

SPECIFICATION OF SWADEEP NATURE SWITCH **FOR OUTDOOR LIGHTING**

APPLICATION: Compound / Yard Lighting, **Street Lighting**, Elevation Lighting, **Landscape Lighting**, Gardens, **Aviation Lighting etc.**

- 1) The switch must be suitable for direct installation in single-phase AC supply.
- 2) The operation voltage range must be 180 to 290VAC. It should be able to withstand a fault voltage of upto 440 VAC.
- 3) **OPTICAL SENSOR:**
 - a) The sensor used should be reliable for calibration stability
 - b) The sensing circuit should be sealed in a container meeting IP 54
 - c) The sensor should be located behind a vertical wall to avoid accumulation of dust etc.
- 4) **OPERATIONAL SPECIFICATIONS:**

Operating Voltage	-	230VAC \pm 10% 50 Hz
Recommended Lighting Load	-	Upto 3000 watts
Maximum Continuous Current	-	16A
Illuminance for Switching ON	-	<60 lux for >30 seconds
<i>Illuminance for Switching OFF:</i>		
a) In Field	-	>10 lux for >30 seconds
b) In Lab	-	>60 lux for >30 seconds
<i>Resolution for ON Duration-</i>		<i>4 to 8 hours with 1/2 hour steps</i>
- 5) **AUTO OVERLOAD TRIP AND LATCH MECHANISM:**

Swadeep Nature Switch is provided with Electronic over Current Trip and Latch Mechanism. LED Flashes as an indication of this state. Electrical reset will restart the nature switch and the steps are:

 - a) Switch OFF the mains, and
 - b) Remove overload, and
 - c) Switch ON the mains
- 6) **AUTO OVER/LOW VOLTAGE TRIP AND RESET:**

Auto over voltage trip	-	>270 VAC
Auto Over voltage Reset	-	< 250 VAC
Auto Low Voltage Trip	-	<150 VAC
Auto Low Voltage Reset	-	>165 VAC
- 7) **Terminal Construction:**

The terminals provision for connection to LIVE IN, NEUTRAL and LIVE OUT should be properly enclosed in such a way that no live part is open.
- 8) The switch must have an endurance of atleast 5,000 cycles at full rated load
- 9) The switch must perform in an ambient temperature range of -10°C to $+60^{\circ}\text{C}$
- 10) The switch must perform in open air with RH upto 95% at 25°C
- 11) It must meet the drop and topple test from a height of 3 feet on any side atleast for 5 Drops.