

## Philips DynaPower Driver

For TUV 260W/335W/230W XPT lamp

# Manual

## 1. Introduction

This electronic ballast is designed to operate two TUV 260W/335W/230W XPT low-pressure amalgam lamps for water treatment in an industrial environment. The ballast operates the lamps in a highly efficient way. The lamp power output can be varied from 60 to 100% by using a 4-20mA signal.





## 2. Technical description

The Philips DynaPower electronic ballast offers the following features and advantages:

- Integrated microprocessor control
- Driver three kinds of UV lamps (TUV 260W/335W/230W) via dipswitch setup.
- Powering and controlling of two lamps independently.
- High power output (more than 600 W)
- High frequency operation (more than 40 kHz)
- Power factor > 98 %
- Electric efficiency > 92 %
- Independent of AC line voltage in a range of 208 ~ 277 Vrms  $\pm$  10% Single phase
- Programmed preheating time 22 sec
- Automatic monitoring of lamp power after ignition pulse
- Automatic re-start if lamp failed to ignite
- Variable power control via 4 ~ 20mA with operating range 10 ~ 20mA (60%~100% of lamp power) for TUV 260W/335W

Dimensions (WxLxH) mm : 240 x 235 x 47mm

Weight : approx. 1.5 kg

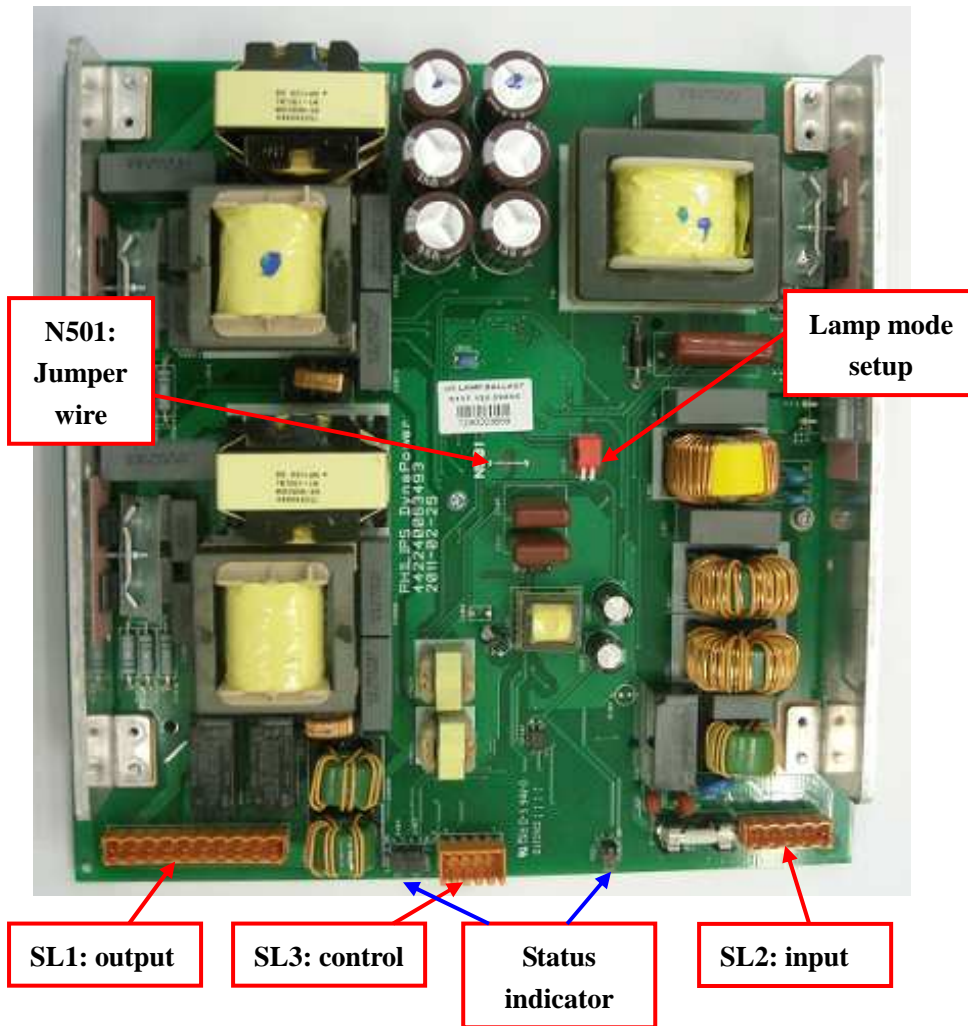
Voltage input (V/Hz) : 208~277V / 50~60Hz

Power factor : > 98 %

Current input (A) : Max 3.1A

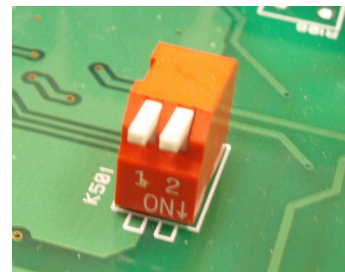
Dimming range : 60%~100% with dimming signal 10~20mA (260W/335W)

## 3. Setup description



### 1) Lamp mode setup

SW 1	SW 2	Lamp Mode
ON	ON	335W
ON	OFF	260W
OFF	ON	230W fixed power
OFF	OFF	260W fixed power



#### Note:

- Lamp mode **MUST** be set correctly before switching on the main power.
- N501 is a jump wire. If this jump connection is connected, while control signal < 4mA, the driver will go to full power output; If this jump connection is open circuit, the driver will be switched off after 30 sec delay.

## 2) Status Indicators

Lamps in operation	2 green LED's
Driver in operation	1 yellow LED

## 3) Connections

Lamp Connection	SL1 : (0.2-1.0 mm <sup>2</sup> solid copper wire)
Power Connection	SL2 : (1.0-2.5 mm <sup>2</sup> solid copper wire)
Control Signal Connection	SL3 : (1.0-2.5 mm <sup>2</sup> solid copper wire)

### SL1

1	Lamp 1, Filament 1, Lamp Circuit
2	Lamp 1, Filament 1, Pre-Heating Circuit
3	Lamp 2, Filament 1, Lamp Circuit
4	Lamp 2, Filament 1, Pre-Heating Circuit
5	not used
6	Lamp 2, Filament 2, Pre-Heating Circuit
7	Lamp 2, Filament 2, Lamp Circuit
8	not used
9	Lamp 1, Filament 2, Pre-Heating Circuit
10	Lamp 1, Filament 2, Lamp Circuit

### SL2

1	Neutral
2	Not used
3	Earth
4	Not used
5	Line

### SL3

1	24V DC External Power Supply for LED operation (optional)
2	Monitoring signal lamp 1 to LED in cabinet door (optional)
3	Monitoring signal lamp 2 to LED in cabinet door (optional)
4	not used
5	Monitoring signal lamp 1 to PLC
6	Monitoring signal lamp 2 to PLC
7	not used
8	24V DC Power Supply from PLC
9	Control Signal Input 4-20mA from PLC
10	Control Signal Ground from PLC