CERTIFICATE FI/41119

Our Ref. HEL-CERT210600661-01

Product Optocoupler

Type

CT81(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT85(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT30(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CT40(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CTR1(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CTR2(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CTR3(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CTR4(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G)
CT25(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT61(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT52(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT78(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
4N(X1)(X2)(V)(Y)(Z)-(H)(G)
H11(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CNY1(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CNY1(X1)F(X2)(X3)(V)(Y)(Z)-(H)(G)
CT30(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT30(X1)(X2)(X3)(V)(Y)(Z)-5L-(H)(G)
CT40(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTR1(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CTR2(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CTR3(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CTR4(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CTR5(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CTR7(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G)
CT40(X1)(X2)(X3)(V)(Y)(Z)-5L-(H)(G)
CT42(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
TIL113(blank;S;SL;M)V
CT41(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
6N13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
6N13(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

CT45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT450(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT453(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT250(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT253(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT26(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT260(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT261(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT263(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT270(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT273(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT31(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT82(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTR2(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G)
CTR3(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G)
CTR4(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G)
CTR6(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G)
CTT(X1)2(X2)3(X3)(V)(Y)(Z)-(H)(G)
CT25(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT35(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT47(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT82(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT52(X1)-2(X2)(X3)(V)(Y)(Z)-(H)(G)
CT22(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT220(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CT223(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CTP1(X1)(X2)(X3)V(Z)
CTP2(X1)(X2)(X3)V(Z)
CTP4(X1)(X2)(X3)V(Z)
CTP5(X1)(X2)(X3)V(Z)
CT1(X1)1(X2)(X3)(V)(Y)(Z)-(H)(G)
CT1(X1)1(X2)(X3)(V)(Y)(Z)-W-(H)(G)
CTL2(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTL4(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTL5(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTL6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT57(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT27(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

CT12(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT35(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM30(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTR1(X1)(X2)(X3)(V)(Z)-M4-(H)(G)
CTR2(X1)(X2)(X3)(V)(Z)-M4-(H)(G)
CTR3(X1)(X2)(X3)(V)(Z)-M4-(H)(G)
CTR4(X1)(X2)(X3)(V)(Z)-M4-(H)(G)
CTM17(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT18(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM2(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM4(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTM10(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTH21(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTH28(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTH25(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTH29(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT3H(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTH24(X1)(X2)(X3)V(Z)-(H)(G)
CTH28(X1)(X2)(X3)V(Z)-4-(H)(G)
CTH29(X1)(X2)(X3)V(Z)-4-(H)(G)
CTHQ3H(X1)(X2)(X3)V(Z)-(H)(G)
CTS6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTS7(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTS31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTS34(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTS45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT063(0..9;A..H;K;L;N)V
CT066(0..9;A..H;K;L;N)V
CT060(0..9;A..H;K;L;N)V
CT061(0..9;A..H;K;L;N)V
CT053(0..9;A..H;K;L;N)V
CT054(0..9;A..H;K;L;N)V
CT050(0..9;A..H;K;L;N)V
CT051(0..9;A..H;K;L;N)V

SGS Fimko Ltd | Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

CT045(0..9;A..H;K;L;N)V
CT024(0..9;A..H;K;L;N)V
CT020(0..9;A..H;K;L;N)V
CT021(0..9;A..H;K;L;N)V
CTD20(0..9;A..H;K;L;M;N)V
CTD21(0..9;A..H;K;L;M;N)V
CTD22(0..9;A..H;K;L;M;N)V
CT20(0..9;A..H;K;L;M;N)V
CT21(0..9;A..H;K;L;M;N)V
CT070(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT071(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CT073(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW26(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW(X1)5(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW27(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW47(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)
CTW20(X1)(X2)(X3)V(Y)(Z)-(H)(G)

Trademark

Certificate Holder

CT Micro International Corporation
P. O. Box 31119 Grand Pavilion, Hibiscus Way, 802 West Road,
802, Grand Cayman, Bay
Cayman Islands

Technical information

Basic/Supplementary/Reinforced insulation
Environmental temperature 110 ºC / 125 ºC (See Additional information)

Other information

See Additional information

The product is certified according to the following standard(s)

EN IEC 62368-1:2020 + A11:2020

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

Validity This certificate is valid until 2026-08-05 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 2021-08-05

