

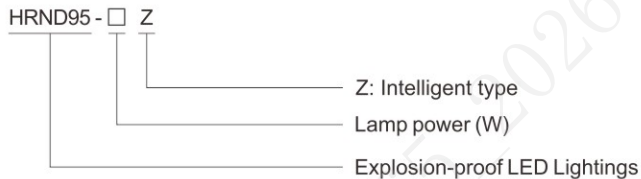
SCS-ZM Intelligent Lighting Management and Control System

HRND95-□Z Series Explosion-proof LED Lightings (Intelligent Type)



- ◆ Explosion protection to
 - CENELEC
 - IEC
 - NEC
- ◆ Can be used in
 - Zone 2
 - Zone 21 and Zone 22
 - Class I, Zone 2
 - Class I, Division 2, Groups A, B, C, D
- ◆ 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.
- ◆ Standard luminaires equip with 60° lens, without lens and 30° lens which are optional, please indicate when placing an order.
- ◆ Standard luminaires do not equip with external reflector, if need, please specify.
- ◆ Low-maintenance costs due to long service life, which is up to 100,000 operating hours.
- ◆ Luminaires feature adjustable brightness for efficient energy-saving lighting;
- ◆ When used with an intelligent lighting system, they enable centralized intelligent management and control of lighting equipment.

■ Catalogue number logic



■ Product features



Intelligent Control

Equipped with an intelligent control chip, it supports individual lamp control, enabling remote on/off operation and brightness adjustment. It can also integrate with smart functions such as light sensing and human presence detection.



Wireless Communication

Features an embedded Zigbee industrial wireless communication module, offering flexible connectivity without the need for communication cabling—greatly simplifying on-site installation.



Intelligent Monitoring

Built-in intelligent sensor chip continuously monitors lamp parameters including power, current, voltage, brightness, on/off status, and fault conditions.



Human Presence Detection

The lamp housing can be equipped with a human presence detection module that senses movement and activates nearby lights accordingly, achieving automatic lighting when people enter the area and turning off when they leave.

Zones 1&2; 21&22

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Technical data

Explosion-proof LED Lightings (Intelligent type) HRND95-□Z

Explosion protection

Global (IECEX)	IECEX (applied for)
Gas and dust	Ex ec mc IIC T□ ¹⁾ Gc Ex tb IIIC T□ ¹⁾ Db
Europe (ATEX)	ATEX (applied for)
Gas and dust	⊕ II 3 G Ex ec mc IIC T□ ¹⁾ Gc ⊕ II 2 D Ex tb IIIC T□ ¹⁾ Db

¹⁾ See Selection Table of P2/85

Certificates

IECEX; ATEX

Conformity to standards

EN 60079-0, EN 60079-7, EN 60079-18, EN 60079-31
IEC 60079-0, IEC 60079-7, IEC 60079-18, IEC 60079-31

Material

Enclosure	Copper-free Aluminium Alloy, powder coated surface,
Glass cover	Toughened glass, stands 4J impact
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.
Exposed fastener	Stainless steel

Lamp

Lamp specification	LED module
Lamp power (W)	Type I: 40W, 60W Type II: 80W, 120W Type III: 160W, 200W Type IV: 240W, 300W
Colour rendering index (Ra)	≥80
Colour temperature (CCT)	5000K

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

Rated voltage

110~277V AC 50/60Hz

Degree of protection

IP66

Ambient temperature

-40°C~+58°C(+40°C)

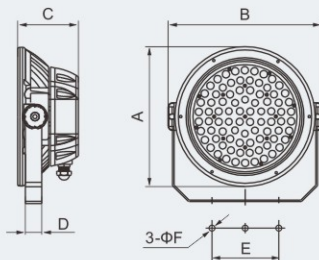
Terminal

3×1.5~4mm² (L+N+PE)

Cable entries

1×M20×1.5 cable gland (DQM-I Ex eb)

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



Type	A	B	C	D	E	F
HRND95-40Z HRND95-60Z	Φ230	263	118	30	100	11
HRND95-80Z HRND95-120Z	Φ310	345	137	36	150	11
HRND95-160Z HRND95-200Z	Φ380	425	166	42	200	11
HRND95-240Z HRND95-300Z	Φ450	501	198	50	200	13

Detailed Parameters

Luminaire photometric curve diagram, external dimensions, installation schematic, mounting accessories, mounting components, and spare parts list are detailed on page P2/86~87.