



# MASTER CityWhite CDO-TT

## MASTER CityWhite CDO-TT Plus 100W/828 E40

Ceramic metal halide lamp with clear tubular outer bulb shape, used in outdoor offering pleasant white light

#### **Product data**

General Information         Cap-Base         E40 [E40]           Bulb Shape         T46 [T 46mm]           Operating Position         UNIVERSAL [Any or Universal (U)]           Life To 5% Failures (Nom)         18000 h           Life To 10% Failures (Nom)         20000 h           Life To 50% Failures (Nom)         27000 h           LSF 2000 h Rated         99 %           LSF 4000 h Rated         99 %           LSF 8000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 16000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 16000 h Rated         99 %           LSF 16000 h Rated         90 %           Light Technical         Color Code           Luminous Flux (Rated) (Nom)         10500 lm           Color Designation         Warm White (WW)           Chromaticity Coordinate X (Nom)         445		
Bulb Shape         T46 [ T 46mm]           Operating Position         UNIVERSAL [Any or Universal (U)]           Life To 5% Failures (Nom)         18000 h           Life To 10% Failures (Nom)         20000 h           Life To 50% Failures (Nom)         27000 h           Life To 50% Failures (Nom)         27000 h           LSF 2000 h Rated         99 %           LSF 4000 h Rated         99 %           LSF 8000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 16000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 16000 h Rated         90 %           Light Technical         Color Code           Luminous Flux (Rated) (Nom)         10500 lm           Color Designation         Warm White (WW)	General Information	
Operating Position         UNIVERSAL [ Any or Universal (U)]           Life To 5% Failures (Nom)         18000 h           Life To 10% Failures (Nom)         20000 h           Life To 20% Failures (Nom)         27000 h           Life To 50% Failures (Nom)         27000 h           LSF 2000 h Rated         99 %           LSF 4000 h Rated         99 %           LSF 8000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 12000 h Rated         99 %           LSF 20000 h Rated         90 %           Light Technical         90 %           Color Code         828 [ CCT of 2800K]           Luminous Flux (Rated) (Nom)         10500 lm           Color Designation         Warm White (WW)	Cap-Base	E40 [ E40]
Life To 5% Failures (Nom)       18000 h         Life To 10% Failures (Nom)       20000 h         Life To 20% Failures (Nom)       22500 h         Life To 50% Failures (Nom)       27000 h         LSF 2000 h Rated       99 %         LSF 4000 h Rated       99 %         LSF 8000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 16000 h Rated       99 %         LSF 20000 h Rated       90 %         LSF 20000 h Rated       90 %         Light Technical       2000 code         Color Code       828 [ CCT of 2800K]         Luminous Flux (Rated) (Nom)       10500 lm         Color Designation       Warm White (WW)	Bulb Shape	T46 [ T 46mm]
Life To 10% Failures (Nom)       20000 h         Life To 20% Failures (Nom)       22500 h         Life To 50% Failures (Nom)       27000 h         LSF 2000 h Rated       99 %         LSF 4000 h Rated       99 %         LSF 8000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 16000 h Rated       99 %         LSF 20000 h Rated       97 %         LSF 20000 h Rated       90 %         Light Technical       20 %         Color Code       828 [ CCT of 2800K]         Luminous Flux (Rated) (Nom)       10500 lm         Color Designation       Warm White (WW)	Operating Position	UNIVERSAL [ Any or Universal (U)]
Life To 20% Failures (Nom)       22500 h         Life To 50% Failures (Nom)       27000 h         LSF 2000 h Rated       99 %         LSF 4000 h Rated       99 %         LSF 8000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 12000 h Rated       97 %         LSF 20000 h Rated       90 %         Light Technical         Color Code       828 [ CCT of 2800K]         Luminous Flux (Rated) (Nom)       10500 lm         Color Designation       Warm White (WW)	Life To 5% Failures (Nom)	18000 h
Life To 50% Failures (Nom)       27000 h         LSF 2000 h Rated       99 %         LSF 4000 h Rated       99 %         LSF 6000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 12000 h Rated       99 %         LSF 16000 h Rated       97 %         LSF 20000 h Rated       90 %         Light Technical         Color Code       828 [ CCT of 2800K]         Luminous Flux (Rated) (Nom)       10500 lm         Color Designation       Warm White (WW)	Life To 10% Failures (Nom)	20000 h
LSF 2000 h Rated 99 %  LSF 4000 h Rated 99 %  LSF 6000 h Rated 99 %  LSF 8000 h Rated 99 %  LSF 12000 h Rated 99 %  LSF 12000 h Rated 99 %  LSF 16000 h Rated 99 %  LSF 16000 h Rated 97 %  LSF 20000 h Rated 90 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	Life To 20% Failures (Nom)	22500 h
LSF 4000 h Rated 99 %  LSF 6000 h Rated 99 %  LSF 8000 h Rated 99 %  LSF 12000 h Rated 99 %  LSF 16000 h Rated 97 %  LSF 20000 h Rated 97 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	Life To 50% Failures (Nom)	27000 h
LSF 6000 h Rated 99 %  LSF 8000 h Rated 99 %  LSF 12000 h Rated 99 %  LSF 16000 h Rated 97 %  LSF 20000 h Rated 97 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	LSF 2000 h Rated	99 %
LSF 8000 h Rated 99 %  LSF 12000 h Rated 99 %  LSF 16000 h Rated 97 %  LSF 20000 h Rated 90 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	LSF 4000 h Rated	99 %
LSF 12000 h Rated 99 %  LSF 16000 h Rated 97 %  LSF 20000 h Rated 90 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 Im  Color Designation Warm White (WW)	LSF 6000 h Rated	99 %
LSF 16000 h Rated 97 %  LSF 20000 h Rated 90 %  Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	LSF 8000 h Rated	99 %
Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	LSF 12000 h Rated	99 %
Light Technical  Color Code 828 [ CCT of 2800K]  Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	LSF 16000 h Rated	97 %
Color Code         828 [ CCT of 2800K]           Luminous Flux (Rated) (Nom)         10500 lm           Color Designation         Warm White (WW)	LSF 20000 h Rated	90 %
Color Code         828 [ CCT of 2800K]           Luminous Flux (Rated) (Nom)         10500 lm           Color Designation         Warm White (WW)		
Luminous Flux (Rated) (Nom) 10500 lm  Color Designation Warm White (WW)	Light Technical	
Color Designation Warm White (WW)	Color Code	828 [ CCT of 2800K]
	Luminous Flux (Rated) (Nom)	10500 lm
Chromaticity Coordinate X (Nom) 445	Color Designation	Warm White (WW)
	Chromaticity Coordinate X (Nom)	445

