HPS Titan Series
Encapsulated Transformers

HPS Titan N encapsulated transformers offer an innovative design with technological improvements for industrial and hazardous applications.

The transformer core and coil is completely encapsulated in epoxy and silica, providing excellent protection from airborne contaminants and prevents the ingress of moisture.

HPS Titan N three phase design has a removable hinged door and factory installed grounding lugs, reducing installation time and money.

APPLICATIONS


Petrochemical


Marine


Industrial


Oil & Gas


Mining


Wastewater

APPROVALS

- ANSI/ISA 12.12.10 - File No. E258346 (Class 1, Division 2, Groups A, B, C, D and Class 1, Zone 2, Group IIC, T3 Hazardous Locations) - T3C/T3A Temperature Classification
- UL 5085-1 and UL5085-2 Listed - File No. E258346
- ABS Type Approval (Marine Duty Service and Offshore Applications)

c UL us LISTED

*For three phase units only

FEATURES & BENEFITS

Single Phase
- Copper winding
- Electrostatic shield
- Standard wall mounting with keyhole mounting slots
- Front accessible hinged door
- Standard Type 3R enclosure suitable for indoor or outdoor applications

Three Phase
- Higher impedance designs lower inrush and short circuit currents, allowing the use of less costly protective devices
- Completely encapsulated in epoxy and silica to prevent the ingress of moisture
- Standard 10kV BIL rating provides increased reliability and protection against critical equipment failure (including voltage spikes and other line transients)
- Copper winding
- Electrostatic shield
- Improved efficiency level that reduces energy costs
- Standard Type 4 enclosure suitable for indoor or outdoor applications
- Removable hinged door allows for easy access to terminations
- Standard integral floor and wall mounting brackets on select kVA's for faster installation
- Optional breather drains ensure that any moisture build-up due to condensation is easily eliminated without compromising Type 4/12 enclosure integrity

Temperature Code*:
- Class 1, Zone 2, Group IIC, T3
- T3A (115°C rise units) at 40°C ambient
- T3C (80°C & 95°C rise units) at 40°C ambient
- **HPS Titan N 80°C and 95°C rise units are suitable for 50°C ambient**
  80°C rise at 50°C ambient maintains T3C performance
  95°C rise at 50°C ambient maintains T3A performance
  (95°C rise unit only available in three phase)

Specifications & Accessories

Single Phase

STANDARD SPECIFICATIONS

kVA:	Up to 37.5kVA
UL Listed:	File: E258346
Frequency:	60 Hz (50/60Hz options available)
Insulation System:	130°C (80°C rise) up to 1 kVA 180°C (115°C rise) 1.5 to 37.5 kVA optional 180°C (80°C rise) 1.5 to 37.5 kVA
Enclosure Type:	Heavy duty enclosed Type 3R standard [optional Type 4, 12, 4X]
Enclosure Finish:	ANSI 61 Grey
Standard Primary Taps:	Refer to wiring diagrams for details
Termination:	Front accessible separated high and low voltage lead wires or copper tabs
Conduit Entry:	Rear or side entry
Impedance:	Typically 1% to 7%
Mounting:	Standard wall mounting with keyhole mounting slots. Lifting provisions standard from 5 kVA to 37.5 kVA.
Seismic:	Seismically qualified according to the International Building Code (IBC) 2018, and the American Society of Civil Engineers ASCE 7-10 specifications, with the following design parameters: Spectral acceleration: $S_{DS} \leq 2.0$ g Importance factor: $I_p = 1.5$ Attachment/height ratio: z/h =1.0" O.S.H.P.D. California Certified
Sound Level:	Meets NEMA ST-20 standards (optional low noise units available)
Warranty:	10 years

COPPER WOUND, SINGLE PHASE

*600 Primary Volts 120/240 Secondary Volts c UL us LISTED 60 Hz

kVA	Catalog Number	Case Style	Approx. Dimensions Inches [mm]			°C Temp. Rise	Approx. Weight Lbs.[kg]	Mtg Type W - Wall F - Floor	Wiring Diagram
			Width	Depth	Height				
0.5	**QC50PECB**	NQ2	5.06 [128.53]	4.56 [115.83]	9.30 [236.22]	80	15 [6.8]	W	SCD 2.1
0.75	**QC75PEKB**	NQ2	5.06 [128.53]	4.56 [115.83]	9.30 [236.22]	80	18 [8.1]	W	SCD 2.1
1	**Q1C0PEKB**	NQ3	5.88 [149.36]	5.19 [131.83]	10.56 [268.23]	80	27 [12.2]	W	SCD 2.1
1.5	**Q1C5PEKF**	NQ3	5.88 [149.36]	5.19 [131.83]	10.56 [268.23]	115	31 [14.0]	W	SCD 2.1
2	**Q002PEKF**	NQ4	7.06 [179.33]	6.25 [158.75]	11.75 [298.45]	115	40 [18.0]	W	SCD 2.1
3	**Q003PEKF**	NQ4	7.06 [179.33]	6.25 [158.75]	11.75 [298.45]	115	52 [23.4]	W	SCD 2.1
5	**Q005PEKF**	NQ5	10.00 [254.00]	7.75 [196.85]	17.25 [438.15]	115	114 [51.3]	W	SCD 2.1
7.5	**Q007PEKF**	NQ5	10.00 [254.00]	7.75 [196.85]	17.25 [438.15]	115	129 [58.1]	W	SCD 2.1
10	**Q010PEKF**	NQ6	12.25 [311.15]	9.25 [234.95]	20.88 [530.36]	115	197 [88.7]	W	SCD 2.1
15	**Q015PEKF**	NQ6	12.25 [311.15]	9.25 [234.95]	20.88 [530.36]	115	234 [106]	W	SCD 2.1
25	**Q025PEKF**	NQ7	14.50 [368.30]	10.75 [273.05]	21.38 [543.06]	115	285 [129]	W	SCD 2.1
37.5	**Q037PEKF**	NQ8	14.50 [368.30]	10.75 [273.05]	27.38 [695.46]	115	454 [205]	W	SCD 2.1

