Highest     | 1,153              | 3              | P      |
| 315                       | Highest     | 1,153              | 3              | P      |
| 316                       | Highest     | 1,153              | 3              | P      |
| Supplementary information |             |                    |                |        |

|        |                                                                   |                                    |   |
|--------|-------------------------------------------------------------------|------------------------------------|---|
| 4.14.3 | Endurance test for Class X-capacitors:                            |                                    | P |
|        | - Test for 1000 h; test temperature (°C); beginning;<br>end ..... | 110°C;<br>2014-09-02 to 2014-10-14 |   |
|        | - Test voltage (V); 1,25 x rated voltage .....                    | AC 381V                            | — |

|        |                                                                                |        |     |
|--------|--------------------------------------------------------------------------------|--------|-----|
| 4.13.2 | Pulse test for Class Y-capacitors:                                             |        | N/A |
|        | - rated capacitance Y-capacitors:<br>lowest value (F), highest value (F) ..... | --     | —   |
|        | - Test temperature (°C) .....                                                  | 23±2°C | —   |

| IEC 60384-14              |                    |                    |                 |         |
|---------------------------|--------------------|--------------------|-----------------|---------|
| Clause                    | Requirement + Test |                    | Result - Remark | Verdict |
| No.                       | Capacitance        | Pulse voltage (kV) | Applied pulses  | Result  |
| 301                       | Lowest             | -                  | -               | N/A     |
| 302                       | Lowest             | -                  | -               | N/A     |
| 303                       | Lowest             | -                  | -               | N/A     |
| 304                       | Lowest             | -                  | -               | N/A     |
| 305                       | Lowest             | -                  | -               | N/A     |
| 306                       | Lowest             | -                  | -               | N/A     |
| 307                       | Highest            | -                  | -               | N/A     |
| 308                       | Highest            | -                  | -               | N/A     |
| 309                       | Highest            | -                  | -               | N/A     |
| 310                       | Highest            | -                  | -               | N/A     |
| 311                       | Highest            | -                  | -               | N/A     |
| 312                       | Highest            | -                  | -               | N/A     |
| Supplementary information |                    |                    |                 |         |

|        |                                                                |  |     |
|--------|----------------------------------------------------------------|--|-----|
| 4.14.4 | Endurance test for Class Y-capacitors:                         |  | N/A |
|        | - Test for 1000 h; test temperature (°C); beginning; end ..... |  | N/A |
|        | - Test voltage (V); 1,7 x rated voltage .....                  |  | —   |

|        |                                                                |  |     |
|--------|----------------------------------------------------------------|--|-----|
| 4.14.5 | Endurance test for lead-through arrangements:                  |  | N/A |
|        | - Test for 1000 h; test temperature (°C); beginning; end ..... |  | —   |
|        | - Test current (A): 1,1 x rated current .....                  |  | —   |
|        | - Maximum temperature of case (°C) .....                       |  | N/A |

|        |                                                                             |               |   |
|--------|-----------------------------------------------------------------------------|---------------|---|
| 4.14.7 | Final inspection: visual examination                                        |               | P |
|        | Initial / final measurements: capacitance and resistance:                   |               | P |
|        | - rated capacitance X-capacitors: lowest value (F), highest value (F) ..... | 3,9nF / 4,7µF | — |
|        | - rated capacitance Y-capacitors: lowest value (F), highest value (F) ..... | --            | — |
|        | - Test temperature (°C) .....                                               | 23±2°C        | — |

| IEC 60384-14              |                                                                                                                                                                           |           |                           |                         |             |           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------------------------|-------------------------|-------------|-----------|
| Clause                    | Requirement + Test                                                                                                                                                        |           |                           | Result - Remark         |             | Verdict   |
|                           |                                                                                                                                                                           |           |                           |                         |             |           |
| No.                       | Capacitance, X-capacitors                                                                                                                                                 |           | Capacitance, Y-capacitors |                         | Resistance  |           |
|                           | initial (F)                                                                                                                                                               | final (F) | initial (F)               | final (F)               | initial (Ω) | final (Ω) |
| 301                       | 3,790 nF                                                                                                                                                                  | 3,754 nF  | -                         | -                       | -           | -         |
| 302                       | 4,004 nF                                                                                                                                                                  | 3,971 nF  | -                         | -                       | -           | -         |
| 303                       | 3,931 nF                                                                                                                                                                  | 3,789 nF  | -                         | -                       | -           | -         |
| 304                       | 3,974 nF                                                                                                                                                                  | 3,939 nF  | -                         | -                       | -           | -         |
| 305                       | 3,891 nF                                                                                                                                                                  | 3,862 nF  | -                         | -                       | -           | -         |
| 306                       | 3,895 nF                                                                                                                                                                  | 3,862 nF  | -                         | -                       | -           | -         |
| 307                       | 3,808 nF                                                                                                                                                                  | 3,684 nF  | -                         | -                       | -           | -         |
| 308                       | 3,950 nF                                                                                                                                                                  | 3,822 nF  | -                         | -                       | -           | -         |
| 309                       | 4,643 μF                                                                                                                                                                  | 4,650 μF  | -                         | -                       | -           | -         |
| 310                       | 4,678 μF                                                                                                                                                                  | 4,683 μF  | -                         | -                       | -           | -         |
| 311                       | 4,666 μF                                                                                                                                                                  | 4,667 μF  | -                         | -                       | -           | -         |
| 312                       | 4,653 μF                                                                                                                                                                  | 4,668 μF  | -                         | -                       | -           | -         |
| 313                       | 4,643 μF                                                                                                                                                                  | 4,645 μF  | -                         | -                       | -           | -         |
| 314                       | 4,667 μF                                                                                                                                                                  | 4,670 μF  | -                         | -                       | -           | -         |
| 315                       | 4,653 μF                                                                                                                                                                  | 4,653 μF  | -                         | -                       | -           | -         |
| 316                       | 4,643 μF                                                                                                                                                                  | 4,648 μF  | -                         | -                       | -           | -         |
|                           | - Initial capacitance (Group 0) within tolerance given in detail specification or printed on capacitor :                                                                  |           |                           | Maximum difference: 5%  |             | P         |
|                           | - The difference between the capacitance value measured finally and in Group 0 shall not exceed 10 %, for ceramic capacitors the difference shall not exceed 20 % ..... : |           |                           | Maximum difference: 10% |             | P         |
|                           | - Difference of resistance shall not exceed 10 % :                                                                                                                        |           |                           | Maximum difference: %   |             | N/A       |
| Supplementary information |                                                                                                                                                                           |           |                           |                         |             |           |

