

# OPTOTRONIC®

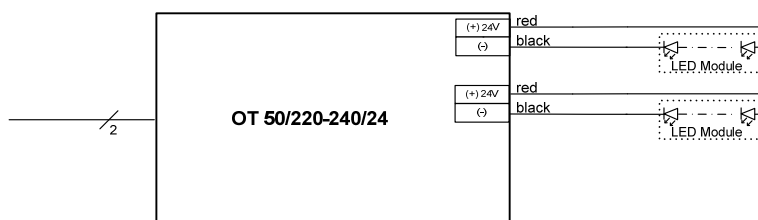
## OT 50/220-240/24

Constant Voltage LED Power supply for 24V LED - Modules

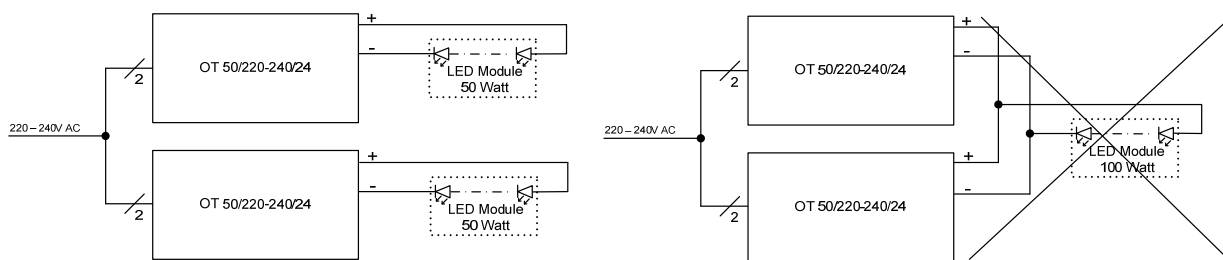
### 1. Technical Data

|                       |                                |                                         |                      |
|-----------------------|--------------------------------|-----------------------------------------|----------------------|
| Nominal Voltage       | 220 – 240 Vac<br>220 – 240 Vdc | Max Out Power                           | 50 Watt              |
| Input Voltage         | 198 – 264 Vac<br>198 – 264 Vdc | Output Voltage                          | 24 Vdc (-0,5V/+0,9V) |
| Line Current, nominal | 0,35A                          | Efficiency                              | 85% @ 230 Vac        |
| Mains Frequency       | 0 / 50 / 60 Hz                 | Ambient Temperature T <sub>a</sub>      | -20°C to +45°C       |
| Power Factor          | 0,95 @ 230 Vac                 | Max. Case Temperature at T <sub>c</sub> | +95°C                |
| Interface             | None                           | Max. Cable Length                       | 10m                  |
| IP Rating             | IP 20                          | Max load per circuit breaker B10        | 12                   |
|                       |                                | Max load per circuit breaker B16        | 19                   |

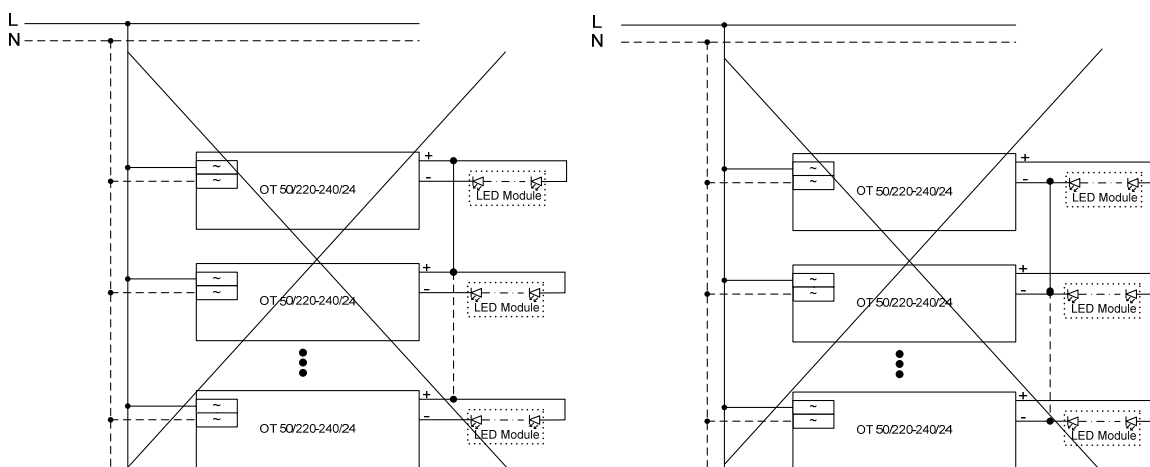
### 2. Connection Schemes



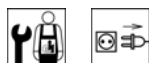
### 3. Safety



Power supplies can be connected in parallel on the primary side, but not on the secondary side



The installation of two or more OPTOTRONIC® OT 50/220-240/24 Power supplies with common “-” or “+” wiring is forbidden.



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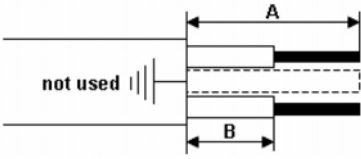
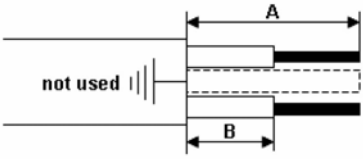
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## OT 50/220-240/24

Constant Voltage LED Power supply for 24V LED - Modules

### Wiring and Connection

- Ensure that the LED module load is within the range of rated voltage, current and power supply (see Technical data)
- Maximum output cable length is limited by EMI and cross diameter
- Use output cable sections adequate to the load demand
- The luminaire manufacturer is responsible for providing the required clearances and creepage distances and also for protection against electrical shock, especially for the line and load wires
- Wire preparation:

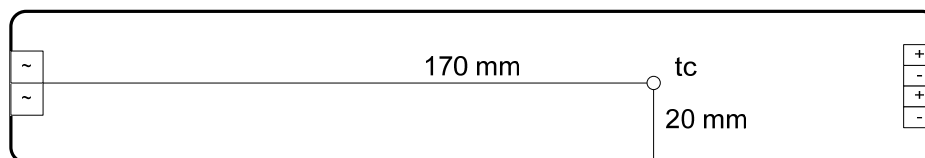
| Input                                                                                                      | Output                                                                                                      |
|------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| Mains Terminal                                                                                             | LED Terminal                                                                                                |
|  <p>A=11.5 mm, B=6 mm</p> |  <p>A=11.5 mm, B=6 mm</p> |
| Solid and flexible                                                                                         | Solid and flexible                                                                                          |
| Wire cross section :<br>H05VV-F 2x1,5 mm <sup>2</sup>                                                      | Wire cross section :<br>H03VV-F2x0,50 mm <sup>2</sup>                                                       |
| Cable Clamp Reference                                                                                      |                                                                                                             |
| Cable Jacket Diameter:                                                                                     | Round: max 7mm                                                                                              |

### Earth Connection

- OT 50/24 is a "Protection Class II" power supply, therefore ground connection is not required

### Mounting and Environmental protection

- The control gear is an independent type for luminaire integration
- Maximum permissible ambient temperature must not be exceeded. Make sure there is adequate space to avoid a build-up of heat. In critical installations the temperature at  $t_c$  has to be controlled. Cfr drawing below:



Bottom view

## 2 General Note

- Power supplies must be installed by a qualified electrician
- Disconnected from mains supplies before wiring work
- For further information see also "OPTOTRONIC – Technical guide" at [www.osram.com](http://www.osram.com)



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