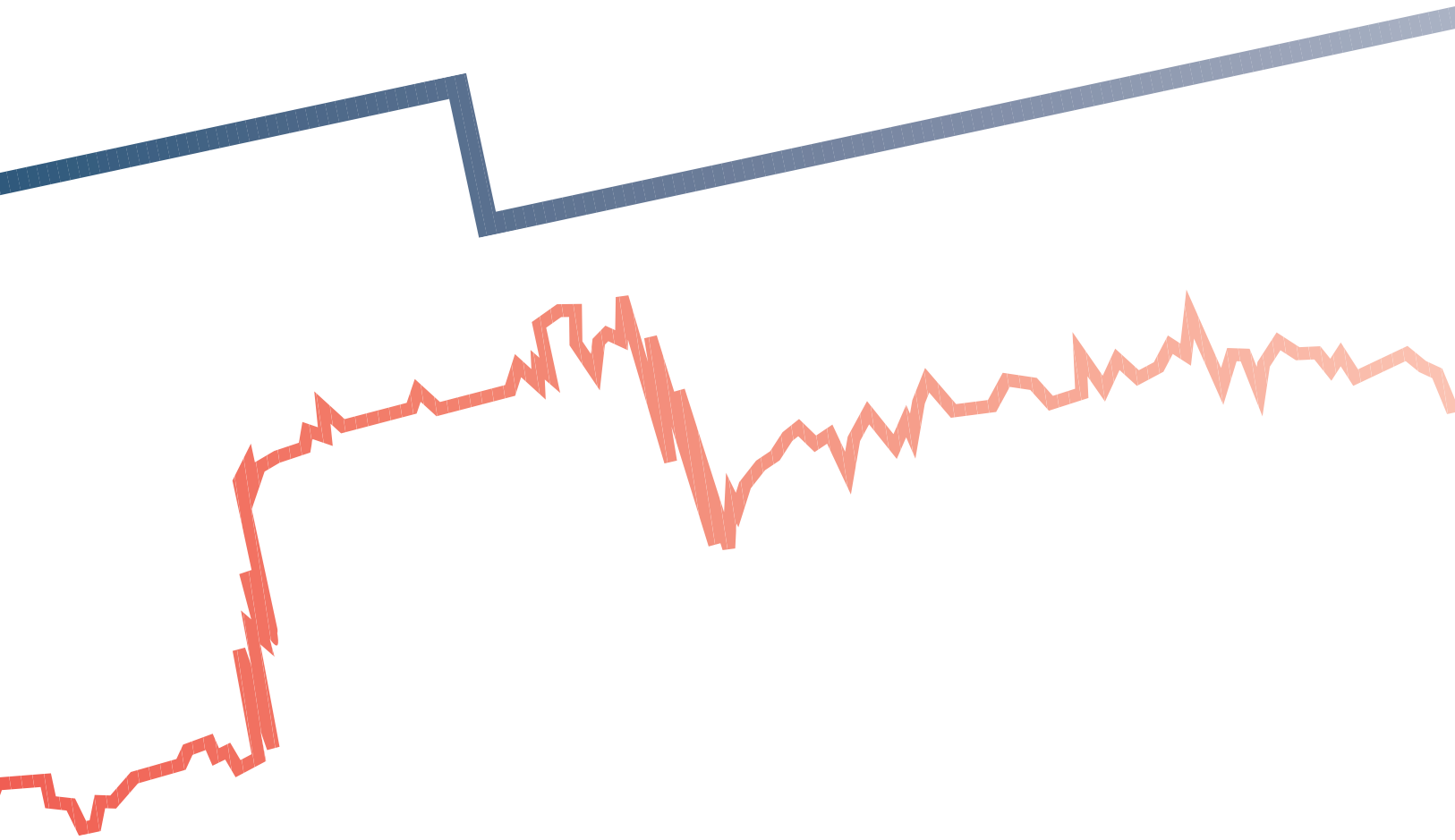




ELECTRODYNAMIC VOLTAGE STABILIZERS



ELECTRODYNAMIC VOLTAGE STABILIZERS

Operating Principle

Enerdoor voltage stabilizer series regulates voltage through a series of transformers. A static control circuit drives the variable autotransformer that supplies the required voltage to a series transformer, either in phase or out of phase, to bring the mains to the rated value.

Three phase stabilizers are available in two versions:

- 1) The FINSTT and FINSTC models perform voltage regulation by an average of three phases and are suitable for lines with balanced voltage and for an unbalance between phases up to 50%. These models are equipped with one stabilizing circuit to ensure a common regulation of the three phase and may be connected to input mains without neutral.
- 2) The FINSTTY and FINSTCY models are equipped with one stabilizing circuit for each phase and are suitable for unbalanced mains with a maximum unbalance between phases up to 100%. For correct operation, the input line must be three phase + neutral.

Voltage regulators do not transform voltage and therefore have the same output voltage as the input. When input and output voltages are different, an additional isolating transformer or autotransformer is required.

Efficiency

At full load the efficiency range is from 96% for small models to 98% for larger units.

Unaffected by power factor and load variations

The operating principle ensures equipment accuracy and regulation speed characteristics remain unaltered under any load condition, with inductive or capacitive loads.

Unaffected by frequency variations

The servomotor control circuit operates correctly with main frequency variations up to $\pm 5\%$.

Negligible waveform distortion

High quality materials and proper use ensure harmonic distortion is always less than 0.2% under any working condition.

