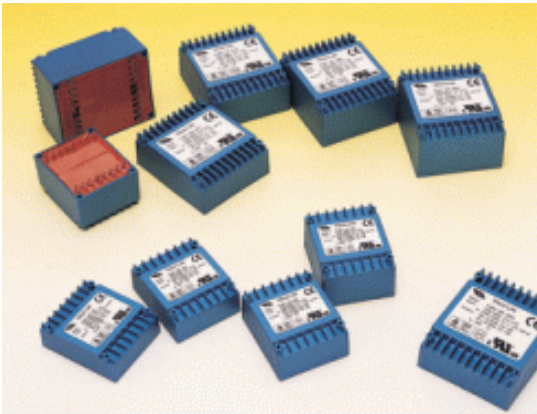


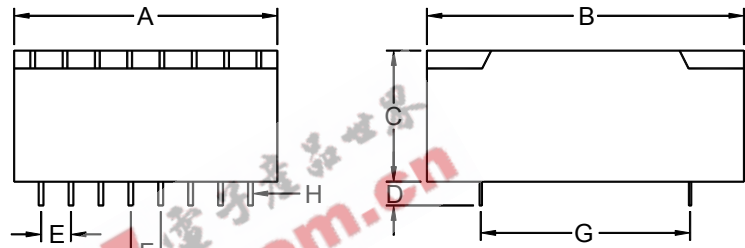
LOW PROFILE
ENCAPSULATED
TRANSFORMER



- Power – 2VA to 70VA
- Dielectric Strength – 3750Vrms
- Primary – Dual primary (115V/230V 50/60Hz)
- Secondary – Series or parallel
- Insulation Class – Class F (155°C)
- Safety Approvals – UL506, CSA C22.2 #6 TUV/EN61558 / EN60950, CE

TL29E & TL29U Series

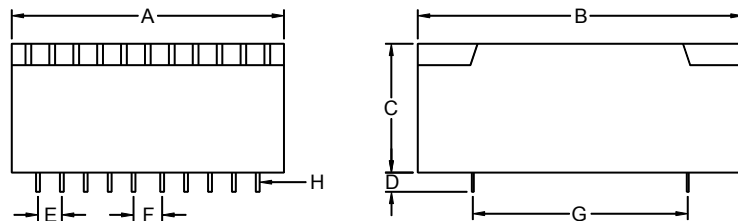
Empty pin shall be omitted if necessary.



| Series | Dimension (mm) | | | | | | | |
|-----------------------|----------------|------|------|------|------|------|------|-------------|
| | A | B | C | D | E | F | G | H |
| 2 (VA) | 44.0 | 53.0 | 17.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| 3 (VA) | 44.0 | 53.0 | 17.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| 4 (VA) | 44.0 | 53.0 | 19.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| 6 (VA) | 44.0 | 53.0 | 22.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| 8 (VA) | 44.0 | 53.0 | 28.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| 10 (VA) | 44.0 | 53.0 | 28.0 | 4.0 | 5.0 | 5.0 | 35.0 | 0.64 x 0.64 |
| Tolerance (mm) | ±0.5 | ±0.5 | ±0.5 | ±1.0 | ±0.2 | ±0.2 | ±0.5 | ±0.1 |

TL39E & TL39U Series

Empty pin shall be omitted if necessary.

