

TECHNICAL CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

USR - Indicates investigation to the United States Standards for Light Emitting Diode (LED) Light Equipment for Use in Lighting Products, UL 8750, and Clause 7.12.1

CNR - Indicates investigation to the Canadian Standard for:
- Light emitting Diode (LED) Equipment for Lighting Applications, CAN/CSA-C22.2 No. 250.13, and Annex A

These products been evaluated for the following characteristics:

| Series Models | | | Product is rated | Type HL (c) | Type TL (d) See NOTE (1) |
|---|---------------------------------------|--|---------------------|-------------|---|
| ECODrive36X/L, SOLOdrive36x/L | Input type- Branch Circuit | Output: type-CC Output is: Class 2 (b1, b2) | Dry and Damp | No | Yes Tref Max: 78 °C Tref: 51 °C See NOTE (1) |
| ECODrive56x/L, SOLOdrive56x/L | Input type- Branch Circuit | Output type- CC Output is: Class 2 (b1, b2) | Dry and Damp | No | Yes Tref Max: 85 ° Tref: 66 °C See NOTE (1) |
| DUALdrive560/L SOLOdrive560/L SOLOdrive561/L | Input type- Branch Circuit | Output type- CC Output is: Class 2 (b1, b2) | Dry and Damp | No | Yes Tref Max: 90 °C Tref: 65 °C See NOTE (2) |
| ECODrive76x/L, SOLOdrive765/L, SOLOdrive766/L, SOLOdrive768/L | Input type- Branch Circuit | Output type- CC Output is: Class 2 (b1, b2) | Dry and Damp | No | Yes Tref Max: 71 °C Tref: 62 °C See NOTE (1) |
| DUALdrive760/L SOLOdrive760/L SOLOdrive761/L | Input type- Branch Circuit | Output type- CC Output is: Class 2 (b1, b2) | Dry and Damp | No | Yes Tref Max: 66 °C Tref: 63 °C See NOTE (1) |
| <p>(1) - Maximum measured case temperature location was on the side of the driver case, near the spring clip securing transistor (Q103)</p> <p>(2) - Maximum measured case temperature location was on the side of the driver case, near the spring clip securing transistor (D207)</p> | | | | | |

A - As defined in

- UL 8750, Clause 7.12.1 and

- CAN/CSA-C22.2 No. 250.13, Clause 8.12

b1 - As defined in UL 8750, Section 8.14

b2 - As defined in CAN/CSA-C22.2 No. 250.13, Annex A

c - Evaluated per UL 8750 requirements for Type HL LED drivers

d - Evaluated per UL 8750 requirements for Type TL LED drivers

Conditions of Acceptability:

Use - For use only in (or with) complete equipment where the acceptability of the combination is determined by UL LLC.

1. Rated output loading for these products was achieved using resistive loads. The temperature tests were performed at nominal 40°C ambient.

2. During the temperature test of the end product, the temperature at Tc location specified in Illustration #14 is to be monitored. The absolute value at Tc cannot exceed 87°C. This value was calculated based on temperatures observed during testing and temperature ratings of the integral components including the electrical insulation system.

3. The main isolation transformer employs Class B (130) insulation system. However, the transformers did operate within the maximum allowable limit of 90 C for Class 105 (A) insulation system.

4. The drivers are intended for building and employ housings with no openings. Acceptability of the LED driver with respect to mounting, spacing, casualty, temperature and segregation is to be determined as part of the end device evaluation.

***5. The Leakage Current test was conducted and complied at 277 V. The need to conduct leakage current testing for products rated 150 V or less shall be considered in the end product.**

6. The drivers employ R/C (XCFR2/XCFR8), terminal blocks for the connection of the input, dimming and output. The minimum electrical rating of the terminal blocks are 300V, 5 Amperes, 105 C. The terminal blocks are suitable for field and factory wiring.

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7. Drivers are dimmable when provided with the 0-10 V, or the DALI dimming circuit interface. The dimming circuits are isolated from primary (input) and secondary (output) circuits with spacings based on the maximum rated branch supply, 277 Vac.

8. The maximum available output parameters of these drivers were within the maximum allowable limits for Class 2, Inherently Limited specified in the UL1310 standard

9. The maximum available output parameters of these drivers are within the maximum allowable limits for LED driver Class 2 per Annex "A" of the Canadian standard CAN/CSA C22.2 No. 250.13-14

Conditions of Acceptability - Continued:

10. The drivers are suitable for a maximum output current of 1400 mA DC. However, the output current may be set at the factory during production to any current setting between 150-1400 mA DC

11. The drivers are suitable for use in a "DRY" and "DAMP" locations

*12. Driver models SOLOdrive365/L, ECOdrive365/L, SOLOdrive565/L, SOLOdrive560/L, **DUALdrive560/L, ECOdrive565/L, SOLOdrive765/L, ECOdrive765/L, SOLOdrive760/L, and DUALdrive 760/L** are dimmable and are provided with a "DALI" dimming interface circuit that is isolated from the primary and secondary circuit (Terminals DA+, DA-).

*13. Driver models SOLOdrive366/L, ECOdrive366/L, SOLOdrive366/L, **SOLOdrive561/L, ECOdrive366/L, SOLOdrive766/L, ECOdrive766/L, and SOLOdrive761/L** are dimmable and are provided with an isolated "0-10" dimming interface circuit (Terminals designated "0-10+" and "0-10-"). And, the maximum available parameters from the dimming circuit terminals meet the limits for a Class 2, inherently limited source

*14. Driver models SOLOdrive368/L, ECOdrive368/L, **SOLOdrive568/L, ECOdrive568/L, SOLOdrive768/L and ECOdrive768/L** are not provided with the dimming options. Therefore, the drivers "NON-Dimmable" drivers

15. The identification of the input/output/dimming terminals is

| Terminal Blocks | Connection |
|---|--|
| L (BLACK) | Supply line |
| N (WHITE) | Supply Neutral |
| PG (GREEN) | Grounding (*) |
| LED1+, LED1- | Channel 1: Output Positive, Negative |
| LED12+, LED2- | Channel 2: Output Positive, Negative |
| LED code+ / LED code- (Yellow-Brown) | Factory current setting terminals (**) |
| 0-10V+ / 0-10V- | "0-10" Dimming connections |
| DA-, DA+, | "DALI" Dimming connections |
| AUX+, AUX- | "Auxiliary" output auxiliary output, rated 15,5 -25V, max current: 18mA |
| Solid Wire Lead Specifications | Strip: 9 mm (11/32 Inch) Diameter: 0.5-1.5 mm (20-16 AWG) |
| <p>*(*) - The suitability and the reliability of this connection to serve as main Grounding Means of the LED driver case have not been evaluated. Therefore, the driver case must be connected to earth ground in the end-use application</p> <p>(**) - The output current may be set at the factory during production to any current setting between 150-1500 mA DC</p> | |