|  |                                                              |                    |   |
|--|--------------------------------------------------------------|--------------------|---|
|  | Final measurements: voltage proof and insulation resistance: |                    | P |
|  | - Test temperature ( $^{\circ}$ C) .....                     | 15-35 $^{\circ}$ C | — |
|  | - Insulation resistance test voltage (V) .....               | 100 V d.c.         | — |

| IEC 60384-14              |                    |           |               |           |                 |           |               |           |
|---------------------------|--------------------|-----------|---------------|-----------|-----------------|-----------|---------------|-----------|
| Clause                    | Requirement + Test |           |               |           | Result - Remark |           | Verdict       |           |
|                           |                    |           |               |           |                 |           |               |           |
| No.                       | X-capacitors       |           |               |           | Y-capacitors    |           |               |           |
|                           | Test A             |           | Test B or C   |           | Test A          |           | Test B or C   |           |
|                           | U<br>(V d.c.)      | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) | U<br>(V a.c.)   | R<br>(MΩ) | U<br>(V a.c.) | R<br>(MΩ) |
| 301                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 302                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 303                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 304                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 305                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 306                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 307                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 308                       | 1311               | > 3000    | 2110          | > 3000    | -               | -         | -             | -         |
| 309                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 310                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 311                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 312                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 313                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 314                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 315                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| 316                       | 1311               | > 212     | 2110          | > 3000    | -               | -         | -             | -         |
| Supplementary information |                    |           |               |           |                 |           |               |           |

| IEC 60384-14 |                                                                                                   |                                                                                                   |         |
|--------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|---------|
| Clause       | Requirement + Test                                                                                | Result - Remark                                                                                   | Verdict |
|              | <b>TEST FOR GROUP 6</b>                                                                           |                                                                                                   |         |
| 4.17         | Passive flammability test :                                                                       |                                                                                                   | P       |
|              | Category of flammability, maximum permitted burning time ..... :<br>Ref: IEC 60384-1:2008 Table 7 | <input type="checkbox"/> A<br><input checked="" type="checkbox"/> B<br><input type="checkbox"/> C | —       |

IEC 60384-1:2008 Table 7

| Category of flammability | Severities<br>Flame exposure time, in seconds, for capacitor volume ranges |                                                          |                                                             |                                | Maximum burning time<br>s |
|--------------------------|----------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------------|--------------------------------|---------------------------|
|                          | Volume $\leq 250 \text{ mm}^3$                                             | $250 \text{ mm}^3 < \text{volume} \leq 500 \text{ mm}^3$ | $500 \text{ mm}^3 < \text{volume} \leq 1\,750 \text{ mm}^3$ | Volume $> 1\,750 \text{ mm}^3$ |                           |
| A                        | 15                                                                         | 30                                                       | 60                                                          | 120                            | 3                         |
| B                        | 10                                                                         | 20                                                       | 30                                                          | 60                             | 10                        |
| C                        | 5                                                                          | 10                                                       | 20                                                          | 30                             | 30                        |

