Floodlights

BAT53 Series Explosion-proof Floodlights

- 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 C, D
  - Class I, Division 1, Groups C, D
- Four enclosure types: 125, 250, 400, 1000.
- Integral control gear, easy installation and maintenance.
- Rapid starting trigger, stable performance and long service life.
- Enclosure in copper-free aluminium, powder coated surface, yellow (RAL1021).
- Toughened glass cover resistant to temperature changes.

Catalogue number logic

BAT53 - □- □ □ □

- Mounting
  - S: street lamp type (only for BAT53-250 type, See P2/100)
  - Y: movable type
  - G: fixed type
- Lamp power (W)
- Lamp
  - HIE: Metal halide lamp
  - HSE: High pressure sodium lamp
  - HME: High pressure mercury lamp
- Enclosure type: 125, 250, 400, 1000
- Explosion-proof floodlights

Selection table

Type/Ordering code	Available lamp power (W)			Lamp holder	Weight (kg)
	HIE	HSE	HME		
BAT53-125	70, 100, 150	70, 100	80, 125	E27	8.45
BAT53-250	175, 250	150, 250	175, 250	E40	14.75
BAT53-400	400	400	-	E40	30.75
BAT53-1000	1000	1000	-	E40	58.00

Note

1. Please specify any spare parts when ordering. See Accessories table.
2. 125, 250 and 400 type light fittings are supplied without lamp. PHILIPS lamps are recommended.
3. HPI European standard ballast is supplied with HIE light fitting. HPI European standard lamps are recommended.
4. 1000 type light fittings are supplied with lamp and ballast.

Zones 1&2; 21&22

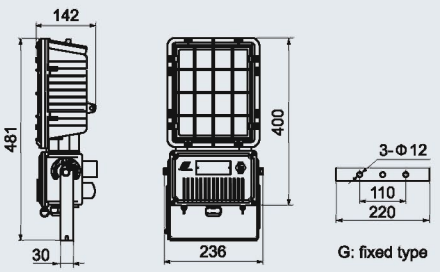
Technical data

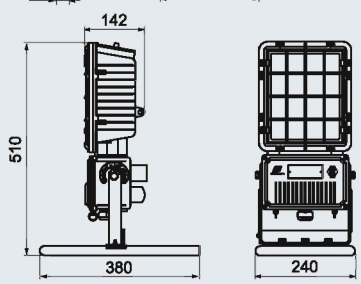
Explosion-proof floodlights	BAT53-125-□□□
Explosion protection	
Gas explosion protection	Ⓔx II 2 G Ex de IIB T□[1)] Gb
Dust explosion protection	Ⓔx II 2 D Ex tb IIIC T□[1)] Db IP66
	[1)] See Selection Table
Certificates	LCIE 13 ATEX ____; IECEx; FM (USA)
Conformity to standards	EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-7: 2007, EN 60079-31: 2009
	IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-7: 2006, IEC 60079-31: 2008
Material	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Ballast	Choke ballast, rapid starting, stable performance
Wire guard	Powder coated carbon steel, white
Internal reflector	High-purity aluminium
Trigger	Explosion-proof electronic trigger
Capacitor	Power factor≥0.90 (compensated)
Exposed fastener	Stainless steel
Lamp	
Lamp holder	E27
Available lamp and lamp power (W)	High pressure sodium lamp (HSE): 70W, 100W
	High pressure mercury lamp (HME): 80W, 125W
	Metal halide lamp (HIE): 70W, 100W, 150W
	Note: HPI European standard ballast is available in general
Rated voltage	220~240V AC 50Hz (60Hz is optional)
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP66
Ambient temperature	-20℃~+55℃
Terminal	3 x 1.5~2.5mm² (L+N+PE)
Cable entries	2 x Φ21: 1 x M20 x 1.5 cable gland (DQM-I Ex e, carbon steel),1 x M20 x 1.5 plug
Available cable outer diameter	Φ5~Φ10 (mm)

