



CERTIFICATE FI/41192

Our Ref. HEL-CERT210600599-02



Product Optocoupler

Type Group A: KAQV217, KAQV217A, KAQW212, KAQW212A, KAQW217, KAQW217A, KAQY212, KAQY212A, KAQY217, KAQY217A
Group B: KAQV212S, KAQV217S, KAQW212S, KAQW217S, KAQY212S, KAQY212SE, KAQY217S, KCP1008, KCP1017

Trademark 

Certificate Holder Cosmo Electronics Corporation
8F., No. 258, Lian Cheng Rd., Chung-Ho Dist., New Taipei City 235, Taiwan

Technical information Environment temperature: max. 85 °C
Group A: Max. 250V AC mains / OVC III / MG IIIa/IIIb / PD2, reinforced insulation
Group B: Max. 150V AC mains / OVC II or 250V AC mains / OVC I: MG IIIa/IIIb / PD2, reinforced insulation

Other information -

The product is certified according to the following standard(s) EN IEC 62368-1:2020 + A11:2020
EN 60601-1:2006 + A1:2013 + A12:2014

Validity This certificate is valid until 22.10.2026 provided that the Conditions for FI certification are met. This certificate includes the right to use the FI mark under the condition that changes (if any) will be checked at SGS Fimko before the product is brought onto market and that the conditions for FI certification are met.

Date of issue 22.10.2021

SGS Fimko Ltd

Signature



Tom Törn
Certification Director

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Member of the SGS Group (SGS SA)

Manufacturer	Cosmo Electronics Corporation 8F., No. 258, Lian Cheng Rd., Chung-Ho Dist., New Taipei City 235, Taiwan
Manufacturing site	<ol style="list-style-type: none"> 1. COSMO Electronics Corporation. No.396, Lu-Pu Road, Dong-Shan Hsiang 269, I-Lan Hsien, Taiwan 2. COSMO Electronics Corporation. No. 16 Tsu-Chen Road, Dong-Shan Hsiang 269, I-Lan Hsien, Taiwan 3. Cosmo Electronics Technology Kunshan Co., Ltd. No. 339, Qing Yang Highway, Zhoushi Town Kunshan, 215300, Jiangsu, China
Directive information	The certified product(s) fulfils requirements of mentioned standard(s) which are harmonised under the Low Voltage Directive (2014/35/EU) at the date of issue of the certificate.
Additional information	<p>The lead form of the model is specified in the model name by the following:</p> <p>Surface mount type: "A" in the model name Small outline for surface mount type: "S" and all other in Group B Dual-in-line type: models without "A" in Group A</p> <p>According to standard EN IEC 62368-1:2020/A11:2020 optocoupler used as safeguard shall comply with the requirements of clause 5.4 or Annex G.12 for optocouplers which requires component to fulfill standard IEC 60747-5-5 2007. In addition, the type testing voltage $V_{ini,a}$ and routine testing voltage $V_{ini,b}$ shall be at least equal to the appropriate test voltage in EN IEC 62368-1:2020/A11:2020 clauses 5.4.9.1 and 5.4.9.2.</p> <p>Models have been tested and certified by VDE certificate Ref. No. VDE 40053989 according to the standard EN 60747-5-5:2011+A1:2015. The used test voltages for $V_{ini,a}$ and $V_{ini,b}$ are Group A: 6000 V_{peak} Group B: 2122 V_{peak}</p> <p>Minimum external clearance and creepage distance: - Group A: 7,7 mm - Group B: 5,9 mm</p> <p>Operating temperature: 85 °C max.</p>

Additional information

For ITAV applications, based on test voltages, optocouplers can be used in implementation where required withstand voltage is
Group A: max. 4kVp/(reinforced AC mains max. 250 V/OVC III).
Group B: max. 1,5 kVp/(reinforced AC mains max. 150 V/OVC II or 250 V/OVC I).

Complying other insulation requirements construction of the optocouplers, final assembly as well as environmental conditions shall be considered.

For medical applications according to standard EN60601-1:2006 + A1:2013 + A12:2014 insulation requirements shall be considered case by case (e.g. operator/patient interface).

Opto-couplers complying with IEC 60747-5-5:2007, or a later edition, are considered equivalent to the requirements of 8.8.2 and 8.9.3.

This certificate replaces the previous Certificate FI/41105, dated 8 June 2021, due to standard update.

As shown in the Test Report(s) No(s): HELES2106000613-1