

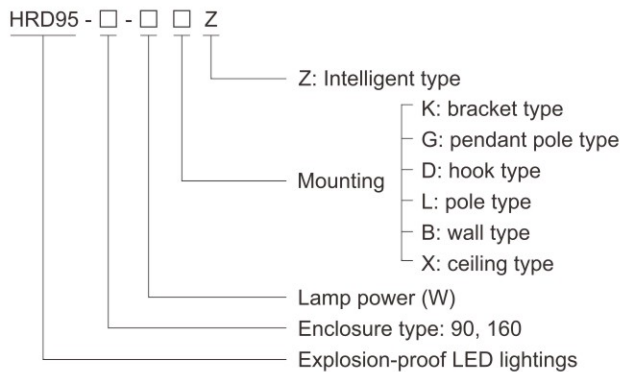
SCS-ZM Intelligent Lighting Management and Control System

HRD95-□□Z Series Explosion-proof LED Lightings (Intelligent Type)



- ◆ 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
- ◆ Two enclosure types: 90, 160
- ◆ 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 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

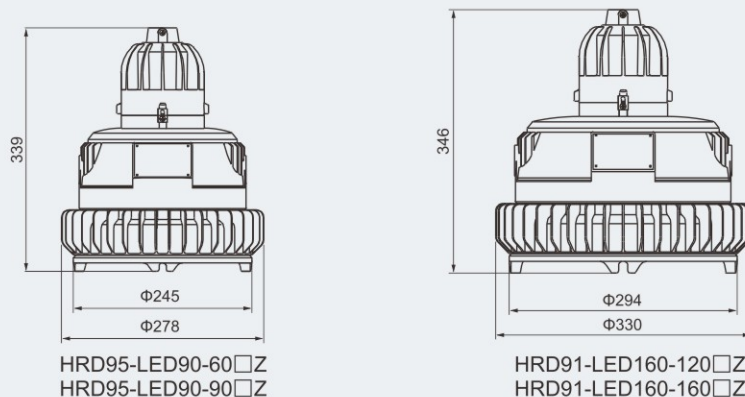
SCS-ZM Intelligent Lighting Management and Control System

HRD95-□Z Series Explosion-proof LED Lightings (Intelligent Type)

Technical data	
Explosion-proof LED lightings (Intelligent type) HRD95-□-□□Z	
Explosion protection Global (IECEX) Gas and dust Europe (ATEX) Gas and dust	IECEX (applied for) Ex db op is IIC T□ ¹⁾ Gb Ex tb op is IIIC T□ ¹⁾ Db IP66 ATEX (applied for) Ex II 2 G Ex db op is IIC T□ ¹⁾ Gb Ex II 2 D Ex tb op is IIIC T□ ¹⁾ Db IP66 ¹⁾ See Selection Table P2/55-56
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 Type 60: 60W, 90W Type 160: 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 M5 (internal & external earth bolts) IP66 -40°C~+55°C(+40°C) 3×1.5~4mm ² (L+N+PE) bracket type, hook type, pole type, pendant pole type, ceiling type 1×M25×1.5 (hook type, pole type, pendant pole type) 2×M25×1.5 (bracket type) 4×M25×1.5 (wall type, ceiling type)
Cable gland	DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39



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



Detailed Parameters

Luminaire photometric curve diagram, external dimensions, installation schematic, mounting accessories, mounting components, and spare parts list are detailed on page P2/58~59.