*Export[1] Primary Volts 120/240 Secondary Volts CE 50/60 Hz

kVA	Catalog Number	Case Style	Approx. Dimensions Inches [mm]			°C Temp. Rise	Approx. Weight Lbs. [kg]	Mtg Type W - Wall F - Floor	Wiring Diagram
			Width	Depth	Height				
0.5	**QC50XECB**	NQ2	5.06 [128.53]	4.56 [115.83]	9.30 [236.22]	80	15 [6.8]	W	SCD 4.1
0.75	**QC75XEKB**	NQ2	5.06 [128.53]	4.56 [115.83]	9.30 [236.22]	80	20 [9.0]	W	SCD 4.1
1	**Q1C0XEKB**	NQ3	5.88 [149.36]	5.19 [131.83]	10.56 [268.23]	80	32 [14.4]	W	SCD 4.1
1.5	**Q1C5XEKF**	NQ3	5.88 [149.36]	5.19 [131.83]	10.56 [268.23]	115	35 [15.8]	W	SCD 4.1
2	**Q002XEKF**	NQ4	7.06 [179.33]	6.25 [158.75]	11.75 [298.45]	115	54 [24.3]	W	SCD 4.1
3	**Q003XEKF**	NQ5	10.00 [254.00]	7.75 [196.85]	17.25 [438.15]	115	105 [47.3]	W	SCD 4.1
5	**Q005XEKF**	NQ5	10.00 [254.00]	7.75 [196.85]	17.25 [438.15]	115	138 [62.1]	W	SCD 4.1
7.5	**Q007XEKF**	NQ6	12.25 [311.15]	9.25 [234.95]	20.88 [530.36]	115	189 [85.1]	W	SCD 4.1
10	**Q010XEKF**	NQ6	12.25 [311.15]	9.25 [234.95]	20.88 [530.36]	115	222 [99.9]	W	SCD 4.1
15	**Q015XEKF**	NQ7	14.50 [368.30]	10.75 [273.05]	21.38 [543.06]	115	300 [135]	W	SCD 4.1
25	**Q025XEKF**				Consult HPS				
37.5	**Q037XEKF**				Consult HPS				

[1]Export = 190/200/208/220/240[2] X 380/400/415/440/480[2] Primary Volts

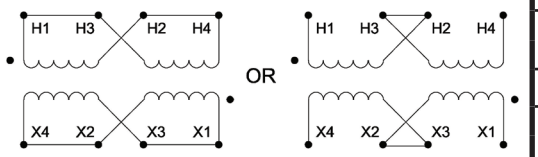
[2]The primary voltage ratio of 240 or 480 is available at 60Hz only with secondary voltage of approximately 130/262V.

***Single Phase Notes:**
Units ending with letter "B" are 80°C rise
Units ending with letter "F" are 115°C rise; 80°C rise optional replace end suffix "F" with "B"
80°C rise units are T3C; 115°C rise units are T3A.
For shielded units 0.50kVA, replace the suffix "CB" with a "KB"
Refer to wiring diagrams for tap details

Electrical Schematics & Connection Drawings - Single Phase

SCD 1.1

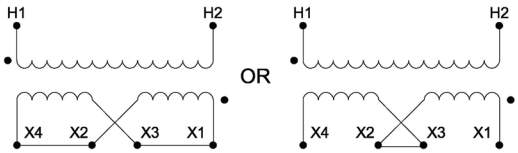
SCHEMATIC



Primary Volts	Connect lines to	Inter-connect
480	H1, H4	H2-H4
240	H1, H4	H1-H3, H2-H4
Secondary Volts	**Connect lines to**	**Inter-connect**
240	X1, X4	X2-X3
120/240	X1, X2, X4	X2-X3
120	X1, X4	X1-X3, X2-X4

SCD 2.1

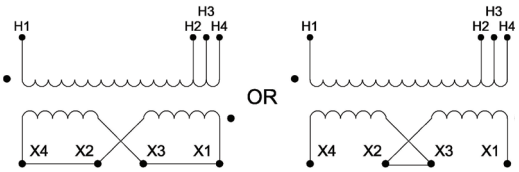
SCHEMATIC



Primary Volts	Connect lines to	Inter-connect
600	H1, H2	-
Secondary Volts	**Connect lines to**	**Inter-connect**
240	X1, X4	X2-X3
120/240	X1, X2, X4	X2-X3
120	X1, X4	X1-X3, X2-X4

SCD 3.1

SCHEMATIC



Primary Volts	Connect lines to	Inter-connect
208	H1, H2	-
240	H1, H3	-
277	H1, H4	-
Secondary Volts	**Connect lines to**	**Inter-connect**
240	X1, X4	X2-X3
120/240	X1, X2, X4	X2-X3
120	X1, X4	X1-X3, X2-X4

Tap arrangements shown are for standard products only. May not be applicable for other products.