

ENEC LICENSE

License No. ENEC-01359-P3

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Date of Issue 2022-11-15

License Holder	SIGNIFY NETHERLANDS B.V. HIGH TECH CAMPUS 48 EINDHOVEN 5656 AE THE NETHERLANDS
Production site	
Certification Mark	See Annex 1
Certified Product	Constant Voltage Built-in LED Module
Model	Main series: InteGrade <i>a o r l xmm (y") c z n f Gg s</i> See page 2-3 for additional Information
Trademark	PHILIPS or 
Ratings	24 V $\equiv$ tc: 70 °C See page 2-3 for additional ratings
Tested acc. to	EN IEC 62031:2020, EN IEC 62031:2020/A11:2021
Test Report No.	4790565921.1 issued on 2022-11-11
Additional Information	This certificate replaces previous certificate no. ENEC-01359-P2 issued on 2020-10-21 See page 3 for additional information

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 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with the Service Agreement including without limitation if the Standard identified on this License is amended or withdrawn prior the Date of Withdrawal of conflicting Standard(s).

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Additional Model(s):

Product Key:

Main series:

InteGrade a o r l x m m (y") c z n f G g s

Where:

- a** = Assembly type (may be "F" or "FIX" or "fixture" or "engine");
- o** = Optic type (may be "NB" (Narrow Beam) or "UB" (defrost Narrow Beam) or blank (defrost lens));
- r** = Version indication (may be "Va" or "value" or "Vi" or "vision" or blank);
- l** = Lumen indication (may be "NB" (Narrow Beam) or "HL" (High Lumen) or "HF" (High Flux) or blank);
- x** = Module length in mm (three or four digits);
- (y")** = Module length in inch (one or two digits or blank);
- c** = CRI of LED divided by 10 (one character, may be "8" or "9" or "C" (Cool) or "W" (Warm) or blank);
- z** = CCT of LED module divided by 100 (two characters, may be a value between 22 and 65 or "WR" (White Red) or "XR" (Extra Red) or blank);
- n** = Color nuance (may be "PW" (Premium White) or "Rose" or blank);
- f** = Fixture type (may be "SD" or "CTR" or blank);
- g** = Number of LED module's generation (may be "1" or "2" or "3" or "4" or blank);
- s** = Commercial suffix for commercial purposes (optional)

Maximum ratings :

Assembly Type	Length [mm]	Power [W]	DC Current [mA]	Number of LEDs	CCT [K]	t _c [°C]
LED module's generation g ≤ 3						
engine	1725	60	2640	336	6500	70
F or FIX or fixture	1750	120	5280	672	6500	70
LED module's generation g = 4						
engine	1750	51,1	2128	273	6500	70
F or FIX or fixture	1600	61	2540	528	6500	70

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Product Key:

Variant series :

CertaFlux LCM400 r xmm cz Geng s

Where:

r = Version indication (may be "Va" (value) or "Vi" (vision) or blank);
x = Module length in mm (three or four digits);
c = CRI of LED divided by 10 (one character, may be "8" or "9" or "C" (Cool) or "W" (Warm));
z = CCT of LED module divided by 100 (two characters, may be a value between 27 and 50 or "WR" (White Red));
g = Number of LED module's generation (may be "3");
s = Commercial suffix for commercial purposes (optional)

Maximum ratings :

Length [mm]	Power [W]	DC Current [mA]	Number of LEDs	CCT [K]	t _c [°C]
1200	12	500	112	5000	70

Additional information:

- The LED Module shall be energized only by a separately approved power supply 24 V_{DC} constant voltage, SELV and short-circuit proof. The connection to power supply shall be made by the DC plug with connecting leads (tails) provided with the Module.
- When two or more LED Modules are connected in a daisy chain configuration (string) the total maximum load of daisy chain shall be 100 W (Maximum supply current: 4,2 A).
- The customer is obligated to add an appropriated cooling system to the LED Module in order to not exceed t_c value.
- Connecting leads of the Module shall be considered as "internal wiring" on the appliances in which the Module will be installed.
- The Module has been evaluated according to IEC TR 62778: 2014: Risk Group 1.
- The Module (as required by the client) has been also evaluated according to clause 4.14.1 of IEC/EN 60598-1 Standard, clauses 21.1, 22.31 and 30.2 of IEC/EN 60335-1 standard, clauses 7.1, 19.104 and Annex CC of IEC/EN 60335-2-24 standard, clauses 7.1, 19.103 and Annex BB of IEC/EN 60335-2-89 standard.
- The Module (as required by the client) have been also evaluated according to IEC 62262 (ed. 1.1) and IEC 60068-2-75 (ed. 2): IK 02 test performed with positive results.

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Annex 1 to License No.

ENEC-01359-P3

Annex of the form of the Mark



15 is the 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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