

## Light Fittings for Fluorescent Lamp

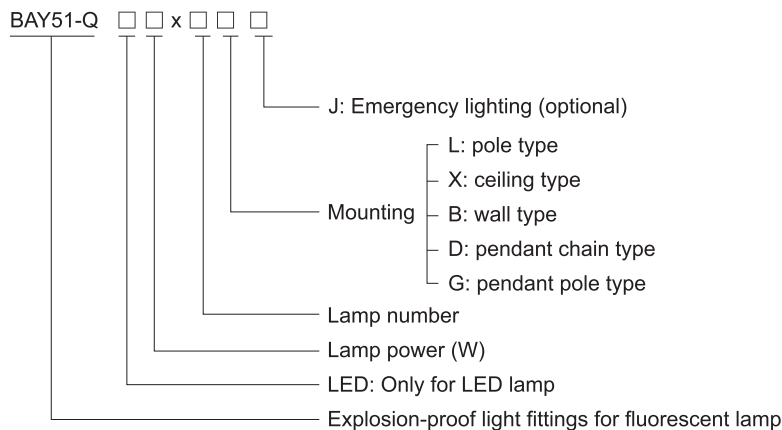
### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp



- ◆ 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: Type I and Type II
  - Available lamp and power
  - T8 Fluorescent Lamps: 18W x 1, 36W x 1, 18W x 2, 36W x 2
  - LED lamps: 14W x 1, 14W x 2, 28W x 1, 28W x 2
- ◆ Enclosure in glass fiber reinforced polyester (GRP), diffuser in polycarbonate, corrosion-proof.
- ◆ Ex e enclosure with explosion-proof components inside.
- ◆ Safety interlock between enclosure and diffuser, switches off on opening.
- ◆ Built-in electronic ballast, power factor  $\geq 0.95$ .
- ◆ Built-in LED driver, wide voltage input, CC-CV (constant current-constant voltage) output, power factor  $\geq 0.95$ .
- ◆ Emergency unit with protections against overcharge and over-discharge.
- ◆ End of lamp life (EOL) rectification effect protection.



#### Catalogue number logic



# Zones 1&2; 21&22

## Light Fittings for Fluorescent Lamp

### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data					
<b>Explosion-proof light fittings for fluorescent lamp BAY51-Q</b> □ × □ □					
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex}</math> II 2 G Ex d e q IIC T4 Gb</p> <p>Dust explosion protection <math>\text{Ex}</math> II 2 D Ex t IIIC T80°C Db IP66</p>				
<b>Certificates</b>	LCIE 12 ATEX 3045X; IECEx CQM 07.0007 RU C-CN.ГБ05.B.00344 (CU-TR)				
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-31				
<b>Material</b>					
Enclosure	GRP, stands 7J impact, corrosion-proof				
Diffuser	Polycarbonate, 90% light transmission, stands 7J impact				
Ballast	Electronic ballast, power factor $\geq 0.95$ , with protection against short circuit, overload, lamp aging, lamp damage and dissymmetry power of lamp tube. Certificate No.: LCIE 06 ATEX 0003U; IECEx CQM 07.0005U				
Exposed fastener	Stainless steel				
<b>Interlock</b>	BZX-6 explosion-proof distance switch, switching off on opening Certificate No.: LCIE 06 ATEX 0002U, IECEx CQM 07.0006U				
<b>Lamp</b>					
Lamp specification	International brand of T8 tube (supplied with the light fittings)				
Lamp power (W)	<table border="1"> <tr> <td>36W x 2</td> <td>18W x 2</td> </tr> <tr> <td>36W x 1</td> <td>18W x 1</td> </tr> </table>	36W x 2	18W x 2	36W x 1	18W x 1
36W x 2	18W x 2				
36W x 1	18W x 1				
<b>Rated voltage</b>	96~254V AC 50/60Hz				
<b>Protection class</b>	II (Protection against electric shock)				
<b>Degree of protection</b>	IP66, IP67(optional)				
<b>Ambient temperature</b>	-20°C~+55°C				
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)				
<b>Cable entries</b>	4 x $\Phi 26$ : 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.				
<b>Available cable outer diameter</b>	$\Phi 9$ ~ $\Phi 16$ (mm)				



