



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 ≥ 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^{>1}
- * 330W CDM lamp with AllStart™Technology compared to 400W quartz Metal Halide lamp. ^{>1} 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)
- Lamp contains mercury. Manage in Accord with Disposal Laws. See: www.lamprecycle.org or 1-800-555-0050

Versions



EX39, ED-37, Clear

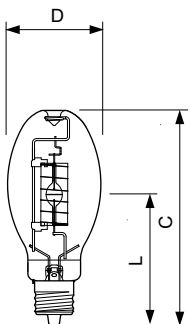
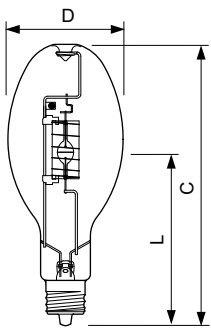


EX39, ED-28, Clear



EX39, ED-37, Coated

Dimensional drawing



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

Product	D	D	L (min)	L (max)	L	C
CDM205/U/O/4K/EA/ED28	3.5 in	89 mm	125 mm	129 mm	127 mm	8.313 in
CDM145/U/O/4K/ED28 EA	3.5 in	88.9 mm	125 mm	129 mm	127 mm	8.313 in
ALLSTART						
CDM330/U/O/4K/ED28 EA	3.5 in	89 mm	132 mm	127 mm	127 mm	8.313 in
ALLSTART						

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General Information

Cap-Base	EX39
Operating Position	Universal

Light Technical

Color Rendering Index (Min)	-
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Approval and Application

Order Code	Full Product Name	Mercury (Hg) Content (Max)	Picogram Per Lumen Hour
232595	CDM330/U/O/4K EA 130V 6/1	50 mg	84.2 pg/lm.h
232561	CDM205/U/O/4K EA 130V 12/1	38 mg	121.8 pg/lm.h
411058	CDM330/U/O/4K ED28	50 mg	96.7 pg/lm.h

Order Code	Full Product Name	Mercury (Hg) Content (Max)	Picogram Per Lumen Hour
411074	CDM145/U/O/4K ED28	37 mg	163.1 pg/lm.h
236935	CDM330/C/U/O/4K EA 130V 6/1	50 mg	90 pg/lm.h

Operating and Electrical

Order Code	Full Product Name	Lamp Current (Nom)	Voltage (Max)	Voltage (Min)	Voltage (Nom)	Power (Rated) (Nom)	Re-Ignition Time (Min) (Nom)
232595	CDM330/U/O/4K EA 130V 6/1	3.02 A	140 V	120 V	130 V	-	15 min
232561	CDM205/U/O/4K EA 130V 12/1	1.9 A	138 V	118 V	128 V	-	18.3 min
411058	CDM330/U/O/4K ED28	3.02 A	140 V	120 V	130 V	-	20 min
411074	CDM145/U/O/4K ED28	1.45 A	141 V	117 V	125 V	145.5 W	8 min
236935	CDM330/C/U/O/4K EA 130V 6/1	3.02 A	140 V	120 V	130 V	-	15 min

General Information

Order Code	Full Product Name	Life To 50% Failures (Nom)
232595	CDM330/U/O/4K EA 130V 6/1	24000 h
232561	CDM205/U/O/4K EA 130V 12/1	20000 h
411058	CDM330/U/O/4K ED28	20000 h

Order Code	Full Product Name	Life To 50% Failures (Nom)
411074	CDM145/U/O/4K ED28	20000 h
236935	CDM330/C/U/O/4K EA 130V 6/1	24000 h

Luminaire Design Requirements

Order Code	Full Product Name	Bulb Temperature (Max)
232595	CDM330/U/O/4K EA 130V 6/1	163 °C
232561	CDM205/U/O/4K EA 130V 12/1	175 °C
411058	CDM330/U/O/4K ED28	240 °C

Order Code	Full Product Name	Bulb Temperature (Max)
411074	CDM145/U/O/4K ED28	400 °C
236935	CDM330/C/U/O/4K EA 130V 6/1	163 °C

Light Technical (1/3)

Order Code	Full Product Name	Chromaticity Coordinate X		Chromaticity Coordinate Y		Color Code
		(Max)	(Min)	(Max)	(Min)	
232595	CDM330/U/O/4K EA 130V 6/1	0.397	0.365	0.381	0.404	940
232561	CDM205/U/O/4K EA 130V 12/1	0.397	0.365	0.381	0.404	841
411058	CDM330/U/O/4K ED28	0.397	0.365	0.381	0.404	940
411074	CDM145/U/O/4K ED28	0.390	0.358	0.374	0.400	940
236935	CDM330/C/U/O/4K EA 130V 6/1	0.402	0.370	0.386	0.404	940

Light Technical (2/3)

Energy Advantage CDM Lamps with Allstart Technology

Order Code	Full Product Name	Color Designation	Correlated		Lumen Maintenance - 10% Life	Lumen Maintenance - 40% Life	Luminous Efficacy (rated) (Min)	Luminous Efficacy (rated) (Nom)	Design Mean Lumens	Luminous Flux (Rated) (Min)
			Color Temperature (Nom)	Color Rendering Index (Nom)						
232595	CDM330/U/O/4K EA 130V 6/1	4000 Kelvin	-	86	90 %	75 %	91 lm/W	97 lm/W	24000 lm	30000 lm
232561	CDM205/U/O/4K EA 130V 12/1	4100 Kelvin	-	84	94 %	80 %	88 lm/W	95 lm/W	15600 lm	18000 lm
411058	CDM330/U/O/4K ED28	4000 Kelvin	-	87	90 %	80 %	91 lm/W	97 lm/W	25600 lm	30000 lm
411074	CDM145/U/O/4K ED28	4000 Kelvin	4200 K	87	90 %	80 %	85 lm/W	95 lm/W	11020 lm	12400 lm
236935	CDM330/C/U/O/4K EA 130V 6/1	4000 Kelvin	3950 K	86	90 %	80 %	85 lm/W	94 lm/W	23250 lm	28000 lm

Light Technical (3/3)

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)
232595	CDM330/U/O/4K EA 130V 6/1	32000 lm
232561	CDM205/U/O/4K EA 130V 12/1	19500 lm
411058	CDM330/U/O/4K ED28	32000 lm

Order Code	Full Product Name	Luminous Flux (Rated) (Nom)
411074	CDM145/U/O/4K ED28	13775 lm
236935	CDM330/C/U/O/4K EA 130V 6/1	31000 lm

Mechanical and Housing

Order Code	Full Product Name	Bulb Finish	Bulb Shape
232595	CDM330/U/O/4K EA 130V 6/1	Clear	ED37
232561	CDM205/U/O/4K EA 130V 12/1	Clear	ED28
411058	CDM330/U/O/4K ED28	Clear	ED28

Order Code	Full Product Name	Bulb Finish	Bulb Shape
411074	CDM145/U/O/4K ED28	Clear	ED28
236935	CDM330/C/U/O/4K EA 130V 6/1	Coated glass	ED37

