ENERDOOR
Engineered by Finmotor

# Static Var Generator FINSVG

Datasheet 3/2017

## Static var generator to compensate inductive and reactive power

**APPROVALS:**



**FINSVG.030 - 100**

### FEATURES

- No capacitor bank
- Controls PF compensation
- Unaffected by harmonic resonance
- High speed response

### BENEFITS

- Compensates from 30 KVAR
- Compensates inductive and capacitive reactive power
- Modular design
- Remote control RS485 standard (Modbus-Profibus optional)

### MARKETS

- Soft start motors
- DC motors
- Oil and water plants
- Process automation
- End-user plants

### ORDERING CODE

| FINSVG | .100 | .4 | .4F | .W | .D |
|---|---|---|---|---|---|
| Model | Kvar | 4 = 400V<br>5 = 480V<br>6 = 600V<br>7 = 690V | 3F = 3phase<br>4F = 3phase with neutral | R = Rack mount<br>W = Wall mount | D = with HMI<br>C = without HMI |

### ATTENUATION INDICATOR




### TECHNICAL SPECIFICATIONS

| | |
|---|---|
| **Nominal voltage** | 400 / 690 Vac |
| **Frequency** | 50 – 60 Hz -5 / +3% |
| **Reactive power compensation** | 30-100 Kvar |
| **PF Compensation** | 0.99 |
| **Overall efficiency** | >97% |
| **Power grid structure** | 3-phase, 3-phase plus neutral |
| **Current transformer** | 150:5 ~ 10,000:5 |
| **Reaction time** | <50 us |
| **Overall response time** | <5 ms |
| **Switching frequency** | 20 KHz |
| **Communications ports** | RS485 |
| **Communications protocols** | Modbus, TCP/IP |
| **Module display interface** | 4.3 inch LCD touch screen |
| **Optional external display interface** | 8.0 inch LCD touch screen (FINHMI8.0) |
| **Altitude** | 1500m Over power decreases by 1% every 100m |
| **Operating temperature** | -10°C / + 40°C |
| **Protection class** | IP 20 |
| **Noise level** | <56 dB |
| **Color** | Ral 7035, Black |

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## ELECTRICAL CHARACTERISTICS

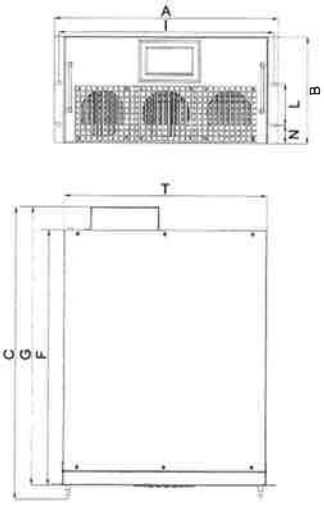
| FINSVG | Rated Compensation (Kvar) | Rated Voltage (Vac) | Power Grid Structure | Cooling Mode | Response Time |
|---|---|---|---|---|---|
| .030.4.X.Y.Z | 30 | 400 (-40%+15%) | 3P3W ; 3P4W | Air 75L/sec | <5ms |
| .040.5.X.Y.Z | 40 | 480 (-20%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .050.4.X.Y.Z | 50 | 400 (-40%+15%) | 3P3W ; 3P4W | Air 75L/sec | <5ms |
| .063.5.X.Y.Z | 63 | 480 (-20%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .050.6.X.Y.Z | 50 | 600 (-30%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .075.5.X.Y.Z | 75 | 480 (-20%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .075.6.X.Y.Z | 75 | 600 (-30%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .090.6.X.Y.Z | 90 | 600 (-30%+15%) | 3P3W ; 3P4W | Air 359L/sec | <5ms |
| .100.4.X.Y.Z | 100 | 400 (-40%+15%) | 3P3W ; 3P4W | Air 300L/sec | <5ms |

X = power grid structure  Y = mounting type  Z = HMI display

## MECHANICAL DIMENSIONS mm

| FINSVG | Rack mounted | | | | | | | | | Wall mounted | | | | | | | Weight Kg. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | F | G | I | L | N | T | H | J | E | P | Q | M | R | |
| .030.4.X.Y.Z | 540 | 190 | 555 | 510 | 540 | 524 | 105 | 42.5 | 500 | 560 | 536 | 10 | 360 | 500 | 191 | 510 | 30 |
| .040.5.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 35 |
| .050.4.X.Y.Z | 540 | 190 | 555 | 510 | 540 | 524 | 105 | 42.5 | 500 | 560 | 536 | 10 | 360 | 500 | 191 | 510 | 48 |
| .063.5.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 48 |
| .050.6.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 50 |
| .075.5.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 35 |
| .075.6.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 66 |
| .090.6.X.Y.Z | 544 | 250 | 655 | 590 | 640 | 526 | 140 | 55 | 520 | 665 | 638 | 10 | 400 | 505 | 253 | 590 | 67 |
| .100.4.3F.Y.Z | 540 | 269 | 550 | 470 | 520 | 521 | 180 | 44.5 | 500 | 557 | 530 | 10 | 400 | 505 | 286 | 478 | 67 |
| .100.4.4F.Y.Z | 540 | 269 | 550 | 470 | 520 | 521 | 180 | 44.5 | 500 | 553 | 518 | 10 | 400 | 505 | 271 | 520 | 67 |

## RACK MOUNTED




## WALL MOUNTED