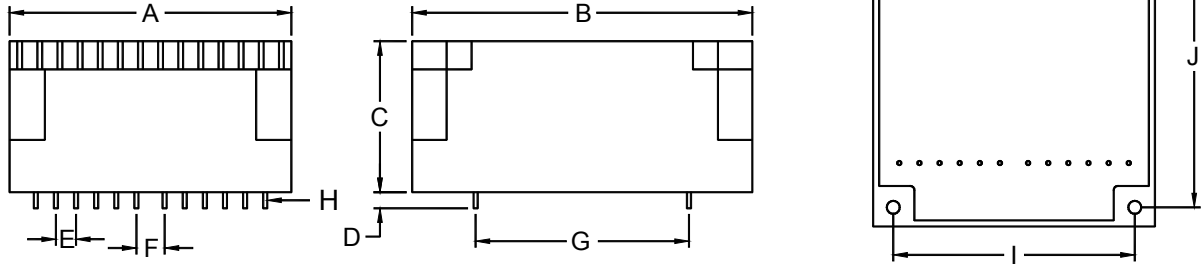


| Series | Dimension (mm) | | | | | | | |
|-----------------------|----------------|------|------|------|------|------|------|-------------|
| | A | B | C | D | E | F | G | H |
| 10 (VA) | 57.0 | 68.0 | 22.0 | 4.0 | 5.0 | 6.0 | 45.0 | 0.64 x 0.64 |
| 14 (VA) | 57.0 | 68.0 | 24.0 | 4.0 | 5.0 | 6.0 | 45.0 | 0.64 x 0.64 |
| 18 (VA) | 57.0 | 68.0 | 27.0 | 4.0 | 5.0 | 6.0 | 45.0 | 0.64 x 0.64 |
| 24 (VA) | 57.0 | 68.0 | 31.0 | 4.0 | 5.0 | 6.0 | 45.0 | 0.64 x 0.64 |
| 30 (VA) | 57.0 | 68.0 | 35.0 | 4.0 | 5.0 | 6.0 | 45.0 | 0.64 x 0.64 |
| Tolerance (mm) | ±0.5 | ±0.5 | ±0.5 | ±1.0 | ±0.2 | ±0.2 | ±0.5 | ±0.1 |

LOW PROFILE
ENCAPSULATED
TRANSFORMER

TL48E & TL48U Series

Empty pin shall be omitted if necessary.



| Series | Dimension (mm) | | | | | | | | | | |
|-----------------------|----------------|------|------|------|------|------|------|------|------|------|------|
| | A | B | C | D | E | F | G | H | I | J | K |
| 35 (VA) | 70 | 84.5 | 37.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 40 (VA) | 70 | 84.5 | 37.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 42 (VA) | 70 | 84.5 | 37.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 48 (VA) | 70 | 84.5 | 37.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 52 (VA) | 70 | 84.5 | 47.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 56 (VA) | 70 | 84.5 | 47.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 60 (VA) | 70 | 84.5 | 47.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| 70 (VA) | 70 | 84.5 | 47.5 | 4.0 | 5.0 | 7.0 | 53.0 | Ø1.0 | 60 | 75 | Ø3.2 |
| Tolerance (mm) | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±0.2 | ±0.2 | ±0.5 | ±0.1 | ±0.5 | ±0.5 | ±0.2 |

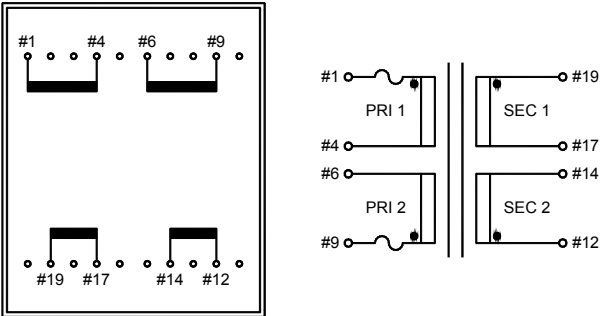
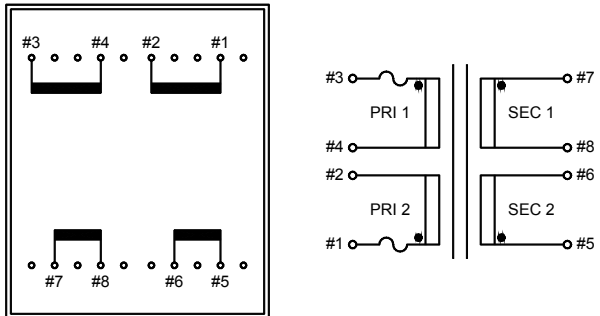
TL29E & TL29U Series

