TRACO POWER

Industrial Power Supplies

TBLC Series, 6 – 90 W

- **Low profile case, module depth only 55 mm**
- **Suitable for mounting in domestic installation panels**
- **Very high efficiency and low standby power ➔ compliance to ECO-Standard**
- **High power density**
- **Low output ripples and spikes**
- **Suitable for household appliance and industrial applications**
- **For distributed power**
- **UL 1310 class II, NEC class 2 compliance**
- **UL 508 listed**
- **Universal input range 85 to 264 VAC**
- **Operating temperature range: –25°C to +70°C**
- **Adjustable output voltage**
- **Short circuit and overload protection**
- **DC–OK indicator LED**

ErP ready · CE · CB Scheme · SI Type Approved Bauart Geprüft · c UL us UL508 · c UL us UL60950-1

This new DIN-Rail mounting power supplies are designed for industrial and residential applications. They are lower cost than the existing TBL range, with similar electrical specifications. Additionally, they fully comply to the new standby power and efficiency requirements (ECO Standard). They are intended for connecting as class II devices, so the safety earth connection is not required. They are mountable in flat racks due to their small dimensions in depth. Their dimensions comply to the DIN 43880 standard.

Models

Order Code	Output Power (max.)	Output Voltage* (nom.)(adjustable)	Output Current (max.)	Efficiency (typ.)
TBLC 06-105	**6 W**	5.0 VDC	1.2 A	74 %
TBLC 06-112	**6 W**	12 VDC	0.5 A	81 %
TBLC 06-124	**6 W**	24 VDC	0.25 A	79 %
TBLC 15-105	**12 W**	5.0 VDC	2.4 A	81 %
TBLC 15-112	**15 W**	12 VDC	1.25 A	85 %
TBLC 15-124	**15 W**	24 VDC	0.63 A	85 %
TBLC 25-105	**20 W**	5.0 VDC	4.0 A	82 %
TBLC 25-112	**24 W**	12 VDC	2.0 A	86 %
TBLC 25-124	**25 W**	24 VDC	1.05 A	87 %
TBLC 50-112	**48 W**	12 VDC	4.0 A	88 %
TBLC 50-124	**50 W**	24 VDC	2.1 A	89 %
TBLC 75-112	**72 W**	12 VDC	6.0 A	89 %
TBLC 75-124	**75 W**	24 VDC	3.1 A	89 %
TBLC 90-112	**90 W**	12 VDC	7.5 A	90 %
TBLC 90-124	**90 W**	24 VDC	3.75 A	90 %

Input Specifications

Input voltage	– nominal ranges – effective ranges		100 – 240 VAC; 50/60 Hz 85 – 264 VAC; 47-63 Hz (below 100 VAC a derating of 2 %/V is required)
Input voltage frequency			47 – 63 Hz
No load power consumption		6–50 W models: 75–90 W models:	< 0.3 W < 0.5 W
Harmonic limits			EN 61000-3-2, class A
Leakage current			0.25 mA max.
Inrush current		6–50 W models: 75–90 W models:	15/30 A (115/230 VAC) 25/50 A (115/230 VAC)

Output Specifications

Output voltage / current		5 VDC models: 12 VDC models: 24 VDC models:	5.0 – 5.5 VDC* 12.0 – 16.0 VDC* 24.0 – 28.0 VDC*
Regulation	– Input variation – Load variation (10–90 %)		0.3 % max. 0.3 % max.
Hold-up time			60 ms min. (at 230 VAC) 15 ms typ. (at 115 VAC)
Start-up	– Start up behavior – Start up time	TBLC 75-112 and 90-112: other models:	0-75 % constant current load 0-100 % constant current load 1 s max.
Ripple and Noise (20 MHz bandwidth)			50 mVp-p max.
Current limit (continuous)			105 – 130 % of Iout nom., constant current
Short circuit current		TBLC 75-112 and 90-112: other models:	70 – 90 % of Iout nom. (typ.), foldback 120 – 200 % of I out nom
Output overvoltage protection			150 % of Vout nom. (typ.)
DC OK signal	– trigger threshold ON		> 95 % of the set voltage

General Specifications

Operating temperature			–25°C to +70°C derating above +55°C: 2.5 %/K
Storage temperature			–40°C to +85°C
Temperature coefficient			0.02 %/K
Cooling			convection cooling, no internal fan
Pollution degree			2
Humidity (non condensing)			5–95 % rel. H max.
Altitude during operation			4800 m max.
Isolation	– I/O isolation		3000 VAC (4242 VDC)
Class of protection			safety class II
Degree of protection			IP 20 (IEC/EN 60529)
Reliability, calculated MTBF (at 25°C acc. to IEC 61709)			> 1.9 Mio. h

* Output voltage can be adjusted as indicated. However, output power has to be maintained at nominal value. This means the output nominal current has to be reduced in accordance with the increase of output voltage.

All specifications valid at nominal input voltage, full load and +25°C after warm-up time unless otherwise stated.