

**DATASHEET / DATENBLATT LP41 / LP43**



**INPUT / EINGANGSSEITE**

	LP412403	LP412406	LP412412	LP432420
Input rated voltage (2x Vac) Vn		115 – 230 Vac		400 - 480Vac
Rated voltage range (115/230)		90-135Vac / 180-264Vac		360 – 530Vac
Frequency			47 – 63Hz	
Input current (115Vac – 230Vac)	1,0A – 0,6A	2,6A – 1,3A	3,3 – 2,2A	0,95 – 0,85A
Inrush current (Vn – In)	≤ 11A ≤ 5msec.	≤ 11A ≤ 5msec.	≤ 11A ≤ 5msec.	≤ 10A ≤ 5msec.
Internal fuse	T 4A	T 4A	T 10A	F 4A
External fuse (recommended)	F 4A	F 4A	F 16A	F 4A

**OUTPUT / AUSGANGSSEITE**

	LP412403	LP412406	LP412412	LP432420
Output voltage (Vn) (factory setting)			24 Vdc ±3%	
Adjustment range (Vadj)		22 – 27 Vdc		22 – 26Vdc
Start up with capacity load (max.)	≤ 50.000µF	≤ 50.000µF	≤ 50.000µF	≤ 30.000µF
Continuous current at 24V < 40°C	4 A	7,5 A	14,5 A	2,2 A ±5%
Continuous current at 24V < 50°C	3 A	6 A	12 A	20 A
Continuous current at 24V < 60°C	2,5 A	5 A	10 A	15 A
Max. current	5 A	9 A	16 A	1,1xIn ±5%
Residual ripple	≤ 80mVpp	≤ 80mVpp	≤ 80mVpp	≤ 100mVpp
Efficiency	≥ 91%	≥ 91%	≥ 91%	≥ 86%
Holdup time		typ. 40msec.		typ. 27msec.
Start up delay applying mains voltage		max. 1 sec.	max. 2 sec.	max. 2,5 sec.
Minimum load			not necessary	
Over temperature protection		YES. Shut down and automatic restart		
Overload protection		YES		
Over voltage protection		YES		
Short-circuit protection		Hiccup-/Fold back mode → restart after main		
Parallel connection		YES. Only with the same type!		

**CLIMATIC DATA / UMGEBUNGSBEDINGUNGEN**

	LP412403	LP412406	LP412412	LP432420
Ambient temperature (operation)		-25°C - +70°C		-10°C - +70°C
Ambient temperature (storage)		-40°C - +85°C		-25°C - +85°C
Humidity; no moisture condensation			95% to 25°C	

**GENERAL DATA / ALLGEMEINE DATEN**

	LP412403	LP412406	LP412412	LP432420
Isolation Voltage (Input/Output)			3000Vac	
Isolation Voltage (Input / PE)			1605Vac	
Isolation voltage (Output/PE)			500Vac	
Electrical safety	EN60950 / UL508 / 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, EN61000-4-11 Emission: EN55011, EN61000-3-2			
Standards conformity	EN60204-1 (safety of electrical equipment machines) EN61558-2-17 (safety of power transformer)			
Degree of protection	IP 20			
Protection class	I with PE			
Reliability: MTBF IEC61709	>500.000h			
Auxiliary contact			1A – 30Vdc	
dimension (w-h-d)	55 x 110 x 105	55 x 110 x 105	65 x 115 x 135	185 x 125 x 140
weight	~0,5 kg	~0,6 kg	~0,7 kg	~2,1 kg
acc. to EMC 89/336/EEC and EMC 93/68/EEC low voltage directive 2006/95				

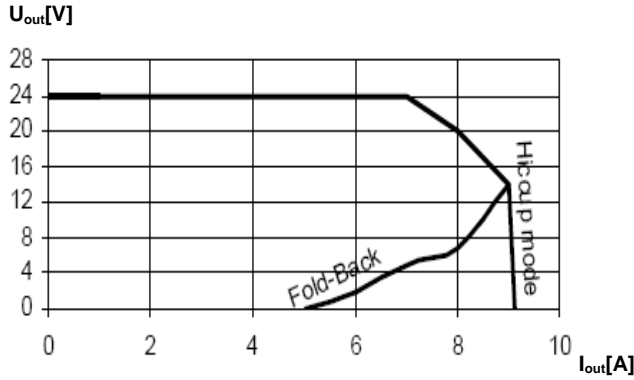


DATASHEET / DATENBLATT LP41/LP43

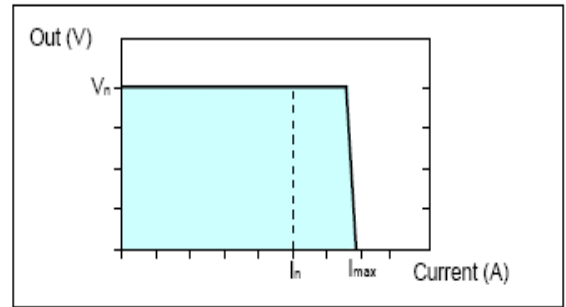
subject to technical changes and misprints

**CABLE CONNECTION / ANSCHLUSSQUERSCHNITT**

	Solid (mm <sup>2</sup> )	Stranded (mm <sup>2</sup> )	AWG	Torque (Nm)	Stripping Length
Input:	0.2 – 2.5	0.2 – 2.5	24 – 14	0.5 – 0.6 Nm	7 mm
Output:	0.2 – 2.5	0.2 – 2.5	24 – 14	0.5 – 0.6 Nm	7 mm
Signal:	0.2 – 2.5	0.2 – 2.5	24 – 14	0.5 – 0.6 Nm	7 mm (only LP412412)
	0.2 – 4.0	0.2 – 4.0 (LP432420)	24 – 14	0.5 – 0.6 Nm	7 mm (only LP432420)



Output Characteristic Curve U/I



- 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": 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.



- 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)

Only at LP412403,  
LP412406, LP412412

**DIMENSIONS**

