

## LED Driver



### ExLDRB Series

The ExLDRB Series explosion-proof driver power supplies are serialized patented products adopting encapsulation (type "m") explosion protection technologies. The PCBA assembly of the power supply complies with the encapsulation type (type "m") explosion protection requirements, fully isolating electronic components from explosive atmospheres and ensuring safe and reliable performance.

CNEx Certificate : CNEx 24.2932U  
IECEX Certificate : IECEX CNEX 24.0031U  
EU ATEX Certificate : 2614 CNEX 24 ATEX 0033U

### Features

- M-type (Ex m) cast sealing explosion-proof structure, electronic components isolated from explosive gas via casting encapsulant
- Full auto-recovery protection: overload, over voltage, short circuit, over temperature
- High power factor  $PF \geq 0.95$ , high efficiency 85%~92%, max THD 15%
- Wide input AC 100-277V, 50/60Hz global universal voltage
- Two versions: non-dimmable (D0) / 0-10V dimmable (D1)
- Multiple power options: 25W/50W/75W/100W/150W/200W/240W
- Natural air cooling, ambient temperature  $-40 \sim +60^{\circ}\text{C}$ , working temperature up to  $+100^{\circ}\text{C}$
- MTBF 30000H @  $T_c=75^{\circ}\text{C}$ , long service life
- IP66 fully sealed housing, silicone rubber waterproof ring

### Application

- Explosion-proof LED high bay lights
  - Chemical factory lighting
  - Oil & gas workshop lighting
  - Mining industrial lamps
  - Hazardous zone warehouse lighting
  - Petrochemical plant lighting
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## Related products

- Match with ExLDRB explosion-proof driver for hazardous area upgrade
- Custom explosion-proof industrial LED luminaires

## Type Designation

ExLDRB - [Power] - [Dimming] - [Emergency]

Series Type	Power	Dimming	Emergency
ExLDRB	25 = 25W 50 = 50W 75 = 75W 100 = 100W 150 = 150W 200 = 200W 240 = 240W	D0 = Non-Dimmable D1 = Dimmable	En = Non-Emergency

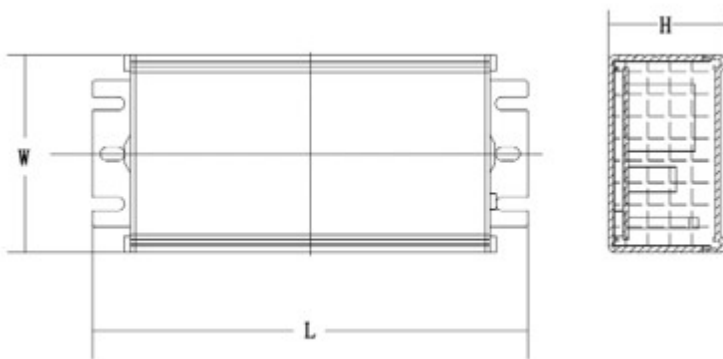
## Optional Power

25W, 50W, 75W, 100W, 150W, 200W, 240W

D0 = Non-Dimmable; D1 = Dimmable; En = Non-Emergency

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## Dimensional drawing



Power Rating	Length L (mm)	Width W (mm)	Height H (mm)
25W / 50W	130	62	36
75W / 100W	150	68	40
150W / 200W / 240W	220	68	40

## Structural Exploded View

1. Driver main housing
2. Cast sealing epoxy layer
3. AC input terminal (L/N/G)
4. DC output terminal (LED+/LED-)
5. Dimming terminal (DIM+/DIM-, only D1 model)
6. IP66 silicon rubber sealing ring

