



# Direct retrofit with immediate energy savings for quartz metal halide

## MASTERColour CDM MW Eco

Ceramic metal halide lamps with clear tubular or coated ellipsoid outer bulb, tailor-made to replace and outperform quartz metal halide lamps on existing gear.

### Benefits

### Features

### Application

### Warnings and Safety

# MASTERColour CDM MW Eco

## Versions



CDM-T MW eco



CDM-E MW eco

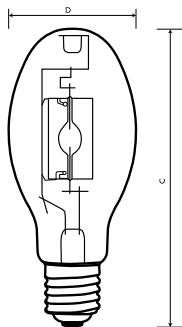
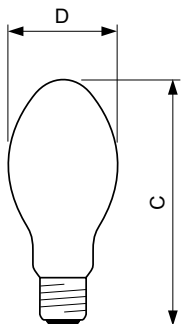
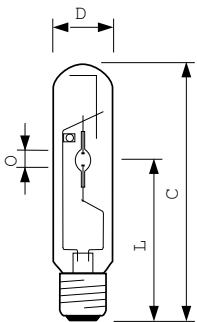


CDM-EP MW eco



CDM-EP MW eco

## Dimensional drawing



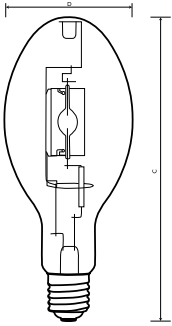
Product	D (max)	O	L	C (max)
MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	47 mm	12.4 mm	157 mm	257 mm
MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	47 mm	11.9 mm	161 mm	257 mm

Product	D (max)	C (max)
MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	91 mm	226 mm
MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	91 mm	226 mm

Product	D (max)	C (max)
MASTERColour MW eco MASTERColour CDM-EP MW eco 230W/840 E40 CL	91 mm	215 mm

# MASTERColour CDM MW Eco

## Dimensional drawing



Product	D (max)	C (max)
MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	121 mm	290 mm

Approval and Application	
Energy Efficiency Label (EEL)	A+
Operating and Electrical	
Re-ignition Time (Min) (Max)	900 s
General Information	
LSF 2000 h Rated	99 %
Light Technical	
Color Designation	Cool White (CW)
LLMF 12000 h Rated	80 %
LLMF 16000 h Rated	77 %
LLMF 2000 h Rated	92 %
LLMF 20000 h Rated	75 %
LLMF 4000 h Rated	87 %
LLMF 6000 h Rated	84 %
LLMF 8000 h Rated	82 %
Mechanical and Housing	
Bulb Material	Hard Glass

## Approval and Application

Order Code	Full Product Name	Energy Consumption kWh/1000 h	Mercury (Hg) Content (Nom)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	250 kWh	32.0 mg
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	397 kWh	48.0 mg
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	396 kWh	48.0 mg
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	251 kWh	32.0 mg
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	250 kWh	27 mg
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	396 kWh	44.6 mg

## Controls and Dimming

Order Code	Full Product Name	Dimmable	Order Code	Full Product Name	Dimmable
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	No	928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	No
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	No	928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	-
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	No	928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	-

## Operating and Electrical (1/2)

# MASTERColour CDM MW Eco

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	2.14 A	132 V	118 V	134 V
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	3.42 A	133 V	115 V	124 V
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	3.52 A	127 V	109 V	118 V

Order Code	Full Product Name	Lamp			
		Current (EM) (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	2.26 A	127 V	113 V	127 V
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	2.09 A	133 V	113 V	123 V
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	3.55 A	127 V	109 V	118 V

## Operating and Electrical (2/2)

Order Code	Full Product Name	Power (Rated) (Nom)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	227.0 W
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	361.0 W
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	360.0 W

Order Code	Full Product Name	Power (Rated) (Nom)
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	228.0 W
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	223 W
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	354 W

## General Information (1/3)

Order Code	Full Product Name	Cap-Base	Life To		
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	E40	16000 h	20000 h	30000 h
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	E40	16000 h	20000 h	30000 h
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	E40/45	16000 h	20000 h	30000 h

Order Code	Full Product Name	Cap-Base	Life To		
			Failures (Nom)	Failures (Nom)	Failures (Nom)
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	E40	16000 h	20000 h	30000 h
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	E40	-	12000 h	20000 h
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	E40	-	12000 h	20000 h

## General Information (2/3)

Order Code	Full Product Name	Life To 5% Failures (Nom)	LSF 12000	LSF 16000	LSF 20000	LSF 24000	LSF 30000	LSF 4000 h	LSF 6000	LSF 8000
			h Rated	h Rated	h Rated	h Rated	h Rated	h Rated	h Rated	h Rated
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	12000 h	95 %	90 %	80 %	70 %	50 %	99 %	99 %	98 %
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	12000 h	95 %	90 %	80 %	70 %	50 %	99 %	99 %	98 %
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	12000 h	95 %	90 %	80 %	70 %	50 %	99 %	99 %	98 %

