DESCRIPTION

PRODUCT COVERED:

USR, CNR– Component, LED array see electrical ratings table for models.

ELECTRICAL RATINGS:

Model No.	Rated Input [x] CC [ ] CV [x] LED array does not have a supply feed through (b)				[ ]Rated Output (a) [ ] CC [ ] CV			
	Voltage [ ] Vac [x] Vdc	[ ] Hz	Max. Current (A)	Power (W)	Voltage [ ] Vac [ ] Vdc	[ ] Hz	Current (A)	Power (W)
SI-Bux923B20$$	49.0	N/A	2.02	99	N/A	N/A	N/A	N/A
SI-Bux463B20$$	49.0	N/A	2.02	99	N/A	N/A	N/A	N/A
SI-Bux243B20$$	55.0	N/A	1.8	99	N/A	N/A	N/A	N/A
SI-Bux123560$$	28.0	N/A	1.8	50.4	N/A	N/A	N/A	N/A

a- Applies to LED controllers and to LED arrays with a supply feed through
b- The input ratings refer to power draw of one unit.
*

Model No.	**Rated Input [x] CC [ ] CV [ ] LED array does not have a supply feed through (b)**				**[ ]Rated Output (a) [ ] CC [ ] CV**				**Note**
	Voltage [ ] Vac [x] Vdc	**[ ] Hz**	**Max. Current (A)**	**Power (W)**	**Voltage [ ] Vac [ ] Vdc**	**[ ] Hz**	**Current (A)**	**Power (W)**	
SI-B8F601B20$$	**55.0**	**N/A**	**1.8**	**99**	**N/A**	**N/A**	**N/A**	**N/A**	**1**
	55.0	**N/A**	**1.8**	**99**	**N/A**	**N/A**	**N/A**	**N/A**	**2**
	55.0	**N/A**	**0.9**	**49.5**	**N/A**	**N/A**	**N/A**	**N/A**	**3**
	55.0	**N/A**	**0.9**	**49.5**	**N/A**	**N/A**	**N/A**	**N/A**	
SI-B8F301B20$$	**55.0**	**N/A**	**1.2**	**66**	**N/A**	**N/A**	**N/A**	**N/A**	**4**
	55.0	**N/A**	**1.2**	**66**	**N/A**	**N/A**	**N/A**	**N/A**	**5**
	55.0	**N/A**	**0.6**	**33**	**N/A**	**N/A**	**N/A**	**N/A**	**6**
	55.0	**N/A**	**0.6**	**33**	**N/A**	**N/A**	**N/A**	**N/A**	

a- Applies to LED controllers and to LED arrays with a supply feed through
b- The input ratings refer to power draw of one unit.

Note – Models SI-B8F601B20$$ and SI-B8F301B20$$ have two input channel and can be used as below modes.

1: Lights to 3500K color temperature of LEDs, connecting to CON_W1+(CON_W3+) and CON_W2-(CON_W4-).
2: Lights to 5000K color temperature of LEDs, connecting to CON_C1+(CON_C3+) and CON_C2-(CON_C4-).
3: Lights to 4000K color temperature of LEDs, connecting to CON_W1+(CON_W3+) and CON_W2-(CON_W4-) and CON_C1+(CON_C3+) and CON_C2-(CON_C4-).
4: Lights to 3500K color temperature of LEDs, connecting to W_CON1(W_CON3) and W_CON2(W_CON4).
5: Lights to 5000K color temperature of LEDs, connecting to C_CON1(C_CON3) and C_CON2(C_CON4).
6: Lights to 4000K color temperature of LEDs, connecting to W_CON1(W_CON3) and W_CON2(W_CON4) and C_CON1(C_CON3) and C_CON2(C_CON4).

MODEL NOMENCLATURE:

u - Represent any alphanumeric code to denote Color Rendering Index of LEDs which is unrelated safety.
x - Represent any alphanumeric code to denote correlated color temperature of LEDs which is unrelated safety.
$$ - Represent any alphanumeric code to denote customer information for marketing purpose only.

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.