Selection Table

Lamp	Lamp power (W)	Temperature classification	
		Gas	Dust
HIE	70	T156℃	T156℃
HSE	70	T156℃	T156℃
HSE	100	T185℃	T185℃
HIE	100	T181℃	T181℃
HIE	150	T190℃	T190℃
HME	80	T163℃	T163℃
HME	125	T209℃	T209℃

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





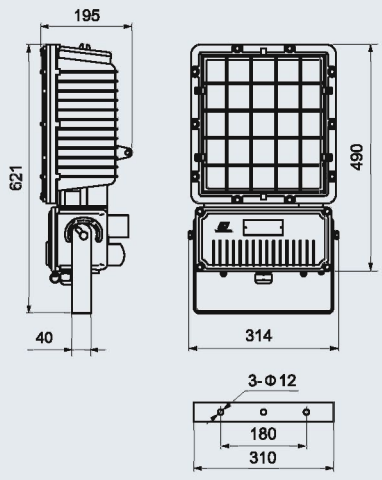
Y: movable type

Floodlights
BAT53 Series Explosion-proof Floodlights

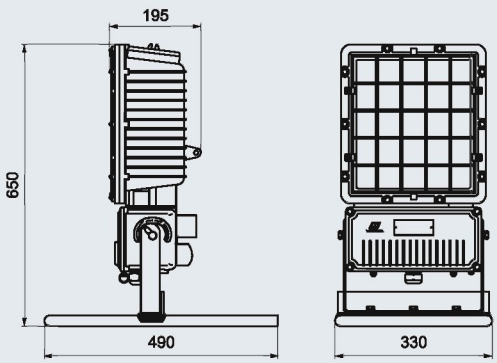
Technical data

Explosion-proof floodlights	BAT53-250-□□□
Explosion protection	
Gas explosion protection	Ⓔx II 2 G Ex de IIB T3 Ex de IIB T3 Gb
Dust explosion protection	Ex tD A21 T190℃ IP65
Certificates	
For gas explosion protection	LCIE 05 ATEX 6143; IECEx CQM 07.0004; FM (USA)
For dust explosion protection	PCEC (China)
Conformity to standards	EN 60079-0: 2004, EN 60079-1: 2004, EN 60079-7: 2003 IEC 60079-0: 2007, IEC 60079-1: 2007, IEC 60079-7: 2006 IEC 61241-0: 2004, IEC 61241-1: 2004
Material	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Ballast	Choke ballast, rapid starting, stable performance
Wire guard	Powder coated carbon steel, white
Internal reflector	High-purity aluminium
Trigger	Explosion-proof electronic trigger
Capacitor	Power factor≥0.90 (compensated)
Exposed fastener	Stainless steel
Lamp	
Lamp holder	E40
Available lamp and lamp power (W)	High pressure sodium lamp (HSE): 150W, 250W High pressure mercury lamp (HME): 175W, 250W Metal halide lamp (HIE): 175W, 250W Note: HPI European standard ballast is available in general
Rated voltage	220~240V AC 50Hz (60Hz is optional)
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP65
Ambient temperature	-20℃~+55℃
Terminal	3 x 1.5~2.5mm² (L+N+PE)
Cable entries	2 x Φ26: 1 x M25 x 1.5 cable gland (DQM-I Ex e, carbon steel),1 x M25 x 1.5 plug
Available cable outer diameter	Φ10~Φ14 (mm)

