

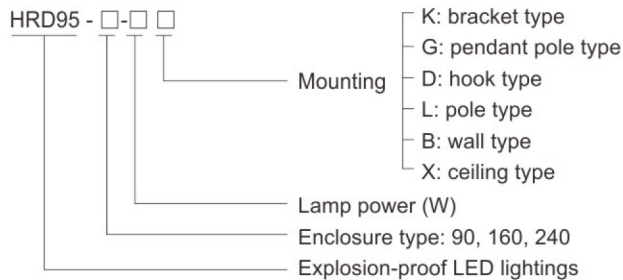
## LED Light Fittings

### HRD95 Series Explosion-proof LED Lightings



- ◆ Explosion protection to
  - CENELEC
  - IEC
  - NEC
- ◆ Can be used in
  - Zone 1 and Zone 2
  - Zone 21 and Zone 22
  - Class I, Zone 1 and Zone 2
  - Class I, Division 2, Groups A, B, C, D
- ◆ Three enclosure types: 90, 160, 240
- ◆ Applicable lamp and power (max.240W)
  - LED: 60W, 90W, 120W, 160W, 200W, 240W
- ◆ Isolated LED lamp compartment, CC-CV (constant current - constant voltage) power controller compartment and terminal compartment; Wind-convection heat dissipation structure.
- ◆ International brand white light LED, reasonable arrangement of multi LED, high lighting efficiency and long service life.
- ◆ Two types of light distribution: spotlight and floodlight, which can be selected on request.
- ◆ Low-maintenance due to long service life is up to 100,000 operating hours.

#### Catalogue number logic



#### Selection table

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
HRD95-90-60K	60	9.80	HRD95-90-60D	60	9.50	HRD95-160-120B	120	13.50
HRD95-90-90K	90	9.80	HRD95-90-90D	90	9.50	HRD95-160-160B	160	13.50
HRD95-160-120K	120	12.70	HRD95-160-120D	120	11.75	HRD95-240-200B	200	26.60
HRD95-160-160K	160	12.70	HRD95-160-160D	160	11.75	HRD95-240-240B	240	26.60
HRD95-240-200K	200	27.50	HRD95-90-60L	60	9.30	HRD95-90-60X	60	9.20
HRD95-240-240K	240	27.50	HRD95-90-90L	90	9.30	HRD95-90-90X	90	9.20
HRD95-90-60G	60	10.75	HRD95-160-120L	120	12.00	HRD95-160-120X	120	11.75
HRD95-90-90G	90	10.75	HRD95-160-160L	160	12.00	HRD95-160-160X	160	11.75
HRD95-160-120G	120	13.05	HRD95-90-60B	60	11.00	HRD95-240-200X	200	24.80
HRD95-160-160G	160	13.05	HRD95-90-90B	90	11.00	HRD95-240-240X	240	24.80

**Note:** 1. The product is supplied according to "Type/Ordering code" in the table with mounting accessories.  
2. Two types of light distribution: spotlight and floodlight. The light fittings are supplied without lens. Lighting distribution is of floodlight. If required, please specify when ordering.

