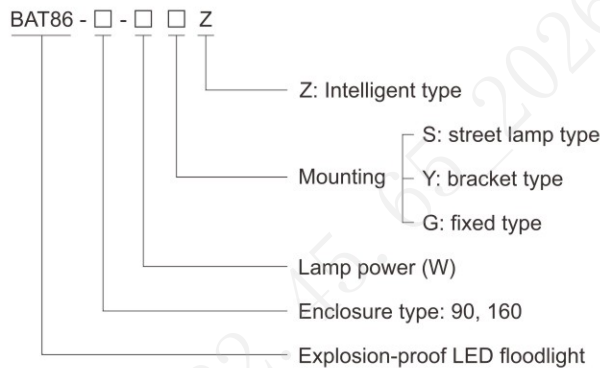


SCS-ZM Intelligent Lighting Management and Control System BAT86-□Z Series Explosion-proof LED Floodlights (Intelligent Type)



- ◆ 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 1, Groups 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.
- ◆ Standard product is of floodlight effect, lens of 30° and 60° can be provided on request to realize spotlight effect.
- ◆ 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

BAT86-□Z Series Explosion-proof LED Floodlights (Intelligent Type)

Technical data

Explosion-proof LED floodlights (Intelligent type) BAT86-□-□□Z

Explosion protection

Global (IECEX)
Gas and dust

IECEX (applied for)
Ex db IIB+H₂ T□¹⁾ Gb
Ex tb IIIC T□¹⁾ Db

Europe (ATEX)
Gas and dust

ATEX (applied for)
⊕ II 2 G Ex db IIB+H₂ T□¹⁾ Gb
⊕ II 2 D Ex tb IIIC T□¹⁾ Db
¹⁾ See Ambient temperature

Certificates

Conformity to standards

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

Material

Enclosure
Glass cover
LED driver

Copper-free Aluminium Alloy, powder coated surface, yellow (RAL1021)
Toughened glass, stands 4J impact
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
Stainless steel

Exposed fastener

Lamp

Lamp specification
Lamp power (W)

LED module
Type 90: 60W, 90W
Type 160: 120W, 160W

Colour rendering index (Ra)
Colour temperature (CCT)

≥70
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

100~277V AC 50/60Hz
M5 (internal & external earth bolts)
IP66

T6/T80°C for Tamb: -60°C~+40°C
T4/T130°C for Tamb: -60°C~+60°C
3×1.5~4mm² (L+N+PE)

Terminal

Mounting

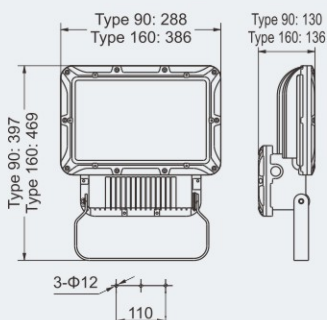
Cable entries

Cable gland

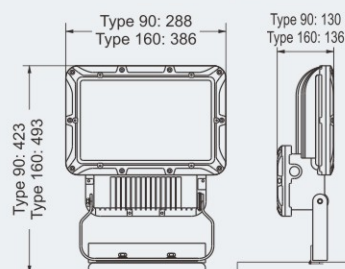
Bracket type, fixed type, street lamp type
1×M25×1.5 plugs
DQM-II (Ex d) or DQM-III (Ex d) is recommended. Please see P6/24~39

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

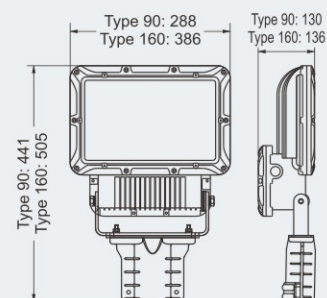
G: fixed type



Y: bracket type



S: street lamp type



Type 90: BAT86-90-60□Z, BAT86-90-90□Z
Type 160: BAT86-160-120□Z, BAT86-160-160□Z

Detailed Parameters

Luminaire photometric curve diagram, external dimensions, installation schematic, mounting accessories, mounting components, and spare parts list are detailed on page P2/82~83.