## MASTERColour CDM MW Eco

Order Code	Full Product Name	Life To 5%								
		Failures (Nom)	LSF 12000 h Rated	LSF 16000 h Rated	LSF 20000 h Rated	LSF 24000 h Rated	LSF 30000 h Rated	LSF 4000 h Rated	LSF 6000 h Rated	LSF 8000 h Rated
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	12000 h	95 %	90 %	80 %	70 %	50 %	99 %	99 %	98 %
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	-	80 %	63 %	50 %	-	-	96 %	-	88 %
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	-	80 %	63 %	50 %	-	-	96 %	-	88 %

### General Information (3/3)

Order Code	Full Product Name	Operating Position	System Description
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	UNIVERSAL	Universal
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	P45	Horizontal Operating Position
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	UNIVERSAL	Universal

Order Code	Full Product Name	Operating Position	System Description
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	UNIVERSAL	Universal
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	UNIVERSAL	Universal
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	UNIVERSAL	Universal

### Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	550 °C
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	600 °C
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	350 °C

Order Code	Full Product Name	Bulb Temperature (Max)
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	350 °C
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	350 °C
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	350 °C

### Light Technical (1/2)

Order Code	Full Product Name	Chromaticity		Correlated Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Code	Temperature (Nom)
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	354	351	842	4200 K
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	376	374	842	4200 K

Order Code	Full Product Name	Chromaticity		Correlated Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Code	Temperature (Nom)
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	375	376	842	4200 K
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	366	363	842	4200 K

# MASTERColour CDM MW Eco

Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Code	Temperature (Nom)
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	379	380	840	4000 K
928495409891	MASTERColour MW eco	386	395	840	4000 K

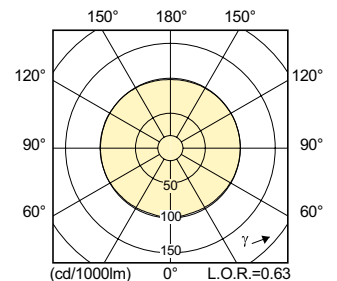
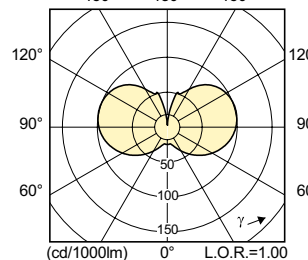
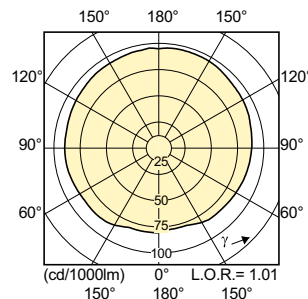
Order Code	Full Product Name	Chromaticity	Chromaticity	Correlated Color	
		Coordinate X (Nom)	Coordinate Y (Nom)	Code	Temperature (Nom)
	MSTColour CDM-EP MW eco 360W/840 E40 CL				

## Light Technical (2/2)

Order Code	Full Product Name	Color	Color	Luminous	Luminous	Luminous		Ratio	
		Rendering Index (Min)	Rendering Index (Nom)	Efficacy (rated) (Min)	Efficacy (rated) (Nom)	Flux (Min)	Flux (Rated) (Min)	Luminous Flux (Rated) (Nom)	Scotopic/Photopic Lumens
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	-	88	-	96.5 lm/W	-	-	21900 lm	1.87
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	-	88	-	98 lm/W	-	-	35270 lm	1.74
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	-	88	-	90 lm/W	-	-	32400 lm	1.74
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	-	90	-	93 lm/W	-	-	21140 lm	1.78
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	84	87	84 lm/W	94 lm/W	18900 lm	-	21000 lm	-
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	-	90	83 lm/W	93 lm/W	-	29700 lm	33000 lm	-

## Mechanical and Housing

Order Code	Full Product Name	Bulb Finish	Bulb	
			Shape	Shape
928070119230	MASTERColour MW eco MASTERColour CDM-T MW eco 230W/842 E40	Clear	T46	
928070319230	MASTERColour MW eco MASTERColour CDM-T MW eco 360W/842 E40	Clear	T46	
928070219830	MASTERColour MW eco MASTERColour CDM-E MW eco 360W/842 E40	Coated glass	B90	
928070419830	MASTERColour MW eco MASTERColour CDM-E MW eco 230W/842 E40	Coated glass	B90	
928495309891	MASTERColour MW eco MSTColour CDM-EP MW eco 230W/840 E40 CL	Clear	B90	
928495409891	MASTERColour MW eco MSTColour CDM-EP MW eco 360W/840 E40 CL	Clear	BD120	



# MASTERColour CDM MW Eco

