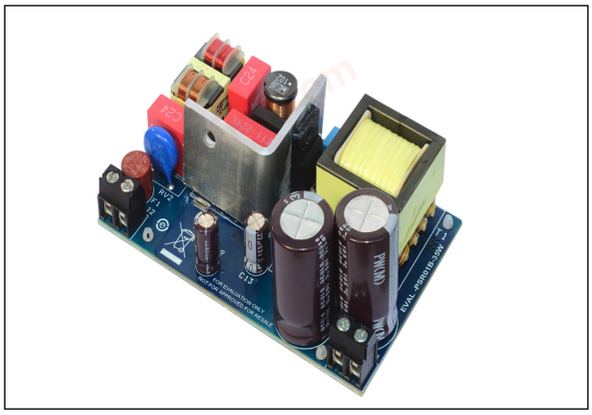
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EVAL-PSR01B-35W

35 W wide input range flyback converter using HVLED001B quasi resonant flyback controller and STF10LN80K5

Data brief



Features

- Input voltage: Vin: 90 - 265 Vrms, f: 45-66 Hz
- Output voltage: 48 V / 730 mA
- High power factor, low THD
- No-load: better than 150 mW @ 230 Vin
- Average full load efficiency: 90%
- Short-circuit protection with auto restart
- Safety: Acc. to EN60065
- EMI: Acc. to EN55022 - conducted emissions

Description

The EVAL-PSR01B-35W is intended to provide a stable and insulated 48 V voltage bus suitable to supply secondary side circuitry for a total output power of 35 W when a wide range of input voltages is applied at its input. A very high power factor is obtained thanks to HVLED001B features. Input voltage variations, excessive input voltage (overvoltage like surge or bursts) or very low input voltages are managed by some of the HVLED001B protections, improving the reliability of the application.

The efficiency of the application is very high even at very low load thanks to the improved frequency fold-back feature that, contemporarily, reduces the output voltage ripple at light load.

Output short-circuit and overload protections are auto-restart for a safe operation in lighting environment.

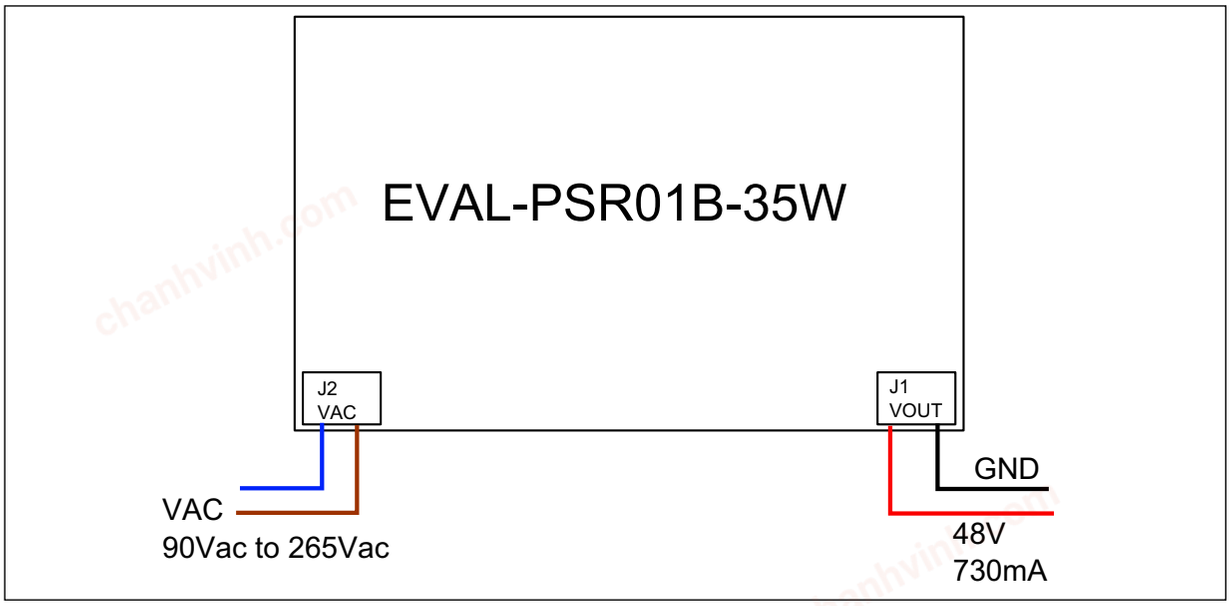
Extremely low input power is there at no load conditions.

