

# CLED SERIES LED LUMINAIRES

## STANDARD — FLAMEPROOF — HAZARDOUS LOCATION

### FEATURES

- Compact and lightweight LED luminaire with a small mounting footprint adaptable to different installation requirements.
- Modular design provides multiple combinations for maximum versatility.
- Twelve light outputs provide up to 24,000 lumens.
- Choice of three different color temperatures (CCT): 5000K cool white (-C), 4000K neutral white (-N) or 3000K warm white (-W).
- Choice of optics for optimal light distribution in a variety of applications: Type V, medium beam (55°) or narrow beam (25°).
- Multiple mounting options: ceiling, pendant, wall bracket or stanchion mounting.
- Design is suited for mounting heights ranging from 2 m up to 15 m (7 ft up to 50 ft).
- Wide ambient range: -40 °C to +50 °C / +55 °C (-40 °F to +122 °F / +131 °F).
- IK10 impact resistant glass lens.
- Two M20 or M25 threaded entry holes on each side of the wiring compartment. Supplied with 2 x M20 or 2 x M25 blanking plugs.
- Customize to the application requirements; standard clear glass lens, or optional glass lens with diffuser.
- Optional safety cable threads through the fixture housing for additional safety.
- Field replaceable LED drivers and glass assembly.
- Robust enclosure housing with exceptional

- thermal design that renders a longer luminaire life.
- Standard 6 kV surge protection.
- Optional 10 kV or 20 kV surge protection available.
- Separate field wiring compartment with screw terminal blocks for easy and secure connections (0.2 mm<sup>2</sup> to 6 mm<sup>2</sup>).
- Heavy duty, high temperature silicone gaskets.
- Reported L70 is > 60,000 hours.
- Photometric data and drawings available upon request.

### WARRANTY

- 5 year standard warranty.

### TYPICAL APPLICATIONS

- Flameproof luminaire solution, certified for hazardous areas in explosive gas Zones 1 and 2 or dust Zones 21 and 22 atmosphere.
- Designed for use in indoor and outdoor applications; suitable for use in:
  - Areas where flammable gases and vapors or combustible dusts may be present
  - Marine (salt water spray) and wet locations
- For use in a wide range of field applications such as
  - Power plants
  - Processing plants
  - Chemical plants
  - Oil refineries
  - Waste and sewage treatment
  - Hydrogen and Biofuels plants
  - LNG (Liquid Natural Gas) plants



### LUMINAIRE MATERIALS

- Body: pressure die-cast copperfree aluminum with gray epoxy powder coat finish
- Glass lens: high strength toughened glass.
- Gasket: silicone
- Blanking plugs: nylon
- Mounting accessories: zinc plated steel, or stainless steel
- Guard and all the fasteners: high corrosion resistant stainless steel

### OPTIONS (PURCHASE SEPARATELY)

- Globe guard
- Safety cable

### ATEX/IECEx LISTINGS ①

- Zones 1 and 2 – 21 and 22 | Gas (G) and Dust (D) | IP66

① Refer to catalog pages for detailed certification information.

### PRODUCT SPECIFICATIONS

Series Lumen Output	CLED03	CLED04	CLED05	CLED06	CLED07	CLED08	CLED10	CLED12	CLED14	CLED16	CLED20	CLED24
Input Power (W, @120-277 Vac)	29	39	52	58	68	78	93	114	134	152	190	228
Equivalencies (W, HID)	50-70W	70-100W	100-150W	150-175W	150-250W	175-300W	200-350W	350-400W	350-400W	400-600W	600-800W	1000W
Nominal Lumens ❶	2900	3900	5000	6200	7000	8000	10000	12000	14000	16000	20000	24000
Efficacy (up to, lm/W) ❶	100	100	96	107	103	103	108	105	104	105	105	105
Color Temperature (CCT) (K)	5000   4000   3000											
Color Rendering Index (CRI)	≥ 70 CRI											
Voltage	120-277 Vac, 50/60 Hz; 125-300 Vdc											
Surge Protection	6 kV Standard   10 kV or 20 kV Optional											
L70 Lifetime (hrs, reported)	> 60,000 hours											
Ambient Temperature ❷	-40 °C ≤ Ta ≤ +55 °C (-40 °C ≤ Ta ≤ +131 °C)						-40 °C ≤ Ta ≤ +50 °C (-40 °C ≤ Ta ≤ +122 °C)		-40 °C ≤ Ta ≤ +55 °C (-40 °C ≤ Ta ≤ +131 °C)		-40 °C ≤ Ta ≤ +50 °C (-40 °C ≤ Ta ≤ +122 °C)	
Temperature Code ❷	T4											
Fixture Weight kg (lbs)	8.2 (18.07)			8.9 (19.62)					21.5 (47.40)			
Replaceable Parts	Drivers, Replacement Lens, and Fuse Assembly											

① Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Refer to catalog pages for detailed performance.

