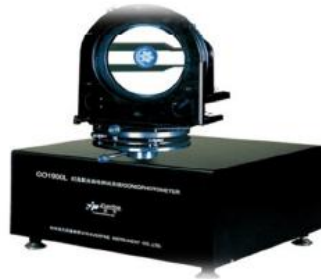




Shenzhen Trismart Lighting Technology Co., Ltd.

Shenzhen Trismart Lighting Technology Co., Ltd. is a research and development, design, production and sales of private high-tech enterprises. Company's management and technical team has 20 years' experience in the development and design of industrial lightings, professional lightings and lighting engineering systems. The chairman of the company, Dr. Chen, is the member of China Lighting Society, the Deputy Secretary General of the Shenzhen Lighting Appliance Association and a senior expert of Shenzhen Lighting Society. Trismart Lighting is a cooperative supplier of European Union led street lamps, a network supplier of Royal Shell (shell) and a network supplier of large enterprises such as Sinopec, PetroChina, State Grid, Datang Electric Power and Huadian Group.



云天化集团
YUNTIANHUA GROUP

SZG200 series of led explosionproof lamp

Led explosionproof
platform lighting



Features:

- Composite explosion-proof type with flameproof, increased safety and encapsulation type can be used in various dangerous places.
- ATEX certification
- Explosionproof mark:  II 2 G Ex demb IIC T6 Gb
- Adopting Philips ultra-bright led chips, luminous efficacy of luminaire can reach 155-170 lm/W which saves 40% energy compared with similar products.
- Power supply is directly attached to the shell. Its surface temperature rise is less than 30 °C and service lifespan is up to 50000 hours.
- Patented composite heat dissipation mode of surface heat radiation+internal air convection, heat dissipation is excellent.

Technical parameters:

Parameter items	50W	80W	100W	150W	200W
Input voltage (V)	90-305Vac	90-305Vac	90-305Vac	90-305Vac	90-305Vac
Power efficiency	≥90%	≥90%	≥90%	≥90%	≥90%
Power factor	≥0.95	≥0.95	≥0.95	≥0.95	≥0.95
Luminous efficiency for led (lm/W)	230	220	205	220	205
Light efficacy for luminaire (lm/W)	170	160	155	160	155
Energy efficiency rating for luminaire	Class 2	Class 2	Class 2	Class 2	Class 2
Energy saving rate	40%	40%	40%	40%	40%
Luminous flux for luminaire (lm)	8500±5%	12800±5%	15500±5%	24000±5%	31000±5%
Correlated color temperature (K)	3000-6000	3000-6000	3000-6000	3000-6000	3000-6000
Color rendering index (Ra)	≥75	≥75	≥75	≥75	≥75
Beam angle (°)	120°	120°	120°	120°	120°
Working temperature (°C)	-35°C - +40°C	-35°C - +40°C	-35°C - +40°C	-35°C - +40°C	-35°C - +40°C
Material of heat dissipation shell	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum	ADC die-casting aluminum
Material of cover	Tempered glass	Tempered glass	Tempered glass	Tempered glass	Tempered glass
IP protection	IP66	IP66	IP66	IP66	IP66
Modular quantity (pcs)	1	1	1	2	2
Dimensions (mm)	φ240*135	φ240*135	φ240*135	480*240*135	480*240*135
Weight (Kg)	2.8	3.0	3.0	5.9	6.2
Mounting mode	G3/4 pipe thread /U-bracket	G3/4 pipe thread /U-bracket	G3/4 pipe thread /U-bracket	G3/4 pipe thread /U-bracket	G3/4 pipe thread /U-bracket