Selection table					
Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-Q18 x 1L	18 x 1	6.80	BAY51-Q18 x 2L	18 x 2	7.00
BAY51-Q18 x 1X	18 x 1	6.70	BAY51-Q18 x 2X	18 x 2	6.90
BAY51-Q18 x 1B	18 x 1	7.80	BAY51-Q18 x 2B	18 x 2	7.90
BAY51-Q18 x 1D	18 x 1	8.10	BAY51-Q18 x 2D	18 x 2	8.20
BAY51-Q18 x 1G	18 x 1	7.70	BAY51-Q18 x 2G	18 x 2	7.85
BAY51-Q36 x 1L	36 x 1	11.40	BAY51-Q36 x 2L	36 x 2	11.60
BAY51-Q36 x 1X	36 x 1	11.30	BAY51-Q36 x 2X	36 x 2	11.40
BAY51-Q36 x 1B	36 x 1	12.30	BAY51-Q36 x 2B	36 x 2	12.50
BAY51-Q36 x 1D	36 x 1	12.60	BAY51-Q36 x 2D	36 x 2	12.75
BAY51-Q36 x 1G	36 x 1	12.20	BAY51-Q36 x 2G	36 x 2	12.40

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).

## Light Fittings for Fluorescent Lamp

## BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

## Technical data

## Explosion-proof emergency light fittings for fluorescent lamp BAY51-Q□ × □□J

## Explosion protection

Gas explosion protection

⊕ II 2 G Ex d e q IIC T4 Gb

Dust explosion protection

⊕ II 2 D Ex tb IIIC T80°C Db IP66

## Certificates

LCIE 10 ATEX 3009; IECEX CQM 12.0002X; CU-TR

## Conformity to standards

EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-31  
IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-31

## Material

Enclosure

GRP, stands 7J impact, corrosion-proof

Diffuser

Polycarbonate, 90% light transmission, stands 7J impact

Ballast

Electronic ballast, power factor ≥ 0.95, with protection against short circuit, overload, lamp aging, lamp damage and dissymmetry power of lamp tube.

Emergency controller

BY-2 emergency controller

Exposed fastener

Certificate No.: LCIE 10 ATEX 3010U, IECEX CQM 11.0041U

Stainless steel

## Lamp

Lamp specification

International brand of T8 tube (supplied with the light fittings)

Lamp power (W)

36W x 2 18W x 2

36W x 1 18W x 1

## Emergency power (W)

36W x 1, 18W x 1

## Emergency starting time

0.3s

## Charging time

24h

## Emergency lighting time

120min (180min is optional)

## Rated voltage

96~254V AC 50/60Hz

## Protection class

II (Protection against electric shock)

## Degree of protection

IP66, IP67(optional)

## Ambient temperature

-20°C~+55°C

## Terminal

3 x 1.5~4mm<sup>2</sup> (L+N+PE)

## Cable entries

4 x Φ26; 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.

## Available cable outer diameter

Φ9~Φ16 (mm)



## Selection table

Type / Ordering code	Lamp power(W)	Weight(kg)	Type / Ordering code	Lamp power(W)	Weight(kg)
BAY51-Q18 x 1LJ	18 x 1	8.65	BAY51-Q18 x 2LJ	18 x 2	8.80
BAY51-Q18 x 1XJ	18 x 1	8.50	BAY51-Q18 x 2XJ	18 x 2	8.70
BAY51-Q18 x 1BJ	18 x 1	9.60	BAY51-Q18 x 2BJ	18 x 2	9.75
BAY51-Q18 x 1DJ	18 x 1	9.90	BAY51-Q18 x 2DJ	18 x 2	10.00
BAY51-Q18 x 1GJ	18 x 1	9.50	BAY51-Q18 x 2GJ	18 x 2	9.65
BAY51-Q36 x 1LJ	36 x 1	13.00	BAY51-Q36 x 2LJ	36 x 2	13.05
BAY51-Q36 x 1XJ	36 x 1	12.95	BAY51-Q36 x 2XJ	36 x 2	13.10
BAY51-Q36 x 1BJ	36 x 1	14.00	BAY51-Q36 x 2BJ	36 x 2	14.10
BAY51-Q36 x 1DJ	36 x 1	14.30	BAY51-Q36 x 2DJ	36 x 2	14.45
BAY51-Q36 x 1GJ	36 x 1	13.90	BAY51-Q36 x 2GJ	36 x 2	14.05

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).