Low internal impedance

Voltage stabilizers installed in already existing systems do not require new calculations for protection since internal impedance varying from 0.52 to 0.015 ohm does not significantly affect line impedance.

Operating temperature

Designed to operate correctly with a maximum environment temperature of 40°C under the worst conditions.

Conformity to Standards

This series conforms to the EMC Directive 89/336/EEC and the Low Voltage Directive 73/23/EEC Standards.

General Features**Range**

From 1 kVA to 4000 kVA

- Single phase voltage: 100-110-115-120-127-200-220-230-240-265-277
- Three phase voltage: 208-220-230-240-380-400-415-440-460-480-500
- Frequency: 50 or 60 Hz
- Special versions equipped with optional fittings

Accuracy

Even when strong harmonic distortions are present, Enerdoor voltage stabilizers ensure the true RMS value of the voltage with an accuracy range that varies, according to the model, from $\pm 0.5\%$ to $\pm 1.5\%$.

Correction speed

The advanced electronic control circuit ensures a fast response from 11 to 50 ms/volt, according to the model. A controlled deceleration minimizes overshooting.

Overload capacity

The regulation system may support overloads up to 10 times the rated current for 10 milliseconds, 5 times for 6 seconds, and 2 times for 1 minute, without damage.

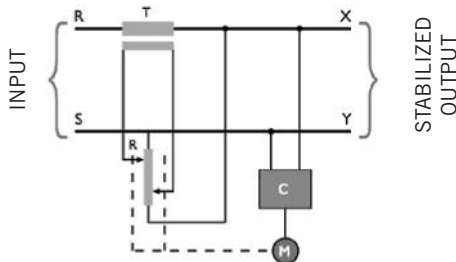
The following models are contained in metallic cabinets characterized by the protection degree IP21.

According to international Standards, the protection degree IP21 means:

IP2X: Protection against solid particles over 12 mm

IPX1: Protection against vertical drippings

These AVR's are suitable for indoor installation in rooms without splashes or dust. The single phase model FINSMT.20.B2.5 and three phase models FINSTT.20.A6S and FINSTT.20.B12S are fitted with a range selector. The power rating each model may deliver is selected by a switching device available on the cabinet.



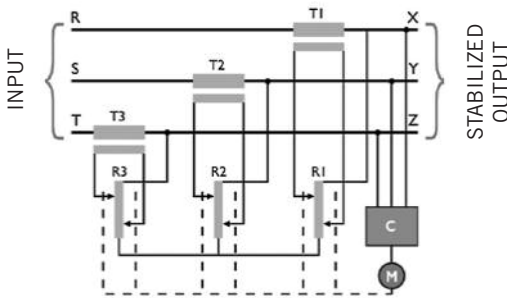
SINGLE PHASE M STABILIZERS

Single phase

- 230 Vac as standard
- FINSMT (Toroidal core)
- FINSMC (Square section linear core)

Single phase with asymmetric regulation

- 230 Vac as standard
- FINSMTA (Toroidal core)
- FINSMCA (Square section linear core)



THREE PHASE T STABILIZERS

Three phase

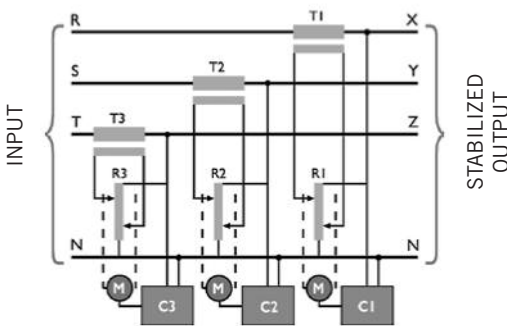
- 400 Vac as standard
- FINSTT (Toroidal core)
- FINSTC (Square section linear core)

Three phase with independent regulation

- 400 Vac as standard
- FINSTTY (Toroidal core)
- FINSTCY (Square section linear core)

Three phase with asymmetric regulation

- 230 Vac as standard
- FINSTTA (Toroidal core)
- FINSTCA (Square section linear core)



THREE PHASE T STABILIZERS

Optional Fittings

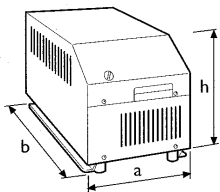
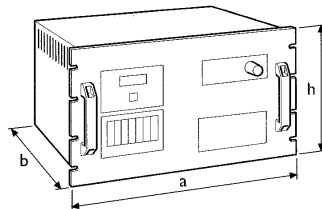
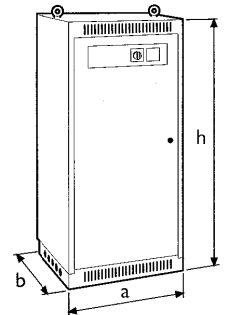
- Remote control
- Input or output circuit breaker (with or without earth leakage)
- Manual or automatic by-pass
- Isolating transformer
- Step-up / step-down transformer or autotransformer
- Surge arrester (lightning protection)
- Over / under voltage protection
- Thermal relay
- Reversed phase sequence and phase failure protection
- IP54 indoor or outdoor versions

- T = buck-boost transformer
- R = variable transformer
- C = electronic control circuit
- M = servomotor

ELECTRIC CHARACTERISTICS

| | |
|-----------------|--|
| Nominal voltage | 230 Vac (Additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Average |
| Core type | Toroidal |
| Input | Symmetric |