| E TYPE | U TYPE |
|--|--|
| <p>FIG. A shows primary pins #1, #3, #5, #7 and secondary pins #16, #14, #12, #10. FIG. B shows primary pins #1, #3, #5, #7 and secondary pins #16, #14, #12, #10.</p> | <p>FIG. C shows primary pins #3, #4, #2, #1 and secondary pins #7, #8, #6, #5. FIG. D shows primary pins #3, #4, #2, #1 and secondary pins #7, #8, #6, #5.</p> |
| <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 3) (Pin 1 & Pin 7 short, Pin 3 & Pin 5 short)</p> <p>230V/50Hz (at Pin 1 – Pin 5) (Pin 3 & Pin 7 short)</p> <p>Output Voltage : (Pin 10 – 12 & Pin 14 – 16)</p> | <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 & Pin 3 short, Pin 2 & Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 & Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 & Pin 7 – 8)</p> |

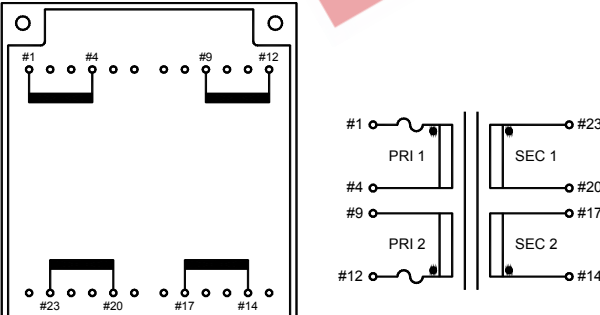
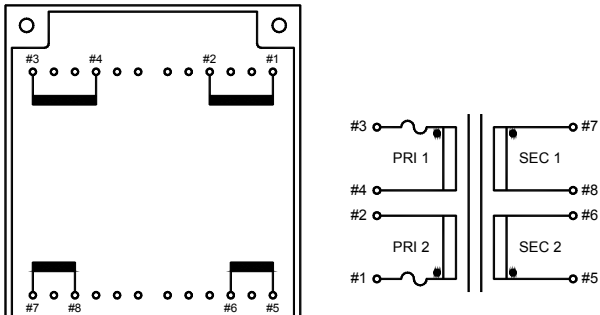
**2VA, 3VA & 4VA without fuse (Fig A or C)

LOW PROFILE
ENCAPSULATED
TRANSFORMER

TL39E & TL39U Series

| E TYPE | U TYPE |
|--|--|
|  <p>Bottom View</p> |  <p>Bottom View</p> |
| <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 4) (Pin 1 & Pin 9 short, Pin 4 & Pin 6 short)</p> <p>230V/50Hz (at Pin 1 – Pin 6) (Pin 4 & Pin 9 short)</p> <p>Output Voltage : (Pin 12 – 14 & Pin 17 – 19)</p> | <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 & Pin 3 short, Pin 2 & Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 & Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 & Pin 7 – 8)</p> |

TL48E & TL48U Series

| E TYPE | U TYPE |
|--|--|
|  <p>Bottom View</p> |  <p>Bottom View</p> |
| <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 4) (Pin 1 & Pin 12 short, Pin 4 & Pin 9 short)</p> <p>230V/50Hz (at Pin 1 – Pin 9) (Pin 4 & Pin 12 short)</p> <p>Output Voltage : (Pin 14 – 17 & Pin 20 – 23)</p> | <p>Input Voltage : 115V/60Hz (at Pin 1 – Pin 2) (Pin 1 & Pin 3 short, Pin 2 & Pin 4 short)</p> <p>230V/50Hz (at Pin 1 – Pin 4) (Pin 2 & Pin 3 short)</p> <p>Output Voltage : (Pin 5 – 6 & Pin 7 – 8)</p> |