|                                               |                         |                                     |                                     |                             |                             |                             |
|-----------------------------------------------|-------------------------|-------------------------------------|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|
| Volume of samples $\text{mm}^3$ / capacitance | --                      | 378<br>3,9nF                        | 378<br>22nF                         | 15232<br>3,3 $\mu$ F        | 26048<br>4,7 $\mu$ F        | --                          |
| Flame exposure time (s)                       | $\leq 250 \text{ mm}^3$ | $251\text{-}500 \text{ mm}^3$<br>20 | $251\text{-}500 \text{ mm}^3$<br>20 | $> 1750 \text{ mm}^3$<br>60 | $> 1750 \text{ mm}^3$<br>60 | $> 1750 \text{ mm}^3$<br>60 |
| No.                                           | Burning time (s)        |                                     |                                     |                             |                             |                             |
| 601                                           | -                       | 0                                   | -                                   | 3                           | 7                           | -                           |
| 602                                           | -                       | 0                                   | -                                   | 3                           | 3                           | -                           |
| 603                                           | -                       | 0                                   | -                                   | 4                           | 10                          | -                           |
| 604                                           | -                       | 0                                   | -                                   | 5                           | 0                           | -                           |
| 605                                           | -                       | -                                   | 0                                   | 3                           | 6                           | -                           |
| 606                                           | -                       | -                                   | 1                                   | 4                           | 6                           | -                           |
| 607                                           | -                       | -                                   | 0                                   | 4                           | 6                           | -                           |
| 608                                           | -                       | -                                   | 0                                   | 2                           | 5                           | -                           |
| Supplementary information                     |                         |                                     |                                     |                             |                             |                             |

| IEC 60384-14 |                                                                                                           |                       |         |
|--------------|-----------------------------------------------------------------------------------------------------------|-----------------------|---------|
| Clause       | Requirement + Test                                                                                        | Result - Remark       | Verdict |
|              | <b>TEST FOR GROUP 7</b>                                                                                   |                       |         |
| 4.18         | Active flammability test:                                                                                 |                       | P       |
|              | - rated capacitance X-capacitors:<br>lowest value (F), intermediate value (F); highest<br>value (F) ..... | 3,9nF / 2,2μF / 4,7μF | —       |
|              | - rated capacitance Y-capacitors:<br>lowest value (F), intermediate value (F); highest<br>value (F) ..... | --                    | —       |
|              | Requirement: Cheesecloth around capacitors does<br>not burn with a flame                                  |                       | P       |

| No.                       | Capacitance  | Ur (V) | Ui (kV) | Applied pulses | Observation |
|---------------------------|--------------|--------|---------|----------------|-------------|
| <b>Class X-capacitors</b> |              |        |         |                |             |
| 701                       | Lowest       | 305    | 2,5     | 20             | P           |
| 702                       | Lowest       | 305    | 2,5     | 20             | P           |
| 703                       | Lowest       | 305    | 2,5     | 20             | P           |
| 704                       | Lowest       | 305    | 2,5     | 20             | P           |
| 705                       | Lowest       | 305    | 2,5     | 20             | P           |
| 706                       | Lowest       | 305    | 2,5     | 20             | P           |
| 707                       | Lowest       | 305    | 2,5     | 20             | P           |
| 708                       | Lowest       | 305    | 2,5     | 20             | P           |
| 709                       | Intermediate | 305    | 2,5     | 20             | P           |
| 710                       | Intermediate | 305    | 2,5     | 20             | P           |
| 711                       | Intermediate | 305    | 2,5     | 20             | P           |
| 712                       | Intermediate | 305    | 2,5     | 20             | P           |
| 713                       | Intermediate | 305    | 2,5     | 20             | P           |
| 714                       | Intermediate | 305    | 2,5     | 20             | P           |
| 715                       | Intermediate | 305    | 2,5     | 20             | P           |
| 716                       | Intermediate | 305    | 2,5     | 20             | P           |
| 717                       | Highest      | 305    | 2,5     | 20             | P           |
| 718                       | Highest      | 305    | 2,5     | 20             | P           |
| 719                       | Highest      | 305    | 2,5     | 20             | P           |
| 720                       | Highest      | 305    | 2,5     | 20             | P           |
| 721                       | Highest      | 305    | 2,5     | 20             | P           |
| 722                       | Highest      | 305    | 2,5     | 20             | P           |
| 723                       | Highest      | 305    | 2,5     | 20             | P           |
| 724                       | Highest      | 305    | 2,5     | 20             | P           |
| Supplementary information |              |        |         |                |             |

| IEC 60384-14              |                    |        |         |                 |             |
|---------------------------|--------------------|--------|---------|-----------------|-------------|
| Clause                    | Requirement + Test |        |         | Result - Remark | Verdict     |
| No.                       | Capacitance        | Ur (V) | Ui (kV) | Applied pulses  | Observation |
| <b>Class Y-capacitors</b> |                    |        |         |                 |             |
| 701                       | Lowest             | -      | -       | -               | N/A         |
| 702                       | Lowest             | -      | -       | -               | N/A         |
| 703                       | Lowest             | -      | -       | -               | N/A         |
| 704                       | Lowest             | -      | -       | -               | N/A         |
| 705                       | Lowest             | -      | -       | -               | N/A         |
| 706                       | Lowest             | -      | -       | -               | N/A         |
| 707                       | Lowest             | -      | -       | -               | N/A         |
| 708                       | Lowest             | -      | -       | -               | N/A         |
| 709                       | Intermediate       | -      | -       | -               | N/A         |
| 710                       | Intermediate       | -      | -       | -               | N/A         |
| 711                       | Intermediate       | -      | -       | -               | N/A         |
| 712                       | Intermediate       | -      | -       | -               | N/A         |
| 713                       | Intermediate       | -      | -       | -               | N/A         |
| 714                       | Intermediate       | -      | -       | -               | N/A         |
| 715                       | Intermediate       | -      | -       | -               | N/A         |
| 716                       | Intermediate       | -      | -       | -               | N/A         |
| 717                       | Highest            | -      | -       | -               | N/A         |
| 718                       | Highest            | -      | -       | -               | N/A         |
| 719                       | Highest            | -      | -       | -               | N/A         |
| 720                       | Highest            | -      | -       | -               | N/A         |
| 721                       | Highest            | -      | -       | -               | N/A         |
| 722                       | Highest            | -      | -       | -               | N/A         |
| 723                       | Highest            | -      | -       | -               | N/A         |
| 724                       | Highest            | -      | -       | -               | N/A         |
| Supplementary information |                    |        |         |                 |             |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