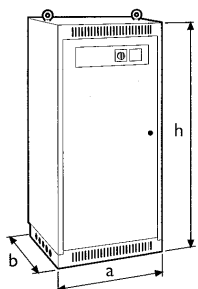
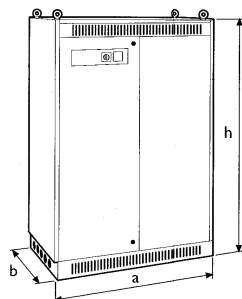
| FINSMT | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|----------------|--------------------------|--------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------------|------------------|-------------|
| FINSMT.30.A1 | 1 | 4.3 | ±30 | 13 | ± 1,5 | 210x385x200 | 18 | 1 |
| FINSMT.25.B1 | 1 | 4.3 | ±25 | 14 | ± 1,5 | 210x385x200 | 20 | 1 |
| FINSMT.20.B2.5 | 2 / 2.5 | 8.7 / 11 | ±20 / ±15 | 15 / 18 | ± 1,5 | 210x385x200 | 20 | 1 |
| FINSMT.10.B3 | 3 | 13 | ±10 | 25 | ± 1,5 | 210x385x200 | 20 | 1 |
| FINSMT.30.B2 | 2 | 8.7 | ±30 | 20 | ± 0.5 | 485X500X275 | 36 | 2 |
| FINSMT.25.B3 | 3 | 13 | ±25 | 20 | ± 0.5 | 485X500X275 | 36 | 2 |
| FINSMT.20.B4 | 4 | 17 | ±20 | 23 | ± 0.5 | 485X500X275 | 36 | 2 |
| FINSMT.15.B5 | 5 | 22 | ±15 | 27 | ± 0.5 | 485X500X275 | 36 | 2 |
| FINSMT.10.B8 | 8 | 35 | ±10 | 33 | ± 0.5 | 485X500X275 | 36 | 2 |
| FINSMT.30.C3 | 3 | 13 | ±30 | 24 | ± 0.5 | 485X500X275 | 47 | 2 |
| FINSMT.25.C4 | 4 | 17.4 | ±25 | 25 | ± 0.5 | 485X500X275 | 47 | 2 |
| FINSMT.20.C6 | 6 | 26 | ±20 | 27 | ± 0.5 | 485X500X275 | 47 | 2 |
| FINSMT.15.C7 | 7 | 30 | ±15 | 30 | ± 0.5 | 485X500X275 | 47 | 2 |
| FINSMT.10.C10 | 10 | 43 | ±10 | 35 | ± 0.5 | 485X500X275 | 47 | 2 |
| FINSMT.30.D6 | 6 | 26 | ±30 | 24 | ± 0.5 | 485X500X275 | 60 | 2 |
| FINSMT.25.D8 | 8 | 35 | ±25 | 23 | ± 0.5 | 485X500X275 | 60 | 2 |
| FINSMT.20.D10 | 10 | 43 | ±20 | 27 | ± 0.5 | 485X500X275 | 60 | 2 |
| FINSMT.15.D15 | 15 | 65 | ±15 | 30 | ± 0.5 | 485X500X275 | 60 | 2 |
| FINSMT.10.D20 | 20 | 87 | ±10 | 35 | ± 0.5 | 485X500X275 | 60 | 2 |
| FINSMT.30.E12 | 12 | 52 | ±30 | 20 | ± 1 | 650X450X1000 | 110 | 3 |
| FINSMT.25.E15 | 15 | 65 | ±25 | 26 | ± 1 | 650X450X1000 | 110 | 3 |
| FINSMT.20.E21 | 21 | 91 | ±20 | 42 | ± 1 | 650X450X1000 | 110 | 3 |
| FINSMT.15.E30 | 30 | 130 | ±15 | 58 | ± 1 | 650X450X1000 | 110 | 3 |
| FINSMT.10.E40 | 40 | 174 | ±10 | 64 | ± 1 | 650X450X1000 | 110 | 3 |

CASE 1

CASE 2

CASE 3


ELECTRIC CHARACTERISTICS

| | |
|-----------------|--|
| Nominal voltage | 230 Vac (Additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Average |
| Core type | Square section linear core |
| Input | Symmetric |