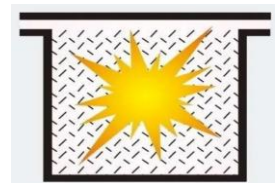
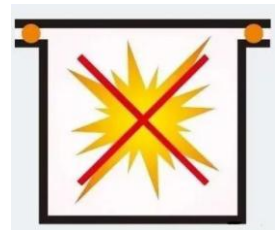
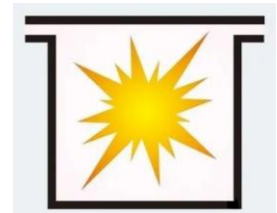
SZG200 series of led explosionproof lamp

Explosion-proof type and principle:

Flameproof enclosure: All components of the equipment that can ignite explosive gas mixture are closed in an enclosure. The enclosure can withstand the internal explosion of the combustible mixtures penetrated into it through any joint surface or structural gap and isn't damaged, and can ensure that the internal flame gas spread through the gap to reduce energy which is not enough to detonate the gas outside the enclosure.

Increased safety: Electrical equipment that do not generate arc and spark under normal operation conditions are taken some additional measures to improve its safety and prevent the possibility of dangerous temperature, arc and spark in its internal and external components. Further protective measures are taken in the structure to improve the reliability and safety performance of the equipment.

Encapsulation: The electrical components that may produce the sparks, arcs or dangerous temperature which can ignite explosive gas mixtures are encapsulated in the pouring agent so that it cannot ignite the surrounding explosive gas mixture. The pouring measures can prevent the short circuit of electrical components and solidify the electrical insulation and avoid the generation of sparks, arcs, dangerous temperatures, and prevent the invasion of explosive mixture and control the surface temperature under normal and fault conditions.



Selection table of Explosive gas atmospheres hazardous location:

Suitable hazardous areas	Explosionproof type of lamps	Explosionproof mark
Zone 0	intrinsic safety(ia)	Ex ia
	special type designed for Zone 0(s)	Ex s
Zone 1	intrinsic safety(ib)	Ex ib
	flameproof enclosure	Ex d
	increased safety	Ex e
	pressurized enclosure	Ex px、Ex py
	powder filling	Ex q
	encapsulation	Ex m
	type of protection "n"	Ex nA、Ex nC、Ex nR
Zone 2	pressurized enclosure	Ex pz

SZG200 series of led explosionproof lamp

Super brightness 3030 led chip

- led chip luminous efficiency: 205-230 lm/W
- light efficacy of luminaire: 155-170 lm/W
- The thermal resistance is only 3°C and 75% lower
- The illuminance is 40% higher
- average service life: ≥100,000 hours
- no blue light hazard



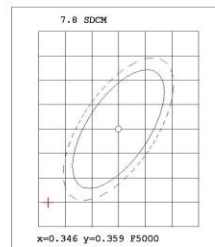
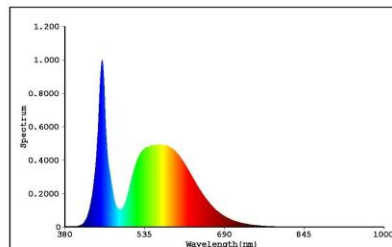
Led explosionproof
platform lighting

Test report of luminous efficiency of led chip

EVERFINE 远方

Test report
EVERFINE LEDspec Test Report 3 Of 4

Spectrum Test Report



Color Parameters:

Chromaticity Coordinate(2Deg):x=0.3328 y=0.3439/u'=0.2060 v'=0.4791 duv=1.302e-003
Tc=5484K Dominant WL:Ld=552.1nm Purity=3.1%
Ratio:R=14.0% G=82.3% B=3.7% Peak WL:Lp=452.8nm HWL:18.5nm
Render Index:Ra=75.7
R1 =74.13 R2 =80.20 R3 =82.28 R4 =76.12 R5 =74.24
R6 =71.69 R7 =84.13 R8 =62.77 R9 =-13.42 R10=50.62
R11=72.60 R12=43.24 R13=75.20 R14=89.82 R15=70.27
TM30 Parameters: Rf = 73.3, Rg:94.2

Photo Parameters:

