

DESCRIPTION

PRODUCT COVERED:

USR - Component "Thermally Limited" type Drivers with Isolated, Class 2 output Models:

ECODrive1065/S	ECODrive1065/M	SOLOdrive1065/S	SOLOdrive1065/M
ECODrive1066/S	ECODrive1066/M	SOLOdrive1066/S	SOLOdrive1066/M
ECODrive1068/S	ECODrive1068/M	SOLOdrive1068/S	SOLOdrive1068/M
		DUALdrive1065/S	DUALdrive1065/M

CNR - Component Drivers with "LED Driver Class 2" output, Models:

ECODrive1065/S	ECODrive1065/M	SOLOdrive1065/S	SOLOdrive1065/M
ECODrive1066/S	ECODrive1066/M	SOLOdrive1066/S	SOLOdrive1066/M
ECODrive1068/S	ECODrive1068/M	SOLOdrive1068/S	SOLOdrive1068/M
		DUALdrive1065/S	DUALdrive1065/M

SERIES NOMENCLATURE: ECODrive 1065/S

EXAMPLE:				
ECODrive	10	6	5	S
I	II	III	IV	V

CODE		
I		Series Designation: ECODrive, SOLOdrive or DUALdrive
II	10	The first two digits indicates the maximum output power (Watts) <ul style="list-style-type: none"> "10" - 100 Watts
III	6	The third digit indicates the maximum output voltage (V): <ul style="list-style-type: none"> "6" - 60 V
IV	5	The fourth Digit indicates the type of option/options provided: <ul style="list-style-type: none"> "5" = DALI Dimming "6" = 0-10V Dimming (isolated) "8" = Non dimmable
V	S	"S" The letter indicates the enclosure dimensions: <ul style="list-style-type: none"> "S" - Enclosure Type 230 by 80 by 30 mm "M" - Enclosure Type 370 by 40.5 by 30 mm

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 #1 is to be monitored. The absolute value at Tc cannot exceed the specified Tref-max for each driver. This value was calculated based on temperatures observed during testing and temperature ratings of the integral components including the electrical insulation system.

Since the marking label specifies a maximum operating ambient of 50°C, the drivers were tested at an elevated ambient of 50°C and the maximum measured case temperature at the "Tc" location was as follows for each model:

Model	Maximum Allowable limit for "Tc" location at 50°C
ECOdrive106x/M	85
ECOdrive106x/S	83
SOLOdrive106x/M	85
SOLOdrive106x/S	83
DUALdrive1065/M	85
DUALdrive1065/S	83

3. The main isolation transformer employs Class B (130) insulation system

4. The drivers are intended for installation inside the enclosure of the end-use application luminaire and employ housings with no openings. However, the housing was also subjected to the Mechanical strength tests for metal enclosures as specified in Section #8.15 of UL8750 standard and the results of the tests were compliant. The 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 maximum measured leakage current while driver model ECOdrive106x/S was connected to a 277 VAC was as specified in the following table. Based on end use requirements and the construction presented, this test shall be considered as part of the end product evaluation. **Also, driver model ECOdrive106x/S was considered representative of the remaining models:**

Series Models	Measured, MIU	
	120 VAC, 60 Hz	277 VAC, 60 Hz
ECOdrive106x/S	(+)	0.5
(+) - Considered covered by the 277 V test		

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.

CONDITIONS OF ACCEPTABILITY - CONTINUED:

7. Drivers with 0-10 V or DALI dimming circuit, the dimming circuit is 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 UL 1310 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. The maximum output voltage exceeds 42.4 V DC but less than 60 V DC

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. Driver models **ECODrive1065/M, ECODrive1065/S, SOLODrive1065/M, SOLODrive1065/S, DUALDrive1065/M and model DUALDrive1065/S** are dimmable and are provided with a "DALI" dimming interface circuit that is isolated from the primary and secondary circuit (Terminals DA+, DA-).

12. Driver models **ECODrive1066/M, ECODrive1066/S, SOLODrive1066/M and model SOLODrive1066/S** 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

13. Models **ECODrive1068/M, ECODrive1068/S, SOLODrive1068/M and model SOLODrive1068/S** are "NON-Dimmable" drivers and the dimming circuit option is not provided

14. Identification of input/output/dimming connections:

Terminal Blocks	Connection
L (BLACK)	Supply line
N (WHITE)	Supply Neutral
PG (GREEN)	Grounding (*)
LED1+, LED1-	Channel 1: Output Positive, Negative
LED2+, 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: 18 -50mA
Solid Wire Lead Specifications	Strip: 9 mm (11/32 Inch) Diameter: 0.5-1.5 mm (20-16 AWG)

(*) - The suitability as the main Grounding connection at the input terminal block of the LED driver case have not been evaluated. Therefore, the driver case must be connected to earth ground in the end-use application

(**) - The output current may be set at the factory during production to any current setting between 150-1400 mA DC