



The easiest switch to comfortable white light

MASTER CityWhite CDO-TT

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

Benefits

- White warm color impression providing comfort and safety
- Easy upgrade from SON to white light without additional cost
- Flexible light levels and reduced energy consumption possible via dimming option

Features

- High-quality white light
- Directly retrofit on HPS (SON/NAV) installations for upgrade from yellow to white light
- "Plus" concept with high efficacy translates into high light output and improved lumen maintenance
- Good color rendering and harmonized warm white color temperature
- Dimmable

Application

- Beautification and functional lighting for City centers, shopping centers and pedestrian areas, residential areas, road lighting and floodlighting

MASTER CityWhite CDO-TT

Warnings and Safety

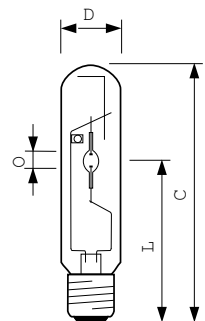
- Use only in totally enclosed luminaire, even during testing (IEC61167, IEC 62035, IEC60598)
- The luminaire must be able to contain hot lamp parts if the lamp ruptures
- Lamps may use electromagnetic control gear or electronic gear suitable to drive CDO lamps (e.g. HID-PV Xt CDO)
- Control gear must 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.

Versions



Dimensional drawing

... D ...



Product	D (max)	O	L	C (max)
MASTER CityWhite CDO-TT Plus 70W/828 E27	36 mm	7.15 mm	102 mm	156 mm

Product
MASTER CityWhite CDO-TT Plus 100W/828 E40
MASTER CityWhite CDO-TT Plus 150W/828 E40
MASTER CityWhite CDO-TT Plus 250W/830 E40

MASTER CityWhite CDO-TT

Approval and Application

Energy Efficiency Label (EEL) A+

Controls and Dimming

Dimmable Yes

General Information

LSF 2000 h Rated 99 %

LSF 4000 h Rated 99 %

Operating Position UNIVERSAL

Light Technical

Colour Designation Warm White (WW)

Ratio Scotopic/Photopic Lumens 1.30

Mechanical and Housing

Bulb Finish Clear

Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	80 kWh	7.8 mg
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	107 kWh	11.6 mg
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	163 kWh	15.8 mg
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	275 kWh	25.3 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	0.95 A	101 V	85 V	93 V
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	1.2 A	105 V	89 V	97 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	1.8 A	106 V	90 V	98 V
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	2.92 A	108 V	92 V	100 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	73.0 W	720 s
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	97.0 W	900 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	148.0 W	900 s
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	250.0 W	900 s

General Information (1/2)

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	E27	12000 h	16500 h	27000 h
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	E40	20000 h	22500 h	27000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	E40	20000 h	22500 h	27000 h
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	E40	16000 h	18500 h	23000 h

General Information (2/2)

MASTER CityWhite CDO-TT

Order Code	Full Product Name	Life To 5% Failures (Nom)	LSF 12000 h Rated	LSF 16000 h Rated	LSF 20000 h Rated	LSF 6000 h Rated	LSF 8000 h Rated
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	9500 h	90 %	81 %	71 %	98 %	96 %
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	18000 h	99 %	97 %	90 %	99 %	99 %
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	18000 h	99 %	97 %	90 %	99 %	99 %
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	14000 h	98 %	90 %	71 %	99 %	99 %

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	350 °C
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	450 °C
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	450 °C
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	450 °C

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity		Correlated Colour Temperature	
		Coordinate X (Nom)	Coordinate Y (Nom)	Colour Code	Temperature (Nom)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	446	393	828	2800 K
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	445	395	828	2800 K
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	445	395	828	2800 K

Light Technical (2/3)

Order Code	Full Product Name	Colour Rendering Index (Nom)	Colour							Luminous Efficacy (rated) (Nom)
			LLMF 12000 h Rated	LLMF 16000 h Rated	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated	
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	90	80.5 %	76.5 %	97 %	73.5 %	93 %	89.5 %	86 %	103 lm/W
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	88	85 %	82 %	95 %	80 %	92 %	90 %	88 %	108 lm/W
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	87	85 %	82 %	95 %	80 %	92 %	90 %	88 %	110 lm/W
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	88	85 %	82 %	95 %	80 %	92 %	90 %	88 %	113 lm/W

Light Technical (3/3)

MASTER CityWhite CDO-TT

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	7500 lm
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	10500 lm

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	16500 lm
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	28300 lm

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape
12030800	MASTER CityWhite CDO-TT Plus 70W/828 1SL/12	T35
12032200	MASTER CityWhite CDO-TT Plus 100W/828 E40	T46
12034600	MASTER CityWhite CDO-TT Plus 150W/828 E40	T46
12197800	MASTER CityWhite CDO-TT Plus 250W/830 E40	T46

