



## **Frequency Converters** Technical Specifications

10 - 500 kVA 3Ph Input / 3Ph Output



| MODEL                   | 5010   | 5015  | 5020    | 5030   | 5040   | 5060    | 5080   | 5100    | 5120    | 5160   | 5200   | 5250   | 5300    | 5400  | 5500 |
|-------------------------|--|---|---------|--------|--------|---------|--------|---------|---------|--------|--------|--------|---------|-------|------|
| Power (kVA)             | 10   | 15  | 20      | 30     | 40     | 60      | 80     | 100     | 120     | 150    | 200    | 250    | 300     | 400   | 500  |
| INPUT                   |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage                 | 115-200Vac, 220/380Vac, 254/440Vac<br>3 Faz+Nötr ya da Nötr'süz Özel Tasarım     |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage Tolerance       | ±20%   |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Frequency               | 50 Hz, (60 Hz Optional)  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Input Power Factor      |  |   |         |        |        |         |        | >0,     | 98      |        |        |        |         |       |      |
| THDi                    | <5%  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| OUTPUT                  |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage                 | 115-200Vac, 220/380Vac, 254/440Vac<br>3 Phase+N or Special Design witout Neutral |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage Tolerance       | ±1%  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Frequency               |  | 50 Hz; 60 Hz; 400 Hz $\pm 0.5\%$ (Optional) |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Efficiency (100% Load)  | >89%   |   |         |        | 90%    |         |        |         |         |        | 91%    |        |         |       |      |
| Power Factor            |  |   |         |        |        |         |        | 0.8     | 3       |        |        |        |         |       |      |
| THDv                    |  |   |         |        |        |         |        | < 39    | %       |        |        |        |         |       |      |
| Crest Ratio             |  |   |         |        |        |         |        | 3:1     |         |        |        |        |         |       |      |
| PROTECTIONS             |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage Protection      |  |   |         |        | Ir     | nverter | Opera: | tion Li | mits ar | e Adju | stable |        |         |       |      |
| Temp. Protection        | IGBT Heatsink and Output Transformer Over Temperature Protection                 |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Overload                | 10 min. for %100 - %125 ; 1 min. for %125 - %150 , Inverter Off for $>\!$ %150   |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Over Current Protection | Fuse and Electronic Protection   |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| BATTERY (Optional)      |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Voltage                 |  |   |         |        |        |         |        | Vdc ((  | •       | al)    |        |        |         |       |      |
| Quantity                |  |   |         |        |        |         | 60     | ) (Opt  | ional)  |        |        |        |         |       |      |
| GENERAL                 |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Display                 |  | Gr  | aphic   | LCD P  |        |         |        | , Inve  |         |        |        | Mimic  | : Diagi | am    |      |
| Warnings                |  |   |         |        | l      |         |        | ogged   |         |        |        |        |         |       |      |
| Working Type            |  |   |         |        |        |         |        | ne, DS  |         |        |        |        |         |       |      |
| Topology                |  |   |         |        | -      |         | -      | WM,     |         |        |        |        |         |       |      |
| Communication           |  | Dry Co                                      | ontacts | , Opti | onal R | emote   | Contr  | ol ove  | r Inter | net by | SNM    | P, Opt | ional   | Moden | n    |
| ENVIRONMENTAL           |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Operating Temperature   |  |   |         |        |        |         |        | 0 - 40  |         |        |        |        |         |       |      |
| Relative Humidity       |  | 95% (non condensing)                        |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Operating Altitude      |  | <2000 m                                     |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Protection Level        |  | IP20<br><60 dBA                             |         |        |        |         |        |         |         |        |        |        |         |       |      |
| Acoustic Noise (1 m.)   |  | < 60  | dBA     |        |        | <       | 65 dE  | зА      |         | < 70   | dBA    | <74    | dBA     | <75   | dBA  |
| PHYSICAL                |  |   |         |        |        |         |        |         |         |        |        |        |         |       |      |



## **GENERAL SPECIFICATIONS**

- Pure Sinewave wave form (THD<3%)
- DSP Controlled
- Static IGBT PWM inverter
- 500 logged events history
- Graphic LCD Panel

## FREQUENCY CONVERTER

350x800x1080

Dimensions (HxWxD) mm

Static frequency converters are used with the devices which can not adapt to line frequency. Static converters are more economic and more technological solution than the conventional motor generator (Dynamic Converter) for these problems. Their efficiency is higher, but operation costs are lower. Frequency converter's dynamic response is very short, because of working with static components. They are DSP controlled and they can be developed according to customer needs. Battery can be added to system and converter can continue to work even in line failures.

500x800x1080 550x800x1340 650x1100x1680 780x1260x1900 810x2030x2190

112 115 119 160 165 172 290 315 490 540 870 890 1370 1480