② Refer to catalog pages for detailed temperature tables/operating temperature based on lumen output/certification.

**APPLETON™**

For product information:  
www.masteringled.com  
1.800.621.1506

  
**EMERSON™**

# CLED SERIES LED LUMINAIRES

## STANDARD — FLAMEPROOF — HAZARDOUS LOCATION

### Project Information

Part Number: \_\_\_\_\_ Date: \_\_\_\_\_  
 Project: \_\_\_\_\_  
 Fixture Type: \_\_\_\_\_

### Specifications

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

### CATALOG NUMBERING GUIDE

Series Prefix	Lumen Output	Color Temperature	Light Distribution Pattern	Cable Entry	Wiring	Voltage	Options
CLED						BU	
<b>SERIES PREFIX:</b>		<b>LUMEN OUTPUT: ①</b>		<b>COLOR TEMPERATURE:</b>		<b>WIRING:</b>	
<b>CLED</b> CLED Series Explosionproof LED Luminaires		<b>LOW LUMEN MODELS</b>		<b>C</b> 5000K (Cool) <b>N</b> 4000K (Neutral) <b>W</b> 3000K (Warm) <b>G</b> Green ③		<b>S</b> Standard <b>L</b> Dual Loop In/Out Through Wired	
		<b>03</b> 2900 <b>04</b> 3900 <b>05</b> 5000 <b>06</b> 6200 <b>07</b> 7000 <b>08</b> 8000 <b>10</b> 10000 <b>12</b> 12000		<b>LIGHT DISTRIBUTION PATTERN:</b>		<b>VOLTAGE:</b>	
				<b>G5</b> NEMA Type V <b>GM</b> Medium (55°) <b>GN</b> Narrow (25°)		<b>BU</b> 120-277 Vac, 50/60 Hz; 125-300 Vdc	
		<b>LUMEN OUTPUT: ①</b>		<b>CONDUIT ENTRY:</b>		<b>OPTIONS:</b>	
		<b>HIGH LUMEN MODELS ②</b>		<b>1</b> Metric M20 <b>2</b> Metric M25		<b>D</b> Diffuser <b>10</b> Surge Protection 10 kV <b>20</b> Surge Protection 20 kV	
		<b>14</b> 14000 <b>16</b> 16000 <b>20</b> 20000 <b>24</b> 24000					

① Lumen values apply to CCT 5000K, 70CRI Fixtures. Lumen output may vary slightly for different models. Tolerance +/-10%.

② CLED14, CLED16, CLED20 and CLED24 are only for High Lumen type.

③ For Green other colors (i.e. Red, Blue, or Amber), contact your local sales representative.

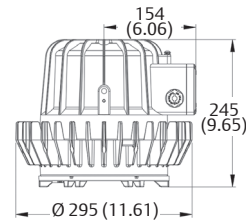
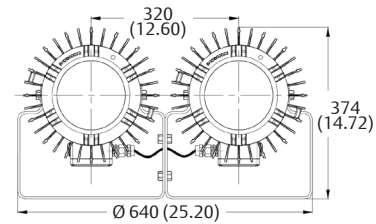
### MOUNTING ACCESSORIES ①

	Material	Catalog Number
<b>Wall Mounting   Set of One</b>		
	Zinc Plated Steel	CHIDWZ
	SS 304	CHIDWS
	SS 316	CHIDWS6
<b>Ceiling Mounting   Set of One</b>		
	Zinc Plated Steel	CHIDCZ
	SS 304	CHIDCS
	SS 316	CHIDCS6
<b>Pendant Mounting   Set of One</b>		
	Zinc Plated Steel	CHIDBZ
	SS 304	CHIDBS
	SS 316	CHIDBS6
<b>Stanchion Mounting   Set of Two</b> Pole Dimension: Ø 42 ~ Ø 49 mm (1-1/4" ~ 1-1/2")		
	Zinc Plated Steel	CFEHC49Z
	SS 304	CFEHC49S
<b>Factory Fitted Bracket for High Lumen ②   Set of Two</b>		
	Zinc Plated Steel	CLEDTMZ
	SS 304	CLEDTMS
	SS 316	CLEDTMS6

① Mounting accessories must be purchase separately.