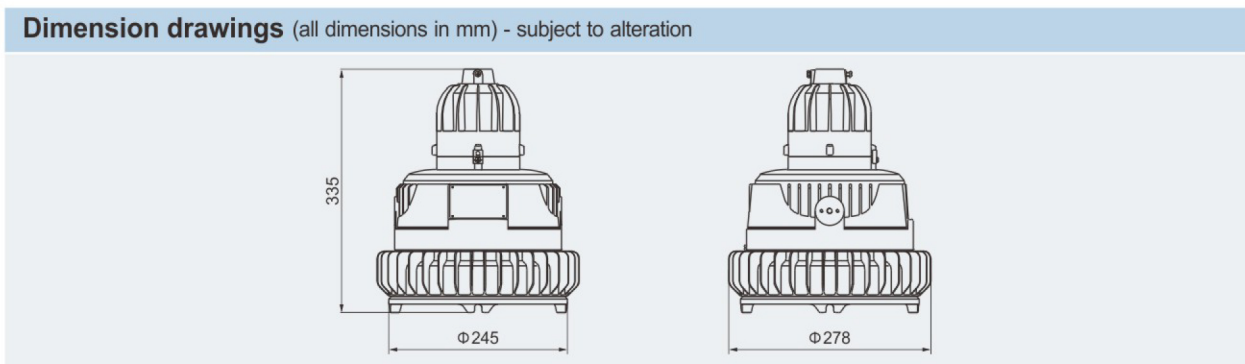
## Zones 1&2; 21&22

## LED Light Fittings HRD95 Series Explosion-proof LED Lightings

Technical data	
<b>Explosion-proof LED lightings HRD95-90-□□</b>	
<b>Explosion protection</b>	
Global (IECEX) Gas and dust	IECEX CNEX 18.0024 X Ex db op is IIC T□ <sup>1)</sup> Gb Ex tb op is IIIC T□ <sup>1)</sup> Db IP66
Europe (ATEX) Gas and dust	CNEX 18 ATEX 0020X ⊕ II 2 G Ex db op is IIC T□ <sup>1)</sup> Gb ⊕ II 2 D Ex tb op is IIIC T□ <sup>1)</sup> Db IP66 <sup>1)</sup> See Selection Table
<b>Certificates</b>	IECEX; ATEX; CU-TR
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-28, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-28, IEC 60079-31
<b>Material</b>	
Enclosure	Copper-free aluminium alloy, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Exposed fastener	Stainless steel
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit
<b>Lamp</b>	
Lamp specification	LED module, Multiple LED
Lamp power (W)	60W, 90W
Colour rendering index (Ra)	≥ 80
Colour temperature (CCT)	5700K Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.
<b>Rated voltage</b>	100~277V AC 50/60Hz, 130~250V DC
<b>Earthing protection</b>	M5 (internal & external earth bolts)
<b>Degree of protection</b>	IP66
<b>Ambient temperature</b>	-40°C~+55°C
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)
<b>Mounting</b>	bracket type, hook type, pole type, pendant pole type, ceiling type
<b>Cable entries</b>	1 x M25 x 1.5 (hook type, pole type, pendant pole type) 2 x M25 x 1.5 (bracket type) 4 x M25 x 1.5 (wall type, ceiling type)
<b>Cable gland</b>	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29



Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
60	71°C (T6)	71°C	86°C (T5)	86°C
90	82°C (T5)	82°C	97°C (T4)	97°C



## LED Light Fittings

### HRD95 Series Explosion-proof LED Lightings

#### Technical data

#### Explosion-proof LED lightings HRD95-160-□□

##### Explosion protection

Global (IECEX)  
Gas and dust

IECEX CNEX 18.0024 X  
Ex db op is IIC T□<sup>1)</sup> Gb  
Ex tb op is IIIC T□<sup>1)</sup> Db IP66

Europe (ATEX)  
Gas and dust

CNEX 18 ATEX 0020X  
⊕ II 2 G Ex db op is IIC T□<sup>1)</sup> Gb  
⊕ II 2 D Ex tb op is IIIC T□<sup>1)</sup> Db IP66

<sup>1)</sup> See Selection Table

##### Certificates

##### Conformity to standards

IECEX; ATEX; CU-TR  
EN 60079-0, EN 60079-1, EN 60079-28, EN 60079-31  
IEC 60079-0, IEC 60079-1, IEC 60079-28, IEC 60079-31

##### Material

Enclosure  
Glass cover  
Exposed fastener  
LED driver

Copper-free aluminium alloy, powder coated surface, yellow (RAL1021)  
Toughened glass, stands 4J impact

Stainless steel

Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit

##### Lamp

Lamp specification  
Lamp power (W)  
Colour rendering index (Ra)  
Colour temperature (CCT)

LED module, Multiple LED  
120W, 160W  
≥ 80  
5700K

Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.

