

ENEC LICENSE

License No. ENEC-02538-M 1
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License Holder Signify Netherlands B.V.
High Tech Campus 48
Eindhoven, 5656 AE Netherlands

Production site

Certification Mark See Annex 1
Certified Product Built-in LED Module
Model Fortimo LEDFlex ym xlm/m zcc Ca Gg
See Page 2

Trademark **PHILIPS**

Rated Voltage / Frequency Voltage 24 V — P nominal 22.5 W/m
Itc 85°C, SELV input only (see page 2-3 for further ratings).

Rated Current / Power See Rated Voltage / Frequency.

Insulation Class -

Degree of protection (IP) -

Tested acc. to EN 62031:2008/A1:2013, EN 62031:2008/A2:2015, EN 62031:2008

Test Report No. 4788959894-1 issued on 2019-05-09

Additional The report was revised to include technical modifications.
See page 2-3



Certification Manager
Jan-Erik Storgaard

Certification Body

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 16 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).

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Model Details:

Fortimo LEDFlex ym xlm/m zcc Ca Gg Where:

y - Module length in m. one or two digits up to 50.

x - Lumen output/m, three or four digits up to 2500.

z - CRI of LED divided by 10. one digit, may be "7", "8" and "9".

cc - CCT of Module divide by 100. May be followed by PW.

a - Unit minimum cut length in cm. May be "5" or "10".

g - Number of module generation. May be "1".

Additional Information:

This Certificate replaces Certificate No. ENEC-02538 date 2019-03-27 due to following reasons:

- evaluate the lead wires, connectors according to IEC/EN 60598 Clause 5.3 and Clause 15.5,
- conduct the thermal test according to IEC/EN 60598 Clause 12.4 per request.

Maximum ratings of the series:

Model name	Modelname on min. cuttable unit. (Optional)	Modelname on min. cuttable unit.	CCT [K]	Power [W/m]	DC Voltage [V]	to [°C]
Fortimo LEDFlex 5m 1000lm/m 830 C10 G1	1000lm/m 830	929001490880	3000	7.1	24	85
Fortimo LEDFlex 5m 1000lm/m 840 C10 G1	1000lm/m 840	929001490980	4000	6.6	24	85
Fortimo LEDFlex 5m 1000lm/m 827 C10 G1	1000lm/m 827	929001491080	2700	7.4	24	85
Fortimo LEDFlex 5m 1000lm/m 865 C10 G1	1000lm/m 865	929001491180	6500	6.6	24	85
Fortimo LEDFlex 5m 1500lm/m 830 C10 G1	1500lm/m 830	929001491280	3000	10.9	24	85
Fortimo LEDFlex 5m 1500lm/m 840 C10 G1	1500lm/m 840	929001491380	4000	10.0	24	85
Fortimo LEDFlex 5m 1500lm/m 827 C10 G1	1500lm/m 827	929001491480	2700	11.2	24	85
Fortimo LEDFlex 5m 1500lm/m 865 C10 G1	1500lm/m 865	929001491580	6500	10.0	24	85
Fortimo LEDFlex 5m 2000lm/m 830 C10 G1	2000lm/m 830	929001491680	3000	14.9	24	85
Fortimo LEDFlex 5m 2000lm/m 840 C10 G1	2000lm/m 840	929001491780	4000	13.8	24	85
Fortimo LEDFlex 5m 2000lm/m 827 C10 G1	2000lm/m 827	929001491880	2700	15.6	24	85
Fortimo LEDFlex 5m 2000lm/m 865 C10 G1	2000lm/m 865	929001491980	6500	13.8	24	85
Fortimo LEDFlex 5m 2500lm/m 830 C10 G1	2500lm/m 830	929001492080	3000	18.9	24	85
Fortimo LEDFlex 5m 2500lm/m 840 C10 G1	2500lm/m 840	929001492180	4000	17.6	24	85
Fortimo LEDFlex 5m 2500lm/m 827 C10 G1	2500lm/m 827	929001492280	2700	19.9	24	85
Fortimo LEDFlex 5m 2500lm/m 865 C10 G1	2500lm/m 865	929001492380	6500	17.6	24	85
Fortimo LEDFlex 50m 1000lm/m 830 C10 G1	1000lm/m 830	929001493280	3000	7.1	24	85
Fortimo LEDFlex 50m 1000lm/m 840 C10 G1	1000lm/m 840	929001493380	4000	6.6	24	85
Fortimo LEDFlex 50m 1500lm/m 830 C10 G1	1500lm/m 830	929001493480	3000	10.9	24	85

