



# The easiest switch to comfortable white light

## MASTER CityWhite CDO-ET

Ceramic metal halide lamp, with opalized ovoid 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-ET

## 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 electronic or electromagnetic control gear
- 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.

Approval and Application	
Energy Efficiency Label (EEL)	A+
Controls and Dimming	
Dimmable	Yes
General Information	
Life To 50% Failures (Nom)	27000 h
LSF 2000 h Rated	99 %
LSF 4000 h Rated	99 %
Operating Position	UNIVERSAL
Luminaire Design Requirements	
Bulb Temperature (Max)	350 °C
Light Technical	
Colour Code	828
Colour Designation	Warm White (WW)
Ratio Scotopic/Photopic Lumens	1.30
Mechanical and Housing	
Bulb Finish	Coated glass

## Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/	Mercury (Hg) Content
		1000 h	(Nom)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	78 kWh	7.8 mg
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	157 kWh	15.8 mg

## Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	0.99 A	96 V	80 V	83 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	1.85 A	98 V	82 V	89 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	71.0 W	720 s

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time
		(Nom)	(Min) (Max)
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	143 W	900 s

## General Information (1/2)

# MASTER CityWhite CDO-ET

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 5%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	E27	15000 h	17000 h	13000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 5%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	E40	20000 h	22500 h	18000 h

## General Information (2/2)

Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF
		12000 h Rated	16000 h Rated	20000 h Rated	6000 h Rated	8000 h Rated
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	90 %	81 %	71 %	98 %	96 %
15881300	MASTER CityWhite CDO-	99 %	97 %	90 %	99 %	99 %

Order Code	Full Product Name	LSF	LSF	LSF	LSF	LSF
		12000 h Rated	16000 h Rated	20000 h Rated	6000 h Rated	8000 h Rated
	ET Plus 150W/828 E40					

## Light Technical (1/3)

Order Code	Full Product Name	Chromaticity		Correlated Colour	
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Rendering Index (Min)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	438	398	2900 K	81
15881300	MASTER CityWhite	443	402	2830 K	-

Order Code	Full Product Name	Chromaticity		Correlated Colour	
		Coordinate X (Nom)	Coordinate Y (Nom)	Temperature (Nom)	Rendering Index (Min)
	CDO-ET Plus 150W/828 E40				

## Light Technical (2/3)

Order Code	Full Product Name	Colour Rendering								
		Index (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	Luminous Efficacy (rated) (Nom)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	84	80.5 %	76.5 %	97 %	73.5 %	93 %	89.5 %	86 %	99.3 lm/W
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	85	85 %	82 %	95 %	80 %	92 %	90 %	88 %	107.69 lm/W

## Light Technical (3/3)

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	7050 lm
15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	15400 lm

## Mechanical and Housing

## MASTER CityWhite CDO-ET

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
15875200	MASTER CityWhite CDO-ET Plus 70W/828 E27	B70	15881300	MASTER CityWhite CDO-ET Plus 150W/828 E40	BD90

