DESCRIPTION

PRODUCT COVERED:

*USR, CNR General purpose transformers, Cat. Nos. F, FS, **and MIM** Series. For individual catalog numbers covered, see below.

GENERAL:

These are single phase, open core and coil insulating transformers. The F Series is single primary rated 115 V, *50/60 Hz, and the FS Series is dual primary rated 115/230 V, *50/60 Hz. The secondaries of all transformers have two identical windings with their parallel/series ratings given below:

| Cat. No. | | Secondary | |
|---|---|---|---|
| Single Primary (115 V) | Dual Primary (115/230 V) | V | Current, A |
| F10-110, **MIM 321** | FS10-110, **MIM 320** | 5/10 | 0.22/0.11 |
| F10-250, **MIM 421** | FS10-250, **MIM 420** | 5/10 | 0.5/0.25 |
| F10-600, **MIM 521** | FS10-600, **MIM 520** | 5/10 | 1.2/0.6 |
| F10-1200, **MIM 621** | FS10-1200, **MIM 620** | 5/10 | 2.4/1.2 |
| F10-2000, **MIM 720** | FS10-2000, **MIM 721** | 5/10 | 4.0/2.0 |
| F10-3600, **MIM 820** | FS10-3600, **MIM 821** | 5/10 | 7.2/3.6 |
| * F12-090, **MIM 323** | **FS12**-090, **MIM 322** | 6.3/12.6 | 0.18/0.09 |
| F12-200, **MIM 423** | FS12-200, **MIM 422** | 6.3/12.6 | 0.4/0.2 |
| F12-500, **MIM 523** | FS12-500, **MIM 522** | 6.3/12.6 | 1.0/0.5 |
| F12-1000, **MIM 623** | FS12-1000, **MIM 622** | 6.3/12.6 | 2.0/1.0 |
| F12-1600, **MIM 722** | FS12-1600, **MIM 723** | 6.3/12.6 | 3.2/1.6 |
| F12-2850, **MIM 822** | FS12-2850, **MIM 823** | 6.3/12.6 | 5.7/2.85 |
| F16-070, **MIM 325** | FS16-070, **MIM 324** | 8/16 | 0.14/0.007 |
| F16-150, **MIM 425** | FS16-150, **MIM 424** | 8/16 | 0.3/0.15 |
| F16-400, **MIM 525** | FS16-400, **MIM 524** | 8/16 | 0.8/0.4 |
| F16-800, **MIM 625** | FS16-800, **MIM 624** | 8/16 | 1.6/0.8 |
| F16-1250, **MIM 724** | FS16-1250, **MIM 725** | 8/16 | 2.5/1.25 |
| F16-2250, **MIM 824** | FS16-2250, **MIM 825** | 8/16 | 4.5/2.25 |
| F20-055, **MIM 327** | FS20-055, **MIM 326** | 10/20 | 0.11/0.055 |
| F20-120, **MIM 427** | FS20-120, **MIM 426** | 10/20 | 0.24/0.12 |
| F20-300, **MIM 527** | FS20-300, **MIM 526** | 10/20 | 0.6/0.3 |
| F20-600, **MIM 627** | FS20-600, **MIM 626** | 10/20 | 1.2/0.6 |
| F20-1000, **MIM 726** | FS20-1000, **MIM 727** | 10/20 | 2.0/1.0 |
| F20-1800, **MIM 826** | FS20-1800, **MIM 827** | 10/20 | 3.6/1.8 |