② High lumen type must be supplied with this bracket.

### DIMENSIONAL DRAWINGS ③ | MILLIMETERS (INCHES)

<b>CLED3 to CLED12</b>
<b>Low Lumen</b>

<b>CLED14 to CLED24</b>
<b>High Lumen</b>


③ Driver housing model shown. Refer to catalog pages for additional dimensional information; available on [www.masteringled.com](http://www.masteringled.com).

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[www.masteringled.com](http://www.masteringled.com)

**EMERSON**

# CLED SERIES LED LUMINAIRES

## EMERGENCY BATTERY BACKUP — FLAMEPROOF — HAZARDOUS LOCATION

### FEATURES

- Compact and lightweight LED luminaire with a small mounting footprint adaptable to different installation requirements.
- Modular design provides multiple combinations for maximum versatility.
- Two different emergency duration options: 90 or 180 minutes. The lumen output will be different at different duration.
- Seven light outputs provide up to 12,000 lumens.
- Choice of three different color temperatures (CCT): 5000K cool white (-C), 4000K neutral white (-N) or 3000K warm white (-W).
- Choice of optics for optimal light distribution in a variety of applications: Type V, medium beam (55°) or narrow beam (25°).
- Multiple mounting options: ceiling, pendant, wall bracket or stanchion mounting.
- Design is suited for mounting heights ranging from 2 m up to 15 m (7 ft up to 50 ft).
- Wide ambient range: -40 °C to +50 °C / +55 °C (-40 °F to +122 °F / +131 °F).
- IK10 impact resistant glass lens.
- Two M20 or M25 threaded entry holes on each side of the wiring compartment. Supplied with 2 x M20 or 2 x M25 blanking plugs.
- Customize to the application requirements; standard clear glass lens, or optional glass lens with diffuser.
- Optional safety cable threads through the fixture housing for additional safety.

- Field replaceable LED drivers and glass assembly.
- Robust enclosure housing with exceptional thermal design that renders a longer luminaire life.
- Standard 6 kV surge protection.
- Optional 10 kV or 20 kV surge protection available.
- Separate field wiring compartment with screw terminal blocks for easy and secure connections (0.2 mm<sup>2</sup> to 6 mm<sup>2</sup>).
- Heavy duty, high temperature silicone gaskets.
- Reported L70 is > 60,000 hours.
- Photometric data and drawings available upon request.

### WARRANTY

- 5 year standard warranty.

### TYPICAL APPLICATIONS

- Flameproof luminaire solution, certified for hazardous areas in explosive gas Zones 1 and 2 or dust Zones 21 and 22 atmosphere.
- Designed for use in indoor and outdoor applications; suitable for use in:
  - Areas where flammable gases and vapors or combustible dusts may be present
  - Marine (salt water spray) and wet locations
- For use in a wide range of field applications such as
  - Power plants
  - Processing plants
  - Chemical plants
  - Oil refineries
  - Waste and sewage treatment
  - Hydrogen and Biofuels plants
  - LNG (Liquid Natural Gas) plants



### LUMINAIRE MATERIALS

- Body: pressure die-cast copperfree aluminum with gray epoxy powder coat finish
- Glass lens: high strength toughened glass.
- Gasket: silicone
- Blanking plugs: nylon
- Mounting accessories: zinc plated steel, or stainless steel
- Guard and all the fasteners: high corrosion resistant stainless steel

### OPTIONS (PURCHASE SEPARATELY)

- Globe guard
- Safety cable

### ATEX/IECEX LISTINGS ①

- Zones 1 and 2 – 21 and 22 | Gas (G) and Dust (D) | IP66

① Refer to catalog pages for detailed certification information.

### PRODUCT SPECIFICATIONS

Series Lumen Output	CLED03	CLED04	CLED05	CLED06	CLED08	CLED10	CLED12
Input Power (W, @120-277 Vac)	34	42	55	59	84	110	118
Equivalencies (W, HID)	50-70W	70-100W	100-150W	150-175W	175-300W	200-350W	350-400W
Nominal Lumens ❶	2900	3900	5000	6200	8000	10000	12000
Efficacy (up to, lm/W) ❶	100	93	91	105	95	91	102
Color Temperature (CCT) (K)	5000   4000   3000						
Color Rendering Index (CRI)	≥ 70 CRI						
Voltage	120-277 Vac, 50/60 Hz; 125-300 Vdc						
Surge Protection	6 kV Standard						
L70 Lifetime (hrs, reported)	> 60,000 hours						
Ambient Temperature ❷	-40 °C ≤ Ta ≤ +55 °C (-40 °C ≤ Ta ≤ +131 °C)					-40 °C ≤ Ta ≤ +50 °C (-40 °C ≤ Ta ≤ +122 °C)	
Temperature Code ❷	T4						
Fixture Weight kg (lbs)	8.9 (19.62)			21.7 (47.84)			
Replaceable Parts	Drivers, Replacement Lens, BMM, Battery Pack, and Fuse Assembly						