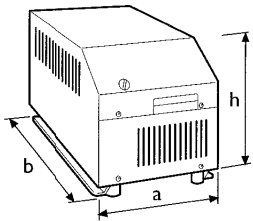
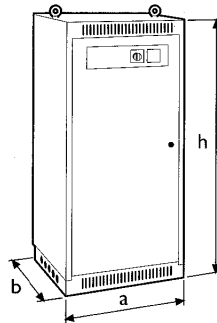
| FINSMC | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|----------------|--------------------------|--------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------------|------------------|-------------|
| FINSMC.30.A16 | 16 | 70 | ±30 | 8 | ±1 | 650X650X1300 | 187 | 3 |
| FINSMC.25.A18 | 18 | 78 | ±25 | 9 | ±1 | 650X650X1300 | 187 | 3 |
| FINSMC.20.A25 | 25 | 109 | ±20 | 10 | ±1 | 650X650X1300 | 187 | 3 |
| FINSMC.15.A36 | 36 | 157 | ±15 | 12 | ±1 | 650X650X1300 | 187 | 3 |
| FINSMC.10.A56 | 56 | 243 | ±10 | 18 | ±1 | 650X650X1300 | 187 | 3 |
| FINSMC.30.B25 | 25 | 109 | ±30 | 18 | ±1 | 650X650X1800 | 235 | 3 |
| FINSMC.25.B30 | 30 | 130 | ±25 | 19 | ±1 | 650X650X1800 | 235 | 3 |
| FINSMC.20.B42 | 42 | 182 | ±20 | 21 | ±1 | 650X650X1800 | 235 | 3 |
| FINSMC.15.B59 | 59 | 257 | ±15 | 24 | ±1 | 650X650X1800 | 235 | 3 |
| FINSMC.10.B87 | 87 | 378 | ±10 | 31 | ±1 | 650X650X1800 | 235 | 3 |
| FINSMC.30.C33 | 33 | 143 | ±30 | 18 | ±1 | 650X650X1800 | 280 | 3 |
| FINSMC.25.C45 | 45 | 195 | ±25 | 19 | ±1 | 650X650X1800 | 280 | 3 |
| FINSMC.20.C59 | 59 | 257 | ±20 | 21 | ±1 | 650X650X1800 | 280 | 3 |
| FINSMC.15.C85 | 85 | 370 | ±15 | 24 | ±1 | 650X650X1800 | 280 | 3 |
| FINSMC.10.C117 | 117 | 509 | ±10 | 31 | ±1 | 650X650X1800 | 280 | 3 |
| FINSMC.30.D47 | 47 | 204 | ±30 | 26 | ±1 | 650X650X1800 | 340 | 3 |
| FINSMC.25.D62 | 62 | 270 | ±25 | 28 | ±1 | 650X650X1800 | 340 | 3 |
| FINSMC.20.D82 | 82 | 357 | ±20 | 29 | ±1 | 650X650X1800 | 340 | 3 |
| FINSMC.15.D115 | 115 | 500 | ±15 | 34 | ±1 | 650X650X1800 | 340 | 3 |
| FINSMC.10.D177 | 177 | 770 | ±10 | 45 | ±1 | 650X650X1800 | 340 | 3 |
| FINSMC.30.E68 | 68 | 296 | ±30 | 20 | ±1 | 1100X650X1800 | 455 | 4 |
| FINSMC.25.E85 | 85 | 370 | ±25 | 21 | ±1 | 1100X650X1800 | 455 | 4 |
| FINSMC.20.E115 | 115 | 500 | ±20 | 23 | ±1 | 1100X650X1800 | 455 | 4 |
| FINSMC.15.E164 | 164 | 713 | ±15 | 26 | ±1 | 1100X650X1800 | 455 | 4 |
| FINSMC.10.E247 | 247 | 1074 | ±10 | 33 | ±1 | 1100X650X1800 | 455 | 4 |
| FINSMC.30.F93 | 93 | 404 | ±30 | 27 | ±1 | 1100X650X1800 | 670 | 4 |
| FINSMC.25.F120 | 120 | 522 | ±25 | 29 | ±1 | 1100X650X1800 | 670 | 4 |
| FINSMC.20.F164 | 164 | 713 | ±20 | 33 | ±1 | 1100X650X1800 | 670 | 4 |
| FINSMC.15.F230 | 230 | 1000 | ±15 | 38 | ±1 | 1100X650X1800 | 670 | 4 |
| FINSMC.10.F320 | 320 | 1391 | ±10 | 47 | ±1 | 1100X650X1800 | 670 | 4 |

CASE 3

CASE 4


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Average |
| Core type | Toroidal |
| Input | Symmetric |

| FINSTT | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|----------------|-------------------|-------------------|-----------------------|----------------------|----------------------|---------------------------|-----------|------|
| FINSTT.30.A3 | 3 | 4 | ±30 | 13 | ± 1 | 600X300X260 | 45 | 1 |
| FINSTT.25.A3.5 | 3.5 | 4 | ±25 | 15 | ± 1 | 600X300X260 | 45 | 1 |
| FINSTT.20.A6S | 5 / 6 | 7 / 9 | ±20 / ±15 | 18 / 21 | ± 1 | 600X300X260 | 45 | 1 |
| FINSTT.10.A9 | 9 | 13 | ±10 | 30 | ± 1 | 600X300X260 | 45 | 1 |
| FINSTT.30.B6 | 6 | 9 | ±30 | 13 | ± 1 | 270X445X480 | 78 | 1 |
| FINSTT.25.B6.5 | 6.5 | 9.4 | 25 | 15 | ± 1 | 270X445X480 | 78 | 1 |
| FINSTT.20.B12S | 9 / 12 | 13 / 17 | ±20 / ±15 | 21 | ± 1 | 270X445X480 | 78 | 1 |
| FINSTT.10.B17 | 17 | 25 | ±10 | 30 | ± 1 | 270X445X480 | 78 | 1 |
| FINSTT.30.C10 | 10 | 13 | ±30 | 15 | ± 1 | 650X450X1000 | 122 | 3 |
| FINSTT.25.C13 | 13 | 14 | ±25 | 16 | ± 1 | 650X450X1000 | 122 | 3 |
| FINSTT.20.C17 | 17 | 22 | ±20 | 18 | ± 1 | 650X450X1000 | 122 | 3 |
| FINSTT.15.C22 | 22 | 30 | ±15 | 21 | ± 1 | 650X450X1000 | 122 | 3 |
| FINSTT.10.C31 | 31 | 45 | ±10 | 21 | ± 1 | 650X450X1000 | 122 | 3 |

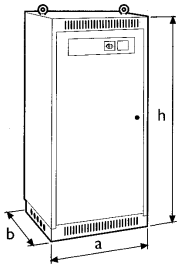
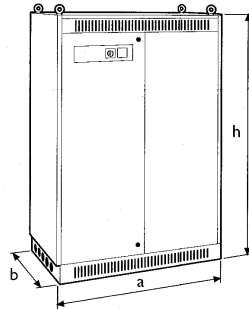
CASE 1