**Sample list:**

| Code no.: | Manufacturer of Film<br>Type designation                           | Manufacturer of Epoxy<br>Type designation             | Enclosure<br>Type designation        |
|-----------|--------------------------------------------------------------------|-------------------------------------------------------|--------------------------------------|
| 1         | Jiangmen Enrichment Industrial Limited.PP metallized polypropylene | Shanghai Runlong Electronic Materials RL-300A/RL-300B | Kingfa Sci & Tech Co., Ltd.PBT-RG151 |
| 2         | Qingdao SungMoon Electronics Co. PP metallized polypropylene       | Suzhou Pochely Electronic Material HB-5225A/B         | Kingfa Sci & Tech Co., Ltd.PBT-RG151 |
| 3         | Jiangmen Enrichment Industrial Limited.PP metallized polypropylene | Suzhou Pochely Electronic Material HB-5225A/B         | Kingfa Sci & Tech Co., Ltd.PBT-RG151 |
| 4         | Qingdao SungMoon Electronics Co. PP metallized polypropylene       | Shanghai Runlong Electronic Materials RL-300A/RL-300B | Kingfa Sci & Tech Co., Ltd.PBT-RG151 |

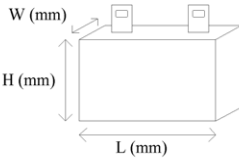
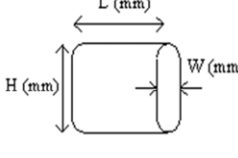
The samples were divided into the test groups 1; 2; 3; 6; 7 as follows:

| Code no.: | Sample no.:                                                                             |
|-----------|-----------------------------------------------------------------------------------------|
| 1         | 101,201,202,203,301,302,309,310,601-602,605-606(small),701,702,709,710,717,718          |
| 2         | 102,103,204,205,206,303,304,311,312,603-604,607-608(small),703,704,711,712,719,720      |
| 3         | 104,105,207,208,209,305,306,313,314,601-604(med.),601-604(high),705,706,713,714,721,722 |
| 4         | 106,210,211,212,307,308,315,316,605-608(med.),605-608(high),707,708,715,716,723,724     |

| IEC 60384-14 |                    |                 |         |
|--------------|--------------------|-----------------|---------|
| Clause       | Requirement + Test | Result - Remark | Verdict |

## General product information:

| Typ(en)<br>Type(s) | Benennungskapazität<br>Rated capacitance | Abmessungen der Kondensatoren<br>(mm)<br>Dimensions of capacitors (mm) |          |          | Abmessungen der<br>Kondensatorelemente (mm)<br>Dimensions of capacitor<br>elements (mm) |            |            | Volumen (mm <sup>3</sup> )<br>Volume (mm <sup>3</sup> ) | Metallisierte Polypropylen-Folie<br>Metallized Polypropylene Film |
|--------------------|------------------------------------------|------------------------------------------------------------------------|----------|----------|-----------------------------------------------------------------------------------------|------------|------------|---------------------------------------------------------|-------------------------------------------------------------------|
|                    |                                          | L (mm)±1                                                               | H (mm)±1 | W (mm)±1 | L (mm)±0.5                                                                              | H (mm)±0.5 | W (mm)±0.5 |                                                         |                                                                   |
|                    | (µF)                                     |                                                                        |          |          |                                                                                         |            |            |                                                         | µm (±0,5) *<br>mm (±0,5)                                          |
| MKP                | 0,0039                                   | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5          | 2,7        | 378,0                                                   | 10*7                                                              |
| MKP                | 0,0047                                   | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 10*7                                                              |
| MKP                | 0,0056                                   | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 10*7                                                              |
| MKP                | 0,0068                                   | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 10*7                                                              |
| MKP                | 0,0068                                   | 13                                                                     | 9        | 4        | 9,8                                                                                     | 5,6        | 2,5        | 468,0                                                   | 10*9                                                              |
| MKP                | 0,0082                                   | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5          | 2,7        | 378,0                                                   | 8*7                                                               |
| MKP                | 0,0082                                   | 13                                                                     | 9        | 4        | 9,8                                                                                     | 5,6        | 2,5        | 468,0                                                   | 10*9                                                              |
| MKP                | 0,01                                     | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 8*7                                                               |
| MKP                | 0,01                                     | 13                                                                     | 9        | 4        | 9,8                                                                                     | 6          | 2,8        | 468,0                                                   | 10*9                                                              |
| MKP                | 0,012                                    | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 8*7                                                               |
| MKP                | 0,012                                    | 13                                                                     | 9        | 4        | 9,8                                                                                     | 5,6        | 2,5        | 468,0                                                   | 8*9                                                               |
| MKP                | 0,015                                    | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 7          | 3          | 378,0                                                   | 8*7                                                               |
| MKP                | 0,015                                    | 13                                                                     | 9        | 4        | 9,8                                                                                     | 5,6        | 2,5        | 468,0                                                   | 8*9                                                               |
| MKP                | 0,018                                    | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 5,8        | 2,8        | 378,0                                                   | 7*7                                                               |
| MKP                | 0,018                                    | 13                                                                     | 9        | 4        | 9,8                                                                                     | 5,8        | 2,6        | 468,0                                                   | 8*9                                                               |
| MKP                | 0,022                                    | 10,5                                                                   | 9        | 4        | 7,8                                                                                     | 6,8        | 2,8        | 378,0                                                   | 7*7                                                               |
| MKP                | 0,022                                    | 13                                                                     | 9        | 4        | 9,8                                                                                     | 6,1        | 2,9        | 468,0                                                   | 8*9                                                               |
| MKP                | 0,022                                    | 17,5                                                                   | 9,5      | 5        | 14,8                                                                                    | 6,3        | 3,2        | 831,3                                                   | 10*14                                                             |