## Light Fittings for Fluorescent Lamp

### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

Technical data	
<b>Explosion-proof light fittings with LED tubes</b>	<b>BAY51-Q LED</b> □ × □□□
<b>Explosion protection</b>	<p>Gas explosion protection <math>\text{Ex}</math> II 2 G Ex d e q mb IIC T4 Gb</p> <p>Dust explosion protection <math>\text{Ex}</math> II 2 D Ex tb IIIC T80°C Db IP66</p>
<b>Certificates</b>	ATEX and IECEx (applied for)
<b>Conformity to standards</b>	EN 60079-0, EN 60079-1, EN 60079-5, EN 60079-7, EN 60079-18, EN 60079-31 IEC 60079-0, IEC 60079-1, IEC 60079-5, IEC 60079-7, IEC 60079-18, IEC 60079-31
<b>Material</b>	
Enclosure	GRP, stands 7J impact, corrosion-proof
Diffuser	Polycarbonate, 90% light transmission, stands 7J impact
LED driver	Wide voltage input, CC-CV (constant current - constant voltage) output, power factor $\geq 0.95$ , 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
<b>Lamp</b>	
Lamp specification	International brand of LED module (supplied with the light fittings)
Lamp power (W)	14W x 1, 28W x 1, 14W x 2, 28W x 2
Colour Temperature (CCT)	Cool white: 5400 ~ 6500K Note: cool white is available in general. Warm white (2700~3500K) or nature white (4700~5400K) is optional, please specify when ordering.
<b>Rated voltage</b>	96~254V AC 50/60Hz
<b>Protection class</b>	II (Protection against electric shock)
<b>Degree of protection</b>	IP66, IP67(optional)
<b>Ambient temperature</b>	-20°C~+55°C
<b>Terminal</b>	3 x 1.5~4mm <sup>2</sup> (L+N+PE)
<b>Cable entries</b>	4 x $\Phi 26$ : 2 x M25 x 1.5 cable glands (DQM-I Ex e, plastic), 2 x M25 x 1.5 plugs.
<b>Available cable outer diameter</b>	$\Phi 9$ ~ $\Phi 16$ (mm)
<b>Emergency data</b>	
Emergency controller	Special emergency controller and battery pack, with protection against overcharge and overdischarge.
Emergency power (W)	14W x 1, 28W x 1
Emergency starting time	0.3s
Charging time	24h
Emergency lighting time	120min (180min is optional)



