

## POWER SUPPLY 3-PHASE, 36 V DC DIMENSION X SERIES

36 V DC, 26,6 A, semi-regulated

XT40.361 Powersupply. 400V AC. 36VDC/ 26A

- Width 96mm
- Up to 95,5% efficiency
- 125 % power boost
- Suitable for eg. supply for motors





## PRODUCT DESCRIPTION

The power supplies in the Dimension X-Series include a new and innovative concept for generating an isolated DC voltage from a three-phase mains system.

A semi-regulated resonant converter enables a very compact design, maximum efficiency and extremely competitive pricing with only a small compromise in the output voltage regulation, output ripple and hold-up time.

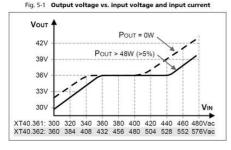
Weighing just 1.4 kg, the device provides 960 watts of continuous output power and an additional 25% power reserve for dynamic loads. The light-weight design along with compact dimensions facilitate straightforward mounting on DIN-rail.

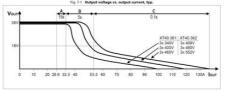
Primary use are applications involving supplies to motors, valves and other load circuits with a high power consumption, where an accurate output voltage regulation which is standard on traditional switched-mode power supplies is not required. Furthermore, these switched-mode power supplies can often replace mains transformers with rectifiers.

## **SPECIFICATIONS**

Input voltage AC	400 V
Input voltage ac min	360 V AC
Input voltage ac max	440 V AC
Inrush current at 400 V ac typical	4 A
Power Factor at 400 V AC, full load. Typical	0,93
Supply Frequency	50-60 ±6 %
Power consumption at 400 V ac	1,65 A
Output voltage	36 V DC
Output voltage min	36 V DC

Output voltage max	36 V DC
Output Current	26,6 A
Effect	960 W
Power Reduction Of 60 To 70 ° C	24 W/°C
Ripple. max	250 mV pp
Temperature Range Without Derating From	-25 °C
Temperature Range Without Derating To	60 °C
Efficiency At 400 V AC, full load. Typical	95,5 %
MTBF (IEC 61709) 400 V ac, max loan, +40 °C	529000 h
Width	96 mm
Width Height	96 mm 124 mm
Height	124 mm
Height Depth	124 mm 159 mm
Height Depth	124 mm 159 mm
Height  Depth  Weight	124 mm 159 mm 1,4 kg
Height  Depth  Weight  Series	124 mm 159 mm 1,4 kg Dimension X
Height  Depth  Weight  Series  Approvals	124 mm  159 mm  1,4 kg  Dimension X  CB, CE, CSA, UL
Height  Depth  Weight  Series  Approvals  Material Protection	124 mm  159 mm  1,4 kg  Dimension X  CB, CE, CSA, UL  Aluminium





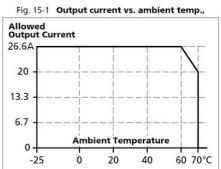


Fig. 9-1 Efficiency vs. output current

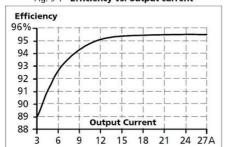
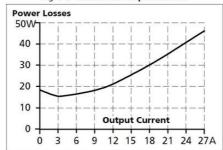


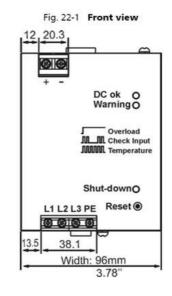
Fig. 9-2 Losses vs. output current

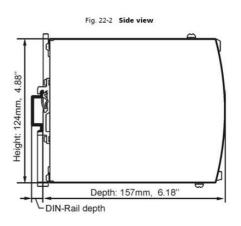


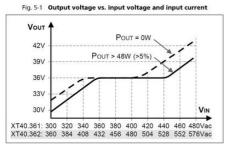
25. COMPARISON BETWEEN THE XT40, A TRANSFORMER AND A TRADITIONAL SWITCHED-MODE POWER SUPPLY

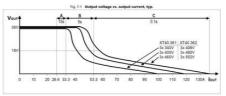
	XT40 Semi- regulated power supply	Traditional switched-mode power supply	Transformer power supply
Input voltage range	+	**	
Inrush current surge	**	+	
Hold-up time		+	
Phase-loss operation			
Efficiency	***	**	
Output voltage regulation		++	
Output adjustment range		**	
Ripple & noise voltage		**	
Error diagnostics	**	**	
Harmonic distortion (PFC)		+	
EMIC	**	**	
Ease of installation	**	**	
Size	***	**	
Weight	***		
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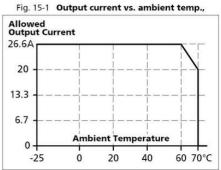


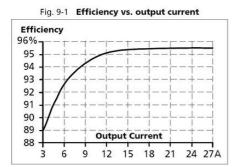


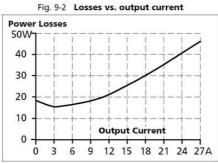






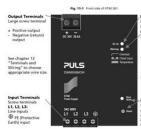






25. COMPARISON BETWEEN THE XT40, A TRANSFORMER AND A TRADITIONAL SWITCHED-MODE POWER SUPPLY

	XT40 Semi- regulated power supply	Traditional switched-mode power supply	Transformer power supply
Input voltage range	+	++	
Inrush current surge	**	+	
Hold-up time			
Phase-loss operation		•	
Efficiency	***	**	
Output voltage regulation	•	++	
Output adjustment range		**	
Ripple & noise voltage		**	
Error diagnostics	***	++	
Harmonic distortion (PFC)			
EMC	**	**	
Ease of installation	**	**	
Size	+++	++	- 2
Weight	***		
	*** very very good	es very good	* nood * no



DC-ok LED (green)
Indicates a normal operation. The LED is
if the output voltage is higher than 32.4V

Warning LED (yellow)

A steady-state light indicates an output current higher than the nominal current and that the internal shutdown timer is running.

A double flash indicates a phase-loss or

XT40.361: 333940c to > 38560Vac)
A fast flash warns of an impending temperature shut-down. A shut-down can be expected within 10 minutes, if the ambient temperature or the load current stays constant.

Shut-down LED (red) and reset button. The red LED flashes when the device has shut down. Pressing the reset button or cycling the input power (10s required) initiates a restart. If the fault has been cleared the device will operate normally.