| IEC 60384-14       |                                          |                                                                                                                                                          |          |          |                                                                                                                                                                             |            |                 |                                                         |                                                                  |
|--------------------|------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|-----------------|---------------------------------------------------------|------------------------------------------------------------------|
| Clause             | Requirement + Test                       |                                                                                                                                                          |          |          |                                                                                                                                                                             |            | Result - Remark |                                                         | Verdict                                                          |
| Typ(en)<br>Type(s) | Bemessungskapazität<br>Rated capacitance | Abmessungen der Kondensatoren<br>(mm)<br>Dimensions of capacitors (mm)  |          |          | Abmessungen der<br>Kondensatorelemente (mm)<br>Dimensions of capacitor<br>elements (mm)  |            |                 | Volumen (mm <sup>3</sup> )<br>Volume (mm <sup>3</sup> ) | Metallisierte Polypropylen-Folie<br>Metalized Polypropylene Film |
|                    | (μF)                                     | L (mm)±1                                                                                                                                                 | H (mm)±1 | W (mm)±1 | L (mm)±0.5                                                                                                                                                                  | H (mm)±0.5 | W (mm)±0.5      |                                                         | μm (±0,5) *<br>mm (±0,5)                                         |
| MKP                | 0,027                                    | 10,5                                                                                                                                                     | 11       | 5        | 7,8                                                                                                                                                                         | 6,8        | 3,7             | 577,5                                                   | 7*7                                                              |
| MKP                | 0,027                                    | 13                                                                                                                                                       | 9        | 4        | 9,8                                                                                                                                                                         | 5,6        | 2,5             | 468,0                                                   | 6*9                                                              |
| MKP                | 0,027                                    | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,5        | 3,4             | 831,3                                                   | 10*14                                                            |
| MKP                | 0,033                                    | 10,5                                                                                                                                                     | 11       | 5        | 7,8                                                                                                                                                                         | 7,8        | 3,8             | 577,5                                                   | 7*7                                                              |
| MKP                | 0,033                                    | 13                                                                                                                                                       | 9        | 4        | 9,8                                                                                                                                                                         | 5,9        | 2,7             | 468,0                                                   | 6*9                                                              |
| MKP                | 0,036                                    | 10,5                                                                                                                                                     | 12       | 6        | 7,8                                                                                                                                                                         | 7,6        | 4,4             | 756,0                                                   | 7*7                                                              |
| MKP                | 0,036                                    | 13                                                                                                                                                       | 9        | 4        | 9,8                                                                                                                                                                         | 6          | 2,8             | 468,0                                                   | 6*9                                                              |
| MKP                | 0,039                                    | 10,5                                                                                                                                                     | 12       | 6        | 7,8                                                                                                                                                                         | 7,9        | 4,8             | 756,0                                                   | 7*7                                                              |
| MKP                | 0,039                                    | 13                                                                                                                                                       | 9        | 4        | 9,8                                                                                                                                                                         | 6          | 2,8             | 468,0                                                   | 6*9                                                              |
| MKP                | 0,047                                    | 10,5                                                                                                                                                     | 12       | 6        | 7,8                                                                                                                                                                         | 8,5        | 4,7             | 756,0                                                   | 7*7                                                              |
| MKP                | 0,047                                    | 13                                                                                                                                                       | 11       | 5        | 9,8                                                                                                                                                                         | 6,4        | 3,3             | 715,0                                                   | 6*9                                                              |
| MKP                | 0,047                                    | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,5        | 3,4             | 831,3                                                   | 8*14                                                             |
| MKP                | 0,056                                    | 13                                                                                                                                                       | 11       | 5        | 9,8                                                                                                                                                                         | 6,9        | 3,7             | 715,0                                                   | 6*9                                                              |
| MKP                | 0,056                                    | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,3        | 3,2             | 831,3                                                   | 7*14                                                             |
| MKP                | 0,068                                    | 13                                                                                                                                                       | 11       | 5        | 9,8                                                                                                                                                                         | 7,9        | 3,9             | 715,0                                                   | 6*9                                                              |
| MKP                | 0,068                                    | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,7        | 3,5             | 831,3                                                   | 7*14                                                             |
| MKP                | 0,082                                    | 13                                                                                                                                                       | 12       | 6        | 9,8                                                                                                                                                                         | 8,4        | 4,4             | 936,0                                                   | 6*9                                                              |
| MKP                | 0,082                                    | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,3        | 3,2             | 831,3                                                   | 6*14                                                             |
| MKP                | 0,1                                      | 13                                                                                                                                                       | 12       | 6        | 9,8                                                                                                                                                                         | 8,8        | 4,8             | 936,0                                                   | 6*9                                                              |
| MKP                | 0,1(M)                                   | 17,5                                                                                                                                                     | 9,5      | 5        | 14,8                                                                                                                                                                        | 6,6        | 3,4             | 831,3                                                   | 6*14                                                             |
| MKP                | 0,1                                      | 17,5                                                                                                                                                     | 11       | 5        | 14,8                                                                                                                                                                        | 7,4        | 3,4             | 962,5                                                   | 6*14                                                             |
| MKP                | 0,1                                      | 18                                                                                                                                                       | 12       | 6        | 14,8                                                                                                                                                                        | 8          | 4               | 1296,0                                                  | 7*14                                                             |
| MKP                | 0,12                                     | 13                                                                                                                                                       | 13       | 7        | 9,8                                                                                                                                                                         | 9,5        | 5,6             | 1183,0                                                  | 6*9                                                              |
| MKP                | 0,12                                     | 17,5                                                                                                                                                     | 11       | 5        | 14,8                                                                                                                                                                        | 8,1        | 3,4             | 962,5                                                   | 6*14                                                             |
| MKP                | 0,15                                     | 13                                                                                                                                                       | 14       | 8        | 9,8                                                                                                                                                                         | 10,7       | 6               | 1456,0                                                  | 6*9                                                              |
| MKP                | 0,15 (M)                                 | 17,5                                                                                                                                                     | 11       | 5        | 14,8                                                                                                                                                                        | 8,3        | 3,6             | 962,5                                                   | 6*14                                                             |