CASE 3


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Average |
| Core type | Square section linear core |
| Input | Symmetric |

| FINSTC | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|----------------|--------------------------|--------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------------|------------------|-------------|
| FINSTC.30.A22 | 22 | 31 | ±30 | 10 | ± 1 | 650X650X1300 | 250 | 3 |
| FINSTC.25.A30 | 30 | 43 | ±25 | 11 | ± 1 | 650X650X1300 | 250 | 3 |
| FINSTC.20.A40 | 40 | 58 | ±20 | 12 | ± 1 | 650X650X1300 | 250 | 3 |
| FINSTC.15.A55 | 55 | 79 | ±15 | 14 | ± 1 | 650X650X1300 | 250 | 3 |
| FINSTC.10.A85 | 85 | 123 | ±10 | 18 | ± 1 | 650X650X1300 | 250 | 3 |
| FINSTC.30.B35 | 35 | 51 | ±30 | 10 | ± 1 | 650X650X1300 | 280 | 3 |
| FINSTC.25.B46 | 46 | 67 | ±25 | 11 | ± 1 | 650X650X1300 | 280 | 3 |
| FINSTC.20.B58 | 58 | 84 | ±20 | 12 | ± 1 | 650X650X1300 | 280 | 3 |
| FINSTC.15.B85 | 85 | 123 | ±15 | 14 | ± 1 | 650X650X1300 | 280 | 3 |
| FINSTC.10.B115 | 115 | 167 | ±10 | 18 | ± 1 | 650X650X1300 | 280 | 3 |
| FINSTC.30.C50 | 50 | 72 | ±30 | 10 | ± 1 | 650X650X1300 | 355 | 3 |
| FINSTC.25.C63 | 63 | 91 | ±25 | 11 | ± 1 | 650X650X1300 | 355 | 3 |
| FINSTC.20.C85 | 85 | 123 | ±20 | 12 | ± 1 | 650X650X1300 | 355 | 3 |
| FINSTC.15.C122 | 122 | 177 | ±15 | 14 | ± 1 | 650X650X1300 | 355 | 3 |
| FINSTC.10.C190 | 190 | 275 | ±10 | 18 | ± 1 | 650X650X1300 | 355 | 3 |
| FINSTC.30.D70 | 70 | 101 | ±30 | 14 | ± 1 | 650X650X1800 | 415 | 3 |
| FINSTC.25.D85 | 85 | 123 | ±25 | 16 | ± 1 | 650X650X1800 | 415 | 3 |
| FINSTC.20.D110 | 110 | 159 | ±20 | 17 | ± 1 | 650X650X1800 | 415 | 3 |
| FINSTC.15.D165 | 165 | 239 | ±15 | 20 | ± 1 | 650X650X1800 | 415 | 3 |
| FINSTC.10.D260 | 260 | 377 | ±10 | 26 | ± 1 | 650X650X1800 | 415 | 3 |
| FINSTC.30.E100 | 100 | 145 | ±30 | 12 | ± 1 | 650X650X1800 | 630 | 4 |
| FINSTC.30.E100 | 135 | 196 | ±25 | 13 | ± 1 | 1100X650X1800 | 630 | 4 |
| FINSTC.20.E170 | 170 | 246 | ±20 | 14 | ± 1 | 1100X650X1800 | 630 | 4 |
| FINSTC.15.E230 | 230 | 333 | ±15 | 17 | ± 1 | 1100X650X1800 | 630 | 4 |
| FINSTC.10.E380 | 380 | 551 | ±10 | 22 | ± 1 | 1100X650X1800 | 630 | 4 |

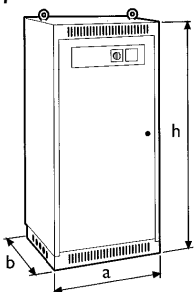
| FINSTC | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy ($\pm\%$) | Dimensions (mm) a x b x h | Weight Kg | Case |
|-----------------------|--------------------------|--------------------------|------------------------------|-----------------------------|---|----------------------------------|------------------|-------------|
| FINSTC.30.F140 | 140 | 203 | ± 30 | 12 | ± 1 | 1100X650X1800 | 900 | 4 |
| FINSTC.25.F180 | 180 | 261 | ± 25 | 14 | ± 1 | 1100X650X1800 | 900 | 4 |
| FINSTC.20.F240 | 240 | 348 | ± 20 | 16 | ± 1 | 1100X650X1800 | 900 | 4 |
| FINSTC.15.F340 | 340 | 493 | ± 15 | 18 | ± 1 | 1100X650X1800 | 900 | 4 |
| FINSTC.10.F540 | 540 | 783 | ± 10 | 30 | ± 1 | 1100X650X1800 | 900 | 4 |
| FINSTC.30.G210 | 210 | 304 | ± 30 | 21 | ± 1 | 1100X1100X1800 | 1200 | 4 |
| FINSTC.25.G270 | 270 | 391 | ± 25 | 23 | ± 1 | 1100X1100X1800 | 1200 | 4 |
| FINSTC.20.G355 | 355 | 514 | ± 20 | 26 | ± 1 | 1100X1100X1800 | 1320 | 4 |
| FINSTC.15.G510 | 510 | 739 | ± 15 | 29 | ± 1 | 1100X1100X1800 | 1320 | 4 |
| FINSTC.10.G780 | 780 | 1130 | ± 10 | 46 | ± 1 | 1100X1100X1800 | 1320 | 4 |