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Fortimo LEDFlex 50m 1500lm/m 840 C10 G1	1500lm/m 840	929001493580	4000	10.0	24	85
Fortimo LEDFlex 50m 2000lm/m 830 C10 G1	2000lm/m 830	929001493680	3000	14.9	24	85
Fortimo LEDFlex 50m 2000lm/m 840 C10 G1	2000lm/m 840	929001493780	4000	13.8	24	85
Fortimo LEDFlex 50m 2500lm/m 830 C10 G1	2500lm/m 830	929001493880	3000	18.9	24	85
Fortimo LEDFlex 50m 2500lm/m 840 C10 G1	2500lm/m 840	929001493980	4000	17.6	24	85
Fortimo LEDFlex 5m 1000lm/m 930PW C5 G1	1000lm/m 930PW	929001489280	3000	8.2	24	85
Fortimo LEDFlex 5m 1000lm/m 940PW C5 G1	1000lm/m 940PW	929001489380	4000	7.6	24	85
Fortimo LEDFlex 5m 1000lm/m 927 C5 G1	1000lm/m 927	929001489480	2700	8.6	24	85
Fortimo LEDFlex 5m 1000lm/m 965 C5 G1	1000lm/m 965	929001489580	6500	7.6	24	85
Fortimo LEDFlex 5m 1500lm/m 930PW C5 G1	1500lm/m 930PW	929001489680	3000	12.6	24	85
Fortimo LEDFlex 5m 1500lm/m 940PW C5 G1	1500lm/m 940PW	929001489780	4000	11.8	24	85
Fortimo LEDFlex 5m 1500lm/m 927 C5 G1	1500lm/m 927	929001489880	2700	13.2	24	85
Fortimo LEDFlex 5m 1500lm/m 965 C5 G1	1500lm/m 965	929001489980	6500	11.8	24	85
Fortimo LEDFlex 5m 2000lm/m 930PW C5 G1	2000lm/m 930PW	929001490080	3000	17.1	24	85
Fortimo LEDFlex 5m 2000lm/m 940PW C5 G1	2000lm/m 940PW	929001490180	4000	16.0	24	85
Fortimo LEDFlex 5m 2000lm/m 927 C5 G1	2000lm/m 927	929001490280	2700	18.0	24	85
Fortimo LEDFlex 5m 2000lm/m 965 C5 G1	2000lm/m 965	929001490380	6500	16.0	24	85
Fortimo LEDFlex 5m 2500lm/m 930PW C5 G1	2500lm/m 930PW	929001490480	3000	21.2	24	85
Fortimo LEDFlex 5m 2500lm/m 940PW C5 G1	2500lm/m 940PW	929001490580	4000	20.0	24	85
Fortimo LEDFlex 5m 2500lm/m 927 C5 G1	2500lm/m 927	929001490680	2700	22.5	24	85
Fortimo LEDFlex 5m 2500lm/m 965 C5 G1	2500lm/m 965	929001490780	6500	20.0	24	85
Fortimo LEDFlex 50m 1000lm/m 930PW C5 G1	1000lm/m 930PW	929001492480	3000	8.2	24	85
Fortimo LEDFlex 50m 1000lm/m 940PW C5 G1	1000lm/m 940PW	929001492580	4000	7.6	24	85
Fortimo LEDFlex 50m 1500lm/m 930PW C5 G1	1500lm/m 930PW	929001492680	3000	12.6	24	85
Fortimo LEDFlex 50m 1500lm/m 940PW C5 G1	1500lm/m 940PW	929001492780	4000	11.8	24	85
Fortimo LEDFlex 50m 2000lm/m 930PW C5 G1	2000lm/m 930PW	929001492880	3000	17.1	24	85
Fortimo LEDFlex 50m 2000lm/m 940PW C5 G1	2000lm/m 940PW	929001492980	4000	16.0	24	85
Fortimo LEDFlex 50m 2500lm/m 930PW C5 G1	2500lm/m 930PW	929001493080	3000	21.2	24	85
Fortimo LEDFlex 50m 2500lm/m 940PW C5 G1	2500lm/m 940PW	929001493180	4000	20.0	24	85

- The modules have been evaluated according to IEC/TR 62778 and the Lamp classification Group for Blue Light Hazard is Risk Group 1.
- The modules can be supplied only by SELV electronic LED controlgears separately approved according to IEC/EN 61347-2-13 and protected against output short-circuit and overload.
- The customer is obligated to add an appropriated cooling system to the LED module in order to not exceed its value. Temperature test shall be performed on the final product to verify the effectiveness of this cooling system.
- The product under test is a constant voltage Built-in LED module for linear lighting applications (indoor and outdoor use).
- The maximum use length shall not draw current exceeding 5A.
- The lead wires, connectors have been evaluated according to IEC/EN 60598 Clause 5.3 and Clause 15.5, to carry current not exceeding 5A.
- As requested, the thermal test according to IEC/EN 60598 Clause 12.4 has been conducted additionally.

Certification Body

The product and production described on the Licence comply with the ENEC requirements and the UL Global Service Agreement, with reference to Term and Conditions for the ENEC mark. The Owner of the Licence is entitled to use the ENEC 16 (as shown in annex 1) for the products listed on the Licence and manufactured at the production site listed. UL has to be informed in writing about any change to the product or production site in accordance with the Term and Conditions of the ENEC mark.



Annex 1 to License No.

ENEC-02538-M1

Annex of the form of the Mark



* Identification number of the Certification Body

Size of the mark:

The size of the mark may be reduced on the condition that it remains legible and that the ratio $b/a=1,7$ is kept

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This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this License, in accordance with the ENEC Requirements. The Designated License holder is entitled to use the ENEC 15 Mark (as shown in annex 1) for the Certified Product manufactured at the production site(s) identified above in accordance with the ENEC Mark Service Agreement including without limitation the ENEC Mark Testing and Certification Services Service Terms. Only those Products bearing the ENEC Mark should be considered as being covered by UL's ENEC Mark Service. This License shall remain valid unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the Date of Withdrawal of said Standard(s).