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



G: fixed type

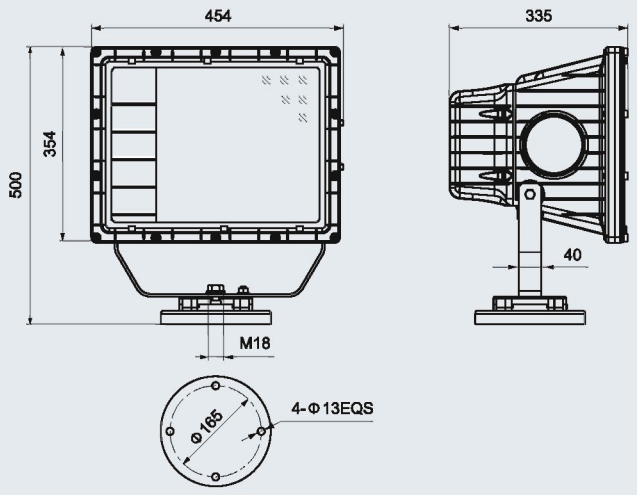


Y: movable type

Technical data

Explosion-proof floodlights	BAT53-400-□□□
Explosion protection	
Gas explosion protection	Ex II 2 G Ex de IIB T3
Dust explosion protection	Ex tD A21 T190℃ IP65
Certificates	
For gas explosion protection	LCIE 07 ATEX 6106; IECEx CQM 08.0014; BR229792 (Brazil); FM (USA)
For dust explosion protection	PCEC (China)
Conformity to standards	EN 60079-0: 2004, EN 60079-1: 2004, EN 60079-7: 2003 IEC 60079-0: 2004, IEC 60079-1: 2003, IEC 60079-7: 2001 IEC 61241-0: 2004, IEC 61241-1: 2004
Material	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Ballast	Choke ballast, rapid starting, stable performance
Internal reflector	High-purity aluminium
Trigger	Explosion-proof electronic trigger
Capacitor	Power factor≥0.90 (compensated)
Exposed fastener	Stainless steel
Wire guard (optional)	Powder coated carbon steel(white) or stainless steel
Lamp	
Lamp holder	E40
Available lamp and lamp power (W)	High pressure sodium lamp (HSE): 400W (tubular) Metal halide lamp (HIE): 400W (tubular) Note: HPI European standard ballast is available in general
Rated voltage	220~240V AC 50Hz (60Hz is optional)
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP65
Ambient temperature	-20℃~+55℃
Terminal	3 x 1.5~2.5mm² (L+N+PE)
Cable entries	2 x M25 x 1.5: 1 x M25 x 1.5 cable gland (DQM-I Ex e, carbon steel),1 x M25 x 1.5 plug
Available cable outer diameter	Φ10~Φ14 (mm)

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



Floodlights
BAT53 Series Explosion-proof Floodlights

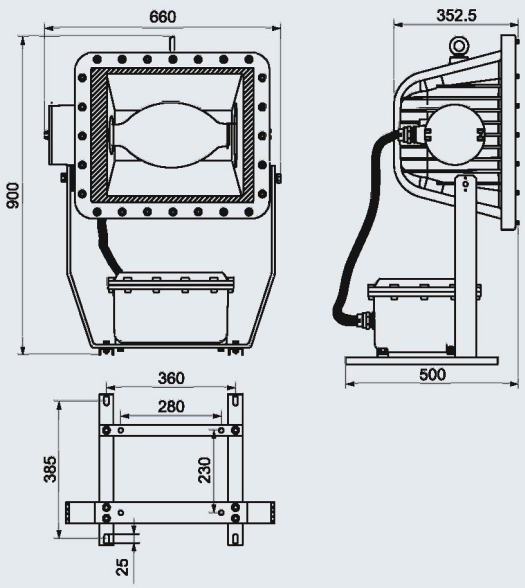
Technical data

Explosion-proof floodlights	BAT53-1000-□□□
Explosion protection	
Gas explosion protection	Ⓔx II 2 G Ex d IIB T□[1)] Gb
Dust explosion protection	Ⓔx II 2 D Ex tb IIIC T□[1)] Db IP66
	[1)] See Selection Table
Certificates	PCEC (China); LCIE 13 ATEX ____
Conformity to standards	EN 60079-0: 2009, EN 60079-1: 2007, EN 60079-31: 2009 IEC 60079-0: 2011, IEC 60079-1: 2007, IEC 60079-31: 2008
Material	
Enclosure	Copper-free aluminium, powder coated surface, yellow (RAL1021)
Glass cover	Toughened glass, stands 4J impact
Ballast	Choke ballast, rapid starting, stable performance
Trigger	General trigger
Capacitor	Power factor≥0.90 (compensated)
Internal reflector	High-purity aluminium
Exposed fastener	Stainless steel
Lamp	
Lamp holder	E40
Available lamp and lamp power (W)	High pressure sodium lamp (HSE):1000W Metal halide lamp (HIE):1000W Note: HPI European standard ballast is available in general
Rated voltage	230V AC 50Hz (60Hz is optional)
Earthing protection	M5 (internal & external earth bolts)
Degree of protection	IP66
Ambient temperature	-20℃~+55℃
Terminal	3 x 1.5~2.5mm² (L+N+PE)
Cable entries	1 x M25 x 1.5
Cable gland	The cable between floodlight and ballast through BNG-M25 x 1.5(M)/M25 x 1.5(M) explosion-proof flexible conduit (length: 1000 mm); One explosion-proof cable gland (DQM-II-M25 x 1.5, Ex d, brass, armored, cable wiring)
Available cable outer diameter	Φ10~Φ14 (mm)