CASE 3

CASE 4


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Independent |
| Core type | Toroidal |
| Input | Symmetric |

| FINSTTY | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|-----------------|-------------------|-------------------|-----------------------|----------------------|----------------------|---------------------------|-----------|------|
| FINSTTY.30.A3 | 3 | 4 | ±30 | 13 | ± 1 | 650X450X1000 | 90 | 3 |
| FINSTTY.25.A4.5 | 4.5 | 7 | ±25 | 14 | ± 1 | 650X450X1000 | 90 | 3 |
| FINSTTY.20.A6 | 6 | 9 | ±20 | 16 | ± 1 | 650X450X1000 | 90 | 3 |
| FINSTTY.15.A7.5 | 7.5 | 11 | ±15 | 18 | ± 1 | 650X450X1000 | 90 | 3 |
| FINSTTY.10.A10 | 10 | 14 | ±10 | 21 | ± 1 | 650X450X1000 | 90 | 3 |
| FINSTTY.30.B6 | 6 | 9 | ±30 | 11 | ± 1 | 650X450X1000 | 115 | 3 |
| FINSTTY.25.B9 | 9 | 13 | ±25 | 12 | ± 1 | 650X450X1000 | 115 | 3 |
| FINSTTY.20.B12 | 12 | 17 | ±20 | 14 | ± 1 | 650X450X1000 | 115 | 3 |
| FINSTTY.15.B15 | 15 | 22 | ±15 | 16 | ± 1 | 650X450X1000 | 115 | 3 |
| FINSTTY.10.B24 | 24 | 35 | ±10 | 19 | ± 1 | 650X450X1000 | 115 | 3 |
| FINSTTY.30.C9 | 9 | 13 | ±30 | 13 | ± 1 | 650X450X1000 | 135 | 3 |
| FINSTTY.25.C15 | 15 | 22 | ±25 | 14 | ± 1 | 650X450X1000 | 135 | 3 |
| FINSTTY.20.C18 | 18 | 26 | ±20 | 16 | ± 1 | 650X450X1000 | 135 | 3 |
| FINSTTY.15.C21 | 21 | 30 | ±15 | 18 | ± 1 | 650X450X1000 | 135 | 3 |
| FINSTTY.10.C30 | 30 | 43 | ±10 | 21 | ± 1 | 650X450X1000 | 135 | 3 |
| FINSTTY.30.D18 | 18 | 26 | ±30 | 13 | ± 1 | 650X450X1000 | 210 | 3 |
| FINSTTY.25.D24 | 24 | 35 | ±25 | 14 | ± 1 | 650X450X1000 | 210 | 3 |
| FINSTTY.20.D30 | 30 | 43 | ±20 | 16 | ± 1 | 650X450X1000 | 210 | 3 |
| FINSTTY.15.D45 | 45 | 65 | ±15 | 18 | ± 1 | 650X450X1000 | 210 | 3 |
| FINSTTY.10.D60 | 60 | 87 | ±10 | 21 | ± 1 | 650X450X1000 | 210 | 3 |
| FINSTTY.30.E30 | 30 | 43 | ±30 | 13 | ± 1 | 650X450X1300 | 240 | 3 |
| FINSTTY.25.E36 | 36 | 52 | ±25 | 14 | ± 1 | 650X450X1300 | 240 | 3 |
| FINSTTY.20.E46 | 46 | 66 | ±20 | 16 | ± 1 | 650X450X1300 | 240 | 3 |
| FINSTTY.15.E66 | 66 | 95 | ±15 | 18 | ± 1 | 650X450X1300 | 240 | 3 |
| FINSTTY.10.E105 | 105 | 152 | ±10 | 21 | ± 1 | 650X450X1300 | 240 | 3 |
| FINSTTY.30.F36 | 36 | 43 | ±15 | 13 | ± 1 | 650X450X1300 | 290 | 3 |
| FINSTTY.25.F45 | 45 | 52 | ±15 | 14 | ± 1 | 650X450X1300 | 290 | 3 |
| FINSTTY.20.F60 | 60 | 66 | ±15 | 16 | ± 1 | 650X450X1300 | 290 | 3 |
| FINSTTY.15.F90 | 90 | 95 | ±15 | 18 | ± 1 | 650X450X1300 | 290 | 3 |
| FINSTTY.10.F120 | 120 | 152 | ±15 | 21 | ± 1 | 650X450X1300 | 290 | 3 |

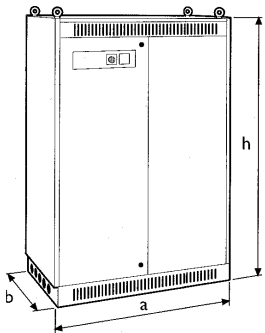
CASE 3


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Independent |
| Core type | Square section linear core |
| Input | Symmetric |