SGS Fimko Ltd

Signature

Peter Fagerstedt
Certification Manager

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

Manufacturer	CT Micro International Corporation P. O. Box 31119 Grand Pavilion Hibiscus Way, 802 West Road Grand Cayman, Bay, 802, Cayman Islands
Manufacturing site	Xiamen Harvatek Opto Electronic Limited 1 Floor, No.1158, Fang Shan Nan Road, Xiang An Branch, Torch Hi-Tech Industrial Development Zone 361101, Xiamen, Fujian, China
Additional information	Models: **Optocouplers in VDE certificate 40039590** Group A1: CT81(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT85(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT30(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CT40(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CTR1(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CTR2(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CTR3(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CTR4(X1)(X2)(X3)(V)(Y)(Z)-4L-(H)(G), CT25(X1)(X2)(X3)(V)(Y)(Z)-(H)(G) CT61(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT52(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT78(X1)(X2)(X3)(V)(Y)(Z)-(H)(G) Group A2: 4N(X1)(X2)(V)(Y)(Z)-(H)(G), H11(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CNY1(X1)(X2)(X3)(V)(Y)(Z)-(H)(G) CNY1(X1)F(X2)(X3)(V)(Y)(Z)-(H)(G), CT30(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT30(X1)(X2)(X3)(V)(Y)(Z)-5L-(H)(G), CT40(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTR1(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CTR2(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CTR3(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CTR4(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CTR5(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CTR7(X1)(X2)(X3)(V)(Y)(Z)-6L-(H)(G), CT40(X1)(X2)(X3)(V)(Y)(Z)-5L-(H)(G), CT42(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), TIL113(blank;S;SL;M)V, CT41(X1)(X2)(X3)(V)(Y)(Z)-(H)(G) Group A3: 6N13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), 6N13(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT450(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT453(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT250(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT253(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT26(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT260(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT261(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT263(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT270(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT273(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT31(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT82(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTR2(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G), CTR3(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G), CTR4(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G), CTR6(X1)(X2)(X3)(V)(Y)(Z)-8L-(H)(G), CTT(X1)2(X2)3(X3)(V)(Y)(Z)-(H)(G), CT25(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT35(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT47(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT82(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT52(X1)-2(X2)(X3)(V)(Y)(Z)-(H)(G), CT22(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT220(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G), CT223(X1)(X2)(X3)(V)(Y)(Z)-W-(H)(G) Group A4: CT1(X1)1(X2)(X3)(V)(Y)(Z)-(H)(G), CT1(X1)1(X2)(X3)(V)(Y)(Z)-W-(H)(G), CTL2(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTL4(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTL5(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTL6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

CT57(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Group A5:
CT27(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT12(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CT35(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTM6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTM30(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTM31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTM45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTR1(X1)(X2)(X3)(V)(Z)-M4-(H)(G), CTR2(X1)(X2)(X3)(V)(Z)-M4-(H)(G),
CTR3(X1)(X2)(X3)(V)(Z)-M4-(H)(G), CTR4(X1)(X2)(X3)(V)(Z)-M4-(H)(G),
CTM17(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT18(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTM13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTM2(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTM4(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTM10(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Group A6:
CTH21(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTH28(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTH25(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTH29(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CT3H(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Group A7:
CTS6(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTS7(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTS31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTS34(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTS45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Group A8:
CT063(0..9;A..H;K;L;N)V, CT066(0..9;A..H;K;L;N)V, CT060(0..9;A..H;K;L;N)V,
CT061(0..9;A..H;K;L;N)V,
CT053(0..9;A..H;K;L;N)V, CT054(0..9;A..H;K;L;N)V, CT050(0..9;A..H;K;L;N)V,
CT051(0..9;A..H;K;L;N)V,
CT045(0..9;A..H;K;L;N)V, CT024(0..9;A..H;K;L;N)V, CT020(0..9;A..H;K;L;N)V,
CT021(0..9;A..H;K;L;N)V,
CTD20(0..9;A..H;K;L;M;N)V, CTD21(0..9;A..H;K;L;M;N)V,
CTD22(0..9;A..H;K;L;M;N)V,
CT20(0..9;A..H;K;L;M;N)V, CT21(0..9;A..H;K;L;M;N)V,
CT070(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CT071(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CT073(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Group A9:
CTW31(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTW13(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTW45(X1)(X2)(X3)(V)(Y)(Z)-(H)(G), CTW26(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTW(X1)5(X2)(X3)(V)(Y)(Z)-(H)(G), CTW27(X1)(X2)(X3)(V)(Y)(Z)-(H)(G),
CTW47(X1)(X2)(X3)(V)(Y)(Z)-(H)(G)

Optocouplers in VDE certificate 40048408
Group B1:
CTP1(X1)(X2)(X3)V(Z), CTP2(X1)(X2)(X3)V(Z), CTP4(X1)(X2)(X3)V(Z),
CTP5(X1)(X2)(X3)V(Z)