| IEC 60384-14       |                                          |                                                                        |          |          |                                                                                   |            |                 |                                                         |                                                                   |
|--------------------|------------------------------------------|------------------------------------------------------------------------|----------|----------|-----------------------------------------------------------------------------------|------------|-----------------|---------------------------------------------------------|-------------------------------------------------------------------|
| Clause             | Requirement + Test                       |                                                                        |          |          |                                                                                   |            | Result - Remark |                                                         | Verdict                                                           |
| Typ(en)<br>Type(s) | Bemessungskapazität<br>Rated capacitance | Abmessungen der Kondensatoren<br>(mm)<br>Dimensions of capacitors (mm) |          |          | Abmessungen der Kondensatorelemente (mm)<br>Dimensions of capacitor elements (mm) |            |                 | Volumen (mm <sup>3</sup> )<br>Volume (mm <sup>3</sup> ) | Metallisierte Polypropylen-Folie<br>Metallized Polypropylene Film |
|                    |                                          | L (mm)±1                                                               | H (mm)±1 | W (mm)±1 | L (mm)±0.5                                                                        | H (mm)±0.5 | W (mm)±0.5      |                                                         |                                                                   |
|                    | (µF)                                     |                                                                        |          |          |                                                                                   |            |                 |                                                         | µm (±0,5) *<br>mm (±0,5)                                          |
| MKP                | 0,15                                     | 18                                                                     | 12       | 6        | 14,8                                                                              | 8,3        | 4,3             | 1296,0                                                  | 6*14                                                              |
| MKP                | 0,15                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 8,3        | 3,6             | 2385,0                                                  | 7*21                                                              |
| MKP                | 0,18                                     | 13                                                                     | 14       | 8        | 9,8                                                                               | 11,3       | 6,5             | 1456,0                                                  | 6*9                                                               |
| MKP                | 0,18                                     | 18                                                                     | 12       | 6        | 14,8                                                                              | 9,2        | 4,5             | 1296,0                                                  | 6*14                                                              |
| MKP                | 0,18                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 8,7        | 4               | 2385,0                                                  | 7*21                                                              |
| MKP                | 0.22 (M)                                 | 13                                                                     | 14       | 8        | 9,8                                                                               | 11,4       | 6,8             | 1456,0                                                  | 6*9                                                               |
| MKP                | 0,22                                     | 13                                                                     | 16       | 8        | 9,8                                                                               | 13         | 6,8             | 1664,0                                                  | 6*9                                                               |
| MKP                | 0.22 (M)                                 | 18                                                                     | 12       | 6        | 14,8                                                                              | 9,5        | 4,7             | 1296,0                                                  | 6*14                                                              |
| MKP                | 0,22                                     | 18                                                                     | 13       | 7        | 14,8                                                                              | 9,2        | 5,2             | 1638,0                                                  | 6*14                                                              |
| MKP                | 0,22                                     | 18                                                                     | 14,5     | 8,5      | 14,8                                                                              | 11         | 6,3             | 2218,5                                                  | 7*14                                                              |
| MKP                | 0,22                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 10,4       | 4,2             | 2385,0                                                  | 7*21                                                              |
| MKP                | 0,22                                     | 26,5                                                                   | 14,5     | 7        | 21,8                                                                              | 9,2        | 4,5             | 2689,8                                                  | 7*21                                                              |
| MKP                | 0,27                                     | 18                                                                     | 13,5     | 7,5      | 14,8                                                                              | 10,5       | 5,8             | 1822,5                                                  | 6*14                                                              |
| MKP                | 0,27                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 10,9       | 4,6             | 2385,0                                                  | 7*21                                                              |
| MKP                | 0,33                                     | 18                                                                     | 14       | 8        | 14,8                                                                              | 11,2       | 6,5             | 2016,0                                                  | 6*14                                                              |
| MKP                | 0,33                                     | 18                                                                     | 15,5     | 8        | 14,8                                                                              | 11,2       | 6,5             | 2232,0                                                  | 6*14                                                              |
| MKP                | 0,33                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 9,5        | 4,8             | 2385,0                                                  | 6*21                                                              |
| MKP                | 0,36                                     | 18                                                                     | 14,5     | 8,5      | 14,8                                                                              | 11,7       | 7               | 2218,5                                                  | 6*14                                                              |
| MKP                | 0,36                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 10,8       | 4,5             | 2385,0                                                  | 6*21                                                              |
| MKP                | 0,39                                     | 18                                                                     | 14,5     | 8,5      | 14,8                                                                              | 12         | 7,3             | 2218,5                                                  | 6*14                                                              |
| MKP                | 0,39                                     | 26,5                                                                   | 15       | 6        | 21,8                                                                              | 11         | 4,7             | 2385,0                                                  | 6*21                                                              |
| MKP                | 0.47(M)                                  | 18                                                                     | 14,5     | 8,5      | 14,8                                                                              | 12         | 7,3             | 2218,5                                                  | 6*14                                                              |
| MKP                | 0,47                                     | 18                                                                     | 16       | 10       | 14,8                                                                              | 13         | 8,2             | 2880,0                                                  | 6*14                                                              |
| MKP                | 0,47                                     | 18                                                                     | 19       | 11       | 14,8                                                                              | 15,8       | 9,5             | 3762,0                                                  | 7*14                                                              |
| MKP                | 0,47                                     | 18                                                                     | 21       | 12       | 14,8                                                                              | 14,5       | 9,8             | 4536,0                                                  | 7*14                                                              |
| MKP                | 0,47                                     | 26,5                                                                   | 16       | 7        | 21,8                                                                              | 11,6       | 5,3             | 2968,0                                                  | 6*21                                                              |
| MKP                | 0,47                                     | 26,5                                                                   | 17       | 8,5      | 21,8                                                                              | 13         | 6,7             | 3829,3                                                  | 7*21                                                              |
| MKP                | 0,47                                     | 26,5                                                                   | 19       | 10       | 21,8                                                                              | 12,2       | 7,3             | 5035,0                                                  | 7*21                                                              |
| MKP                | 0,47                                     | 32                                                                     | 18       | 9        | 25,8                                                                              | 11,1       | 6,4             | 5184,0                                                  | 7*25                                                              |