| FINSTCY | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|-----------------|--------------------------|--------------------------|------------------------------|-----------------------------|-----------------------------|----------------------------------|------------------|-------------|
| FINSTCY.30.A48 | 48 | 69 | ±30 | 5 | ± 1 | 1100X650X1800 | 485 | 4 |
| FINSTCY.25.A55 | 55 | 79 | ±25 | 6 | ± 1 | 1100X650X1800 | 485 | 4 |
| FINSTCY.20.A75 | 75 | 108 | ±20 | 6 | ± 1 | 1100X650X1800 | 485 | 4 |
| FINSTCY.15.A110 | 110 | 159 | ±15 | 7 | ± 1 | 1100X650X1800 | 485 | 4 |
| FINSTCY.10.A170 | 170 | 245 | ±10 | 11 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.30.B70 | 75 | 109 | ±30 | 10 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.25.B90 | 90 | 130 | ±25 | 11 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.20.B120 | 125 | 181 | ±20 | 12 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.15.B170 | 175 | 254 | ±15 | 14 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.10.B260 | 260 | 377 | ±10 | 18 | ± 1 | 1100X650X1800 | 560 | 4 |
| FINSTCY.30.C100 | 100 | 145 | ±30 | 10 | ± 1 | 1100X650X1800 | 625 | 4 |
| FINSTCY.25.C135 | 135 | 196 | ±25 | 11 | ± 1 | 1100X650X1800 | 625 | 4 |
| FINSTCY.20.C175 | 175 | 254 | ±20 | 12 | ± 1 | 1100X650X1800 | 625 | 4 |
| FINSTCY.15.C255 | 255 | 370 | ±15 | 14 | ± 1 | 1100X650X1800 | 625 | 4 |
| FINSTCY.10.C350 | 350 | 507 | ±10 | 18 | ± 1 | 1100X650X1800 | 625 | 4 |
| FINSTCY.30.D140 | 140 | 203 | ±30 | 15 | ± 1 | 1100X650X1800 | 780 | 4 |
| FINSTCY.25.D185 | 185 | 268 | ±25 | 16 | ± 1 | 1100X650X1800 | 780 | 4 |
| FINSTCY.20.D245 | 245 | 355 | ±20 | 17 | ± 1 | 1100X650X1800 | 780 | 4 |
| FINSTCY.15.D345 | 345 | 500 | ±15 | 20 | ± 1 | 1100X650X1800 | 780 | 4 |
| FINSTCY.10.D530 | 530 | 768 | ±10 | 26 | ± 1 | 1100X650X1800 | 780 | 4 |
| FINSTCY.30.E205 | 205 | 297 | ±30 | 11 | ± 1 | 1100X1100X1800 | 1230 | 4 |
| FINSTCY.25.E255 | 255 | 370 | ±25 | 12 | ± 1 | 1100X1100X1800 | 1230 | 4 |
| FINSTCY.20.E345 | 345 | 500 | ±20 | 13 | ± 1 | 1100X1100X1800 | 1230 | 4 |
| FINSTCY.15.E490 | 490 | 710 | ±15 | 15 | ± 1 | 1100X1100X1800 | 1280 | 4 |
| FINSTCY.10.E740 | 740 | 1072 | ±10 | 19 | ± 1 | 1100X1100X1800 | 1280 | 4 |
| FINSTCY.30.F280 | 280 | 406 | ±30 | 16 | ± 1 | 1100X1100X1800 | 1500 | 4 |
| FINSTCY.25.F360 | 360 | 522 | ±25 | 17 | ± 1 | 1100X1100X1800 | 1500 | 4 |
| FINSTCY.20.F490 | 490 | 710 | ±20 | 19 | ± 1 | 1100X1100X1800 | 1530 | 4 |
| FINSTCY.15.F690 | 690 | 1000 | ±15 | 22 | ± 1 | 1100X1100X1800 | 1530 | 4 |
| FINSTCY.10.F960 | 960 | 1391 | ±10 | 27 | ± 1 | 1100X1100X1800 | 1580 | 4 |

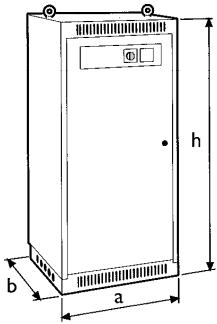
| FINSTCY | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy ($\pm\%$) | Dimensions (mm) a x b x h | Weight Kg | Case |
|------------------|--------------------------|--------------------------|------------------------------|-----------------------------|---|----------------------------------|------------------|-------------|
| FINSTCY.30.G380 | 380 | 551 | ± 30 | 13 | ± 1 | 3 units 1100x1100x1800 | 2750 | 4 (3u) |
| FINSTCY.25.G500 | 500 | 725 | ± 25 | 14 | ± 1 | 3 units 1100x1100x1800 | 2750 | 4 (3u) |
| FINSTCY.20.G690 | 690 | 1000 | ± 20 | 16 | ± 1 | 3 units 1100x1100x1800 | 2750 | 4 (3u) |
| FINSTCY.15.G1000 | 1000 | 1449 | ± 15 | 27 | ± 1 | 3 units 1100x1100x1800 | 2950 | 4 (3u) |
| FINSTCY.10.G1500 | 1500 | 2165 | ± 10 | 44 | ± 1 | 3 units 1100x1100x1800 | 2950 | 4 (3u) |
| FINSTCY.30.H520 | 520 | 754 | ± 30 | 18 | ± 1 | 3 units 1100x1100x1800 | 3200 | 4 (3u) |
| FINSTCY.25.H690 | 690 | 1000 | ± 25 | 20 | ± 1 | 3 units 1100x1100x1800 | 3200 | 4 (3u) |
| FINSTCY.20.H920 | 920 | 1333 | ± 20 | 23 | ± 1 | 3 units 1100x1100x1800 | 3350 | 4 (3u) |
| FINSTCY.15.H1300 | 1300 | 1884 | ± 15 | 27 | ± 1 | 3 units 1100x1100x1800 | 3450 | 4 (3u) |
| FINSTCY.10.H1900 | 1900 | 2754 | ± 10 | 36 | ± 1 | 3 units 1100x1100x1800 | 3450 | 4 (3u) |
| FINSTCY.30.I770 | 770 | 1116 | ± 30 | 18 | ± 1 | 3 units 1100x1100x1800 | 4370 | 4 (3u) |
| FINSTCY.25.I1000 | 1000 | 1449 | ± 25 | 20 | ± 1 | 3 units 1100x1100x1800 | 4370 | 4 (3u) |
| FINSTCY.20.I1330 | 1330 | 1928 | ± 20 | 23 | ± 1 | 3 units 1100x1100x1800 | 4370 | 4 (3u) |
| FINSTCY.15.I1800 | 1800 | 2609 | ± 15 | 27 | ± 1 | 3 units 1100x1100x1800 | 4450 | 4 (3u) |
| FINSTCY.10.I2800 | 2800 | 4058 | ± 10 | 36 | ± 1 | 3 units 1100x1100x1800 | 4450 | 4 (3u) |
| FINSTCY.30.L1100 | 1100 | 1588 | ± 30 | 20 | ± 1 | 3 units 2020x1410x2010 | 6800 | 4 (3u) |
| FINSTCY.25.L1400 | 1400 | 2021 | ± 25 | 23 | ± 1 | 3 units 2020x1410x2010 | 6800 | 4 (3u) |
| FINSTCY.20.L1800 | 1800 | 2598 | ± 20 | 26 | ± 1 | 3 units 2020x1410x2010 | 7035 | 4 (3u) |
| FINSTCY.15.L2500 | 2500 | 3609 | ± 15 | 30 | ± 1 | 3 units 2020x1410x2010 | 7300 | 4 (3u) |
| FINSTCY.10.L4000 | 4000 | 5774 | ± 10 | 39 | ± 1 | 3 units 2020x1410x2010 | 7300 | 4 (3u) |

