

# EAC-TABI

## THREE PHASE AC BIDIRECTIONAL SYSTEMS



POSITIVE PROBLEM SOLVING **+ =**

**The EAC-TABI is a series of high power bidirectional three phase AC systems. Each unit is user programmable to operate as either an AC source or AC sink.**

A true sinewave output is provided as standard. The output frequency is adjustable in the range of 45 - 105Hz. Different frequency ranges are optional, with up to 805Hz possible. An RS-232 and CAN interface are provided as standard. The high resolution TFT front panel displays a host of measurement and setting functions. Besides standard models, other nominal power levels and voltages can be user specified. Single phase and unidirectional versions are also available.

- + Single Phase Models Available on Request**
- + RS-232 & CAN Interfaces as Standard**
- + Extended Frequency Range Possible**
- + Built in Freestanding Cabinet**
- + TFT Front Panel Screen**
- + Systems up to 500kVA**

# EAC-TABI

## BIDIRECTIONAL THREE PHASE AC SOURCES

## FURTHER DETAILS

Each unit is built in its own freestanding cabinet. An external operating panel is available so that the TFT screen can be operated remotely. This is particularly useful where the power supply may be operating in a potentially hazardous environment, such as a test cell.

### OPTIONS

| CODE      | DESCRIPTION   |
|-----------|---|
| /F400     | Increased output frequency range 95 - 420Hz             |
| /F800     | Increased output frequency range 195 - 805Hz            |
| /IES      | Interface for emergency stop                            |
| /ETHERNET | Factory fitted Ethernet interface                       |
| /ANALOGUE | Factory fitted 0 - 10V analogue interface               |
| /EOP      | External operation panel for remote control of the unit |

### TECHNICAL DATA

| GENERAL                            |  |
|------------------------------------|--|
| Mains Input Voltage                | 3 × 400VAC ± 10%, 50/60Hz [other inputs available on request]                    |
| Output Voltage                     | See selection table  |
| Standard Output Frequency          | 45 - 105Hz [other ranges optionally available]                                   |
| Output Frequency Accuracy          | ± 0.1%   |
| Rated Output Power                 | See selection table  |
| Static Voltage Regulation          | ± 1% [fs]  |
| Dynamic Voltage Regulation         | ± 4% at 100% load change [50/60Hz], ±8% [800Hz]                                  |
| Asymmetric Load Voltage Regulation | ± 2% at 100% unbalanced load   |
| Regulation Time                    | <25msec  |
| Overload Characteristic            | 150% for 1 min / 125% for 10 min / 110% for 20 min                               |
| Short-Circuit Characteristic       | 2 × I <sub>NOM</sub> for 5s according EN 50091, Part 1                           |
| Waveform                           | Sinusoidal   |
| Distortion Factor at Linear Load   | ≤5% [typically 3%]   |
| EMC                                | According to EN 50091-2  |
| Permissible Power Factor           | Power derating, if power factor deviates from 0.8 lagging                        |
| Crest Factor of the Load Current   | ≤2.3% [at 100% load]   |
| Permissible Ambient Temperature    | 0 up to +40°C  |
| Permissible Environment            | 3K3 according to IEC 60721 (max. 85% rel. humidity, none condensation)           |
| Permissible Operating Altitude     | 1000m above sea level with rated load  |
| Protection Class                   | IP20 according to IEC 60529  |
| Paint Finish                       | RAL 7035   |
| Cooling                            | Forced air cooling or convection cooling dependent on rated nominal system power |

