

HPS TITAN® TRANSFORMERS FOR HARSH ENVIRONMENTS AND HAZARDOUS LOCATIONS

SINGLE PHASE STANDARD SPECIFICATIONS

0.50 TO 1 KVA



1.5 TO 37.5 KVA



SECTION 8

| | 0.50 kVA to 1 kVA | 1.5 kVA to 37.5 kVA |
|--|---|---|
| ANSI/ISA 12.12.10 | File No. E258346 (Class 1, Division 2, Groups A, B, C, D and Class I, Zone 2, Group IIC, T3 Hazardous Locations) - T3C Temperature Classification | File No. E258346 (Class 1, Division 2, Groups A, B, C, D and Class I, Zone 2, Group IIC, T3 Hazardous Locations) - T3C/T3A Temperature Classification |
| ABS Type Approval (RQS) | Certificate No.: 14-HS1174640-PDA | Certificate No.: 14-HS1174640-PDA |
| North American Temperature Classification | T3C Approval | T3C Approval for 80°C rise units T3A Approval for 115°C rise units |
| Frequency | 60 Hz (50/60 Hz on units with 380V primary) | 60 Hz (50/60 Hz on units with 380V primary) |
| Insulation System | 130°C (80°C rise) standard on all units. | 180°C (115°C rise) standard on all units. Optional 180°C (80°C rise) available. |
| Electrostatic Shield | Optional on 0.50 kVA. Standard on 0.75 kVA and 1 kVA. | Standard on all units. |
| Encapsulation | All units are encapsulated with electrical grade silica sand and resin compounds. | All units are encapsulated with electrical grade silica sand and resin compounds. |
| Enclosure Type | Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12 | Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12 |
| Enclosure Finish | ANSI 61 Grey, UL50 | ANSI 61 Grey, UL50 |
| Termination | Front accessible separate high and low voltage lead wires or copper tabs. | Front accessible separate high and low voltage lead wires or copper tabs. |
| Conduit Knock-Outs | Standard side and rear knock-outs on all units (no knock-outs on Stainless Steel enclosures). | Standard side and rear knock-outs on all units (no knock-outs on Stainless Steel enclosures). |
| Impedance | Typically 5 to 10% on 0.50 kVA. Typically 1 to 5% on 0.75 kVA and 1 kVA | Typically 1 to 5%. |
| Mounting | Standard Wall Mounting Lifting provisions standard on all units. | Standard Wall Mounting Lifting provisions standard on units. |
| Seismic | Seismically certified in accordance with IBC 2009; Section 1613 Earthquake Loads, for $S_{DS} \leq 2.00g$, $z/h = 1.0$, and $I_p = 1.5$ | Seismically certified in accordance with IBC 2009; Section 1613 Earthquake Loads, for $S_{DS} \leq 2.00g$, $z/h = 1.0$, and $I_p = 1.5$ |
| Sound Level | Meets NEMA ST-20 standards. (Optional low noise units available on request) | Meets NEMA ST-20 standards. (Optional low noise units available on request) |

Other voltages and kVA ratings not listed in this section are available upon request. Please contact customer service for details, price and availability.

All HPS TITAN single phase transformers are UL Listed for "Class 1, Division 2, Groups A, B, C, D and Class I, Zone 2, Group IIC, T3 Hazardous Locations" and are ABS Type Approved for "Marine Duty Service and Offshore Applications - Electrical Distribution and Propulsion".



SINGLE PHASE, NEMA 3R STYLE ENCLOSURE



208/240/277 Primary Volts

120/240 Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style (Pages 228 - 230) | Approx. Dimensions (Inches) | | | Approx. Weight (Lbs.) | Mtg Type W - Wall F - Floor | Wiring Diagram (Pages 243 - 258) |
|------|----------------|---------------------------------|--------------------------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
| | | | Width | Depth | Height | | | |
| 0.50 | QC50YECB | NQ2 | 5.06 | 4.56 | 9.30 | 19 | W | SCD 18 |
| 0.75 | QC75YEKB | NQ2 | 5.06 | 4.56 | 9.30 | 21 | W | SCD 18 |
| 1 | Q1C0YEKB | NQ3 | 5.88 | 5.19 | 10.56 | 28 | W | SCD 18 |
| 1.5 | Q1C5YEKF | NQ3 | 5.88 | 5.19 | 10.56 | 36 | W | SCD 18 |
| 2 | Q002YEKF | NQ4 | 7.06 | 6.25 | 11.75 | 44 | W | SCD 18 |
| 3 | Q003YEKF | NQ4 | 7.06 | 6.25 | 11.75 | 56 | W | SCD 18 |
| 5 | Q005YEKF | NQ5 | 10.00 | 7.75 | 17.25 | 134 | W | SCD 6 |
| 7.5 | Q007YEKF | NQ5 | 10.00 | 7.75 | 17.25 | 160 | W | SCD 6 |
| 10 | Q010YEKF | NQ6 | 12.25 | 9.25 | 20.88 | 204 | W | SCD 6 |
| 15 | Q015YEKF | NQ6 | 12.25 | 9.25 | 20.88 | 248 | W | SCD 6 |
| 25 | Q025YEKF | NQ7 | 14.50 | 10.75 | 21.38 | 345 | W | SCD 6 |
| 37.5 | Q037YEKF | NQ8 | 14.50 | 10.75 | 27.38 | 476 | W | SCD 6 |

For shielded 0.50 kVA units, replace the suffix "CB" with a "KB".