Table continued

| Cat. No. | | Secondary | |
|---|---|---|---|
| Single Primary (115 V) | Dual Primary (115/230 V) | V | Current, A |
| F24-045, **MIM 329** | FS24-045, **MIM 328** | 12/24 | 0.09/0.045 |
| F24-100, **MIM 429** | FS24-100, **MIM 428** | 12/24 | 0.2/0.1 |
| F24-250, **MIM 529** | FS24-250, **MIM 528** | 12/24 | 0.5/0.25 |
| F24-500, **MIM 629** | FS24-500, **MIM 628** | 12/24 | 1.0/0.5 |
| F24-800, **MIM 728** | FS24-800, **MIM 729** | 12/24 | 1.6/0.8 |
| F24-1500, **MIM 828** | FS24-1500, **MIM 829** | 12/24 | 3.0/1.5 |
| F28-040, **MIM 331** | FS28-040, **MIM 330** | 14/28 | 0.08/0.04 |
| F28-85, **MIM 431** | FS28-85, **MIM 430** | 14/28 | 0.17/0.085 |
| F28-200, **MIM 531** | FS28-200, **MIM 530** | 14/28 | 0.4/0.2 |
| F28-420, **MIM 631** | FS28-420, **MIM 630** | 14/28 | 0.84/0.42 |
| F28-700, **MIM 730** | FS28-700, **MIM 731** | 14/28 | 1.4/0.7 |
| F28-1300, **MIM 830** | FS28-1300, **MIM 831** | 14/28 | 2.6/1.3 |
| F36-030, **MIM 333** | FS36-030, **MIM 332** | 18/36 | 0.06/0.03 |
| F36-65, **MIM 433** | FS36-65, **MIM 432** | 18/36 | 0.13/0.065 |
| F36-170, **MIM 533** | FS36-170, **MIM 532** | 18/36 | 0.34/0.17 |
| F36-350, **MIM 633** | FS36-350, **MIM 632** | 18/36 | 0.7/0.35 |
| F36-550, **MIM 732** | FS36-550, **MIM 733** | 18/36 | 1.1/0.55 |
| F36-1000, **MIM 832** | FS36-1000, **MIM 833** | 18/36 | 2.0/1.0 |
| F48-023, **MIM 335** | FS48-023, **MIM 334** | 24/48 | 0.046/0.023 |
| F48-050, **MIM 435** | FS48-050, **MIM 434** | 24/48 | 0.1/0.005 |
| F48-125, **MIM 535** | FS48-125, **MIM 534** | 24/48 | 0.25/0.125 |
| F48-250, **MIM 635** | FS48-250, **MIM 634** | 24/48 | 0.5/0.25 |
| F48-400, **MIM 734** | FS48-400, **MIM 735** | 24/48 | 0.8/0.4 |
| F48-750, **MIM 834** | FS48-750, **MIM 835** | 24/48 | 1.5/0.75 |
| F56-020, **MIM 337** | FS56-020, **MIM 336** | 28/56 | 0.04/0.02 |
| F56-045, **MIM 437** | FS56-045, **MIM 436** | 28/56 | 0.09/0.045 |
| F56-110, **MIM 537** | FS56-110, **MIM 536** | 28/56 | 0.22/0.11 |
| F56-220, **MIM 637** | FS56-220, **MIM 636** | 28/56 | 0.44/0.22 |
| F56-350, **MIM 736** | FS56-350, **MIM 737** | 28/56 | 0.7/0.35 |
| F56-650, **MIM 836** | FS56-650, **MIM 837** | 28/56 | 1.3/0.65 |
| F120-010, **MIM 339** | FS120-01, **MIM 338** | 60/120 | 0.02/0.01 |
| F120-020, **MIM 439** | FS120-02, **MIM 438** | 60/120 | 0.04/0.02 |
| F120-050, **MIM 539** | FS120-05, **MIM 538** | 60/120 | 0.1/0.05 |
| F120-100, **MIM 639** | FS120-100, **MIM 638** | 60/120 | 0.2/0.1 |
| F120-160, **MIM 738** | FS120-160, **MIM 739** | 60/120 | 0.32/0.16 |
| F120-300, **MIM 838** | FS120-300, **MIM 839** | 60/120 | 0.6/0.3 |

ENGINEERING CONSIDERATIONS (NOT FOR FIELD REPRESENTATIVE'S USE):

Use - For use only in equipment where the acceptability of the combination has been determined by Underwriters Laboratories Inc.

CNR indicates investigation to Canadian Standard C22.2, No. 66-1988 "Speciality Transformers."

Conditions of Acceptability -

1. The transformer shall be housed within an enclosure of noncombustible materials in compliance with the requirements of the class of equipment in which it is used.

2. Acceptability of mounting shall be judged in the final application.

3. The acceptability of the circuit board terminal shall be determined in the end-use application.

SPACINGS:

Spacings between uninsulated live-metal parts of opposite polarity and between uninsulated live- and dead-metal parts shall not be less than shown in the following table, except these spacings do not apply to conductors comprising the turns of a coil.

| Potential Involved, V | Spacings, in. | |
|---|---|---|
| | Through Air | Over Surface |
| 0-50 | 1/16 | 1/16 |
| 51-125 | 1/8 | 1/4 |
| 126-250 | 1/4 | 3/8 |