Chromaticity Coordinate Y (Nom)	395
Correlated Color Temperature (Nom)	2800 K
Luminous Efficacy (rated) (Nom)	108 lm/W
Color Rendering Index (Nom)	88
LLMF 2000 h Rated	95 %
LLMF 4000 h Rated	92 %
LLMF 6000 h Rated	90 %
LLMF 8000 h Rated	88 %
LLMF 12000 h Rated	85 %
LLMF 16000 h Rated	82 %
LLMF 20000 h Rated	80 %
Operating and Electrical	
Power (Rated) (Nom)	97.0 W
Lamp Current Run-Up (Max)	2.2 A
Lamp Current (EM) (Nom)	1.2 A
Ignition Peak Voltage (Max)	5000 V
Ignition Supply Voltage (Min)	198 V
Re-Ignition Time (Min) (Max)	900 s
Ignition Time (Max)	30 s
Voltage (Max)	105 V

Datasheet, 2017, January 30 data subject to change

### **MASTER CityWhite CDO-TT**

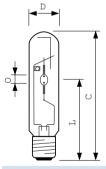
Voltage (Min)	89 V
Voltage (Nom)	97 V
Controls and Dimming	
Dimmable	Yes
Run-Up Time 90% (Max)	2 min
Mechanical and Housing	
Bulb Finish	Clear
Approval and Application	
Energy Efficiency Label (EEL)	A+
Mercury (Hg) Content (Nom)	11.6 mg
Energy Consumption kWh/1000 h	107 kWh
UV	
Pet (Niosh) (Min)	8 h/500lx

Luminaire Design Requirements	3
Bulb Temperature (Max)	450 °C
Cap-Base Temperature (Max)	250 °C
Product Data	
Full product code	871829112032200
Order product name	MASTER CityWhite CDO-TT Plus 100W/828 E40
EAN/UPC - Product	8718291120322
Order code	928082119231
Numerator - Quantity Per Pack	1
Numerator - Packs per outer box	12
Material Nr. (12NC)	928082119231
Net Weight (Piece)	0.137 kg
ILCOS Code	MT-100/828-H-E40-48/211

#### Warnings and Safety

- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- Lamps may use electromagnetic control gear or electronic gear suitable to drive CDO lamps (e.g. HID-PV Xt CDO)
- Control gear must include end-of-life protection (IEC61167, IEC 62035)
- Warm restart time can be up to 15 minutes; T15 ignitors therefore advised
- A lamp breaking is extremely unlikely to have any impact on your health. If a lamp breaks, ventilate the room for 30 minutes and remove the parts, preferably with gloves. Put them in a sealed plastic bag and take it to your local waste facilities for recycling. Do not use a vacuum cleaner.

#### **Dimensional drawing**





Product	D	0	L	С
MASTER CityWhite CDO-TT Plus 100W/828 E40	47 mm	8.5 mm	132 mm	211 mm

## **MASTER CityWhite CDO-TT**

#### Photometric data