LOW PROFILE
ENCAPSULATED
TRANSFORMER

| Series | Part Number | Input Voltage (V) | Secondary RMS Rating | |
|--------|----------------|-------------------|----------------------|------------|
| | | | Series | Parallel |
| 2VA | TL29X-005-0200 | 2 x 115 | 10V @200mA | 5V @400mA |
| | TL29X-006-0166 | 2 x 115 | 12V @166mA | 6V @332mA |
| | TL29X-008-0125 | 2 x 115 | 16V @125mA | 8V @250mA |
| | TL29X-009-0111 | 2 x 115 | 18V @111mA | 9V @222mA |
| | TL29X-010-0100 | 2 x 115 | 20V @100mA | 10V @200mA |
| | TL29X-012-0083 | 2 x 115 | 24V @83mA | 12V @166mA |
| | TL29X-015-0066 | 2 x 115 | 30V @66mA | 15V @132mA |
| | TL29X-017-0059 | 2 x 115 | 34V @59mA | 17V @118mA |
| | TL29X-018-0055 | 2 x 115 | 36V @55mA | 18V @110mA |
| | TL29X-020-0050 | 2 x 115 | 40V @50mA | 20V @100mA |
| | TL29X-021-0047 | 2 x 115 | 42V @47mA | 21V @94mA |
| | TL29X-024-0041 | 2 x 115 | 48V @41mA | 24V @82mA |
| | TL29X-028-0036 | 2 x 115 | 56V @36mA | 28V @72mA |
| | TL29X-115-0009 | 2 x 115 | 230V @9mA | 115V @18mA |
| 3VA | TL29X-005-0300 | 2 x 115 | 10V @300mA | 5V @600mA |
| | TL29X-006-0250 | 2 x 115 | 12V @250mA | 6V @500mA |
| | TL29X-008-0187 | 2 x 115 | 16V @187mA | 8V @374mA |
| | TL29X-009-0166 | 2 x 115 | 18V @166mA | 9V @332mA |
| | TL29X-010-0150 | 2 x 115 | 20V @150mA | 10V @300mA |
| | TL29X-012-0125 | 2 x 115 | 24V @125mA | 12V @250mA |
| | TL29X-015-0100 | 2 x 115 | 30V @100mA | 15V @200mA |
| | TL29X-017-0088 | 2 x 115 | 34V @88mA | 17V @176mA |
| | TL29X-018-0083 | 2 x 115 | 36V @83mA | 18V @166mA |
| | TL29X-020-0075 | 2 x 115 | 40V @75mA | 20V @150mA |
| | TL29X-021-0071 | 2 x 115 | 42V @71mA | 21V @142mA |
| | TL29X-024-0063 | 2 x 115 | 48V @63mA | 24V @126mA |
| | TL29X-028-0053 | 2 x 115 | 56V @53mA | 28V @106mA |
| | TL29X-115-0013 | 2 x 115 | 230V @13mA | 115V @26mA |
| 4VA | TL29X-005-0400 | 2 x 115 | 10V @400mA | 5V @800mA |
| | TL29X-006-0333 | 2 x 115 | 12V @333mA | 6V @666mA |
| | TL29X-008-0250 | 2 x 115 | 16V @250mA | 8V @500mA |
| | TL29X-009-0222 | 2 x 115 | 18V @222mA | 9V @444mA |
| | TL29X-010-0200 | 2 x 115 | 20V @200mA | 10V @400mA |
| | TL29X-012-0166 | 2 x 115 | 24V @166mA | 12V @332mA |
| | TL29X-015-0133 | 2 x 115 | 30V @133mA | 15V @266mA |
| | TL29X-017-0118 | 2 x 115 | 34V @118mA | 17V @236mA |
| | TL29X-018-0111 | 2 x 115 | 36V @111mA | 18V @222mA |
| | TL29X-020-0100 | 2 x 115 | 40V @100mA | 20V @200mA |
| | TL29X-021-0095 | 2 x 115 | 42V @95mA | 21V @190mA |
| | TL29X-024-0083 | 2 x 115 | 48V @83mA | 24V @166mA |
| | TL29X-028-0071 | 2 x 115 | 56V @71mA | 28V @142mA |
| | TL29X-115-0017 | 2 x 115 | 230V @17mA | 115V @34mA |
| 6VA | TL29X-005-0600 | 2 x 115 | 10V @600mA | 5V @1200mA |
| | TL29X-006-0500 | 2 x 115 | 12V @500mA | 6V @1000mA |
| | TL29X-008-0375 | 2 x 115 | 16V @375mA | 8V @750mA |
| | TL29X-009-0333 | 2 x 115 | 18V @333mA | 9V @666mA |
| | TL29X-010-0300 | 2 x 115 | 20V @300mA | 10V @600mA |
| | TL29X-012-0250 | 2 x 115 | 24V @250mA | 12V @500mA |
| | TL29X-015-0200 | 2 x 115 | 30V @200mA | 15V @400mA |
| | TL29X-017-0176 | 2 x 115 | 34V @176mA | 17V @352mA |
| | TL29X-018-0166 | 2 x 115 | 36V @166mA | 18V @332mA |
| | TL29X-020-0150 | 2 x 115 | 40V @150mA | 20V @300mA |
| | TL29X-021-0142 | 2 x 115 | 42V @142mA | 21V @284mA |
| | TL29X-024-0125 | 2 x 115 | 48V @125mA | 24V @250mA |
| | TL29X-028-0107 | 2 x 115 | 56V @107mA | 28V @214mA |
| | TL29X-115-0026 | 2 x 115 | 230V @26mA | 115V @52mA |