## Mechanical and Housing

Power	Color	Enclosure Material
All Series	Black	Metal housing with cast sealing

## General Information (1/2)

order code	Explosion Cert.	Protection Class	Enclosure Rating	Dimmable	Emergency	Flammability	Glow wire test
ExLDRB25D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB50D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB75D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB100D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB150D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB200D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB240D0En	CNEx/IECEX/A TEX	Class I	IP66	No	No	F	650/5
ExLDRB75D1En	CNEx/IECEX/A TEX	Class I	IP66	Yes	No	F	650/5
ExLDRB100D1En	CNEx/IECEX/A TEX	Class I	IP66	Yes	No	F	650/5
ExLDRB150D1En	CNEx/IECEX/A TEX	Class I	IP66	Yes	No	F	650/5
ExLDRB200D1En	CNEx/IECEX/A TEX	Class I	IP66	Yes	No	F	650/5
ExLDRB240D1En	CNEx/IECEX/A TEX	Class I	IP66	Yes	No	F	650/5

## General Information (2/2)

order code	Load type	Output Current	Output Voltage Range	Temp rise $\Delta T$
ExLDRB25D0En	Constant current LED Module	460mA	28~54VDC	3.5K
ExLDRB50D0En	Constant current LED Module	930mA	28~54VDC	3.5K
ExLDRB75D0En	Constant current LED Module	1400mA	28~54VDC	3.5K
ExLDRB100D0En	Constant current LED Module	1870mA	28~54VDC	3.5K
ExLDRB150D0En	Constant current LED Module	2800mA	28~54VDC	3.2K
ExLDRB200D0En	Constant current LED Module	3750mA	28~54VDC	3.2K
ExLDRB240D0En	Constant current LED Module	4500mA	28~54VDC	3.2K
ExLDRB75D1En	Constant current LED Module	1400mA	28~54VDC	3.5K
ExLDRB100D1En	Constant current LED Module	1870mA	28~54VDC	3.5K
ExLDRB150D1En	Constant current LED Module	2800mA	28~54VDC	3.2K
ExLDRB200D1En	Constant current LED Module	3750mA	28~54VDC	3.2K
ExLDRB240D1En	Constant current LED Module	4500mA	28~54VDC	3.2K

## Initial Performance (IEC Compliant)

order code	Rated Power	Power Factor	Max THD	Efficiency	No-Load Power	Start-up Time	Hold-up Time
ExLDRB25D0En	25W	≥0.95	15%	85%	≤3W	≤2S	≥10Ms
ExLDRB50D0En	50W	≥0.95	15%	89%	≤3W	≤2S	≥10Ms
ExLDRB75D0En	75W	≥0.95	15%	90%	≤3W	≤2S	≥10Ms
ExLDRB100D0En	100W	≥0.95	15%	90%	≤3W	≤2S	≥10Ms
ExLDRB150D0En	150W	≥0.95	15%	91%	≤3W	≤2S	≥10Ms
ExLDRB200D0En	200W	≥0.95	15%	92%	≤3W	≤2S	≥10Ms
ExLDRB240D0En	240W	≥0.95	15%	92%	≤3W	≤2S	≥10Ms
ExLDRB75D1En	75W	≥0.95	15%	90%	≤3W	≤2S	≥10Ms
ExLDRB100D1En	100W	≥0.95	15%	90%	≤3W	≤2S	≥10Ms
ExLDRB150D1En	150W	≥0.95	15%	91%	≤3W	≤2S	≥10Ms
ExLDRB200D1En	200W	≥0.95	15%	92%	≤3W	≤2S	≥10Ms
ExLDRB240D1En	240W	≥0.95	15%	92%	≤3W	≤2S	≥10Ms

