

Industrial Grade Step-Up or Step-Down Transformers



Signal's DU and SU transformers have been designed to provide a multitude of step-up or step-down voltages to accommodate the various input voltages available throughout the world.

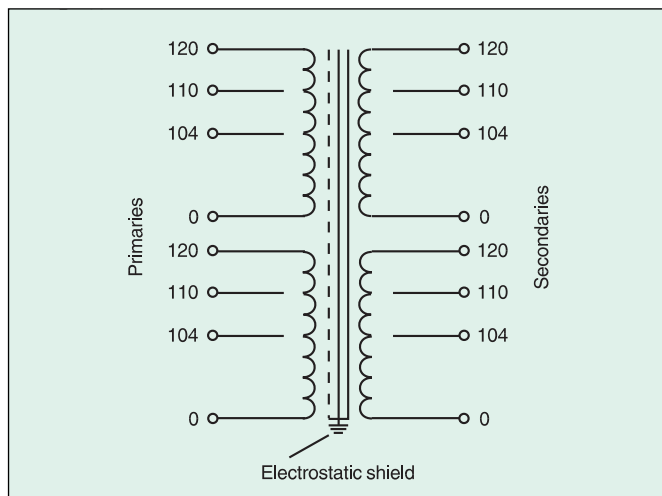
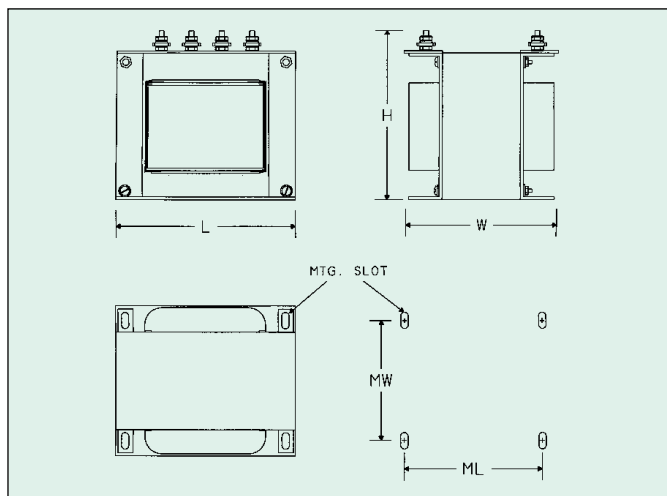
General Specifications

- **Power** – 250 VA to 10 KVA (500 VA to 20 KVA possible if used as auto-transformer)
- **Dielectric Strength** – 2500VRMS Hipot
- **Primaries** – Dual/tapped primaries: Parallel connected (104V, 110V, 120V - 50-500 Hz)
Series connected (208V, 220V, 230V, 240V - 50-500 Hz)
- **Secondaries** – Dual/tapped secondaries: **DU Series**
Parallel connected (104V, 110V, 120V - 50-500 Hz)
Series connected (208V, 220V, 230V, 240V - 50-500 Hz)
- **Electrostatic Shield** – 2 mil thick copper foil connected to ground. The connection may be opened if an ungrounded shield is desired.
- **Terminals** – Plated brass screw type terminals
- **Insulation** – Class A insulation (105°C)

As shown on the schematic diagram the "DU" line is designed with dual primaries and secondaries. All four windings are identically rated at 0/104/110/120 volts. This permits series or parallel connections on either primary or secondary. Therefore, a nominal 110 to 110 volt, 220 to 220 volt, 110 to 220 volt, or 220 to 110 volt transformer can be set up. The winding taps permit intermediate series ratings such as 208, 214, or 230 volts. It is also possible to make auto-transformer connections by connecting a primary group in series with a secondary group. Such nominal ratings as 440 to 220 volts or 220 to 440 volts can be set up, in addition to the standard ratings described above. A further advantage to auto-transformer connection is the fact that the KVA rating of a particular type is doubled.