LOW PROFILE
ENCAPSULATED
TRANSFORMER

| Series | Part Number | Input Voltage (V) | Secondary RMS Rating | |
|--------|----------------|-------------------|----------------------|-------------|
| | | | Series | Parallel |
| 8VA | TL29X-005-0800 | 2 x 115 | 10V @800mA | 5V @1600mA |
| | TL29X-006-0666 | 2 x 115 | 12V @666mA | 6V @1332mA |
| | TL29X-008-0500 | 2 x 115 | 16V @500mA | 8V @1000mA |
| | TL29X-009-0444 | 2 x 115 | 18V @444mA | 9V @888mA |
| | TL29X-010-0400 | 2 x 115 | 20V @400mA | 10V @800mA |
| | TL29X-012-0333 | 2 x 115 | 24V @333mA | 12V @666mA |
| | TL29X-015-0266 | 2 x 115 | 30V @266mA | 15V @532mA |
| | TL29X-017-0235 | 2 x 115 | 34V @235mA | 17V @470mA |
| | TL29X-018-0222 | 2 x 115 | 36V @222mA | 18V @444mA |
| | TL29X-020-0200 | 2 x 115 | 40V @200mA | 20V @400mA |
| | TL29X-021-0190 | 2 x 115 | 42V @190mA | 21V @380mA |
| | TL29X-024-0166 | 2 x 115 | 48V @166mA | 24V @332mA |
| | TL29X-028-0143 | 2 x 115 | 56V @143mA | 28V @286mA |
| | TL29X-115-0035 | 2 x 115 | 230V @35mA | 115V @70mA |
| 10VA | TL29X-005-1000 | 2 x 115 | 10V @1000mA | 5V @2000mA |
| | TL29X-006-0833 | 2 x 115 | 12V @833mA | 6V @1666mA |
| | TL29X-008-0625 | 2 x 115 | 16V @625mA | 8V @1250mA |
| | TL29X-009-0555 | 2 x 115 | 18V @555mA | 9V @1110mA |
| | TL29X-010-0500 | 2 x 115 | 20V @500mA | 10V @1000mA |
| | TL29X-012-0416 | 2 x 115 | 24V @416mA | 12V @832mA |
| | TL29X-015-0333 | 2 x 115 | 30V @333mA | 15V @666mA |
| | TL29X-017-0294 | 2 x 115 | 34V @294mA | 17V @588mA |
| | TL29X-018-0277 | 2 x 115 | 36V @277mA | 18V @554mA |
| | TL29X-020-0250 | 2 x 115 | 40V @250mA | 20V @500mA |
| | TL29X-021-0238 | 2 x 115 | 42V @238mA | 21V @476mA |
| | TL29X-024-0208 | 2 x 115 | 48V @208mA | 24V @416mA |