| IEC 60384-14        |                                          |                                                                        |          |          |                                                                                         |            |                 |                                                         |                                                                  |
|---------------------|------------------------------------------|------------------------------------------------------------------------|----------|----------|-----------------------------------------------------------------------------------------|------------|-----------------|---------------------------------------------------------|------------------------------------------------------------------|
| Clause              | Requirement + Test                       |                                                                        |          |          |                                                                                         |            | Result - Remark |                                                         | Verdict                                                          |
| Type(en)<br>Type(s) | Bemessungskapazität<br>Rated capacitance | Abmessungen der Kondensatoren<br>(mm)<br>Dimensions of capacitors (mm) |          |          | Abmessungen der<br>Kondensatorelemente (mm)<br>Dimensions of capacitor<br>elements (mm) |            |                 | Volumen (mm <sup>3</sup> )<br>Volume (mm <sup>3</sup> ) | Metallisierte Polypropylen-Folie<br>Metalized Polypropylene Film |
|                     | (μF)                                     | L (mm)±1                                                               | H (mm)±1 | W (mm)±1 | L (mm)±0.5                                                                              | H (mm)±0.5 | W (mm)±0.5      |                                                         | μm (±0,5) *<br>mm (±0,5)                                         |
| MKP                 | 0,56                                     | 18                                                                     | 19       | 11       | 14,8                                                                                    | 15         | 8,6             | 3762,0                                                  | 6*14                                                             |
| MKP                 | 0,56                                     | 26,5                                                                   | 16       | 7        | 21,8                                                                                    | 13,4       | 5,5             | 2968,0                                                  | 6*21                                                             |
| MKP                 | 0,56                                     | 32                                                                     | 18       | 9        | 25,8                                                                                    | 12,8       | 6,5             | 5184,0                                                  | 7*25                                                             |
| MKP                 | 0,68                                     | 18                                                                     | 19       | 11       | 14,8                                                                                    | 15,6       | 9,3             | 3762,0                                                  | 6*14                                                             |
| MKP                 | 0,68                                     | 26,5                                                                   | 17       | 8,5      | 21,8                                                                                    | 13,1       | 6,8             | 3829,3                                                  | 6*21                                                             |
| MKP                 | 0,68                                     | 26,5                                                                   | 19       | 10       | 21,8                                                                                    | 14,6       | 8,3             | 5035,0                                                  | 7*21                                                             |
| MKP                 | 0,68                                     | 26,5                                                                   | 20       | 11       | 21,8                                                                                    | 14,6       | 8,3             | 5830,0                                                  | 7*21                                                             |
| MKP                 | 0,68                                     | 32                                                                     | 18       | 9        | 25,8                                                                                    | 13,6       | 7,3             | 5184,0                                                  | 7*25                                                             |
| MKP                 | 0.82 (M)                                 | 18                                                                     | 19       | 11       | 14,8                                                                                    | 15,8       | 9,5             | 3762,0                                                  | 6*14                                                             |
| MKP                 | 0,82                                     | 18                                                                     | 21       | 12       | 14,8                                                                                    | 18,1       | 10,2            | 4536,0                                                  | 6*14                                                             |
| MKP                 | 0,82                                     | 26,5                                                                   | 19       | 10       | 21,8                                                                                    | 14,1       | 7,8             | 5035,0                                                  | 6*21                                                             |
| MKP                 | 0,82                                     | 32                                                                     | 18       | 9        | 25,8                                                                                    | 13         | 6,8             | 5184,0                                                  | 6*25                                                             |
