

## ■ DATASHEET: LP412405



### ■ INPUT

Input rated voltage (2 x Vac)	115 – 230 Vac
Rated voltage range (115/230)	90 – 135 Vac / 180 – 264 Vac
Frequency	47 – 63Hz ± 6%
Input current (115Vac – 230Vac)	1,8 – 0,9A
Inrush current (Vn – In)	≤ 11A ≤ 5msec.
Internal fuse	T 4A
External fuse (recommended)	10A (MCB curve B)

### ■ OUTPUT

Output voltage (Vn) (factory setting)	24 Vdc
Adjustment range (Vadj)	22 – 27 Vdc
Start up with capacity load (max.)	≤ 50.000µF
Continuous current at 24V < 40°C	5 A (permanent)
Continuous current at 24V < 50°C	4,5 A (permanent)
Continuous current at 24V < 60°C	4 A (Permanent)
Max. current	In @60°C x (1,8-2,2)
Residual ripple	≤ 80m Vpp
Efficiency	≥ 91%
Holdup time	typ. 20msec.
Over temperature protection	YES. Shut down and automatic restart
Overload protection	YES
Over voltage protection	YES
Short-circuit protection	1° Hiccup Mode, 2° Fold Back, 3° Restard After Main
Parallel connection	YES

### ■ CLIMATIC DATA

Ambient temperature (operation)	-25 - +70°C (>60°derating 2,5%°C)
Ambient temperature (storage)	-40 - +85°C
Humidity; no moisture condensation	95% to 25°C

**GENERAL DATA**

Isolation Voltage (Input/Output)	3000Vac
Isolation Voltage (Input / PE)	1605Vac
Isolation voltage (Output/PE)	500Vac
Electrical safety	EN60950 / EN50178 / IEC60950 / SELV EN60950-1 / PELV EN 60204-1
EMC Standards	Immunity: EN61000-4-2, EN61000-4-3, EN61000-4-4, EN61000-4-5, EN61000-4-6, EN61000-6-2 Emission: EN61000-6-4
Standards conformity	EN60204-1 (safety of electrical equipment machines)
Degree of protection	IP 20
Protection class	I with PE connected
Reliability: MTBF IEC61709	>500.000h
Auxiliary contact	Max. DC1: 30Vdc 1A; AC1: 60Vac 1A (min. 1mA at 5Vdc) [EN60947.4.1]
dimension (w-h-d)	55 x 110 x 105
weight	~0,5 kg

acc. to EMC 89/336/EEC and EMC 93/68/EEC  
low voltage directive 2006/95



- MANUAL RESET
- HICCUP MODE
- FOLD - BACK

Device does not start automatically.  
LED "DC": Switch off when is in overload range.



- MANUAL RESET
- HICCUP MODE
- FOLD - BACK

Device starts automatically.  
LED "DC": Switch off when is in overload range.  
Should be used if you have special loads (e.g. capacity)



- MANUAL RESET
- HICCUP MODE
- FOLD - BACK

Device starts automatically.  
LED "DC": Blink when is in overload range.  
The device tries to start again after a short time, if it is a failure on the primary side.

**DIMENSIONS**