| Part No. | KVA | Series Secondaries | | Parallel Secondaries | | Mechanical Dimensions | | | | | Mtg. & Term. Screw | Wgt |
|----------|-----|--------------------|-----------|----------------------|-----------|-----------------------|-------------------|------------------|------------------|------------------|--------------------|---------------------|
| | | Volts | Max. Amps | Volts | Max. Amps | L † | W * | H * | ML † | MW ‡ | | |
| DU-1/4 | 1/4 | 0/208/220/240 | 1.1 | 0/104/110/120 | 2.2 | 5.31" 134.9mm | 4.25" 107.9mm | 5.25" 133.4mm | 4.37" 111.1mm | 2.50" 63.5mm | #10 | 12 lbs 5.44 kg |
| DU-1/2 | 1/2 | 0/208/220/240 | 2.3 | 0/104/110/120 | 4.6 | 5.31" 134.9mm | 5.31" 134.9mm | 5.25" 133.4mm | 4.37" 111.1mm | 3.62" 92.1mm | #10 | 18 lbs 8.16 kg |
| DU-1 | 1 | 0/208/220/240 | 4.5 | 0/104/110/120 | 9 | 7.56" 192.1mm | 6.25" 158.8mm | 7.37" 187.3mm | 6.75" 171.5mm | 4.12" 104.8mm | 1/4 | 33 lbs 14.97 kg |
| DU-2 | 2 | 0/208/220/240 | 9 | 0/104/110/120 | 18 | 7.56" 192.1mm | 8.25" 209.6mm | 7.37" 187.3mm | 6.75" 171.5mm | 6.00" 152.4mm | 1/4 | 56 lbs 25.40 kg |
| DU-3 | 3 | 0/208/220/240 | 14 | 0/104/110/120 | 28 | 7.56" 192.1mm | 9.25" 234.9mm | 7.37" 187.3mm | 6.75" 171.5mm | 7.00" 177.8mm | 1/4 | 70 lbs 31.75 kg |
| DU-5 | 5 | 0/208/220/240 | 23 | 0/104/110/120 | 46 | 7.56" 192.1mm | 10.75" 273.1mm | 7.37" 187.3mm | 6.75" 171.5mm | 8.50" 215.9mm | 1/4 | 89 lbs 40.37 kg |
| DU-7.5 | 7.5 | 0/208/220/240 | 31 | 0/104/110/120 | 62 | 9.00" 228.6mm | 10.75" 273.1mm | 8.00" 203.2mm | 7.50" 190.5mm | 6.50" 165.1mm | 1/4 | 105 lbs 47.63 kg |
| DU-10 | 10 | 0/208/220/240 | 41 | 0/104/110/120 | 82 | 9.00" 228.6mm | 13.00" 330.2mm | 8.00" 203.2mm | 7.50" 190.5mm | 9.00" 228.6mm | 1/4 | 150 lbs 68.04 kg |

*Maximum † ± 0.6" (1.6mm) ‡ ± .12" (3.2mm)



If you don't see a specific part that meets your requirement, see page 31 for our custom magnetics design data sheet.

Signal Transformer

CALL: 516-239-5777 • FAX: (24hrs) 516-239-7208

500 Bayview Avenue, Inwood, New York 11096

Industrial Grade Step-Up or Step-Down Transformers



Signal's DU and SU transformers have been designed to provide a multitude of step-up or step-down voltages to accommodate the various input voltages available throughout the world.

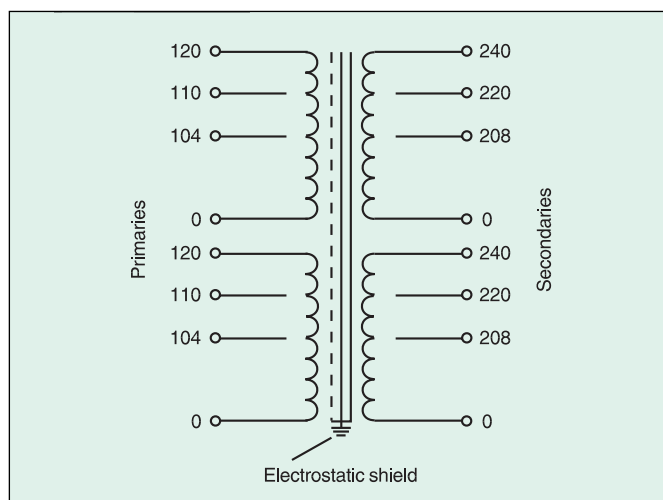
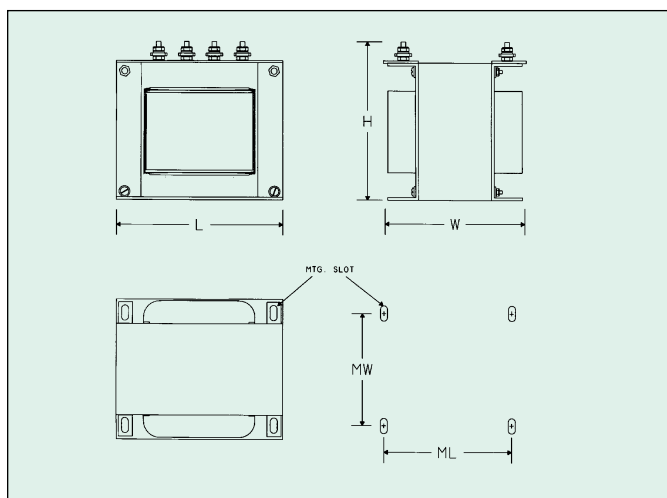
General Specifications

