Filtered converters
with three-phase transformer

# Series ALT/3000

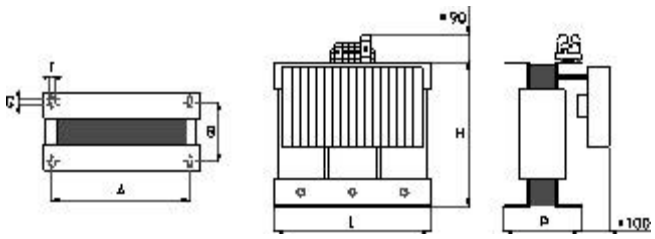
Input on request
Output 24Vdc

## Technical features

- Three-phase power 230/400 V AC (delta/star)
- Different voltage inputs are available upon request
- Rated output 24 V DC
- DC output fuse protection
- Full load output ripple < 5%
- From full to no load voltage output variation < 3 V
- Ambient temperature max. 40°C

## Dimensions and drillings

| Reference Number | Rated power (W) | Output current (A) | Dissipated power (W) | Efficiency % | Dimensions | | | Drillings | | | Weight Kg. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | L | P | H | A | B | G | |
| ALT/3001 | 360 | 15 | 74 | 83,5 | 180 | 100 | 160 | 150 | 76 | 7 | 9,7 |
| ALT/3002 | 480 | 20 | 90 | 85 | 180 | 110 | 160 | 150 | 86 | 7 | 11,5 |
| ALT/3003 | 600 | 25 | 109 | 85,5 | 180 | 120 | 160 | 150 | 96 | 7 | 12,8 |
| ALT/3004 | 720 | 30 | 133 | 84,4 | 240 | 120 | 210 | 200 | 86 | 7 | 15,7 |
| ALT/3005 | 960 | 40 | 168 | 85,4 | 240 | 130 | 210 | 200 | 96 | 7 | 19,3 |
| ALT/3006 | 1200 | 50 | 205 | 86,3 | 240 | 140 | 210 | 200 | 106 | 7 | 23 |
| ALT/3007 | 1800 | 75 | 298 | 86,8 | 300 | 134 | 260 | 250 | 96 | 9 | 32 |
| ALT/3008 | 2400 | 100 | 325 | 87,2 | 300 | 144 | 260 | 250 | 106 | 9 | 34,7 |




The data indicated could change without notice

## Technical notes

The ALT/2000 Family integrates converters with transformers and is suitable for uses where a stabilized output is not needed. For example: relay power supply, electro-magnets, electromagnetic clutches, small DC motors, solenoid valves, etc. The DC output voltage is only filtered with an output ripple of < 5% at full load.

It is possible to order the same models with different input voltages.

The ALT/3000 Family has been studied for continual power supply, where high currents with low output ripples are needed.
The Three-phase system, besides guaranteeing a balanced withdrawal of the converted phases, features a very low ripple (4%), eliminating the need of a filtering capacitor.
For best results, it is advisable to place the heat sink (and transformer) in a vertical position.

The ALG/2000 Family features the same characteristics as ALT/2000, but without the transformer. This family must be powered with a low voltage of 20 V AC to allow a rated output of 24 V DC.

Assembly is foreseen on Omega or G guides. The same models can be ordered with a different output voltage. The ASG/2000 Family features linear regulating converters, suitable for voltage output stabilization, as for powering PLC, sensors, electronic circuits in general, photocells, etc. It is possible to order custom voltage outputs (with proportional inputs). The ASG/3000 Family features switchers with low dissipation, even under high voltages, compared to the linear ones.

This can be translated into higher efficiency and lower heating. A long study has been made to arrive at a low high-frequency emission generated by the switching.

All models are electronically protected against short circuiting and overloading and can remain so without breakdown.

The voltage output, rated at 24 V DC at the moment of testing, can be adjusted within ± 3 volts by a trimmer placed on the card.

Different voltage outputs (i.e. 12 V DC) are available upon request.

The combination of the ASG/MTA Family of Toroidal transformers and stabilized converters complete the group of converters with a voltage input of 230 V or 400 V AC.

To save space in width, the transformer is placed vertically on a printed circuit. See converters with transformer for other electrical features.

It is possible to combine several cards on the same holder, thus matching them with other converter models, as ASG/2000 and 3000, except for ALG/2001 and 2002, as the holder has different dimensions.

The ARS/5000 Family of stabilized switchers is powered directly by a 230 V mains, with a variation acceptance between 170 V and 264 V AC.
This family is built to be assembled on Omega guides which have reduced space in width and enclosed in boxes with an IP30 degree of protection.
The quality of the design and choice of the components, make up a family of converters which are reliable, easy to use, totally protected electrically and advisable for various uses. The power isolation is guaranteed by the galvanic separation of the internal transformer windings, built with the same special care used for all of the transformer families. A thorough study has permitted to reduce to a minimum level the dissipated power and reach high efficiency.

Please contact our Technical Staff if different converter voltages are required. For higher ambient temperatures, please consult Table I to calculate the derating of the output current.