



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 colour 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 colour rendering and harmonized warm white colour temperature
- Dimmable

Application

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

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)

MASTER CityWhite CDO-ET

Controls and Dimming

Dimmable	Yes
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General Information

LSF 2000 h Rated	99 %
LSF 4000 h Rated	99 %
Operating Position	UNIVERSAL

Light Technical

Chromaticity Coordinate X (Nom)	0.447
Chromaticity Coordinate Y (Nom)	0.4
Colour Code	828
Colour Designation	Warm white (WW)
Correlated Colour Temperature (Nom)	2800 K
Luminous Efficacy (rated) (Nom)	99 lm/W
Ratio Scotopic/Photopic Lumens	1.30

Mechanical and Housing

Bulb Finish	Coated glass
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Approval and Application

Order Code	Full Product Name	Energy Consumption	Mercury (Hg)	Mercury (Hg)
		kWh/1000 h	Content (Max)	Content (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	71 kWh	7.8 mg	7.8 mg
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	52 kWh	5.4 mg	5.4 mg
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	95 kWh	12 mg	11.6 mg

Operating and Electrical (1/2)

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	0.99 A	96 V	80 V	83 V
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	0.77 A	86 V	70 V	78 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	0.123 A	98 V	82 V	90 V

Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time	
		(Nom)	(Min)	(Max)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	71.0 W	720 s	
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	51.5 W	720 s	

Order Code	Full Product Name	Power (Rated)	Re-Ignition Time	
		(Nom)	(Min)	(Max)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	95.0 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)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	E27	15000 h	17000 h	27000 h
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	E27	15000 h	17000 h	21000 h

Order Code	Full Product Name	Cap-Base	Life To 10%	Life To 20%	Life To 50%
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	E40	20000 h	22500 h	27000 h

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General Information (2/2)

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
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	13000 h	90 %	81 %	71 %	98 %	96 %
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	13000 h	90 %	74 %	50 %	99 %	98 %
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	18000 h	99 %	97 %	90 %	99 %	99 %

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)	Order Code	Full Product Name	Bulb Temperature (Max)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	350 °C	928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	450 °C
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	350 °C			

Light Technical (1/2)

Order Code	Full Product Name	Colour Rendering Index (Min)	Colour Rendering Index (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated	Order Code	Full Product Name	Colour Rendering Index (Min)	Colour Rendering Index (Nom)	LLMF 12000 h Rated	LLMF 16000 h Rated
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	81	84	80.5 %	76.5 %	928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	-	87	85 %	82 %
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	79	82	80 %	74 %						

Light Technical (2/2)

Order Code	Full Product Name	LLMF 2000 h Rated	LLMF 20000 h Rated	LLMF 4000 h Rated	LLMF 6000 h Rated	LLMF 8000 h Rated	Luminous Flux (Nom)	Luminous Flux (Rated) (Nom)
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	97 %	73.5 %	93 %	89.5 %	86 %	7030 lm	7030 lm
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	98 %	71 %	96 %	92 %	88 %	5100 lm	5100 lm
928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	95 %	80 %	92 %	90 %	88 %	9400 lm	9400 lm

Mechanical and Housing

Order Code	Full Product Name	Bulb Shape	Order Code	Full Product Name	Bulb Shape
928154708835	MASTER CityWhite CDO-ET Plus 70W/828 E27	B70	928154808835	MASTER CityWhite CDO-ET Plus 100W/828 E40	B75
928155008835	MASTER CityWhite CDO-ET Plus 50W/828 E27	B70			