#### Selection table

Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)	Type / Ordering code	Lamp power(W)	Weight (kg)
BAY51-Q LED14 x 1L	14 x 1	8.00	BAY51-Q LED14 x 1LJ	14 x 1	8.30	BAY51-Q LED14 x 2L	14 x 2	8.45	BAY51-Q LED14 x 2LJ	14 x 2	8.80
BAY51-Q LED14 x 1X	14 x 1	7.90	BAY51-Q LED14 x 1XJ	14 x 1	8.20	BAY51-Q LED14 x 2X	14 x 2	8.35	BAY51-Q LED14 x 2XJ	14 x 2	8.70
BAY51-Q LED14 x 1B	14 x 1	8.90	BAY51-Q LED14 x 1BJ	14 x 1	9.20	BAY51-Q LED14 x 2B	14 x 2	9.35	BAY51-Q LED14 x 2BJ	14 x 2	9.70
BAY51-Q LED14 x 1D	14 x 1	9.20	BAY51-Q LED14 x 1DJ	14 x 1	9.50	BAY51-Q LED14 x 2D	14 x 2	9.65	BAY51-Q LED14 x 2DJ	14 x 2	10.00
BAY51-Q LED14 x 1G	14 x 1	8.85	BAY51-Q LED14 x 1GJ	14 x 1	9.15	BAY51-Q LED14 x 2G	14 x 2	9.30	BAY51-Q LED14 x 2GJ	14 x 2	9.65
BAY51-Q LED28 x 1L	28 x 1	12.50	BAY51-Q LED28 x 1LJ	28 x 1	13.10	BAY51-Q LED28 x 2L	28 x 2	12.90	BAY51-Q LED28 x 2LJ	28 x 2	13.60
BAY51-Q LED28 x 1X	28 x 1	13.20	BAY51-Q LED28 x 1XJ	28 x 1	13.90	BAY51-Q LED28 x 2X	28 x 2	13.70	BAY51-Q LED28 x 2XJ	28 x 2	14.40
BAY51-Q LED28 x 1B	28 x 1	13.30	BAY51-Q LED28 x 1BJ	28 x 1	14.00	BAY51-Q LED28 x 2B	28 x 2	13.80	BAY51-Q LED28 x 2BJ	28 x 2	14.50
BAY51-Q LED28 x 1D	28 x 1	13.55	BAY51-Q LED28 x 1DJ	28 x 1	14.25	BAY51-Q LED28 x 2D	28 x 2	14.00	BAY51-Q LED28 x 2DJ	28 x 2	14.75
BAY51-Q LED28 x 1G	28 x 1	13.20	BAY51-Q LED28 x 1GJ	28 x 1	13.90	BAY51-Q LED28 x 2G	28 x 2	13.70	BAY51-Q LED28 x 2GJ	28 x 2	14.40

**Note:** Products above include all the mounting accessories listed in Mounting Accessories & Spare Parts Table (see P2/8~9).

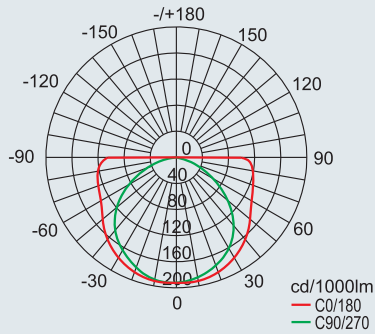
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### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

**Photometric data** Note: LED luminous flux is from the standard product of which colour temperature is 5400 to 6500K (cool white).