Flux = 99.64 lm Eff. : 225.37 lm/W Fe = 296.6 mW

Electrical parameters:

VF = 5.534 V IF = 79.89 mA P = 442.1 mW Ch1
LEVEL:**[OUT] WHITE:ANSI_5700K

Status: T=140.00ms Ip=33646 (51%) [HAAS1200_V1_USB] V2.00.288

Model:80MA
Tester:D.U.01.0151 24V
Temperature:25.3Deg
Manufactory:EVERFINE
Assessor:damin
System:WY + HAAS1200_V1_USB

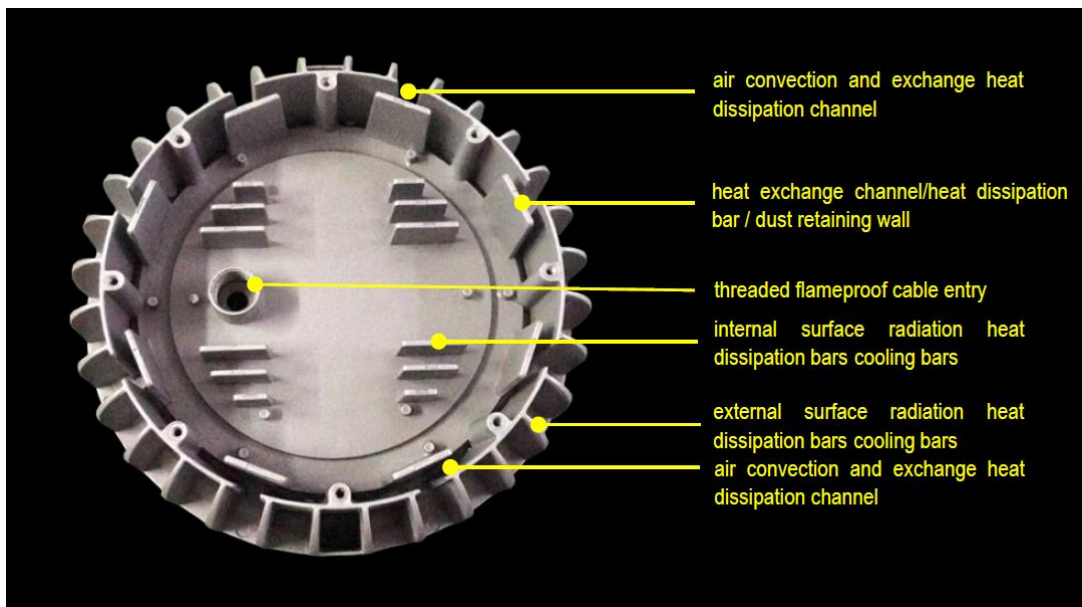
Number:4
Date:2021-06-05 16-41
Humidity:65.0%
Remarks:---

SZG200 series of led explosionproof lamp

Surface radiation + internal convection heat dissipation:

Radiation heat dissipation: Radiation heat dissipation is a heat dissipation method in which infrared rays are emitted from the surface of the object with higher temperature and received by the object with lower temperature. Radiation heat dissipation is related to the environmental temperature difference and radiation area. The lower the environmental temperature, the larger the radiation area, the more radiation heat dissipation.

Convective heat dissipation: Convective heat dissipation refers to that the air close to the heat source rises in temperature and volume due to radiation. The cold air is then supplemented, and the surface of the heat source exchanges heat with the newly moved cold air, thus continuously taking away heat. The larger and faster the air flow channel is, the faster the convection heat dissipation speed is, and the better the heat dissipation effect is.



Product details:



50W/75W/100W



150W/200W



G3/4 pipe mounting



U-bracket mounting

SZG200 series of led explosionproof lamp

Applications:



petrochemical device and other hazardous places



offshore drilling platform and oilfield derrick



oil depot and chemical tank area



workshop and equipment area of pharmaceutical and chemical enterprises