##### Rated voltage

##### Earthing protection

##### Degree of protection

##### Ambient temperature

##### Terminal

##### Mounting

##### Cable entries

100~277V AC 50/60Hz, 130~250V DC

M5 (internal & external earth bolts)

IP66

-40°C~+55°C

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

bracket type, hook type, pole type, pendant pole type, wall type, ceiling type

1 x M25 x 1.5 (hook type, pole type, pendant pole type)

2 x M25 x 1.5 (bracket type)

4 x M25 x 1.5 (wall type, ceiling type)

##### Cable gland

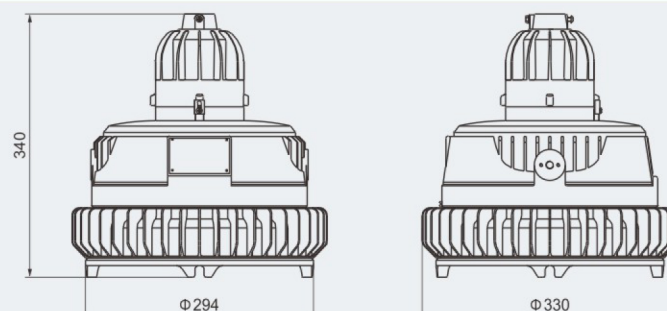
DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29



#### Selection table

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
120	76°C (T6)	76°C	91°C (T5)	91°C
160	93°C (T4)	93°C	108°C (T4)	108°C

#### Dimension drawings (all dimensions in mm) - subject to alteration





## LED Light Fittings HRD95 Series Explosion-proof LED Lightings

### Technical data

#### Explosion-proof LED lightings HRD95-240-□□

##### Explosion protection

Global (IECEX) Gas and dust	IECEX CNEX 18.0024 X Ex db op is IIC T□ <sup>1)</sup> Gb Ex tb op is IIIC T□ <sup>1)</sup> Db IP66
Europe (ATEX) Gas and dust	CNEX 18 ATEX 0020X ⊕ II 2 G Ex db op is IIC T□ <sup>1)</sup> Gb ⊕ II 2 D Ex tb op is IIIC T□ <sup>1)</sup> Db IP66

<sup>1)</sup> See Selection Table

##### Certificates

##### Conformity to standards

IECEX; ATEX; CU-TR  
EN 60079-0, EN 60079-1, EN 60079-28, EN 60079-31  
IEC 60079-0, IEC 60079-1, IEC 60079-28, IEC 60079-31

##### Material

Enclosure	Copper-free aluminium alloy, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Exposed fastener	Stainless steel
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor ≥ 0.95, with function of distributed current, constant current, surge-proof and anti-electromagnetic interference, and protection against overcurrent, open circuit, and short circuit

##### Lamp

Lamp specification	LED module, Multiple LED
Lamp power (W)	200W, 240W
Colour rendering index (Ra)	≥ 80
Colour temperature (CCT)	5700K Note: cool white is available in general. Warm white or nature white is optional, please specify when ordering.

##### Rated voltage

##### Earthing protection

##### Degree of protection

##### Ambient temperature

##### Terminal

##### Mounting

##### Cable entries

##### Cable gland

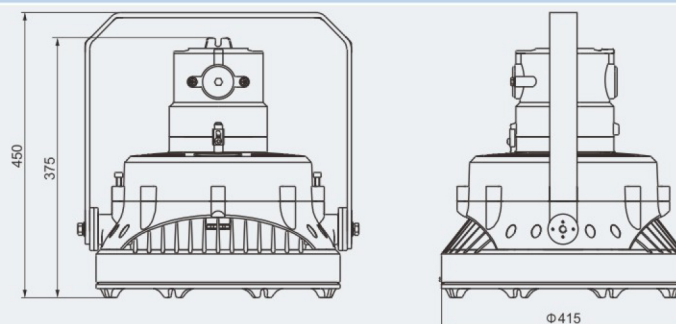
100~277V AC 50/60Hz, 130~250V DC  
M5 (internal & external earth bolts)  
IP66  
-40°C~+55°C  
3 x 1.5~4mm<sup>2</sup> (L+N+PE)  
bracket type, wall type, ceiling type  
2 x M25 x 1.5 (bracket type)  
4 x M25 x 1.5 (wall type, ceiling type)  
DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P7/20~29



