### **Light is OSRAM**

# **OSRAM**

## OT 20/220-240/24 P

#### **Benefits**

Slim form factor for mounting on the cove or into linear luminaires Versatile scope of application due to output power range of up to 20W Suitable for installation under Sunlight Salt mist resistant

#### **Applications**

In areas as hotels, luminous Signage, cruises ship, Public squares and architecture lighting Suitable for indoor and outdoor SELV installations



#### **Approvals**





















#### (C)

In preparation, if not already printed on product label

#### **Product Features**

- Suitable for Class I/II luminaire
- SELV
- Wide t<sub>a</sub> range -30 °C ... +55 °C
- Driver with output power range of up to 20 W
- High efficiency up to 83 %
- Smart Power Supply
- High IP protection (IP66)
- High surge protection: up to 4 kV (L-N)

- Mains voltage:
   220 240 V<sub>AC</sub> / 176 250 V<sub>DC</sub>
- Overload protection
- Over temperature protection
- Short circuit protection
- $t_c max = +85 °C$
- 50'000 h lifetime at t<sub>c</sub>
- 5 years guarantee\*
- Output cable can up to 10 m

<sup>\*10%</sup> cumulated failure ; OSRAM system guarantee

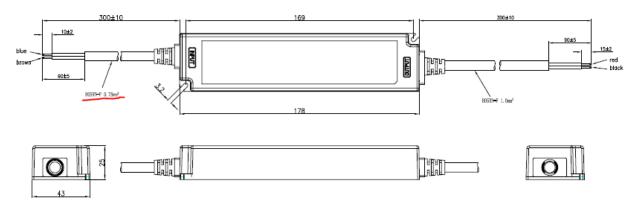
## **Electrical specification**

	Item	Value	Unit	Remarks
INPUT	Nominal voltage	220 – 240	V	
	Mains frequency	50 / 60	Hz	
	Input voltage AC	198 - 264	V	
	Input voltage DC	176-250	V	
	Nominal current	0,10	Α	Full load, 230 Vac, 50 Hz
	Total Harmonic Distortion (THD)	< 15	%	Full load, 230 Vac, 50 Hz / 60 Hz see graphs
	Power factor λ	0,95		Typical, Full load, 230 Vac, 50 Hz / 60 Hz, see graphs
	ECG Efficiency	83	%	Typical, Full load, 230Vac, 50Hz, see graphs
	Power loss in stand-by mode	<500	mW	230Vac, 50Hz
	Protection class	II		
	Suitable for fixtures with prot. Class	1/11		
	Inrush current	20	Α	Full Load ,240VAC,Cold Start
	May units par sirguit brooker	Thd		Duration=100uS 50%lpk—50%lpk
	Max. units per circuit breaker  Nominal output voltage	7bd 24,2	V	
	Voltage accuracy	+/- 5	%	
	· ·		%	Valent at 100 Hz; Full load
_	Voltage ripple	< 10 2 - 20	W	Vpk-pk at 100 Hz; Full load
PU.	Nominal output power		+	Full load, 220 Van E0 Hz
ООТРОТ	Device power loss	20	W	Full load, 230 Vac, 50 Hz
	Maximum power  Capacitive load	1	uF/A	Linear modules allowed
	Galvanic isolation	SELV	ur/A	Lineal modules allowed
	U-OUT (working voltage)	30	V	
	Ambient temperature range	-30+55	°C	
	Max. temperature at tc test point	+85	°C	Measured on t <sub>c</sub> point indicated of the prod label, t <sub>a</sub> not exceeded
	Storage temperature range	-40+85	°C	The state of the s
-	Permitted rel. humidity during operation	5 – 85	%	Not condensing
VTAL	Surge capability (L/N)	4	kV	L/N acc to. EN 61547
ME	Environmental rating	Outdoor		
ENVIRONMENT	IP protection class	IP 66		
Ž	Mains switching cycles	> 100'000	cycles	Ta=25□
Ш	Expected ECG lifetime	50'000	h	Ta=55□, 10% failure rate
	No-load proof	Yes		
	Overheating protection	Yes		Auto recovery
	Overload protection	Yes		Recovery with mains switch off-on
	Short-circuit protection	Yes		Recovery with mains switch off-on
	Type of connection	Cables		
	Height	25	mm	
DIMENSIONS	Length	178	mm	
	Width	43	mm	
	Casing material	Plastic		
	Wire prep. length, input side	5	mm	
	Wire prep. length, output side	5	mm	

	Mounting hole spacing, length	169	mm	
INPUT	Colour L and N	Blue / Brown		
	Cable cross selection	1,0	mm	H05RN-F/2x1.0 mm <sup>2</sup>
	Wire preparation length	90	mm	
	Wire peeling length	10	mm	
	Lead length	300	mm	
OUTPUT	Colour + and -	Red / Black		
	Cable cross selection	1,0	mm	H05RN-F/2x1.0 mm <sup>2</sup>
	Wire preparation length	90	mm	
	Wire peeling length	15	mm	
	Lead length	300	mm	

#### **Protection**

Over temperature, Overload, Short-circuit, open-circuit.



#### Remarks

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Status: Preliminary

- Output under power operation: the output setting is still effective if the load is below the minimum output power without any safety issue, but normal performance such as THD, EMI, etc.. is not guaranteed. See typical operation window graph for details.
- **Output short circuit protection**: short circuit current is limited without damage to the unit. Be sure the load is designed to withstand the short circuit current as well. See typical operation window graph for details. Recovery with mains switch off-on.
- Output overload protection: In case of heavy output power of the load (higher than about 120% of full load), the unit switches off. Recovery with mains switch off -on.
- No load operation: In DC condition, do not to switch on/off the load from the secondary side.
- Over temperature protection: the driver is protected against temporary overheating when Tc exceeds. The protection is self-restoring.
- Touch current: lower than 0.7 mA, according to EN 60598-1 ann. G and EN 61347-1 ann. A.
- Startup time: The startup time to reach the set output current is less than 1 s at full load.
- External flexible cable or cord: The external flexible cable or cord of the LED driver cannot be replaced; if the cord is damaged, the LED driver shall be destroyed.
- Waterproof: the driver is designed for outdoor installation with IP66 waterproof, during and after installation, the connection of input terminal and output terminal should be enclosed to far away from water source. Terminal block need provide IP67 waterproof if IP 67 application needed.
- **Installation:** The wire connection should be installed by professional person, to provide reinforced insulation between L/N terminal block and accessible part, suggest to use terminal block which

conform to EN60998-2-1 or EN60998-2-2, and with effective fixing, such as buckle. The terminal block for the supply can be:

- Screw or crewless;
- Two terminals
- Min. 250 V, 0.75 mm<sup>2</sup> 2.5 mm<sup>2</sup>;
- Skinning about 10 mm at the ends of all conductors.
- **WEEE:** Electrical products must not be thrown out with domestic waste. They must be taken to a communal collecting point for environmentally friendly disposal in accordance with local regulations. Contact your local authorities or stockist for advice on recycling. The packaging material is recyclable. Dispose of the packaging in an environmentally friendly manner and make it available for the recyclable material collection-service.
- For further details please consult the application note.

#### **Standards**

#### **Ordering information**

EN 61347-1

EN 61347-2-13

EN 55015

EN 61547

EN 61000-3-2 EN 61000-3-3

EN 60598-1

EN 62384

Product name	EAN 10	EAN 40	Pieces / Box
OT 20/220-240/24 P	4052899545922	4052899545939	20

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