① Nominal lumens based on Type V optics, 5000K CCT with clear glass lens. Refer to catalog pages for detailed performance.

② Refer to catalog pages for detailed temperature tables/operating temperature based on lumen output/certification.

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## EMERGENCY BATTERY BACKUP — FLAMEPROOF — HAZARDOUS LOCATION

Project Information		Specifications
Part Number: _____	Date: _____	_____
Project: _____		_____
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<b>SERIES PREFIX:</b>		<b>LUMEN OUTPUT: ①</b>		<b>COLOR TEMPERATURE:</b>		<b>WIRING:</b>	
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		<b>03</b> 2900 <b>04</b> 3900 <b>05</b> 5000 <b>06</b> 6200		<b>LIGHT DISTRIBUTION PATTERN:</b>		<b>VOLTAGE:</b>	
		<b>HIGH LUMEN MODELS ②</b>		<b>G5</b> NEMA Type V <b>GM</b> Medium (55°) <b>GN</b> Narrow (25°)		<b>BU</b> 120-277 Vac, 50/60 Hz; 125-300 Vdc	
		<b>08</b> 8000 <b>10</b> 10000 <b>12</b> 12000		<b>CONDUIT ENTRY:</b>		<b>OPTIONS:</b>	
				<b>1</b> Metric M20 <b>2</b> Metric M25		<b>D</b> Diffuser <b>H</b> 90 Minute Emergency ④ <b>E</b> 180 Minute Emergency ⑤	

① Lumen values apply to CCT 5000K, 70CRI Fixtures. Lumen output may vary slightly for different models. Tolerance +/-10%.

② CLED08, CLED10 and CLED12 Emergency Version are only for High Lumen type.

③ For Green other colors (i.e. Red, Blue, or Amber), contact your local sales representative.

④ The emergency duration is 90mins with 1300 Lumen output, 2600 Lumen output for High Lumen type

⑤ The emergency duration is 180mins with 700 Lumen output, 1400 Lumen output for High Lumen type.

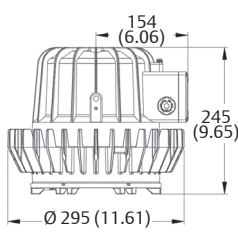
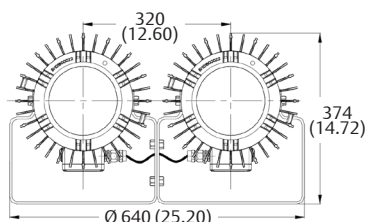
### MOUNTING ACCESSORIES ①

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	SS 304	CHIDWS
	SS 316	CHIDWS6
<b>Ceiling Mounting   Set of One</b>		
	Zinc Plated Steel	CHIDCZ
	SS 304	CHIDCS
	SS 316	CHIDCS6
<b>Pendant Mounting   Set of One</b>		
	Zinc Plated Steel	CHIDBZ
	SS 304	CHIDBS
	SS 316	CHIDBS6
<b>Stanchion Mounting   Set of Two</b>		
Pole Dimension: Ø 42 ~ Ø 49 mm (1-1/4" ~ 1-1/2")		
	Zinc Plated Steel	CFEHC49Z
	SS 304	CFEHC49S
<b>Factory Fitted Bracket for High Lumen ②   Set of Two</b>		
	Zinc Plated Steel	CLEDTMZ
	SS 304	CLEDTMS
	SS 316	CLEDTMS6

① Mounting accessories must be purchase separately.

② High lumen type must be supplied with this bracket.

### DIMENSIONAL DRAWINGS ③ | MILLIMETERS (INCHES)

<b>CLED3 to CLED06</b>
<b>Low Lumen</b>

<b>CLED08 to CLED12</b>
<b>High Lumen</b>


③ Driver housing model shown. Refer to catalog pages for additional dimensional information; available on [www.masteringled.com](http://www.masteringled.com).

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