## SELECTION TABLE

| Part Number      | Maximum Power | Voltage Range | Current      |
|------------------|---------------|---------------|--------------|
| EAC-TABI 10-150  | 10kVA         | 3 × 8 - 150V  | 3 × ±38.5A   |
| EAC-TABI 10-300  | 10kVA         | 3 × 15 - 300V | 3 × ±19.2A   |
| EAC-TABI 10-600  | 10kVA         | 3 × 30 - 600V | 3 × ±9.6A    |
| EAC-TABI 15-150  | 15kVA         | 3 × 8 - 150V  | 3 × ±57.7A   |
| EAC-TABI 15-300  | 15kVA         | 3 × 15 - 300V | 3 × ±28.9A   |
| EAC-TABI 15-600  | 15kVA         | 3 × 30 - 600V | 3 × ±14.4A   |
| EAC-TABI 20-150  | 20kVA         | 3 × 8 - 150V  | 3 × ±77A     |
| EAC-TABI 20-300  | 20kVA         | 3 × 15 - 300V | 3 × ±38.5A   |
| EAC-TABI 20-600  | 20kVA         | 3 × 30 - 600V | 3 × ±19.2A   |
| EAC-TABI 25-150  | 25kVA         | 3 × 8 - 150V  | 3 × ±96.2A   |
| EAC-TABI 25-300  | 25kVA         | 3 × 15 - 300V | 3 × ±48.1A   |
| EAC-TABI 25-600  | 25kVA         | 3 × 30 - 600V | 3 × ±24.1A   |
| EAC-TABI 30-150  | 30kVA         | 3 × 8 - 150V  | 3 × ±115.5A  |
| EAC-TABI 30-300  | 30kVA         | 3 × 15 - 300V | 3 × ±57.7A   |
| EAC-TABI 30-600  | 30kVA         | 3 × 30 - 600V | 3 × ±28.9A   |
| EAC-TABI 40-150  | 40kVA         | 3 × 8 - 150V  | 3 × ±154A    |
| EAC-TABI 40-300  | 40kVA         | 3 × 15 - 300V | 3 × ±77A     |
| EAC-TABI 40-600  | 40kVA         | 3 × 30 - 600V | 3 × ±38.5A   |
| EAC-TABI 50-150  | 50kVA         | 3 × 8 - 150V  | 3 × ±192.5A  |
| EAC-TABI 50-300  | 50kVA         | 3 × 15 - 300V | 3 × ±96.2A   |
| EAC-TABI 50-600  | 50kVA         | 3 × 30 - 600V | 3 × ±48.1A   |
| EAC-TABI 60-150  | 60kVA         | 3 × 8 - 150V  | 3 × ±230.9A  |
| EAC-TABI 60-300  | 60kVA         | 3 × 15 - 300V | 3 × ±115.5A  |
| EAC-TABI 60-600  | 60kVA         | 3 × 30 - 600V | 3 × ±57.7A   |
| EAC-TABI 80-150  | 80kVA         | 3 × 8 - 150V  | 3 × ±307.9A  |
| EAC-TABI 80-300  | 80kVA         | 3 × 15 - 300V | 3 × ±154A    |
| EAC-TABI 80-600  | 80kVA         | 3 × 30 - 600V | 3 × ±77A     |
| EAC-TABI 100-150 | 100kVA        | 3 × 8 - 150V  | 3 × ±384.9A  |
| EAC-TABI 100-300 | 100kVA        | 3 × 15 - 300V | 3 × ±192.5A  |
| EAC-TABI 100-600 | 100kVA        | 3 × 30 - 600V | 3 × ±96.2A   |
| EAC-TABI 120-150 | 120kVA        | 3 × 8 - 150V  | 3 × ±461.9A  |
| EAC-TABI 120-300 | 120kVA        | 3 × 15 - 300V | 3 × ±230.9A  |
| EAC-TABI 120-600 | 120kVA        | 3 × 30 - 600V | 3 × ±115.5A  |
| EAC-TABI 160-150 | 160kVA        | 3 × 8 - 150V  | 3 × ±615.8A  |
| EAC-TABI 160-300 | 160kVA        | 3 × 15 - 300V | 3 × ±307.9A  |
| EAC-TABI 160-600 | 160kVA        | 3 × 30 - 600V | 3 × ±154A    |
| EAC-TABI 200-150 | 200kVA        | 3 × 8 - 150V  | 3 × ±769.8A  |
| EAC-TABI 200-300 | 200kVA        | 3 × 15 - 300V | 3 × ±384.9A  |
| EAC-TABI 200-600 | 200kVA        | 3 × 30 - 600V | 3 × ±192.5A  |
| EAC-TABI 250-150 | 250kVA        | 3 × 8 - 150V  | 3 × ±962.3A  |
| EAC-TABI 250-300 | 250kVA        | 3 × 15 - 300V | 3 × ±481.1A  |
| EAC-TABI 250-600 | 250kVA        | 3 × 30 - 600V | 3 × ±240.6A  |
| EAC-TABI 330-150 | 330kVA        | 3 × 8 - 150V  | 3 × ±1270.2A |
| EAC-TABI 330-300 | 330kVA        | 3 × 15 - 300V | 3 × ±635.1A  |
| EAC-TABI 330-600 | 330kVA        | 3 × 30 - 600V | 3 × ±317.5A  |
| EAC-TABI 400-150 | 400kVA        | 3 × 8 - 150V  | 3 × ±1539.6A |
| EAC-TABI 400-300 | 400kVA        | 3 × 15 - 300V | 3 × ±769.8A  |
| EAC-TABI 400-600 | 400kVA        | 3 × 30 - 600V | 3 × ±384.9A  |
| EAC-TABI 500-150 | 500kVA        | 3 × 8 - 150V  | 3 × ±1924.5A |
| EAC-TABI 500-300 | 500kVA        | 3 × 15 - 300V | 3 × ±962.3A  |
| EAC-TABI 500-600 | 500kVA        | 3 × 30 - 600V | 3 × ±481.1A  |

Different output ranges and application/user specific options are possible. Please contact ETPS Ltd to discuss your requirements.

Every effort is made to ensure that the information provided within this technical summary is accurate. However, ETPS Ltd must reserve the right to make changes to the published specifications without prior notice. Where certain operating parameters are critical for your application we advise that they be confirmed at the time of order. ETPS Ltd specialises in modifying its proven platforms to suit your needs. Please contact our office if your requirement is non-standard. Please note that your actual unit may differ from those shown.



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