### Selection table

Rated power(W)	Temperature classification			
	-40°C ≤ Ta ≤ +40°C		-40°C ≤ Ta ≤ +55°C	
	Gas	Dust	Gas	Dust
200	81°C (T5)	81°C	96°C (T4)	96°C
240	99°C (T4)	99°C	114°C (T4)	114°C

### Dimension drawings (all dimensions in mm) - subject to alteration





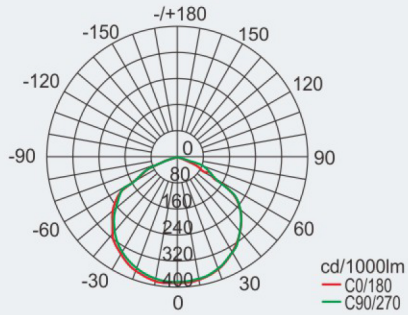
## LED Light Fittings HRD95 Series Explosion-proof LED Lightings

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5700K (cool white).

### HRD95-90-□□

Lamp power (W)	Luminous flux	Wattage
60	7200lm	61W
90	10450lm	90W

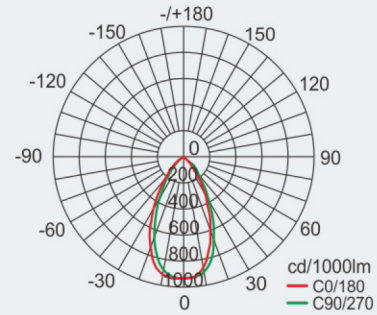
(Standard products without lens)



### HRD95-90-□□

Lamp power (W)	Luminous flux	Wattage
60	7200lm	61W
90	10450lm	90W

(With 60° lens)

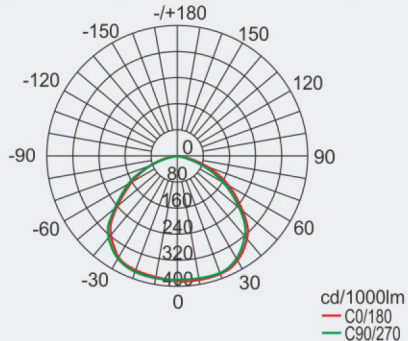


Note: Lens of 40° and 25° can be provided on request.

### HRD95-160-□□

Lamp power (W)	Luminous flux	Wattage
120	13200lm	120W
160	19250lm	160W

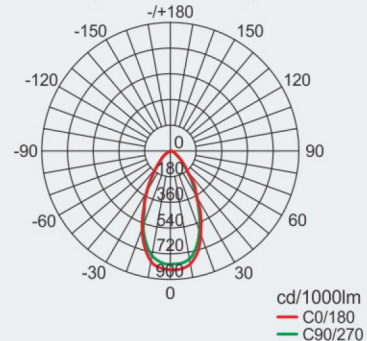
(Standard products without lens)



### HRD95-160-□□

Lamp power (W)	Luminous flux	Wattage
120	13200lm	120W
160	19250lm	160W

(With 60° lens)

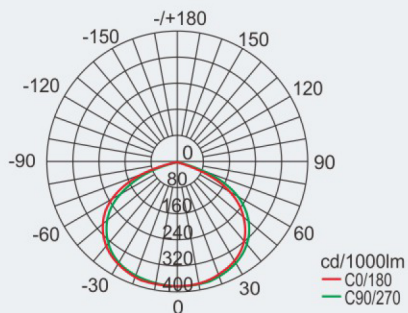


Note: Lens of 40° and 25° can be provided on request.

### HRD95-240-□□

Lamp power (W)	Luminous flux	Wattage
200	25000lm	205W
240	28200lm	245W

(Standard products without lens)