| | TL29X-028-0179 | 2 x 115 | 56V @179mA | 28V @358mA |
| | TL29X-115-0043 | 2 x 115 | 230V @43mA | 115V @86mA |
| 10VA | TL39X-005-1000 | 2 x 115 | 10V @1000mA | 5V @2000mA |
| | TL39X-006-0833 | 2 x 115 | 12V @833mA | 6V @1666mA |
| | TL39X-008-0625 | 2 x 115 | 16V @625mA | 8V @1250mA |
| | TL39X-009-0555 | 2 x 115 | 18V @555mA | 9V @1110mA |
| | TL39X-010-0500 | 2 x 115 | 20V @500mA | 10V @1000mA |
| | TL39X-012-0416 | 2 x 115 | 24V @416mA | 12V @832mA |
| | TL39X-015-0333 | 2 x 115 | 30V @333mA | 15V @666mA |
| | TL39X-017-0294 | 2 x 115 | 34V @294mA | 17V @588mA |
| | TL39X-018-0277 | 2 x 115 | 36V @277mA | 18V @554mA |
| | TL39X-020-0250 | 2 x 115 | 40V @250mA | 20V @500mA |
| | TL39X-021-0238 | 2 x 115 | 42V @238mA | 21V @476mA |
| | TL39X-024-0208 | 2 x 115 | 48V @208mA | 24V @416mA |
| | TL39X-028-0179 | 2 x 115 | 56V @179mA | 28V @358mA |
| | TL39X-115-0043 | 2 x 115 | 230V @43mA | 115V @86mA |
| 14VA | TL39X-005-1400 | 2 x 115 | 10V @1400mA | 5V @2800mA |
| | TL39X-006-1167 | 2 x 115 | 12V @1167mA | 6V @2334mA |
| | TL39X-008-0875 | 2 x 115 | 16V @875mA | 8V @1750mA |
| | TL39X-009-0777 | 2 x 115 | 18V @777mA | 9V @1554mA |
| | TL39X-010-0700 | 2 x 115 | 20V @700mA | 10V @1400mA |
| | TL39X-012-0583 | 2 x 115 | 24V @583mA | 12V @1166mA |
| | TL39X-015-0466 | 2 x 115 | 30V @466mA | 15V @932mA |
| | TL39X-017-0412 | 2 x 115 | 34V @412mA | 17V @824mA |
| | TL39X-018-0388 | 2 x 115 | 36V @388mA | 18V @776mA |
| | TL39X-020-0350 | 2 x 115 | 40V @350mA | 20V @700mA |
| | TL39X-021-0333 | 2 x 115 | 42V @333mA | 21V @666mA |
| | TL39X-024-0291 | 2 x 115 | 48V @291mA | 24V @582mA |
| | TL39X-028-0250 | 2 x 115 | 56V @250mA | 28V @500mA |
| | TL39X-115-0060 | 2 x 115 | 230V @60mA | 115V @120mA |