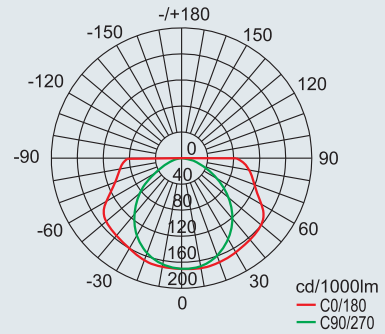
#### BAY51-Q18x1□□

Rated luminous flux  
18Wx1: 1300lm



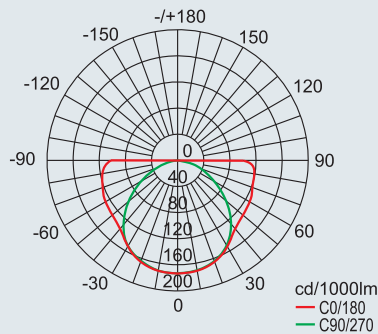
#### BAY51-Q18x2□□

Rated luminous flux  
18Wx2: 2600lm



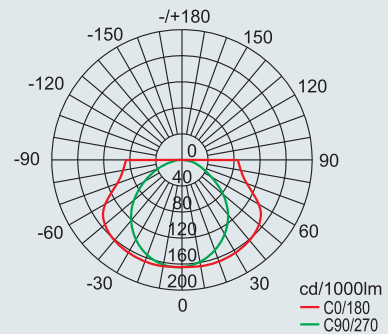
#### BAY51-Q36x1□□

Rated luminous flux  
36Wx1: 3250lm



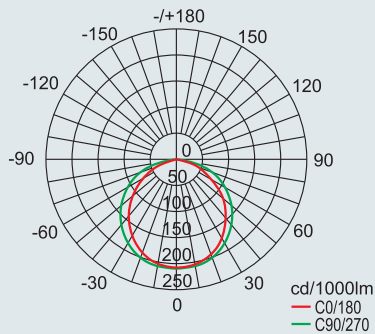
#### BAY51-Q36x2□□

Rated luminous flux  
36Wx2: 6500lm



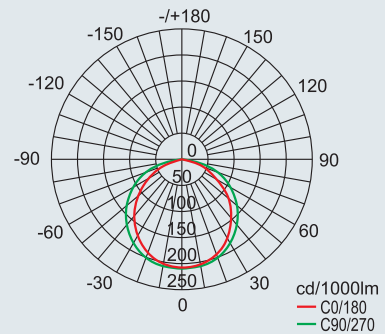
#### BAY51-Q LED 14x□□□

Rated luminous flux  
LED 14Wx1: 1400lm  
LED 14Wx2: 2800lm



#### BAY51-Q LED 28x□□□

Rated luminous flux  
LED 28Wx1: 2800lm  
LED 28Wx2: 5600lm



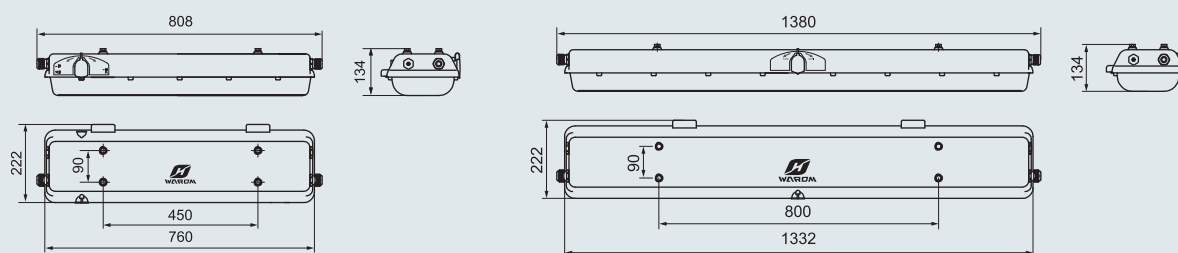
We can provide lighting design and data by professional lighting software DIALUX based upon simulated site situation on request.



## Light Fittings for Fluorescent Lamp

### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

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



BAY51-Q18 x □ □ □  
BAY51-Q LED 14 x □ □ □

BAY51-Q36 x □ □ □  
BAY51-Q LED 28 x □ □ □

#### Accessories

Picture	Name	Ordering code	Weight (kg)
	Explosion-proof distance switch	5136003	0.04
	Spanner	5136004	0.02
	Lamp holder (with wires)	5136005	0.02
	YK36DF-2CS electronic ballast (T8/36W)	5136011	1.30
	YK18DF-2CS electronic ballast (T8/18W)	5118004	1.30
	BY-2 emergency controller (with battery) (T8/36W)	5136019	1.70
	BY-2 emergency controller (with battery) (T8/18W)	5118005	1.70
	HRB14-2C LED driver (LED/14W)	5114001	1.30
	HRB28-2C LED driver (LED/28W)	5128001	1.30
	HRE14-2C LED emergency controller (LED/14W)	5114002	1.75
	HRE28-2C LED emergency controller (LED/28W)	5128002	1.75



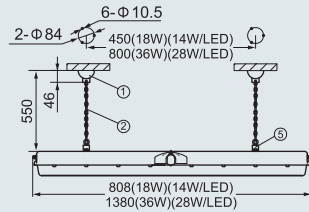
## Light Fittings for Fluorescent Lamp

### BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

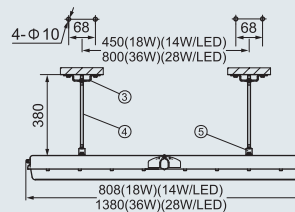
#### Mounting type (all dimensions in mm) – subject to alteration

