

HPS Titan® Applications

The HPS Titan® line of transformers have been designed for installation in harsh environments where efficiency and performance are key. Typical applications include institutional, commercial, industrial, petrochemical, marine, mining, etc. HPS Titan® designs provide:

- **Superior Performance**
- **Compact Efficient Design**
- **Easy Installation and Hook-up**

HPS Titan® Series transformers are UL Listed for "Class 1, Division 2, Groups A, B, C, D and Class I, Zone 2 Group IIC, T3C Hazardous Locations" and also meet ABS Type Approval for "Marine Duty Service and Offshore Applications - Electrical Distribution and Propulsion". With a North American Temperature Classification of T3C/T3A, the HPS Titan Series will remain cool under load.



HPS Titan® Features and Benefits

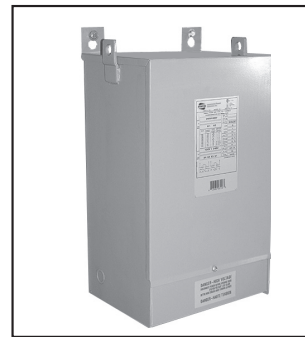
Features	Single Phase	Three Phase
Voltage Groups	5 standard voltage groups	5 standard voltage groups
Ratings	0.5 kVA to 37.5 kVA	2 kVA to 150 kVA
Frequency	60 Hz (50/60 Hz on units with 380V primary)	60 Hz (50/60 Hz on units with 380V primary)
Electrostatic Shield	Optional on 0.50 kVA Standard on 0.75 kVA to 37.5 kVA	Standard on all units
Encapsulated	All units are encapsulated with electrical grade silica sand and resin compounds	
Enclosure	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12	Heavy duty type 3R Optional type 4, 4X (stainless steel) and 12 Optional gasket kit
Terminations	Front accessible separated high and low voltage lead wires or copper tabs	Top accessible separate high and low voltage lead wires or copper tabs
Insulation System	130°C (80°C rise) up to 1 kVA - standard 180°C (115°C rise) 1.5 kVA to 37.5 kVA - standard 180°C (80°C rise) 1.5 kVA to 37.5 kVA - optional	130°C (80°C rise) up to 5 kVA - standard 180°C (115°C rise) 6 kVA to 150 kVA - standard 180°C (80°C rise) 6 kVA to 150 kVA - optional
Mounting	Standard wall mounting with keyhole mounting slots. Lifting provisions standard from 5 kVA to 37.5 kVA.	Standard wall mounting with keyhole mounting slots 2 kVA to 15 kVA (Optional wall mounting kit available for 30 kVA and 45 kVA). Floor Mounted 25 kVA to 150 kVA. Lifting provisions standard on 6 kVA to 150 kVA.
Conduit Knockouts	For rear and side entry into an easily accessible and spacious wiring compartment (no knock-outs on Stainless Steel enclosures).	
Approvals	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 for 80°C rise units T3A Temperature Classification for 115°C rise units UL 508 Listed - File No. E258346 UL Certificate No. 14-HS1174640-PDA (Marine Duty Service and Offshore Applications) ABS Type Approval	
Warranty	All HPS standard catalog encapsulated transformers come with a 10 year limited warranty (please refer to the HPS standard Catalog Transformer Products Warranty for full details)	

HPS TITAN® TRANSFORMERS FOR HARSH ENVIRONMENTS AND HAZARDOUS LOCATIONS

SINGLE PHASE STANDARD SPECIFICATIONS - COPPER WOUND

0.50 TO 1 KVA

1.5 TO 37.5 KVA



	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".



COPPER WOUND SINGLE PHASE, TYPE 3R 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".

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"

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

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".

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"

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

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".

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"

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