LOW PROFILE
ENCAPSULATED
TRANSFORMER

| Series | Part Number | Input Voltage (V) | Secondary RMS Rating | |
|--------|----------------|----------------------|----------------------|-------------|
| | | | Series | Parallel |
| 18VA | TL39X-005-1800 | 2 x 115 | 10V @1800mA | 5V @3600mA |
| | TL39X-006-1500 | 2 x 115 | 12V @1500mA | 6V @3000mA |
| | TL39X-008-1125 | 2 x 115 | 16V @1125mA | 8V @2250mA |
| | TL39X-009-1000 | 2 x 115 | 18V @1000mA | 9V @2000mA |
| | TL39X-010-0900 | 2 x 115 | 20V @900mA | 10V @1800mA |
| | TL39X-012-0750 | 2 x 115 | 24V @750mA | 12V @1500mA |
| | TL39X-015-0600 | 2 x 115 | 30V @600mA | 15V @1200mA |
| | TL39X-017-0529 | 2 x 115 | 34V @529mA | 17V @1058mA |
| | TL39X-018-0500 | 2 x 115 | 36V @500mA | 18V @1000mA |
| | TL39X-020-0450 | 2 x 115 | 40V @450mA | 20V @900mA |
| | TL39X-021-0428 | 2 x 115 | 42V @428mA | 21V @856mA |
| | TL39X-024-0375 | 2 x 115 | 48V @375mA | 24V @750mA |
| | TL39X-028-0321 | 2 x 115 | 56V @321mA | 28V @342mA |
| | TL39X-115-0078 | 2 x 115 | 230V @78mA | 115V @156mA |
| 24VA | TL39X-005-2400 | 2 x 115 | 10V @2400mA | 5V @4800mA |
| | TL39X-006-2000 | 2 x 115 | 12V @2000mA | 6V @4000mA |
| | TL39X-008-1500 | 2 x 115 | 16V @1500mA | 8V @3000mA |
| | TL39X-009-1333 | 2 x 115 | 18V @1333mA | 9V @2666mA |
| | TL39X-010-1200 | 2 x 115 | 20V @1200mA | 10V @2400mA |
| | TL39X-012-1000 | 2 x 115 | 24V @1000mA | 12V @2000mA |
| | TL39X-015-0800 | 2 x 115 | 30V @800mA | 15V @1600mA |
| | TL39X-017-0706 | 2 x 115 | 34V @706mA | 17V @1412mA |
| | TL39X-018-0666 | 2 x 115 | 36V @666mA | 18V @1332mA |
| | TL39X-020-0600 | 2 x 115 | 40V @600mA | 20V @1200mA |
| | TL39X-021-0571 | 2 x 115 | 42V @571mA | 21V @1142mA |
| | TL39X-024-0500 | 2 x 115 | 48V @500mA | 24V @1000mA |
| | TL39X-028-0429 | 2 x 115 | 56V @429mA | 28V @858mA |
| | TL39X-115-0104 | 2 x 115 | 230V @104mA | 115V @208mA |
| 30VA | TL39X-005-3000 | 2 x 115 | 10V @3000mA | 5V @6000mA |
| | TL39X-006-2500 | 2 x 115 | 12V @2500mA | 6V @5000mA |
| | TL39X-008-1875 | 2 x 115 | 16V @1875mA | 8V @3750mA |
| | TL39X-009-1666 | 2 x 115 | 18V @1666mA | 9V @3332mA |
| | TL39X-010-1500 | 2 x 115 | 20V @1500mA | 10V @3000mA |
| | TL39X-012-1250 | 2 x 115 | 24V @1250mA | 12V @2500mA |
| | TL39X-015-1000 | 2 x 115 | 30V @1000mA | 15V @2000mA |
| | TL39X-017-0882 | 2 x 115 | 34V @882mA | 17V @1764mA |
| | TL39X-018-0833 | 2 x 115 | 36V @833mA | 18V @1666mA |
| | TL39X-020-0750 | 2 x 115 | 40V @750mA | 20V @1500mA |
| | TL39X-021-0714 | 2 x 115 | 42V @714mA | 21V @1428mA |
| | TL39X-024-0625 | 2 x 115 | 48V @625mA | 24V @1250mA |
| | TL39X-028-0550 | 2 x 115 | 56V @550mA | 28V @1100mA |
| | TL39X-115-0130 | 2 x 115 | 230V @130mA | 115V @260mA |