THYCON

Est.1968

ComPower Maxi UPS

CPX Maxi 160 – 500kVA

THYCON

Standalone three-phase UPS system
Unmatched power performance

Designed and Published by Thycon.

Up to 96 % AC-AC efficiency

1.0 output power factor

Fully scalable up to 5 MW

COMPOWER MAXI – THE POWERHOUSE

Thycon has always set global standards in uninterruptible-power-supply solutions. The latest generation of ComPower Maxi is the continuation of Thycon's renowned tradition of developing state-of-the-art UPS systems, focusing on delivering the best combination of energy-efficiency and overall power performance in the industry.

Offering maximum power protection, the ComPower Maxi helps you to use less energy and takes up less space, resulting in significant cost savings.

The ComPower Maxi's exceptional design meets all modern requirements of building and operating energy-efficient and environmentally friendly data centers. The ComPower Maxi employs transformerless double conversion UPS topology and is available from 60 to 500 kW.

The ComPower Maxi boasts features and options that cater to customers' needs, including the flexibility to accommodate an increase in power requirements and to provide n+1 parallel redundancy. Easy installation and maintenance form the basis of the core design for this standalone UPS system with front access to electrical connections and fully serviceable components.

Further highlights

- Up to 96 % efficiency in double conversion mode minimizes running costs
- Maximized output active power (kVA = kW)
- Excellent input performance minimizes installation costs
- Power density up to 363 kW / m2 minimizes space requirements
- Full front access maximizes system serviceability

HIGH EFFICIENCY AND LOWEST TOTAL COST OF OWNERSHIP

Power performance, which is measured by system-efficiency, input THDi and input and output power factor is the foundation of the ComPower Maxi. In the normal online double conversion mode, the ComPower Maxi delivers class-leading efficiency of up to 96 percent.

Efficiency

With a transformerless design and Energy Saving Inverter Switching (ESIS) technology, the ComPower Maxi delivers high efficiency at partial and full load (up to 96 percent in double conversion online mode). This level of efficiency dramatically reduces the total cost of ownership of the UPS system during its life cycle. In addition to lower operating costs, the ComPower Maxi extends the service life of components, thereby greatly increasing overall power performance.

Designed and Published by Thycon.

Low input current total harmonic distortion (THDi)

The ComPower Maxi actively manages the input current total harmonic distortion (THDi) at a low level (3.5 percent at 100 percent load). Thycon's unique technology neutralizes the emission of harmonics at the input of the UPS system, providing greater reliability of operations for circuit breakers and extending the overall service life of the equipment. Low harmonic distortion saves unnecessary oversizing of gensets, cabling and circuit breakers, avoids extra heating of input transformers and extends the overall service life of all upstream components.

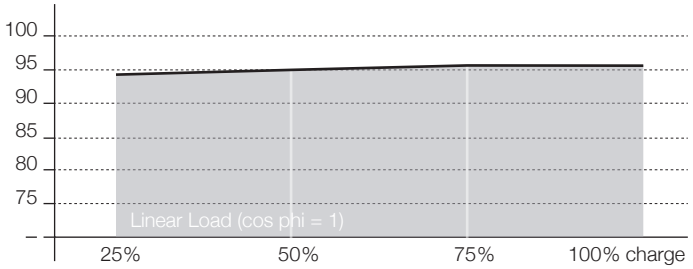
Near-to-unity input power factor

Thanks to the near-to-unity input power factor of 0.99, even with partial loads, the ComPower Maxi reduces the input installation costs by enabling the use of smaller cables. Furthermore it avoids the unnecessary use of additional phase compensating devices, which consequently keeps the overall UPS-efficiency high.

Fully rated output power

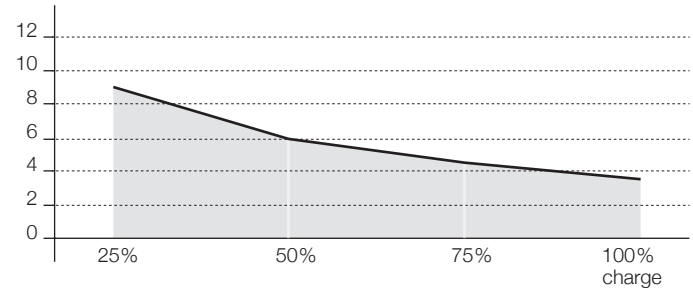
The ComPower Maxi can supply loads from 0.9 leading to 0.9 lagging without derating.

AC–AC efficiency

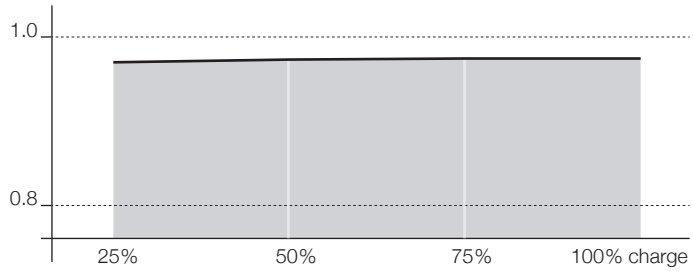


The flat efficiency curve enables significant energy savings in every working condition.