Group B2:
CTH24(X1)(X2)(X3)V(Z)-(H)(G), CTH28(X1)(X2)(X3)V(Z)-4-(H)(G),
CTH29(X1)(X2)(X3)V(Z)-4-(H)(G),
CTHQ3H(X1)(X2)(X3)V(Z)-(H)(G)
Group B3:
CTW20(X1)(X2)(X3)V(Y)(Z)-(H)(G)

SGS Fimko Ltd | Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

Information of component model name:

CT: Denotes “CT Micro”
xxx : Series Part Number (for example 11)
(X1): Product type (X= 0~9)
(X2): Binning Rank (X= 0~9, A~Z, or Blank)
(X3): Test Condition (X= 0~9, A~Z, 0~9&A~Z, or Blank)
V: VDE Safety Option
Y: Lead form option (S, SL, SM, SLM, M or Blank)
Z: Tape and reel option (T1, T2, R3, U4 or Blank)
W: Package color option (W = W, B, or Blank)
H: Lead frame material optiobn (A: aluminum, H: Iron, Blank: Copper)
G: Regulations option (example G (compliance Halogen Free), O (compliance Ozone Depleting Substances)…etc.)
(XXXX): customer request remark. (any characters, or blank)

Differences between models (Package, V_{INI}, max isolation voltage, operating temperature, clearances, creepage distances)

Group A1: 4 pin lead frame, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 7,6 mm, 9,2 mm

Group A2: 6 pin lead frame, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 7,6 mm, 9,2 mm

Group A3: 8 pin lead frame, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 7,6 mm, 9,2 mm

Group A4: Long creepage, V_{INI} 4 kV, U_{IOTM} 6 kV, 125 °C, 8,5 mm, 8,9 mm

Group A5: MFP, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 5,2 mm, 5,9 mm

Group A6: MFP Half Pitch, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 5,2 mm, 5,9 mm

Group A7: SDIP-6(SO-6), V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 7,6 mm, 9,4 mm

Group A8: SOP-8, V_{INI} 2,5 kV, U_{IOTM} 4 kV, 125 °C, 4,5 mm, 5,2 mm

Group A9: Widebody, V_{INI} 4 kV, U_{IOTM} 6 kV, 125 °C, 10,2 mm, 12,0 mm

Group B1: DFN, V_{INI} 1,5 kV, U_{IOTM} 6 kV, 110 °C, 4,0 mm, 4,8 mm

Group B2: MFP Half Pitch, V_{INI} 4 kV, U_{IOTM} 6 kV, 110 °C, 5,2 mm, 5,9 mm

Group B3: Widebody, V_{INI} 7 kV, U_{IOTM} 10 kV, 110 °C, 10,2 mm, 12,0 mm

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.

Models have been tested and certified by VDE certificate Ref. No. VDE 40039590 and 40048408 according to the standard EN 60747-5-5:2011+A1:2015.
The used test voltages for $V_{ini,a}$ and $V_{ini,b}$ are listed above.
Minimum external clearances and creepage distances are listed above.

For ITAV applications, based on test voltages, optocouplers can be used

SGS Fimko Ltd | Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)

in implementation where required withstand voltage is

- Group A1 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)
- Group A2 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)
- Group A3 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)
- Group A4 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)
- Group A5 max. 2,5kVp/(Reinforced, AC mains max. 250V/OVC II)
- Group A6 max. 2,5kVp/(Reinforced, AC mains max. 250V/OVC II)
- Group A7 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)
- Group A8 max. 1,5kVp/(Reinforced, AC mains max. 250V/OVC I or 150 V/OVC II)
- Group A9 max. 2,5kVp/(Reinforced, AC mains max. 300V/OVC II)

- Group B1 max. 0,8kVp/(Reinforced, AC mains max. 150V/OVC I or 100V/OVC II)
- Group B2 max. 2,5kVp/(Reinforced, AC mains max. 250V/OVC II)
- Group B3 max. 4,0kVp/(Reinforced, AC mains max. 300V/OVC III)

Compliance to other insulation requirements, construction of the optocouplers (enclosure option), as well as environmental conditions shall be considered in final assembly.

As shown in the Test Report(s) No(s): 300603-1

FINAS
Finnish Accreditation Service
S003 (EN ISO/IEC 17065)

SGS Fimko Ltd
Takomotie 8, FI-00380 Helsinki, Finland
t. +358 9 696 361 www.sgs.fi
Business ID 0978538-5 Member of the SGS Group (SGS SA)