

IP 20        RoHS

## TALEXconverter LCAI 30 W 700 mA one4all Constant current

### Product description

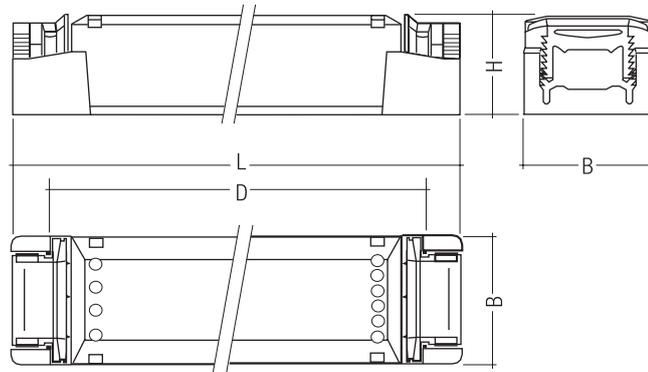
- 1 addressable output channel
- 700 mA PWM output signal
- Short-circuit protection with automatic restart
- No-load detection with automatic restart
- Intelligent Temperature Guard (protection against thermal damage)
- Connecting cable, cable cross-section 0.5 – 2.5 mm<sup>2</sup>
- Power input on standby < 1 W
- Output power 30 W
- Overload protection with automatic restart
- Strain relief

### Properties

- switchDIM-MEMORY and corridorFUNCTION
- Dimming range 1 to 100 %
- Dimming curve adapted to the sensitivity of the eye
- Noise-free precise control via DSI signal, switchDIM or DALI
- Powerless switching via a digital interface (no need for switching via mains)
- Fault reporting and programmable operating parameters in DALI mode
- SELV

### Technical data

Rated supply voltage	220 – 240 V
Input voltage, AC	198 – 264 V
Input voltage, DC	170 – 320 V
Rated current (at 230 V 50 Hz)	0.16 A
Mains frequency	0 / 50 / 60 Hz
Efficiency	> 83 %
$\lambda$ at 230 V / 50 Hz	0.96
Max. input power	36 W
THD (applying to the current)	9 %
Control input dimming	DSI, DALI, switchDIM
Stand-by power at 230 V	0.73 W
Output voltage range	9 – 42.5 V
Output current tolerance	$\pm$ 7.5 %
Output current	700 mA
Output power	30 W
Output power range (without dimming operation)	2 – 30 W
Dimming range	1 – 100 %
PWM frequency	400 Hz
Set up time at 230 V (acc. to the DALI standard)	< 600 ms
Turn off time at full load	20 ms
Turn off time at 3 V	< 300 ms
$t_a$ operating (at lifetime 50,000 h)	-25 ... +40 °C
$t_a$ operating (at lifetime 25,000 h)	–
Max. casing temperature $t_c$	90 °C
Storage temperature	-25 ... +60 °C
Weight	0.168 kg
Dimensions LxWxH	207 x 42 x 31 mm
Hole spacing D	183 – 188 mm



### Ordering data

Type	Article number
LCAI 030/0700 A120 one4all	86458900

Packaging: 25 pieces/carton

**Standards**

- EN 50172
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61347-1
- EN 61347-2-13
- EN 61547
- EN 62384
- EN 62386-207

**Control input (DA/D1, DA/D2)**

Digital DALI/DSI signal or switchDIM can be wired on the same terminals (DA/D1 and DA/D2).

**Digital signal DALI/DSI**

The control input is non-polar and protected against accidental connection with a mains voltage up to 264 V. The control signal is not SELV. Control cable has to be installed in accordance to the requirements of low voltage installations.

**switchDIM**

Integrated switchDIM function allows a direct connection of a push to make switch for dimming and switching.

Brief push (< 0.6 s) switches converter ON and OFF. The converters switch-ON at light level set at switch-OFF.

When the push to make switch is held, LED modules are dimmed. After repush the LED modules are dimmed in the opposite direction.

In installations with converters with different dimming levels or opposite dimming directions (e.g. after a system extension), all converters can be synchronized to 50 % dimming level by a 10 s push. Use of push to make switch with indicator lamp is not permitted.

Different functions depending on each module.

**Dimming**

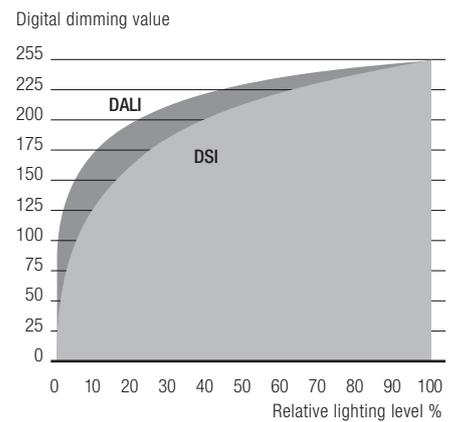
Dimming range 1 % to 100 %

Digital control with:

- DSI signal: 8 bit Manchester Code  
Speed 1 % to 100 % in 1.4 s
  - DALI signal: 16 bit Manchester Code  
Speed 1 % to 100 % in 0.1 s
- Programmable parameter:  
Minimum dimming level  
Maximum dimming level  
Default minimum = 1 %  
Programmable range  $1\% \leq \text{MIN} \leq 100\%$   
Default maximum = 100 %  
Programmable range  $100\% \geq \text{MAX} \geq 1\%$

Dimming curve is adapted to the eye sensitiveness.

**Dimming characteristics**



Dimming characteristics as seen by the human eye

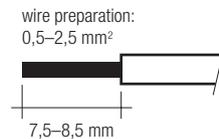
**Wiring type and cross section**

The wiring can be in flexible cable with ferules or solid. For perfect function of the screw terminals the strip length should be 6.5–7.5 mm for the input and output terminal.

Double occupancy possible at max. 1.5 mm<sup>2</sup> cross section.

Max. torque at the clamping screw: 0.5 Nm

**Input / Output terminal**



**Thermal protection of the unit**

The unit also has an ITG (Intelligent Temperature Guard). This protects it from overheating. If the unit is operated at too high a temperature the output is reduced to as little as 70 %.

**Maximum loading of automatic circuit breakers**

Automatic circuit breaker type	C10	C13	C16	C20	B10	B13	B16	B20
Installation Ø	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	1.5 mm <sup>2</sup>	2.5 mm <sup>2</sup>
LCAI 030/0700 A120	50	65	80	100	50	65	80	100

**Wiring diagrams**