For further information contact your local STMicroelectronics sales office. www.st.com

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1 Board description

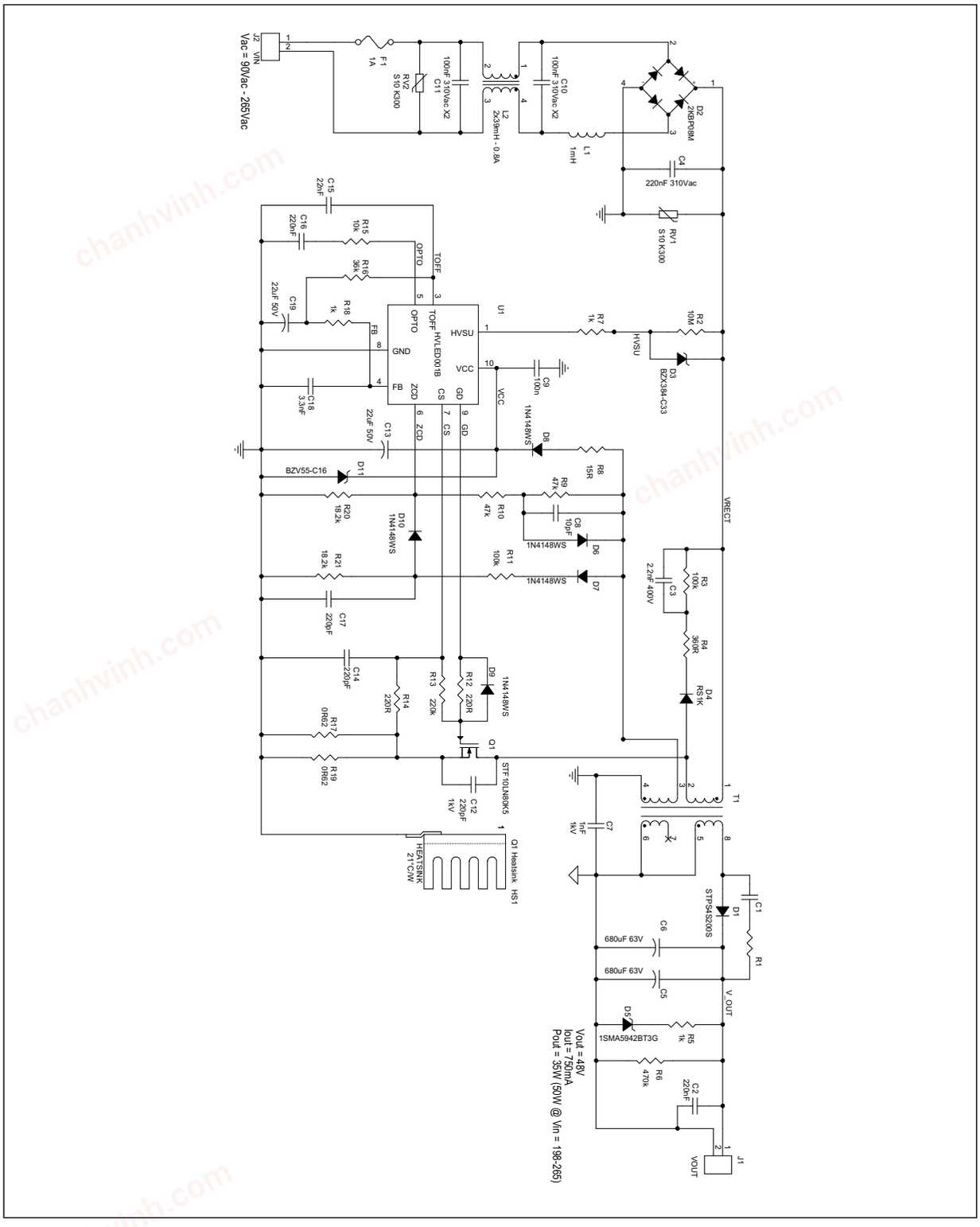
Figure 1. Jumpers and connectors location



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2 Schematic diagram

Figure 2. . EVAL-PSR01B-35W - Schematic (* = component not fitted)



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3 Revision history

Table 1. Document revision history

Date	Revision	Changes
24-Oct-2018	1	Initial release

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