Installation reference

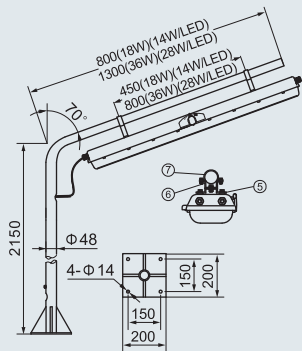
D: pendant chain type



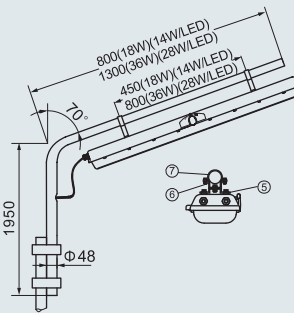
G: pendant pole type



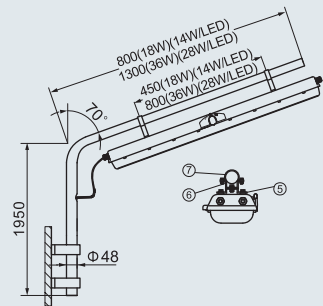
L: pole type (the pole is provided by user)



Suitable for ground pole type

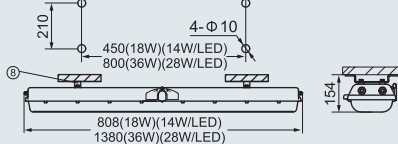


Suitable for fence pole type

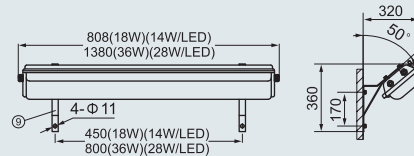


Suitable for wall pole type

X: ceiling type



B: wall type



#### Mounting Accessories & Spare Parts Table

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
D: pendant chain type	①.Sucker	2		5136017	0.15
	②.Chain	2	Length: 450mm	5136016	0.08
	⑤.Mounting bracket	2	Same as pendant pole type	5136030	0.07
G: pendant pole type	③.Mounting bracket	2		51S01G1	0.04
	④.M8 Screw	2	Length: 350mm	51S01G2	0.12
	⑤.Mounting bracket	2		5136030	0.07

**Note:** Accessories not in the table shall be supplied by user.

## Light Fittings for Fluorescent Lamp BAY51-Q Series Explosion-proof Light Fittings for Fluorescent Lamp

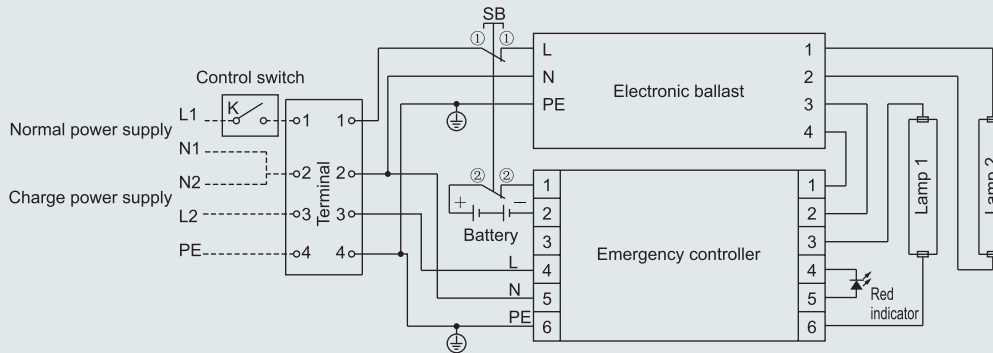
### Mounting Accessories & Spare Parts Table

Supplied according to the mounting type

Mounting type	Accessories			Ordering code	Weight (kg)
	Name	Qty	Illustration		
L: pole type	⑥.Mounting bracket	2		5136012	0.04
	⑦.G1 1/2" Pipe clamp	2		5136014	0.04
	⑤.Mounting bracket	2	Same as pendant pole type	5136030	0.07
X: ceiling type	⑧.Mounting bracket	2		5136015	0.20
B: wall type	⑨.Wall bracket	2	Welded sheet steel	5136B02	0.62

**Note:** Accessories not in the table shall be supplied by user.

### Schematic diagram (BAY51-Q□x□□J, T8 fluorescent lamp)



**Note:** Tube for lamp 2 shall be default for single tube fittings.

