



# Direct retrofit and long life with immediate energy savings

## Energy Advantage CDM Lamps with Allstart Technology

Philips Energy Advantage CDM lamps with AllStart Technology is a high-efficiency protected "O" rated CDM lighting solution that provides energy savings without compromising light quality.

### Benefits

- Reduced maintenance and recycling costs
- Direct retrofit for both probe and pulse start magnetic ballasts (not suitable for operation on electronic ballasts)
- Excellent color rendering of CRI  $\geq 85$

### Features

- Provides crisp, white light
- Up to 100 lumens per watt
- Universal operating position that does not affect the lamp life; exception: 860W vertical position only.
- Long life  $\geq 20,000$  hrs rated average life<sup>1</sup>
- \* 330W CDM lamp with AllStart™Technology compared to 400W quartz Metal Halide lamp. <sup>1</sup> Rated average life is the life obtained on the average, from large representative groups of lamps in laboratory tests under controlled conditions at 10 or more operating hours per start. It is based on survival of at least 50% of the lamps and allows for individual lamps or groups of lamps to vary considerably from the average.

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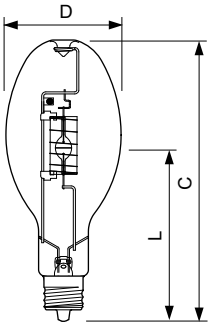
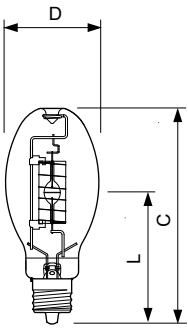
## Application

- Ideal for high-ceiling industrial, retail and distribution centers as well as outdoor applications.

## Warnings and Safety

- R "WARNING: These lamps can cause serious skin burn and eye inflammation from short wave ultraviolet radiation if outer envelope of the lamp is broken or punctured. Do not use where people will remain for more than a few minutes unless adequate shielding or other safety precautions are used. Certain lamps that will automatically extinguish when the outer envelope is broken or punctured are commercially available." This lamp complies with FDA radiation performance standard 21 CFR subchapter J. (USA: 21 CFR 1040.30 Canada: SOR/DORS/80-381)

## Dimensional drawing



Product	D	D	L (max)	L	C
CDM205/U/O/4K/EA/ED28	3.5 inch	89 mm	125 mm	129 mm	8.313 inch
CDM330/U/O/4K/ED28 EA ALLSTART	3.5 inch	89 mm	132 mm	127 mm	8.313 inch

Product	D (max)	D	L (max)	L	C
330W ED37 CO Allstart 1SL	118 mm	4.625 inch	184 mm	178 mm	11.5 inch
Allstart Energy Adv 330W ED37 CL 1SL	118 mm	4.625 inch	184 mm	178 mm	11.5 inch

### General Information

Cap-Base	EX39
Operating Position	UNIVERSAL

## Light Technical

Order Code	Full Product Name	Chromaticity	Chromaticity	Color Designation	Correlated Color	Color	Luminous Efficacy (Rated) (Min)	Luminous Efficacy (rated) (Nom)
		Coordinate X (Nom)	Coordinate Y (Nom)		Temperature (Nom)	rendering index (CRI)		
928601165903	Allstart Energy Adv 330W ED37 CL 1SL	0.381	0.384	4000 Kelvin	-	86	91 lm/W	97 lm/W
928601166003	CDM205/U/O/4K/EA/ED28	0.381	0.384	4100 Kelvin	-	84	88 lm/W	95 lm/W
928601166803	330W ED37 CO Allstart 1SL	0.386	0.390	4000 Kelvin	3950 K	86	85 lm/W	94 lm/W

# Energy Advantage CDM Lamps with Allstart Technology

Order Code	Full Product Name	Chromaticity Coordinate X (Nom)	Chromaticity Coordinate Y (Nom)	Color Designation	Correlated Color Temperature (Nom)	Color rendering index (CRI)	Luminous Efficacy (Rated) (Min)	Luminous Efficacy (rated) (Nom)
928601168202	CDM330/U/O/4K/ED28 EA ALLSTART	0.381	0.384	4000 Kelvin	-	87	91 lm/W	97 lm/W

## Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Voltage (Nom)
928601165903	Allstart Energy Adv 330W ED37 CL 1SL	3.02 A	130 V
928601166003	CDM205/U/O/4K/EA/ED28	1.9 A	128 V

Order Code	Full Product Name	Lamp Current (Nom)	Voltage (Nom)
928601166803	330W ED37 CO Allstart 1SL	3.02 A	130 V
928601168202	CDM330/U/O/4K/ED28 EA ALLSTART	3.02 A	130 V

## Mechanical and Housing

Order Code	Full Product Name	Bulb Finish	Bulb Shape
928601165903	Allstart Energy Adv 330W ED37 CL 1SL	Clear	ED37
928601166003	CDM205/U/O/4K/EA/ED28	Clear	ED28

Order Code	Full Product Name	Bulb Finish	Bulb Shape
928601166803	330W ED37 CO Allstart 1SL	Coated glass	ED37
928601168202	CDM330/U/O/4K/ED28 EA ALLSTART	Clear	ED28

## Approval and Application

Order Code	Full Product Name	Mercury (Hg) Content (Max)
928601165903	Allstart Energy Adv 330W ED37 CL 1SL	50 mg
928601166003	CDM205/U/O/4K/EA/ED28	38 mg

Order Code	Full Product Name	Mercury (Hg) Content (Max)
928601166803	330W ED37 CO Allstart 1SL	50 mg
928601168202	CDM330/U/O/4K/ED28 EA ALLSTART	50 mg

