

SPECIFICATION OF NATURE SWITCH-INDOOR FOR INDOOR LIGHTING

APPLICATION: Office areas, parking areas, corridors, shop floors, bus stations, railway platforms, lobbies, receptions, shopping malls, and window display etc. which are covered by a roof and where natural sun light reaches for a part of the day.

- 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 input voltage of upto 440 VAC.
- 3) **OPTICAL SENSORS:**
 - a) The sensors used should be reliable and stable over the life time.
 - b) The sensing circuit should be sealed in a container meeting IP65.
- 4) **OPERATIONAL SPECIFICATIONS:**

Operating Voltage	-	230VAC \pm 10% 50 Hz
Recommended Lighting Load	-	Upto 2000 watts
Maximum Continuous Current	-	10A
Illuminance for Switching ON	-	< the selected lux level for >5 seconds
Illuminance for Switching OFF	-	>1.5 times the selected lux level for >5 seconds
Lux level options	-	discrete levels of 20,40,60,80,100,150,200,250,300 & 400 Lux.
- 5) **AUTO OVER LOAD TRIP AND LATCH MECHANISM:**

NS-INDOOR is provided with Electronic over Current Trip and Latch Mechanism. LED Flashes as an indication of this state. Electrical reset will restart the NS-INDOOR 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:**

Automatic over voltage trip	-	>280 VAC
Automatic Over voltage Reset	-	< 265 VAC
Automatic Low Voltage Trip	-	<150 VAC
Automatic Low Voltage Reset	-	>165 VAC
- 7) **Terminal Construction:**

The terminal 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.