Note: 80°C rise units are T3C; 115°C rise units are T3A

Units ending with letter "B" are 80°C rise

Units ending with letter "F" are 115°C rise; 80°C rise optional replace suffix "F" with "B"

347/380 Primary Volts



120/240 Secondary Volts

50/60 Hz

| kVA | Catalog Number | Case Style (Pages 228 - 230) | Approx. Dimensions (Inches) | | | Approx. Weight (Lbs.) | Mtg Type W - Wall F - Floor | Wiring Diagram (Pages 243 - 258) |
|------|----------------|---------------------------------|--------------------------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
| | | | Width | Depth | Height | | | |
| 0.50 | QC50FECB | NQ2 | 5.06 | 4.56 | 9.30 | 18 | W | SCD 33 |
| 0.75 | QC75FEKB | NQ2 | 5.06 | 4.56 | 9.30 | 20 | W | SCD 33 |
| 1 | Q1C0FEKB | NQ3 | 5.88 | 5.19 | 10.56 | 26 | W | SCD 33 |
| 1.5 | Q1C5FEKF | NQ3 | 5.88 | 5.19 | 10.56 | 36 | W | SCD 33 |
| 2 | Q002FEKF | NQ4 | 7.06 | 6.25 | 11.75 | 55 | W | SCD 33 |
| 3 | Q003FEKF | NQ5 | 10.00 | 7.75 | 17.25 | 98 | W | SCD 44 |
| 5 | Q005FEKF | NQ5 | 10.00 | 7.75 | 17.25 | 130 | W | SCD 44 |
| 7.5 | Q007FEKF | NQ6 | 12.25 | 9.25 | 20.88 | 185 | W | SCD 44 |
| 10 | Q010FEKF | NQ6 | 12.25 | 9.25 | 20.88 | 155 | W | SCD 44 |
| 15 | Q015FEKF | NQ6 | 12.25 | 9.25 | 20.88 | 248 | W | SCD 44 |
| 25 | Q025FEKF | NQ7 | 14.50 | 10.75 | 21.38 | 345 | W | SCD 44 |
| 37.5 | Q037FEKF | NQ8 | 14.50 | 10.75 | 27.38 | 476 | W | SCD 48 |

For shielded 0.50 kVA units, replace the suffix "CB" with a "KB".

Note: 80°C rise units are T3C; 115°C rise units are T3A

Units ending with letter "B" are 80°C rise

Units ending with letter "F" are 115°C rise; 80°C rise optional replace suffix "F" with "B"

240 X 480 Primary Volts

120/240 Secondary Volts

60 Hz

| kVA | Catalog Number | Case Style (Pages 228 - 230) | Approx. Dimensions (Inches) | | | Approx. Weight (Lbs.) | Mtg Type W - Wall F - Floor | Wiring Diagram (Pages 243 - 258) |
|------|----------------|---------------------------------|--------------------------------|-------|--------|--------------------------|-----------------------------------|-------------------------------------|
| | | | Width | Depth | Height | | | |
| 0.50 | QC50LECB | NQ2 | 5.06 | 4.56 | 9.30 | 23 | W | SCD 1 |
| 0.75 | QC75LEKB | NQ2 | 5.06 | 4.56 | 9.30 | 24 | W | SCD 1 |
| 1 | Q1C0LEKB | NQ3 | 5.88 | 5.19 | 10.56 | 28 | W | SCD 1 |
| 1.5 | Q1C5LEKF | NQ3 | 5.88 | 5.19 | 10.56 | 35 | W | SCD 1 |
| 2 | Q002LEKF | NQ4 | 7.06 | 6.25 | 11.75 | 47 | W | SCD 1 |
| 3 | Q003LEKF | NQ4 | 10.00 | 7.75 | 17.25 | 62 | W | SCD 1 |
| 5 | Q005LEKF | NQ5 | 10.00 | 7.75 | 17.25 | 131 | W | SCD 1 |
| 7.5 | Q007LEKF | NQ5 | 10.00 | 7.75 | 17.25 | 155 | W | SCD 2 |
| 10 | Q010LEKF | NQ6 | 12.25 | 9.25 | 20.88 | 220 | W | SCD 2 |
| 15 | Q015LEKF | NQ6 | 12.25 | 9.25 | 20.88 | 248 | W | SCD 2 |
| 25 | Q025LEKF | NQ7 | 14.50 | 10.75 | 21.38 | 345 | W | SCD 2 |
| 37.5 | Q037LEKF | NQ8 | 14.50 | 10.75 | 27.38 | 476 | W | SCD 2 |

For shielded 0.50 kVA units, replace the suffix "CB" with a "KB".

Note: 80°C rise units are T3C; 115°C rise units are T3A

Units ending with letter "B" are 80°C rise

Units ending with letter "F" are 115°C rise; 80°C rise optional replace suffix "F" with "B"

