

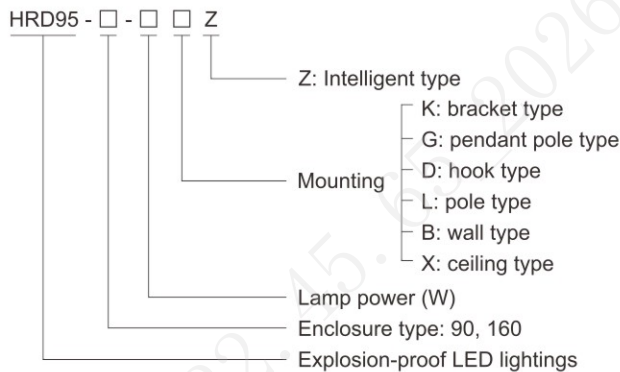
SCS-ZM Intelligent Lighting Management and Control System

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.

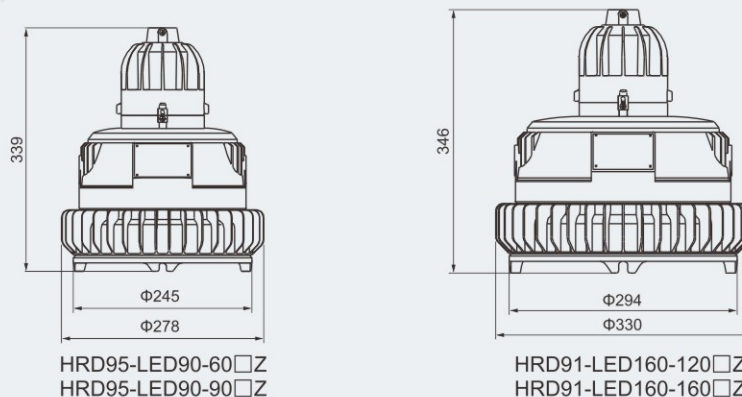
Zones 1&2; 21&22

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Technical data	
Explosion-proof LED lightings (Intelligent type) HRD95-□-□□Z	
Explosion protection	
Global (IECEX)	IECEX (applied for)
Gas and dust	Ex db op is IIC T□ ¹⁾ Gb Ex tb op is IIIC T□ ¹⁾ Db IP66
Europe (ATEX)	ATEX (applied for)
Gas and dust	⊕ II 2 G Ex db op is IIC T□ ¹⁾ Gb ⊕ II 2 D Ex tb op is IIIC T□ ¹⁾ Db IP66 ¹⁾ See Selection Table P2/55-56
Certificates	IECEX; ATEX; CU-TR
Conformity to standards	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
Lamp power (W)	Type 60: 60W, 90W Type 160: 120W, 160W
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	100~277V AC 50/60Hz
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP66
Ambient temperature	-40°C~+55°C(+40°C)
Terminal	3×1.5~4mm ² (L+N+PE)
Mounting	bracket type, hook type, pole type, pendant pole type, ceiling type
Cable entries	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.