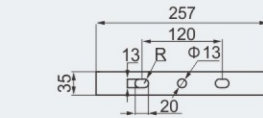
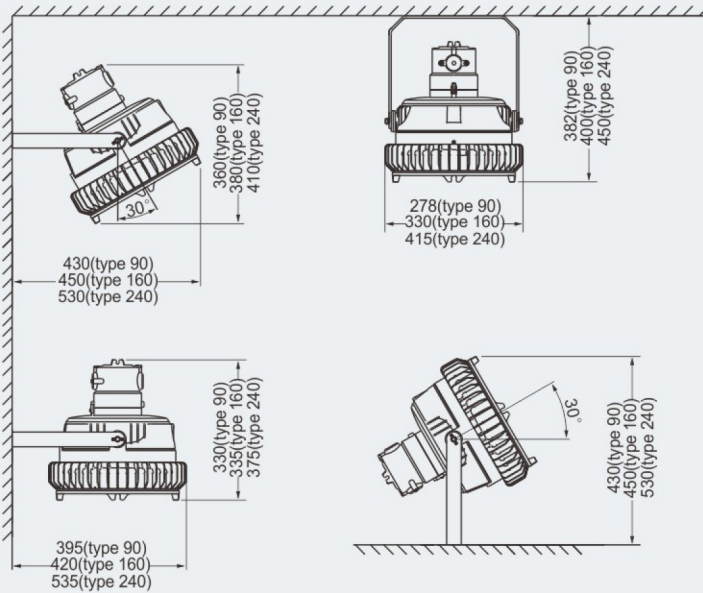


We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.

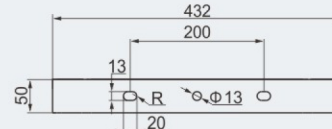
## LED Light Fittings HRD95 Series Explosion-proof LED Lightings

### Mounting type (all dimensions in mm) - subject to alteration

#### K: bracket type



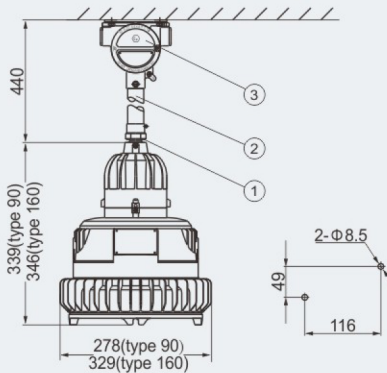
Bracket mounting dimension of type 90, type 160



Bracket mounting dimension of type 240

#### G: pendant pole type

Note: pendant pole type is unavailable to type 240.

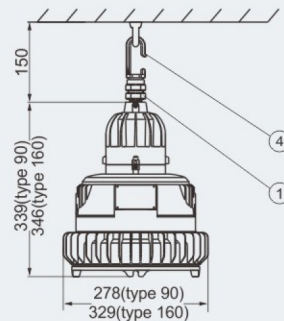


Accessories supplied with the light fittings:

- BGJ-III explosion-proof connector M25×1.5(M)/M25×1.5(F), Stainless steel.
- Straight pipe (M25 x 1.5), length: 300mm.
- BHD51-F (for type 90 and type 160: Copper-free Aluminium Alloy), see P3/4.

#### D: hook type

Note: hook type is unavailable to type 240.

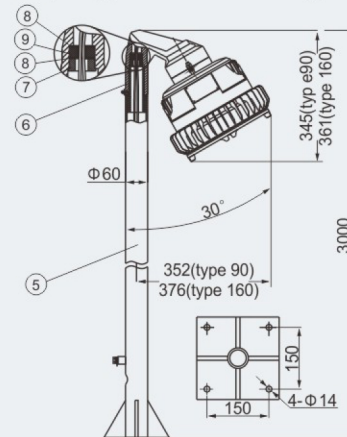


Accessories supplied with the light fittings:

- BGJ-III explosion-proof connector M25×1.5 (M)/M25×1.5(F), Stainless steel.
- Hook (Stainless steel).

#### L: pole type

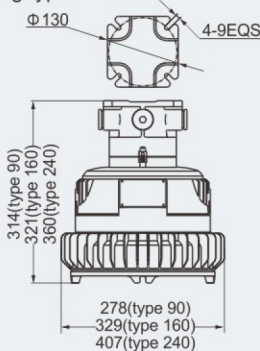
Note: pole type is unavailable to type 240.



Accessories supplied with the light fittings:

- Pole (shall be provided by user).
- Outlet sleeve.
- Locking bolt.
- Washer.
- Sealing ring.

#### X: ceiling type



#### B: wall type