CNR – Indicates investigation to the Canadian Standard for Light Emitting Diode (LED) Equipment for Lighting Applications, CAN/CSA-C22.2 No. 250.13.

Product Characteristics-

Model No. [x] applies to all models- see electrical ratings	Input Type	[ ] Branch Circuit (Mains) [ ] Isolated Circuit [x] Class 2 (a) [ ] LVLE (b1) [ ] LED Class 2 (b2)	
	[ ] Output Type (e1)	[ ] Non-isolated [ ] with PLIMIT @ 15 W (d) [ ] Isolated [ ] with PLIMIT @ 15 W (d) [ ] Class 2 (a) [ ] LVLE (b1) [ ] LED Class 2 (b2)	
	[ ] Output Load Type (e2)	[ ] LED array [ ] AC transformer [ ] switch mode LED driver [ ] Specific load- model(s) xxx made by xxx	
	Environmental Conditions	[ ] Dry [x] Damp [ ] Wet	
	[x] Additionally evaluated to UL 8750 Supplements	[ ] SA- SREC	[ ] Evaluation per SA3.2 [ ] Evaluation per SA4
		[ ] SF- Wired control Circuits(c)	[ ] Evaluated per SF3.1 [ ] per exception 1 [ ] per exception 2[ ]- Not Isolated
		[x] SG- Temperature value @ Tc	130 °C for models SI-Bux123560$$
		[ ] SH- Phase cut dimming	
		[ ] SJ- Special use LED arrays	[ ] Risk Group 1 or 0 for both Retinal Blue Light spectral bands and Risk Group 0 for the remaining spectral bands. [ ] Risk Group 1 [ ] Risk Group 2

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 8.16
b2- As defined in CAN/CSA-C22.2 No. 250.13, Annex A
c- Supplement SF has a future effective date: 2020-011-02
d- Refers to a circuit of 15 W maximum power limit under normal and single fault conditions, as defined in UL 8750, section 8.8 and CAN/CSA-C22.2 No. 250.13, section 9.6
e1- Applies to LED controllers and to LED arrays with a supply feed through
e2- Applies to LED controllers. Check all boxes that apply based on criteria in UL 8750, Clauses 7.9.3 & 9.2.2.e

Conditions of Acceptability –

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

1. These products are intended for building in. These products are open frame. Acceptability with respect to mounting, spacing, casualty, temperature and segregation is to be determined as part of the end device evaluation.

2. These products are provided with push-in terminals for supply connection. These terminals are intended for use with 18 ~ 24 AWG solid copper conductors with 7.5~ 8.5 mm strip length.

3. These products have been evaluated for use with a source of supply noted in the product characteristics table (input type) and electrical ratings noted in the electrical ratings table. Suitability of these products with other sources of supply or electrical ratings is to be determined in the end product.

4. For LED arrays- The temperature tests were performed according to Supplement SG using a manufacturer recommended heat sink as described in this report. During temperature testing of the end product, evaluation of this component can be limited to the temperature at the Test Measurement Point Tc. The absolute value at this point cannot exceed the specific temperature for each model is shown in the following table. See Ill. 4 or 4A for the location of the Tc point for each model.

Components	Temperature, °C	The location of the Tc point
SI-Bux123560$$	130	Ill. 4 or 4A

* 5. For LED arrays with supply feed through- The input ratings (electrical ratings table) refers to one unit. The maximum number of LED arrays that can be serial and parallel connected for operation from the same source **can't exceed the input ratings (electrical ratings table) of one unit for models SI-B8F601B20$$ and SI-B8F301B20$$.**

6. These products are intended only for use in dry and damp locations. The use in other environments shall be considered in the end product evaluation

7. All Tests were conducted with an aluminum heat sink, overall 1200 mm by 50 mm by 5 mm (L x W x H) for models SI-Bux923B20$$, SI-Bux463B20$$ and SI-Bux243B20$$ and overall 680 mm by 50 mm by 30 mm (L x W x H) with 11 fins for models SI-Bux123560$$ **and overall 1200 mm by 50 mm by 10 mm (L x W x H) for models SI-B8F601B20$$ and SI-B8F301B20$$.**