CASE 4


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Independent |
| Core type | Toroidal |
| Input | Asymmetric |

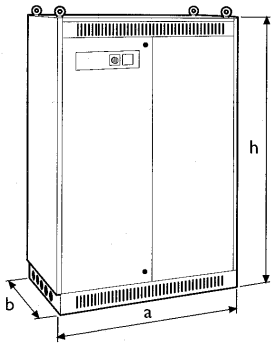
| FINSTTA | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|--------------------|-------------------|-------------------|-----------------------|----------------------|----------------------|---------------------------|-----------|------|
| FINSTTA.1535.A3.3 | 3.3 | 5 | + 15%, -35% | 8 | ± 1 | 650X650X1300 | 110 | 3 |
| FINSTTA.1535.B7.5 | 7.5 | 11 | + 15%, -35% | 12 | ± 1 | 650X650X1300 | 125 | 3 |
| FINSTTA.1535.C10.5 | 10.5 | 15 | + 15%, -35% | 14 | ± 1 | 650X650X1300 | 140 | 3 |
| FINSTTA.1535.D21 | 21 | 30 | + 15%, -35% | 14 | ± 1 | 650X650X1800 | 280 | 3 |
| FINSTTA.1535.E30 | 30 | 43 | + 15%, -35% | 14 | ± 1 | 650X650X1800 | 330 | 3 |

CASE 3


ELECTRIC CHARACTERISTICS

| | |
|-----------------|---|
| Nominal voltage | 400 Vac (480 Vac or additional voltage available upon request) |
| Frequency | 50/60 Hz |
| Regulation | Independent |
| Core type | Square section linear |
| Input | Asymmetric |

| FINSTCA | Rated Power (KVA) | Rated Current (A) | Voltage Variation (%) | Response Time (ms/V) | Output Accuracy (±%) | Dimensions (mm) a x b x h | Weight Kg | Case |
|-------------------|-------------------|-------------------|-----------------------|----------------------|----------------------|---------------------------|-----------|--------|
| FINSTCA.1535.A55 | 55 | 79 | + 15%, -35% | 6 | ± 1 | 1100X650X1800 | 590 | 4 |
| FINSTCA.1535.B85 | 85 | 123 | + 15%, -35% | 11 | ± 1 | 1100X650X1800 | 790 | 4 |
| FINSTCA.1535.C120 | 120 | 173 | + 15%, -35% | 11 | ± 1 | 1100X1100X1800 | 950 | 4 |
| FINSTCA.1535.D175 | 175 | 253 | + 15%, -35% | 16 | ± 1 | 1100X650X1800 | 1150 | 4 |
| FINSTCA.1535.E240 | 240 | 346 | + 15%, -35% | 12 | ± 1 | 2 units 1100x1100x1800 | 1700 | 4 (2u) |
| FINSTCA.1535.F345 | 345 | 498 | + 15%, -35% | 17 | ± 1 | 2 units 1100x1100x1800 | 1980 | 4 (2u) |
| FINSTCA.1535.G440 | 440 | 635 | + 15%, -35% | 16 | ± 1 | 4 units 1100x1100x1800 | 3300 | 4 (4u) |
| FINSTCA.1535.H550 | 550 | 794 | + 15%, -35% | 18 | ± 1 | 4 units 1100x1100x1800 | 4400 | 4 (4u) |
| FINSTCA.1535.I800 | 800 | 1155 | + 15%, -35% | 20 | ± 1 | 4 units 1100x1100x1800 | 5400 | 4 (4u) |

CASE 4


Transformers and
Line Reactors



RFI Filters



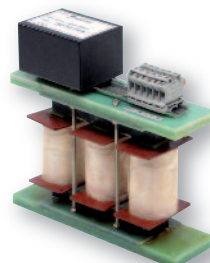
Surge Protection



Passive and Active
Harmonic Filters



Motor Protection



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