Selection Table

Lamp	Lamp power (W)	Temperature classification	
		Gas	Dust
HIE	1000	T242℃	T242℃
HSE	1000	T219℃	T219℃

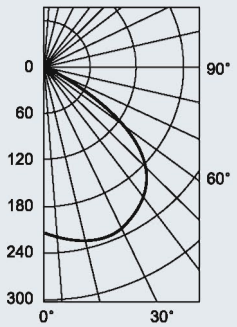
Dimension drawings (all dimensions in mm) - subject to alteration



Photometric data

BAT53-125

Photometric data of
100W metal halide lamp
Rated luminous flux:9000lm;
Luminous intensity distribution cd/1000lm

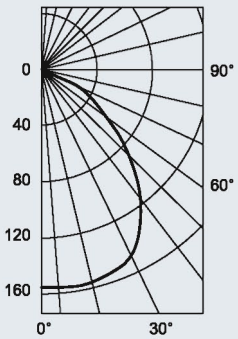


70W Metal halide lamp*0.56
70W High pressure sodium lamp*0.67
100W High pressure sodium lamp*1.06
80W High pressure mercury lamp*0.41
125W High pressure mercury lamp*0.68
150W Metal halide lamp*1.66

Angle	CP	Angle	CP
0	1948	50	1370
5	1945	55	612
10	1953	60	385
15	1963	65	236
20	1950	70	131
25	1955	75	66
30	1839	80	37
35	1733	85	0
40	1649	90	0
45	1588		

BAT53-250

Photometric data of
250W metal halide lamp
Rated luminous flux:23000lm;
Luminous intensity distribution cd/1000lm

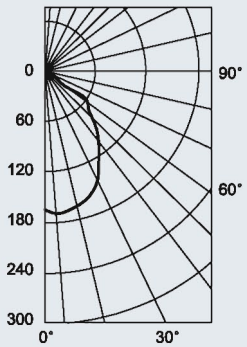


175W Metal halide lamp*0.61
150W High pressure sodium lamp*0.65
250W High pressure sodium lamp*1.22
175W High pressure mercury lamp*0.32
250W High pressure mercury lamp*0.55

Angle	CP	Angle	CP
0	3162	50	1419
5	3197	55	975
10	3183	60	613
15	3128	65	354
20	3073	70	202
25	3010	75	127
30	2790	80	65
35	2505	85	5
40	2191	90	3
45	1806		

BAT53-400

Photometric data of
400W metal halide lamp
Rated luminous flux:38000lm;
Luminous intensity distribution cd/1000lm

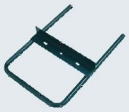


400W High pressure sodium lamp*1.26

Angle	CP	Angle	CP
0	5982	50	2330
5	6178	55	1849
10	6103	60	443
15	6054	65	338
20	5706	70	234
25	5342	75	111
30	4751	80	52
35	4235	85	12
40	3517	90	4
45	2765		

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

Accessories

Picture	Name	Ordering code	Weight (kg)
	Explosion-proof electronic trigger (125, 250, 400 type)	61034	0.30
	125 Explosion-proof capacitor	53012	0.45
	250 Explosion-proof capacitor	53013	0.45
	400 Explosion-proof capacitor	53014	0.55
	125 Movable support	53015	1.80
	250 Movable support	53016	2.35

Note: Ballast see P1/19