- **Power** – 250 VA to 10 KVA (500 VA to 20 KVA possible if used as auto-transformer)
- **Dielectric Strength** – 2500VRMS Hipot
- **Primaries** – Dual/tapped primaries: Parallel connected (104V, 110V, 120V - 50-500 Hz)
Series connected (208V, 220V, 230V, 240V - 50-500 Hz)
- **Secondaries** – Dual/tapped secondaries: **SU Series**
Parallel connected (208V, 220V, 240V - 50-500 Hz)
Series connected (416V, 440V, 460V, 480V - 50-500Hz)
- **Electrostatic Shield** – 2 mil thick copper foil connected to ground. The connection may be opened if an ungrounded shield is desired.
- **Terminals** – Plated brass screw type terminals
- **Insulation** – Class A insulation (105°C)

As shown on the schematic diagram the "SU" line is designed with dual primaries and secondaries. Two primary windings are identically rated at 0/104/110/120. Two secondary windings are identically rated at 0/208/220/240. This permits series or parallel connections on either primary or secondary. Therefore a nominal 110 to 220 volt, 220 to 440 volt, 110 to 440 volt, or 440 to 110 volt transformer can be set up. The winding tape permits intermediate series ratings such as 416, 428, and 460 volts. It is also possible to make auto-transformer connections by connecting a primary group in series with a secondary group. Such nominal ratings as 660 to 330 volts or 330 to 660 volts can be set up, in addition to the standard ratings described above. A further advantage to auto-transformer connection is the fact that the KVA rating of a particular type is doubled.

| Part No. | KVA | Series Secondaries | | Parallel Secondaries | | Mechanical Dimensions | | | | | Mtg. & Term. Screw | Wgt |
|----------|-----|--------------------|-----------|----------------------|-----------|-----------------------|-------------------|------------------|------------------|------------------|--------------------|---------------------|
| | | Volts | Max. Amps | Volts | Max. Amps | L* | W* | H* | ML† | MW‡ | | |
| SU-1/4 | 1/4 | 0/416/440/480 | 0.55 | 0/208/220/240 | 1.1 | 5.31" 134.9mm | 4.25" 107.9mm | 5.25" 133.4mm | 4.37" 111.1mm | 2.50" 63.5mm | #10 | 12 lbs 5.44 kg |
| SU-1/2 | 1/2 | 0/416/440/480 | 1.15 | 0/208/220/240 | 2.3 | 5.31" 134.9mm | 5.31" 134.9mm | 5.25" 133.4mm | 4.37" 111.1mm | 3.62" 92.1mm | #10 | 18 lbs 8.16 kg |
| SU-1 | 1 | 0/416/440/480 | 2.25 | 0/208/220/240 | 4.5 | 7.56" 192.1mm | 6.25" 158.8mm | 7.37" 187.3mm | 6.75" 171.5mm | 4.12" 104.8mm | 1/4 | 33 lbs 14.97 kg |
| SU-2 | 2 | 0/416/440/480 | 4.5 | 0/208/220/240 | 9 | 7.56" 192.1mm | 8.25" 209.6mm | 7.37" 187.3mm | 6.75" 171.5mm | 6.00" 152.4mm | 1/4 | 56 lbs 25.40 kg |
| SU-3 | 3 | 0/416/440/480 | 7 | 0/208/220/240 | 14 | 7.56" 192.1mm | 9.25" 234.9mm | 7.37" 187.3mm | 6.75" 171.5mm | 7.00" 177.8mm | 1/4 | 70 lbs 31.75 kg |
| SU-5 | 5 | 0/416/440/480 | 11.5 | 0/208/220/240 | 23 | 7.56" 192.1mm | 10.75" 273.1mm | 7.37" 187.3mm | 6.75" 171.5mm | 8.50" 215.9mm | 1/4 | 89 lbs 40.37 kg |
| SU-7.5 | 7.5 | 0/416/440/480 | 15.5 | 0/208/220/240 | 31 | 9.00" 228.6mm | 10.75" 273.1mm | 8.00" 203.2mm | 7.50" 190.5mm | 6.50" 165.1mm | 1/4 | 105 lbs 47.63 kg |
| SU-10 | 10 | 0/416/440/480 | 20.5 | 0/208/220/240 | 41 | 9.00" 228.6mm | 13.00" 330.2mm | 8.00" 203.2mm | 7.50" 190.5mm | 9.00" 228.6mm | 1/4 | 150 lbs 68.04 kg |

*Maximum $\pm 0.6"$ (1.6mm) $\pm .12"$ (3.2mm)



If you don't see a specific part that meets your requirement, see page 31 for our custom magnetics design data sheet.

Signal Transformer

CALL: 516-239-5777 • FAX: (24hrs) 516-239-7208

500 Bayview Avenue, Inwood, New York 11096