| MKP                 | 1                                        | 26,5                                                                   | 19       | 10       | 21,8                                                                                    | 16,1       | 8,2             | 5035,0                                                  | 6*21                                                             |
| MKP                 | 1                                        | 26,5                                                                   | 20       | 11       | 21,8                                                                                    | 15,3       | 9               | 5830,0                                                  | 6*21                                                             |
| MKP                 | 1                                        | 32                                                                     | 18       | 9        | 25,8                                                                                    | 15         | 7,2             | 5184,0                                                  | 6*25                                                             |
| MKP                 | 1,2                                      | 26,5                                                                   | 22       | 12       | 21,8                                                                                    | 16,3       | 10              | 6996,0                                                  | 6*21                                                             |
| MKP                 | 1,2                                      | 32                                                                     | 20       | 11       | 25,8                                                                                    | 14,8       | 8,5             | 7040,0                                                  | 6*25                                                             |
| MKP                 | 1,5                                      | 26,5                                                                   | 22       | 12       | 21,8                                                                                    | 18,5       | 10,5            | 6996,0                                                  | 6*21                                                             |
| MKP                 | 1,5                                      | 32                                                                     | 20       | 11       | 25,8                                                                                    | 17,2       | 9,4             | 7040,0                                                  | 6*25                                                             |
| MKP                 | 1,8                                      | 26,5                                                                   | 24,5     | 15,5     | 21,8                                                                                    | 19,1       | 12,8            | 10063,4                                                 | 6*21                                                             |
| MKP                 | 1,8                                      | 32                                                                     | 22       | 13       | 25,8                                                                                    | 18,4       | 10,6            | 9152,0                                                  | 6*25                                                             |
| MKP                 | 2                                        | 26,5                                                                   | 24,5     | 15,5     | 21,8                                                                                    | 21         | 13              | 10063,4                                                 | 6*21                                                             |
| MKP                 | 2                                        | 32                                                                     | 22       | 13       | 25,8                                                                                    | 19         | 11,2            | 9152,0                                                  | 6*25                                                             |
| MKP                 | 2,2                                      | 26,5                                                                   | 24,5     | 15,5     | 21,8                                                                                    | 21,5       | 13,7            | 10063,4                                                 | 6*21                                                             |
| MKP                 | 2,2                                      | 32                                                                     | 24,5     | 15       | 25,8                                                                                    | 19,1       | 12,8            | 11760,0                                                 | 6*25                                                             |
| MKP                 | 2,7                                      | 32                                                                     | 28       | 17       | 25,8                                                                                    | 21         | 14,5            | 15232,0                                                 | 6*25                                                             |
| MKP                 | 3,3                                      | 32                                                                     | 28       | 17       | 25,8                                                                                    | 22,6       | 14,7            | 15232,0                                                 | 6*25                                                             |
| MKP                 | 3,6                                      | 32                                                                     | 29       | 19       | 25,8                                                                                    | 25         | 15,3            | 17632,0                                                 | 6*25                                                             |
| MKP                 | 3,9                                      | 32                                                                     | 33       | 18       | 25,8                                                                                    | 26         | 16,5            | 19008,0                                                 | 6*25                                                             |
| MKP                 | 4,7                                      | 32                                                                     | 37       | 22       | 25,8                                                                                    | 27,7       | 18,2            | 26048,0                                                 | 6*25                                                             |