## Operating and Electrical

order code	Input Frequency	Input Voltage	Max Input Current	Inrush Current	Ripple & Noise
ExLDRB25D0En	50-60Hz	100-277VAC	0.2A	45mA	20% (Pk-Pk)
ExLDRB50D0En	50-60Hz	100-277VAC	0.4A	60mA	20% (Pk-Pk)
ExLDRB75D0En	50-60Hz	100-277VAC	0.6A	70mA	20% (Pk-Pk)
ExLDRB100D0En	50-60Hz	100-277VAC	0.8A	85mA	20% (Pk-Pk)
ExLDRB150D0En	50-60Hz	100-277VAC	1.2A	95mA	20% (Pk-Pk)
ExLDRB200D0En	50-60Hz	100-277VAC	1.6A	100mA	20% (Pk-Pk)
ExLDRB240D0En	50-60Hz	100-277VAC	1.95A	110mA	20% (Pk-Pk)
ExLDRB75D1En	50-60Hz	100-277VAC	0.6A	70mA	20% (Pk-Pk)
ExLDRB100D1En	50-60Hz	100-277VAC	0.8A	85mA	20% (Pk-Pk)
ExLDRB150D1En	50-60Hz	100-277VAC	1.2A	95mA	20% (Pk-Pk)
ExLDRB200D1En	50-60Hz	100-277VAC	1.6A	100mA	20% (Pk-Pk)
ExLDRB240D1En	50-60Hz	100-277VAC	1.95A	110mA	20% (Pk-Pk)

### Protection Function

All models auto recovery: Over Load / Over Voltage / Short Circuit / Over Temperature

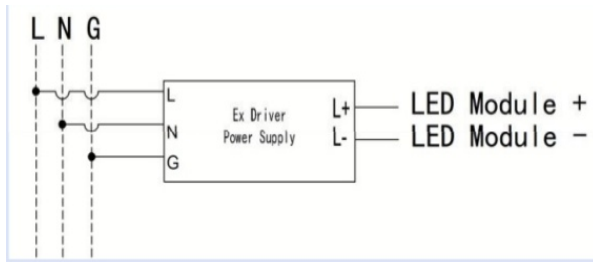
## Approval and Application

order code	Explosion Mark	Ingress protection code	Operating Temp	Storage Temp	Vibration Standard
All ExLDRB Series	Ex mb IIC Gb	IP66	-40 ~ +100	-25 ~ +60	10-500Hz, 2G, X/Y/Z 60min

## Certificates

- CNEEx Certificate: CNEEx 24.2932U
- IECEx Certificate: IECEx CNEX 24.0031U
- EU ATEX Certificate: 2614 CNEX 24 ATEX 0033U

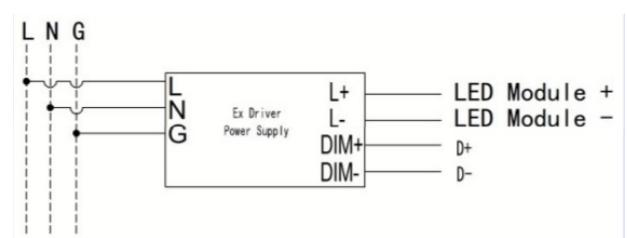
## Wiring Diagram & Installation Notes



### 1. Non-Dimmable (D0) Wiring

AC Input: L / N / G

DC Output: LED Module + / LED Module -



### 2. Dimmable (D1) Wiring

AC Input: L / N / G

DC Output: LED Module + / LED Module -

Dimming port: DIM+ / DIM-

## Limitation & Installation Rules

- Must be installed inside explosion-proof enclosure  $\geq$ IP54, comply IEC/EN 60079-0 & GB/T3836.1
- Supply max prospective short-circuit current  $\leq$ 1500A
- Driver cannot be repaired, replace whole unit when faulty
- Ground wire must be reliably connected for safety & EMI reduction
- Only suitable for constant current LED load; contact sales for custom solution
- Do not touch driver during operation to avoid electric shock
- Do not exceed rated electrical parameters

## Packing, Transportation and Storage

- Equipped with outgoing inspection report
- Anti-sun, anti-rain during transport, handle gently
- Store  $\geq$ 20cm off ground,  $\geq$ 50cm away from wall & heat source
- Re-inspect if storage over 6 months
- Humidity range 5~90%RH, no corrosive gas, no strong vibration

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