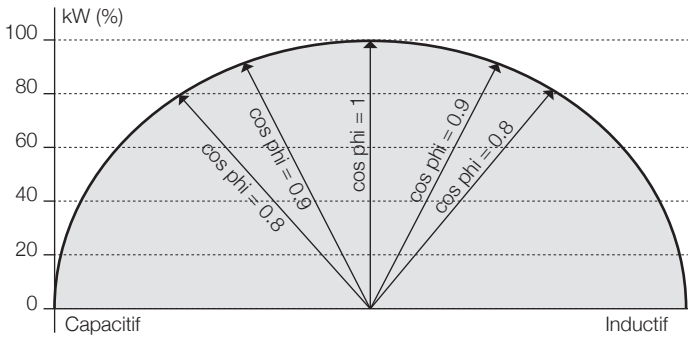
Input current total harmonic distortion (THDi)



Input power factor versus load



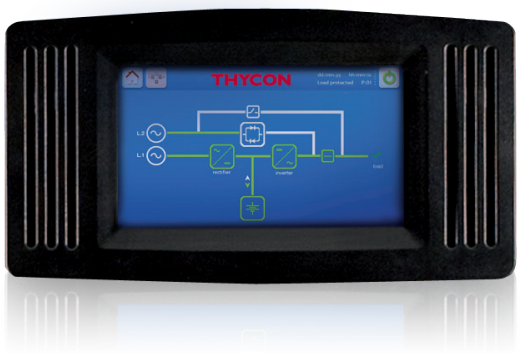
Fully rated output power

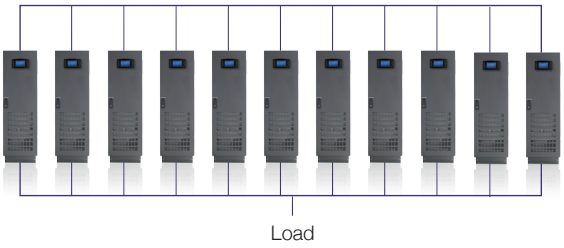


General Data	160 kW	200 kW	250kW	300 kW	400 kW	500 kW
Output power max.	160 kW	200 kW	250 kW	300 kW	400 kW	500 kW
Output power factor	1.0					
Topology	True online double conversion					
Parallel configuration	Up to 10 units					
UPS type	Standalone					
Cable entry	Bottom front				Bottom front or top	
Inbuilt batteries	Optional					
Input						
Nominal input voltage	3 × 380 / 220 V + N, 3 × 400 / 230 V + N, 3 × 415 / 240 V + N					
Voltage tolerance (Ref. to 3 × 400 / 230 V)	For loads <100 % (–20 %, +15 %), < 80 % (–26 %, +15 %), < 60 % (–35 %, +15 %)					
Input distortion THDi	≤ 3 % at 100 %					
Frequency	35–70 Hz					
Power factor	0.99 at 100 % load					
Output						
Rated output voltage	3 × 380 / 220 V + N, 3 × 400 / 230 V + N, 3 × 415 / 240 V + N					
Voltage distortion	< 2 %					
Frequency	50 or 60 Hz					
Overload capability	10 min.: up to 125 % or 1 min.: up to 150 %					
Unbalanced load	100 % possible					
Crest factor	3 : 1					
Efficiency						
Overall efficiency	Up to 96 %					
In eco-mode configuration	98 %					
Environment						
Storage temperature	–25–70 °C					
Operating temperature	0–40 °C					
Altitude configuration	1000 m without derating					
Battery						
Battery type	Sealed, lead-acid, maintenance-free or NiCd					
Communications						
Graphical display	Optional					
Standards						
Safety	IEC / EN 62040-1					
Electromagnetic compatibility (EMC)	IEC / EN 62040-2					
Performance	IEC / EN 62040-3					
Product certification	CE					
Protection rating	IP 20					
Manufacturing	ISO 9001:2008, ISO 14001:2004					
Weight, Dimensions						
Weight (without batteries)	290 kg	310 kg	390 kg	410 kg	950 kg	1000 kg
Dimensions W × H × D (mm)	850 × 1820 × 750		1100 × 1920 × 750		1650 × 1994 × 850	
Dimensions with battery enclosures W × H × D (mm)	970 (or 1180) × 1820 × 750					

Specifications are subject to change without notice.

Designed and Published by Thycon.





Maximum power capacity of up to 5 MW (10 UPS in parallel)

Parallel configuration for power extension or redundancy.

Graphical touchscreen display

Thycon's graphical display offers a fully user friendly and intuitive interface. It is a 7" touchscreen device and makes the operation and the service of the UPS easier than ever.

Top cable entry option for the 400-500 kW UPS

Optionally a top cable entry enclosure may be used for the 400-500 kW UPS. This enclosure extends the overall width of the UPS by 500 mm. It can be positioned on either side of the UPS and permits the connection of all incoming AC/DC power cables from above.

Advanced scalable architecture

If additional capacity or redundancy is needed, up to 10 independent UPS units can operate in parallel configuration, achieving a total power capacity of up to 5 MW. In all parallel configurations, each ComPower Maxi unit operates independently but is securely synchronized with the others. This scalable architecture keeps the purchasing and operating costs of your power protection solutions exceptionally low. As your power requirements grow, the UPS system grows with them – thanks to its flexible scalability – even in the most confined spaces.

Notes

THYCON

THYCON INDUSTRIAL PTY LTD
20 Audrey Ave Coburg
3058 VIC Australia
PH 61 3 9319 9000
FAX 61 3 9319 9001
ABN 17 068 011 049
www.thycon.com.au
info@thycon.com.au

24 HR Service Australia
1800 670 700