

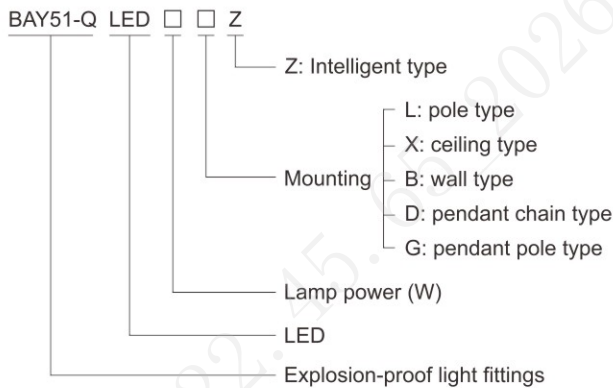
## SCS-ZM Intelligent Lighting Management and Control System

### BAY51-Q LED □ Z Series Explosion-proof Light Fittings (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
- ◆ Enclosure size: Type I and Type II
- ◆ Enclosure: GRP (glass fiber reinforced polyester).  
Diffuser: PC (polycarbonate).
- ◆ 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 Light Fittings (Intelligent type) BAY51-Q LED □□Z

##### Explosion protection

Global (IECEX)	IECEX (applied for)
Gas and dust	Ex db eb mb IIC T6/T5 Gb <sup>1)</sup> Ex tb IIIC T80°C Db <sup>1)</sup>
Europe (ATEX)	ATEX (applied for)
Gas and dust	⊕ II 2 G Ex db eb mb IIC T6/T5 Gb <sup>1)</sup> ⊕ II 2 D Ex tb IIIC T80°C Db <sup>1)</sup>

<sup>1)</sup> See Selection Table for P2/10

##### Certificates

IECEX; ATEX; CU-TR; INMETRO

##### Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-7, EN 60079-18, EN 60079-31,  
IEC 60079-0, IEC 60079-1, IEC 60079-7, IEC 60079-18, IEC 60079-31

##### Material

Enclosure	GRP, stands 7J impact, corrosion-proof
Diffuser	Polycarbonate, high light transmission, stands 7J 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	SMD LED (supplied with the light fittings)
Lamp power (W)	20W, 40W, 60W, 80W
Colour rendering index (Ra)	≥80
Colour temperature (CCT)	5000K Note: nature white is available in general. Warm white or cool white is optional, please specify when ordering.

##### Rated voltage

100-277V AC 50/60Hz

##### Degree of protection

IP66

##### Ambient temperature

-40°C~+60°C(+55°C)(+45°C)<sup>1)</sup>

<sup>1)</sup> See Selection Table for P2/10

##### Terminal

3×1.5~4mm<sup>2</sup> (L+N+PE)

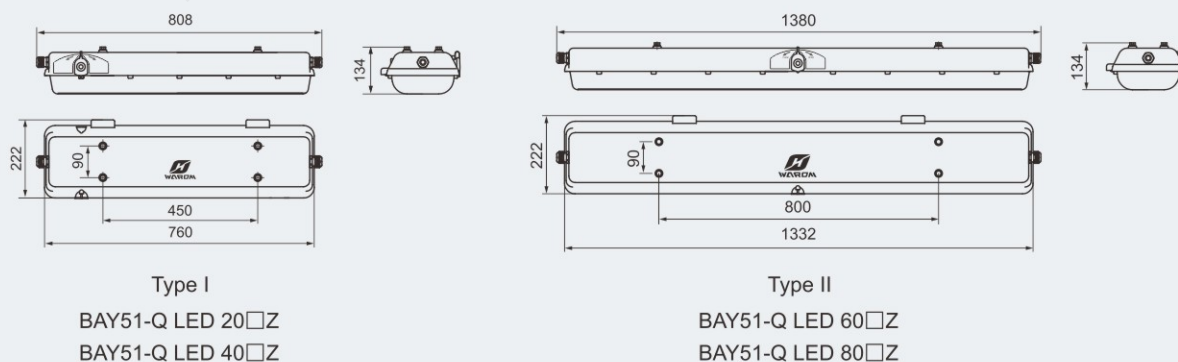
##### Cable entries

Pole type: 1×Φ26: 1×M25×1.5 cable glands (DQM-I/I Ex eb, plastic).  
Other mounting methods: 2×Φ26: 2×M25×1.5 cable glands (DQM-I/I Ex eb, plastic).

##### Available cable outer diameter

Φ9~Φ16 (mm)

#### 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 P2/13~15.

